2011-2012 USF Tampa Graduate Catalog Updates

Items are approved by the USF Tampa Graduate Council on the date noted or as Graduate School (GS) approved.

CATALOG POLICIES AND REQUIREMENTS

Committee Member Qualifications
Clarification of Policy (2/15/10)

Concentration Definition
Defines as a subset of an academic graduate degree program (3/15/10)

Directed Research Hours Applied to Dissertation
Clarifies application of directed research hours (2/15/10)

Major Professor (Removal)
Clarification for removal of Major Professors (2/15/10)

Time Limitation (Doctoral)
Moved doctoral time to degree to 7 years in total (2/15/10)

CURRICULUM

New Programs
Economics (Ph.D.)
new Ph.D. in Economics
10/5/09 (GC)
Spring 2010 (BOT)
6/18/10 (BOG)

New Accelerated Programs
Biology (MS/Non-Thesis)
new Accelerated Biology Program
4/5/10

Program Changes
Career & Technical Education (M.A.)
change curriculum
5/3/10

Exceptional Student Education (M.A.T.)
change curriculum
5/3/10

Management (M.S. in MIS)
change CIP Code
3/1/10

Nursing Science (Ph.D.)
change qualifying exam/manuscript req.
5/3/10

School Psychology (M.A. and Ph.D.)
change curriculum, total hours required
5/3/10

Program Terminations
Executive MBA for Physicians Program (MDX) (M.B.A.)
11/2/09

Concentration Changes
Curriculum and Instruction: Social Science Ed (M.Ed.)
change curriculum
5/3/10

Curriculum and Instruction: School Psych (Ed.S.)
change curriculum, total hours required
5/3/10

English: Rhetoric and Composition (M.A. and Ph.D.)
change curriculum
3/1/10

Other Revisions (GC approval not needed)
Move of Business Economics (M.A.) to CAS Section with some minor corrections
Communications (M.A.) - corrected deadline dates
Government – corrected deadline dates
Library and Information Science – revised their admission deadline and added electives (approval not needed)
Mechanical Engineering (M.M.E.) – corrected TOEFL score requirement
Physics M.S. – add inmissing concentration - Applied Physics (APM)
Psychology M.A. and Ph.D. – correct course title
Sociology M.A. and Ph.D. – minor edits and corrections
Women’s Studies–corrected dept name

Questions about these updates may be directed to the Graduate School at chinescobb@grad.usf.edu
The policies and procedures herein have been approved, as appropriate, by the USF Tampa Graduate Council Policy Committee and by the full USF Tampa Graduate Council, a Standing Committee of the Faculty Senate.

The policies, procedures, and requirements herein are applicable to students admitted to a graduate degree program or graduate certificate, and/or non-degree seeking students taking graduate coursework. Undergraduate students should refer to the Undergraduate Catalog, even if taking graduate coursework. It is the student level that dictates which publication governs, not the level of coursework.

USF Graduate School, 4202 E. Fowler Avenue, BEH 304
Tampa, FL 33620 ~ www.grad.usf.edu
The year 2010 is a banner year for the USF Graduate School as it marks the 30th anniversary of its formation on March 4, 1980. During the following twelve months the Graduate School will be hosting special events to commemorate the anniversary. For information go to http://www.grad.usf.edu/30years.asp

Graduate School Mission Statement

The University of South Florida Graduate School serves as the University hub of leadership for graduate education producing present day and future global leaders, one student at a time.

Graduate School Diversity Statement

The Graduate School at the University of South Florida is committed to the full engagement, empowerment and encouragement of all of the members and constituents we serve; these include students, faculty, staff, academic departments, aspirants, and affiliates.

In recognizing that a university serves a diverse population, we strive not only to serve, but to lead the future in which we “stimulate, encourage and support graduate education efforts that build national distinction...” We understand that in order to realize this future, we must remain steadfast to the policies and practices that emphasize achievement, equal opportunity, trust, respect, and collaboration. Hence, equity and excellence are not merely espoused, but rather are the “lived” values that we strive for and advocate for members of the community of universities and a global workforce.

USF’s Graduate School Administration Policy Statement

For information on the University’s Policy on the Graduate School Administration, Refer to USF Policy 11.001, at http://generalcounsel.usf.edu/policies-and-procedures/index.asp

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This catalog is effective for the 2011-2012 academic year. This catalog includes all policies, procedures, and program and course descriptions in effect at the time of publication. USF reserves the right to repeal, change, or modify the policies, procedures, programs, and course descriptions at any time.

The University of South Florida is committed to the principles of equal education, equal access, and equal employment opportunities without regard to race, color, marital status, sex, religion, national origin, disability, age, or Vietnam or disabled veteran status as provided by law and in accordance with the University’s respect for personal dignity. These principles are applied in the conduct of University programs and activities and the provision of facilities and services.

Archives online: http://www.grad.usf.edu/newsite/catalog/archives.asp
Archived copies are available online for Catalogs published from 1999 through 2010. Paper copies prior to 1998 are archived at the USF Library and may also be archived in the USF-Tampa Graduate School.
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Welcome to Graduate School!

A MESSAGE FROM THE PRESIDENT

Thank you for your interest in graduate education at the University of South Florida. USF is a top-tier, metropolitan research university that last year was named by the *Chronicle of Higher Education* as the fastest growing research university in the nation in federal funding. We are distinguished by our excellent research and graduate education and our location in a major urban region that is among the nation’s most diverse. USF programs recognized as being among the nation’s best include Marine Science, Psychology, Accounting, Applied Anthropology, Public Health and Biochemistry.

Strong interdisciplinary programs put USF on the leading edge of research and graduate education in a number of areas. For example, collaboration among researchers throughout the university has made USF a leader in the neuroscience of aging and USF’s interdisciplinary doctoral program in Aging Studies was the first in the country. The doctoral program in Cancer Biology joins USF research capacity with the strengths of the nationally recognized H. Lee Moffitt Cancer Center and Research Institute.

In addition to doctoral programs, USF offers many opportunities for postgraduate study through our many Master’s and Certificate programs, many of which are designed to prepare graduates to make immediate contributions to the economic, cultural and social vitality of communities. USF also has launched the nation’s first School of Global Sustainability, an interdisciplinary program that will draw from the best researchers and scholars on campus to develop new solutions to the challenges of managing and protecting the world’s limited resources.

Our commitment to diversity, discovery and the application of knowledge relevant to urban communities has earned USF frequent citations as a model of an “engaged university.” The opportunities for graduate education at USF are vast, and we have worked hard to build an environment that supports and encourages innovation. In many areas, USF offers programs that are unsurpassed in their capacity to prepare you to make your best contribution to a challenging world. I invite you to inquire further about USF programs of interest to you.

Sincerely yours,

Judy Genshaft
President
Office of the President

http://system.usf.edu/president/about-president-genshaft.asp
A MESSAGE FROM THE PROVOST AND EXECUTIVE VICE PRESIDENT

Embarking on graduate studies represents a serious commitment, and we appreciate your thoughtful consideration of the University of South Florida as your academic home for this journey.

The valued contributions, success and accomplishments of our graduate students are of the upmost importance to USF’s faculty and staff. As a leading research university, our mission is to engage in meaningful initiatives that support the educational, health, and socio-economic growth of the local, national, and global communities we serve. Our academic programs and research initiatives embrace interdisciplinary inquiry and discovery that are central to the graduate student experience at USF.

The university’s commitment to real-world research with a global impact is evident in its new School of Global Sustainability. Launched in early 2010, this innovative school is geared to preparing students for a new generation of “green collar” careers and finding solutions for a world challenged with the need to protect its fragile environment and limited resources. The school offers a Master of Arts degree in Global Sustainability which integrates various disciplines such as natural and social sciences, engineering, public health, economics, governance and policy, and issues of diversity, with the majority of the courses offered online. The school and degree program are exciting developments, shaped by USF faculty and researchers who are eager to mentor a new generation of global leaders facing challenges never before imagined.

At USF, our professors are leading scholars in their discipline who readily engage new graduate students in their laboratories and research projects. Among them, they hold 55 endowed chairs, 45 endowed professorships, and have won numerous prestigious national and international honors and awards. USF is home to a growing number of Fulbright Scholars, Guggenheim Fellows, NEH and NSF fellows, Getty Fellows, and those holding other esteemed academic positions recognized around the world.

Together with the accomplishments of our students, it is the talent that the faculty brings to USF that has built our reputation as the nation’s most rapidly growing research university over the past decade as noted by the Chronicle of Higher Education. Our university is attracting many of the world’s best and brightest students because they will have the academic mentoring of well regarded faculty to support their academic and scholarly endeavors through research and innovation.

For graduate students, their academic department usually represents the hub for their graduate school experience. However, at USF we value interdisciplinary collaborations and encourage students and faculty to forge relationships across disciplines. We believe that interdisciplinary partnerships with students, faculty, and researchers across campus, in the local community, and around the world strengthen both the university and the graduate student experience at USF. This “collaboration for competition” leads to the creation of new knowledge and exciting, innovative solutions to pervasive and emerging problems. From cross-disciplinary curricula to shared core research facilities, when graduate students engage in enhanced collaboration that provides students with the opportunity to optimize their fullest potential.

Delivering top quality graduate programs is a leading priority for our university as it strengthens its position as a premier research university with state, national, and global impact. The University of South Florida is a place where you can challenge yourself and focus on how you are able to contribute to your discipline, your university, your community, and your world in a meaningful and sustainable way. Whether your career aspirations are to remain in academe or to pursue professional positions in the public sector, business or industry, I am confident that your experience as a graduate student at USF will present you with wonderful and exciting new opportunities.

Ralph C. Wilcox  
Provost & Executive Vice President  
www.acad.usf.edu
A MESSAGE FROM THE DEAN OF THE GRADUATE SCHOOL AND ASSOCIATE VICE PRESIDENT FOR RESEARCH AND INNOVATION

It gives me great pleasure to write this introduction for the University of South Florida (USF) Graduate School Catalogue. As you will see from the information within, we are truly an unstoppable University creating exemplary student success. We have nearly 150 masters and doctoral programs, several dual degree programs, and over 100 graduate certificates. We also have many opportunities for non-degree seeking students. On our several campuses, USF serves more than 47,000 students, of which nearly 10,000 are graduate students. USF has student success, research and innovation, community engagement, global literacy and impact, and integrated, interdisciplinary inquiry as its strategic priorities. Our tuition, among the lowest in the country, provides affordability and we also offer a number of financial aid options. We recognize that graduate students have very different responsibilities and needs, so many of our programs offer flexible day, evening, and weekend classes in addition to online course and degree program offerings.

The mission of the Graduate School is to serve as the university hub of leadership for graduate education producing present-day and future global leaders---one scholar at a time. As a graduate student at the University of South Florida you can be proud that USF is one of the nation’s top public research universities and one of only 25 public research universities nationwide that holds both very high research and community engaged designations by the Carnegie Foundation for the Advancement of Teaching. USF was awarded nearly $400 million dollars in research contracts and grants last year. The Graduate School works closely with the Office of Research and Innovation offering student research opportunities including participation in research events and interdisciplinary research grants. Graduate students at USF can also apply for research, teaching, and graduate assistantships enhancing their educational experiences by putting knowledge to action.

I personally invite each of you to learn more about graduate education and the USF System with locations in Tampa, St. Petersburg, Sarasota/Manatee, and Lakeland. We invite you to become the leader you are destined to be. Welcome to our community of scholars and family of learners!

Karen Liller, Ph.D.

Dean of the Graduate School and Associate Vice President for Research and Innovation

www.grad.usf.edu
Section 2
USF: Florida’s Leading Metropolitan Research University

USF Vision, Mission, Goals, Values, and, Accreditation

USF Strategic Plan:  http://www.ie.usf.edu/StrategicPlan/strategies.asp

Vision
The University of South Florida envisions itself as a pre-eminent research university with state, national and global impact, and positioned for membership in the Association of American Universities (AAU).

Mission
As Florida’s leading metropolitan research university, USF is dedicated to excellence in:

- Student access and success in an engaged, and interdisciplinary, learner-centered environment,
- Research and scientific discovery, including the generation, dissemination, and translation of new knowledge across disciplines; to strengthen the economy; to promote civic culture and the arts; and to design and build sustainable, healthy communities, and
- Embracing innovation, and supporting scholarly and artistic engagement to build a community of learners together with significant and sustainable university-community partnerships and collaborations.

Goals and Strategies

Goal 1
Expanding world-class interdisciplinary research, creative, and scholarly endeavors.

- Promote nationally and internationally distinctive and prominent research and graduate programs,
- Strengthen the University’s research support infrastructure to enhance contracts and grants workflow and output – through critically examining the applicability of alternative models of F&A indirect cost distribution, and other innovative mechanisms,
- Focus on increasing the amount and proportional share of competitive federal research awards,
- Enhance and expand the talent pool of world-class, competitively-funded faculty members, postdoctoral fellows, and graduate students,
- Establish a salary enhancement program that rewards highly productive faculty in the areas of teaching and learning; scholarship, research and creative endeavors; and service and engagement, and
- Strengthen and support integrated and synergistic interdisciplinary research across disciplinary, departmental, college and campus boundaries.

Goal II
Promoting globally competitive undergraduate, graduate and professional programs that support interdisciplinary inquiry, intellectual development, knowledge and skill acquisition, and student success through a diverse, fully-engaged, learner-centered campus environment.

- Create and support globally competitive, relevant and distinctive academic programs that address the changing needs of the region, state and nation through innovative approaches to curriculum development and delivery,
- Provide increased access to excellence in higher education for students who demonstrate the aptitude to succeed,
- Enhance and expand the talent pool by shaping the enrollment profile of USF’s undergraduate and graduate student body to reflect that found at a pre-eminent research university,
• Improve year-to-year retention and time-to-graduation; demonstrated acquisition of knowledge, communication and critical thinking skills; and competency to synthesize and apply new knowledge; together with providing an optimal college experience for all students,

• Build a sustainable campus environment at USF that meets the criteria for Carnegie classification as a "primarily residential" campus, and

• Improve and promote cultural and global literacy, foreign language proficiency, and the international competitiveness of USF graduates through significant growth in study abroad participation, an increase in fee-paying international students, and cross-cultural curriculum development.

Goal III
Expanding local and global engagement initiatives to strengthen and sustain healthy communities and to improve the quality of life.

• Establish a unified institutional structure to facilitate and promote community engagement, social enterprise, and global collaborations in education, research and service learning, including mechanisms for managing fiscal and human resources for student exchange, study abroad and international field placement programs, and faculty research, teaching, outreach and professional development opportunities,

• Develop an up-to-date clearinghouse of information about all the engagement currently occurring at USF and develop institutional systems to measure community engagement,

• Encourage and reward faculty effort in community engagement – require an annual faculty impact statement and explicitly introduce community engagement into USF’s promotion and tenure guidelines, and

• Encourage and reward student engagement in the community and explore the feasibility of acknowledging community engagement and other co-curricular activities on the official transcript.

Goal IV
Enhancing all sources of revenue, and maximizing effectiveness in business practices and financial management to establish a strong and sustainable economic base in support of USF’s growth.

• Refine business practices to ensure a strong and sustainable economic foundation at USF,

• Promote and sustain a positive working environment, significantly improve service quality, and improve staff support through providing competitive salary structures, expanding professional development opportunities, and building cross-functional teams,

• Build USF’s fundraising enterprise and endowment to a level commensurate with that found at a pre-eminent research university by completing a comprehensive campaign to support capital projects, endowed professorships and scholarships, and to supplement operating needs,

• Expand USF’s national identity through developing and implementing a comprehensive, cutting-edge branding campaign grounded in the discovery and dissemination of new knowledge; interdisciplinary collaboration; commercialization and economic development; and global engagement,

• Expand the commercialization of emerging technologies to enhance regional and state economic development, and

• Build a sustainable environment to support an expanded and improved teaching and research mission, a more engaged residential community, and a university-based global village.

Values
The University of South Florida values:

• Excellence in teaching and learning; scholarship and research (both basic and applied/translational); together with community engagement and public service based on the highest standards of discovery, creativity and intellectual attainment,

• Outstanding research and scientific discovery, including the application of new knowledge to solve state, national and global problems,

• Recruitment and retention of world-class faculty and high potential undergraduate and graduate students,
• Access to a world-class, globally relevant and affordable education, including utilization of alternative modes of delivery,
• Student competitiveness, success and academic achievement through knowledge, communication and critical thinking skill acquisition,
• Cultural and ethnic diversity and inclusion along with an enhanced global experience, understanding, and appreciation,
• Integrated, interdisciplinary inquiry and collaboration across departmental, college and campus boundaries,
• Facilitating the optimal development of personal and professional potential of students, faculty, and staff, and enriching the quality of an engaged campus community,
• Shared governance structures that empower all USF stakeholders, campuses and entities to reach their full potential,
• The creation and support of a premier university system that adds value to the region, state and nation while ensuring necessary levels of autonomy and preserving the distinctive regional and strategic identities of all member campuses and entities,
• An environment of collegiality based on the principles of academic freedom, respect, integrity, civility, the freedom to engage in debate, the exchange of ideas and intellectual discovery, and professional responsibility,
• Mutually beneficial partnerships and community engagement that increase the understanding of, and present solutions to, local and global challenges, with a mind to strengthening the economy and building sustainable healthy communities,
• An entrepreneurial spirit and innovation with a focus on defining, informing and generating “next best practices”,
• The utility of proven and emerging technologies to enhance instruction, learning, research and engagement, and to improve service quality and efficiencies in institutional business practices,
• Focus and discipline in aligning the budget and fiscal resources with institutional priorities and action, and
• Transparent accountability along with timely and effective communication.

Accreditation
The University of South Florida is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award degrees at the baccalaureate, masters, specialist, and doctoral levels, including the Doctor of Medicine. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of the University of South Florida.

University Administration

The University of South Florida is a member of the State University System (SUS) of Florida and is governed by the Florida Board of Governors and the University Board of Trustees.

Florida Board of Governors
For a current list of the Board of Governors (BOG), please refer to their website: http://www.flbog.org/.
University Board of Trustees
The USF Board of Trustees was established by the Legislature in 2001. The 13 trustees include distinguished figures in the law, commerce, medicine, education, philanthropy and public policy leadership. Six trustees are appointed by the governor and five trustees are appointed by the Board of Governors. The Faculty Senate President and Student Body President also serve as trustees. The President of the University serves as Corporate Secretary. Information about each Trustee is available online at: http://system.usf.edu/board-of-trustees/.

Lee E. Arnold, Jr.  
Laurence G. Branch  
Margarita R. Cancio, M.D.  
Gene Engle  
Sonja W. Garcia  
Rhea F. Law, Chair  

Kiran C. Patel, M.D.  
John B. Ramil  
Debbie Nye Sembler  
Robert L. Soran  
Juan Soltero  
Sherrill Tomasino  

President:  
Judy Genshaft, Ph.D.  

Provost and Executive Vice President:  
Ralph Wilcox, Ph.D.  

Graduate School Administration:  
Dean of the Graduate School and  
Associate Vice President for Research and Innovation:  
Karen Liller, Ph.D.  
Associate Dean, Graduate School:  
Richard Pollenz, Ph.D.  
Director of Operations  
Elizabeth O’Connell, Ph.D.  

Graduate Executive Coordinating Committee:  
Graduate School  
Karen Liller, Ph.D.  
Graduate School  
Richard Pollenz, Ph.D.  
USF Tampa  
Graham Tobin, Ph.D.  
USF St. Petersburg  
Norene Noonan, Ph.D.  
USF Polytechnic  
Judith Ponticell, Ph.D.  
USF Sarasota-Manatee  
Bonnie Jones, Ph.D.  
USF Health  
Donna Petersen, Ph.D.
**College Deans**
College of Arts and Sciences                                  Eric Eisenberg, Ph.D.
College of Behavioral and Community Sciences                Junius Gonzales Ph.D.
College of Business                                          Robert Forsythe, Ph.D.
College of Education                                          Colleen S. Kennedy, Ph.D.
College of Engineering                                        John Wiencek, Ph.D.
College of Graduate Studies                                  Karen Liller, Ph.D.
College of Marine Science                                    William Hogarth, Ph.D.
College of Medicine                                           Stephen K. Klasko, Ph.D.
College of Nursing                                            Dianne Morrison-Beedy, Ph.D.
College of Public Health                                      Donna Petersen, Ph.D.
College of The Arts                                           Ron L. Morrison, Ph.D.
Honors College                                                Stuart Silverman, Ph.D.
International Affairs                                        Maria Crummett, Ph.D.
Library                                                       William Garrison, Ph.D.
Undergraduate Studies                                         Robert Sullins, Ph.D.

**College Graduate Associate Deans and Representatives (GADR)**
Website: [http://www.grad.usf.edu/graduate-coordinators.asp](http://www.grad.usf.edu/graduate-coordinators.asp)

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**USF Tampa Graduate Council:**
For the most current list of Graduate Council members, please refer to the website:
[http://www.grad.usf.edu/graduate-council.asp](http://www.grad.usf.edu/graduate-council.asp)
Locations

University of South Florida Tampa
4202 E. Fowler Avenue
Tampa, FL 33620
(813) 974-2011
Website: www.usf.edu

USF's main campus, including USF Health, is located in Northeast Tampa, one of the fastest growing areas in Tampa Bay. More than 39,000 students attend classes on the Tampa campus, which sits on more than 1,700 acres and includes extensive health and medical (www.health.usf.edu) learning facilities, residence halls (www.housing.usf.edu), research facilities (www.research.usf.edu), and more. Located in the Tampa Port Authority Building in downtown Tampa, the USF Downtown Center is a symbol of the partnership between USF and the bay-area business community. The facility offers graduate degree programs, non-credit training for business, government, and nonprofit organizations, and meeting, workshop and seminar space.

University of South Florida Sarasota-Manatee
5700 N. Tamiami Trail
Sarasota, FL 34243-2197
(941) 359-4200
Website: www.sarasota.usf.edu

USF Sarasota-Manatee is located on the border of Sarasota and Manatee counties, a vibrant area featuring educational and cultural institutions such as the John & Mable Ringling Museum of Art. The campus offers 44 bachelor's degree, master's degree, and certificate programs to those who have at least an associate's degree.

University of South Florida Polytechnic
3433 Winter Lake Road
Lakeland, FL 33803
(863) 667-7000
Website: http://www.poly.usf.edu/

USF Polytechnic is the state's only polytechnic campus. USFP emphasizes applied learning and research and serves students in Polk, Highlands, Hardee and eastern Hillsborough counties with over 20 undergraduate, graduate and certificate programs. The campus is located in Lakeland, at the heart of Florida's High Tech Corridor.

University of South Florida St. Petersburg
140 Seventh Avenue S.
St. Petersburg, FL 33701
(727) 553-1142
Website: www.stpt.usf.edu

USF's St. Petersburg is located on the beautiful waterfront in downtown St. Petersburg, an area featuring parks, shops, restaurants, art galleries, museums and performing arts and sports venues. USF St. Petersburg serves more than 3,700 undergraduate and graduate students.
Graduate School Staff Directory
4202 E. Fowler Ave., BEH 304, Tampa, FL 33620  813-974-2846  www.grad.usf.edu

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<th>Receptionists</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jessica Sonnenschein</td>
<td>(813) 974-2846</td>
</tr>
<tr>
<td>Barbara Bermudez</td>
<td>(813) 974-2846</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dean's Office</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karen Liller, Ph.D.</td>
<td>(813) 974-7359</td>
</tr>
<tr>
<td>Dean of the Graduate School and</td>
<td></td>
</tr>
<tr>
<td>Associate Vice President for</td>
<td>(813) 974-7359</td>
</tr>
<tr>
<td>Research and Innovation</td>
<td>(813) 974-1976</td>
</tr>
<tr>
<td>Debbie Williams, Executive</td>
<td>(813) 974-1902</td>
</tr>
<tr>
<td>Administrative Specialist</td>
<td>(813) 974-1902</td>
</tr>
<tr>
<td>TBD, Team Assistant</td>
<td>(813) 974-1902</td>
</tr>
<tr>
<td>Rick Pollenz, Ph.D., Associate</td>
<td>(813) 974-6363</td>
</tr>
<tr>
<td>Dean</td>
<td>(813) 974-3396</td>
</tr>
<tr>
<td>Lisa Piazza, Administrative</td>
<td>(813) 974-3396</td>
</tr>
<tr>
<td>Specialist</td>
<td>(813) 974-3159</td>
</tr>
<tr>
<td>Elizabeth O'Connell, Ph.D.,</td>
<td>(813) 974-3159</td>
</tr>
<tr>
<td>Director of Operations</td>
<td>(813) 974-3159</td>
</tr>
<tr>
<td>Trista Moenning, Administrative</td>
<td>(813) 974-3159</td>
</tr>
<tr>
<td>Specialist</td>
<td>(813) 974-3159</td>
</tr>
<tr>
<td>Kokita Wilson, Office Manager</td>
<td>(813) 974-3159</td>
</tr>
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<table>
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<tbody>
<tr>
<td>Carol Hines-Cobb, Assistant</td>
<td>(813) 974-4239</td>
</tr>
<tr>
<td>Director, Academics</td>
<td>(813) 974-4239</td>
</tr>
<tr>
<td>Joseph Butts, Assistant Director</td>
<td>(813) 974-3586</td>
</tr>
<tr>
<td>Academics</td>
<td>(813) 974-3586</td>
</tr>
<tr>
<td>Ryan Durrant, Academic Services</td>
<td>(813) 974-7727</td>
</tr>
<tr>
<td>Administrator</td>
<td>(813) 974-7727</td>
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<tr>
<td>Nick Hage, Webmaster</td>
<td>(813) 974-2626</td>
</tr>
<tr>
<td>TBD, Administrative Specialist</td>
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<tr>
<td>Rod Hale, Admissions Recruiter</td>
<td>(813) 974-2847</td>
</tr>
<tr>
<td>Advisor</td>
<td>(813) 974-2847</td>
</tr>
<tr>
<td>Janet Giles, Academic Program</td>
<td>(813) 974-5220</td>
</tr>
<tr>
<td>Specialist (Theses and</td>
<td>(813) 974-5220</td>
</tr>
<tr>
<td>Dissertations)</td>
<td>(813) 974-5220</td>
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<tr>
<td>Kathy Whitley, Team Assistant</td>
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<table>
<thead>
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<th>Business Operations</th>
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<tbody>
<tr>
<td>Mildred Howard, Associate Director</td>
<td>(813) 974-8356</td>
</tr>
<tr>
<td>Kimberly Carter, Fiscal and</td>
<td>(813) 974-2915</td>
</tr>
<tr>
<td>Business Analyst</td>
<td>(813) 974-2915</td>
</tr>
<tr>
<td>Javier Rodriguez, Fiscal and</td>
<td>(813) 974-9328</td>
</tr>
<tr>
<td>Business Specialist</td>
<td>(813) 974-9328</td>
</tr>
<tr>
<td>Theresa Freeman, Fiscal and Business Specialist</td>
<td>(813) 396-9010</td>
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<table>
<thead>
<tr>
<th>Graduate Admissions</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Francisco Vera, Assistant Director</td>
<td>(813) 974-8800</td>
</tr>
<tr>
<td>Mark Freeman, Lead Admissions</td>
<td>(813) 974-8800</td>
</tr>
<tr>
<td>Officer</td>
<td>(813) 974-8800</td>
</tr>
<tr>
<td>Deise Cedeno, Admissions Officer</td>
<td>(813) 974-8800</td>
</tr>
<tr>
<td>Tanya Delgado, International</td>
<td>(813) 974-8800</td>
</tr>
<tr>
<td>Admissions Officer</td>
<td>(813) 974-8800</td>
</tr>
<tr>
<td>Lada Harland, Admissions Officer</td>
<td>(813) 974-8800</td>
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<tr>
<td>TBD, Admissions Officer</td>
<td>(813) 974-8800</td>
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<tr>
<td>Suzana Moore, Admissions Officer</td>
<td>(813) 974-8800</td>
</tr>
<tr>
<td>John Ruff, Office Manager</td>
<td>(813) 974-8800</td>
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### Graduate Assistantships (GA/RA/TA) Information

<table>
<thead>
<tr>
<th>Name</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Ryan Durrant, Academic Services Administrator</td>
<td>(813) 974-7727</td>
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### Marketing and Recruiting

<table>
<thead>
<tr>
<th>Name</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malcolm Randolph, Admissions Recruiter Advisor</td>
<td>(813) 974-7207</td>
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### Graduate and Professional Student Council

<table>
<thead>
<tr>
<th>Name</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keara Dotson, President</td>
<td>(813) 974-6939</td>
</tr>
<tr>
<td>Maria Booker, Vice-President</td>
<td></td>
</tr>
<tr>
<td>Yan An, Treasurer</td>
<td></td>
</tr>
<tr>
<td>Juanita Martinez, Secretary</td>
<td></td>
</tr>
<tr>
<td>Amalia Bamis, Public Relations</td>
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### Office of Postdoctoral Affairs (OPA)

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Eric Anderson, Academic Services Administrator</td>
<td>(813) 974-7359</td>
</tr>
<tr>
<td>Monica Giraldo Hernandez, Administrative Specialist</td>
<td></td>
</tr>
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</table>

### School of Global Sustainability

<table>
<thead>
<tr>
<th>Name</th>
<th>Contact Information</th>
</tr>
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<tbody>
<tr>
<td>Kalanithy Vairavamoorthy, Ph.D., Director</td>
<td>(813) 974-2846</td>
</tr>
<tr>
<td>James Agarpao, Admin. Assistant</td>
<td></td>
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### M.A. in Global Sustainability Program

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Malcolm Randolph, Interim Academic Advisor</td>
<td>(813) 974-7207</td>
</tr>
<tr>
<td>Matthew Gaboury, webmaster</td>
<td></td>
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### USF System Graduate Offices

<table>
<thead>
<tr>
<th>Name</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>USF Polytechnic: Judith Ponticell, Ph.D. – Associate Vice President</td>
<td>(863) 667-7721</td>
</tr>
<tr>
<td>USF Sarasota-Manatee: Bonnie Jones, Ph.D. – Associate Vice President and Dean</td>
<td>(941) 359-4504</td>
</tr>
<tr>
<td>USF St. Petersburg: Norene Noonan, Ph.D. – Regional Associate Vice Chancellor</td>
<td>(727) 553-4450</td>
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### OTHER CONTACTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Contact Information</th>
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<tbody>
<tr>
<td>Registrar’s Office</td>
<td>(813) 974-2000</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>(813) 974-4700</td>
</tr>
<tr>
<td>Information Technology</td>
<td>(813) 974-1222</td>
</tr>
<tr>
<td>Student Health Services</td>
<td>(813) 974-2331</td>
</tr>
<tr>
<td>Parking and Transportation Services</td>
<td>(813) 974-3990</td>
</tr>
<tr>
<td>University Police</td>
<td>(813) 974-2628</td>
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</tbody>
</table>
### Academic Calendar

**Academic Calendar**  
[http://www.registrar.usf.edu/enroll/regist/calendt.php#1112](http://www.registrar.usf.edu/enroll/regist/calendt.php#1112)  
**Registrar’s Calendar**  
[http://www.registrar.usf.edu/forms/1011cal2010-06-03_12_34_06.pdf](http://www.registrar.usf.edu/forms/1011cal2010-06-03_12_34_06.pdf)  
**Thesis/Dissertation Deadlines**  
[http://www.grad.usf.edu/ETD-deadlines.asp](http://www.grad.usf.edu/ETD-deadlines.asp)  
**Cultural/Diversity Calendar**  
[http://usfweb2.usf.edu/eoa/deo_calendar/default.asp](http://usfweb2.usf.edu/eoa/deo_calendar/default.asp)  
**Attendance Policy for the**  
**Observance of Religious Days**  

#### August 2011 - July 2012

<table>
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<th>Date</th>
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<tr>
<td>August 5</td>
<td>Summer B, last day of classes</td>
<td>August 6</td>
<td>Summer Commencement, Tampa</td>
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<tr>
<td>August 7 - 21</td>
<td>Optional Flexible Scheduling Block - Excluding Holidays</td>
<td>August 22</td>
<td>Fall, first day of classes</td>
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<tr>
<td>September 5</td>
<td>Labor Day</td>
<td>November 11</td>
<td>Veteran's Day</td>
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<tr>
<td>November 24 &amp; 25</td>
<td>Thanksgiving Holiday</td>
<td>December 2</td>
<td>Fall, last day of classes</td>
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<tr>
<td>December 3 - 9</td>
<td>Final Exam Week</td>
<td>December 4</td>
<td>Final Exams (Distance Ed)</td>
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<td>December 10</td>
<td>Fall, Tampa Commencement</td>
<td>December 11</td>
<td>Fall, St. Petersburg Commencement</td>
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<td>December 11</td>
<td>Fall, Sarasota-Manatee Commencement</td>
<td>December 12</td>
<td>Fall, Polytechnic Commencement</td>
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<tr>
<td>December 11 - January 8</td>
<td>Optional Flexible Scheduling Block - Excluding Holidays</td>
<td>December 26</td>
<td>Christmas Holiday</td>
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<tr>
<td>January 2</td>
<td>New Year’s Holiday</td>
<td>January 9</td>
<td>Spring, first day of classes</td>
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<td>January 16</td>
<td>Martin Luther King, Jr.</td>
<td>March 12 - 17</td>
<td>USF Spring Break</td>
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<td>April 27</td>
<td>Spring, last day of classes</td>
<td>April 28 - May 4</td>
<td>Spring Final Exams</td>
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<td>April 29</td>
<td>Spring Final Exams (Distance Learning)</td>
<td>May 4 - 5</td>
<td>Spring Commencement, Tampa</td>
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<td>May 6</td>
<td>Spring Commencement, St. Petersburg</td>
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<td>Spring Commencement, Sarasota-Manatee</td>
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<td>May 7</td>
<td>Spring Commencement, Polytechnic</td>
<td>May 14</td>
<td>Summer A &amp; C, first day of classes</td>
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<td>May 28</td>
<td>Memorial Day</td>
<td>June 22</td>
<td>Summer A, last day of classes</td>
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<td>June 25</td>
<td>Summer B, first day of classes</td>
<td>July 4</td>
<td>Independence Day Holiday</td>
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<tr>
<td>July 20</td>
<td>Summer C, last day of classes</td>
<td>August 3</td>
<td>Summer B, last day of classes</td>
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<td>August 3 - 4</td>
<td>Summer Commencement, Tampa</td>
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</table>

12
**Section 3**

**Graduate Faculty and Research Interests**

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**Graduate Faculty Definition**

The University of South Florida recognizes Graduate Faculty and Affiliate Graduate Faculty.

**Graduate Faculty** is defined to consist of all tenure-track or tenured faculty appointed at the Assistant, Associate, or Professor rank, who holds a terminal degree or equivalent in their discipline. Graduate Faculty members are eligible to teach graduate courses and may direct and serve on master’s, specialist, and doctoral level committees. To chair a doctoral level committee, a Graduate Faculty member must engage in current and sustained scholarly, creative, or research activities, such as publications, performances, exhibitions, patents, inventions and research grants.

**Affiliate Graduate Faculty** membership may be granted by the Graduate School Dean to individuals whose skills or expertise meet criteria established by the College. Affiliate Graduate Faculty membership is in effect for a specified period of time and specific purposes. Affiliate members may be eligible to teach graduate courses, to serve on master’s, specialist, and doctoral level committees, to direct master’s and specialist’s level committees, and to co-direct doctoral level committees, at the discretion of the College. Emeritus Professors and retired or recently resigned professors may also be appointed as Affiliate Graduate Faculty with the approval of the College and Graduate School Dean.

For a current list of Graduate Faculty and Affiliate Graduate Faculty in any program contact the program director or coordinator.

**Graduate Faculty Approval** – Graduate faculty is defined as noted above; Colleges and Departments may have additional requirements. The Graduate School will maintain a list of Graduate Faculty along with approval guidelines from the Colleges and Departments.

**Searchable Faculty Database**

On the Graduate School website is a searchable database that provides information on graduate faculty and research interests. [http://www.grad.usf.edu/programs/faculty.asp](http://www.grad.usf.edu/programs/faculty.asp)
Section 4

Graduate Admissions

Office of Graduate Admissions

University of South Florida
Office of Graduate Admissions
4202 East Fowler Avenue, BEH304
Tampa, FL 33620-8470

Website:  http://www.grad.usf.edu/graduate-admissions.asp
E-mail:  admissions@grad.usf.edu
Phone:  813-974-8800
U.S. Toll-Free:  1-866-974-8800
Fax:  813-974-7343

Director of Operations:  Elizabeth O’Connell, Ph.D.
Assistant Director:  Francisco Vera

Admissions Staff:
Mark Freeman, Deise Cedeño, Tanya Delgado, Lada Harland, Zuzana Moore, John Ruff, Leticia Christie

University Admissions Criteria and Policies

USF Regulation USF3-008
http://generalcounsel.usf.edu/regulations/pdfs/regulation-usf3.018.pdf

Statement of Principles
In graduate admission decisions, multiple sources of information should be used to ensure fairness, promote diversity and balance the limitations of any single measure of knowledge, skills, or abilities. The sources may include: undergraduate grade point average, letters of recommendation, personal statements, samples of academic work, portfolios, auditions, professional experience related to proposed graduate study, as well as nationally known, standardized test scores. It is the responsibility of each graduate program to select admissions criteria that best predict success in their specific field and to determine the weight given to each measure.

None of the sources of information, particularly standardized test scores, should be used in isolation nor should such scores be used in combination or separately to establish minimum or “cut off” scores. Program specific guidelines for the use of standardized test scores should be developed based on the experience of a given department with its pool of applicants.  

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1 Adapted from the GRE “Guide to the Use of Scores” 2003-2003
Admission Requirements
Each applicant to a graduate program at the University of South Florida is required to meet the following minimum requirements:

1. An applicant must have one of the following:
   a. A bachelor’s degree from a regionally accredited institution and satisfying at least one of the following criteria:
      i. “B” average or better in all work attempted while registered as an undergraduate student working for a degree, or
      ii. “B” or better average in all work attempted while registered as an upper division undergraduate student working for a baccalaureate degree.
   b. A bachelor’s degree from a regionally accredited institution and a previous graduate degree from a regionally accredited institution.
   c. The equivalent bachelors and/or graduate degrees from a foreign institution.

2. Submission of standardized test scores is at the discretion of the graduate program. Applicants from countries where English is not the official language must also demonstrate proficiency in English by providing acceptable scores on the Test of English as a Foreign Language (TOEFL) or International English Lang Testing System (IELTS).

3. All specific and additional requirements of the graduate program to which admission is sought (including requirements to submit standardized test scores) consistent with the above Statement of Principles.

The Program Chair and College Dean must approve any exceptions to these requirements with information copies to the Graduate School.

Application Process (How it works)
Graduate applicants are urged to submit accurate and complete information as early as possible. Applications and supporting documents received after the application deadline will be processed for the next available term.

The Graduate Admissions Office and the Graduate Program review your application for admission to the Graduate School. Once the graduate program determines your eligibility for its graduate program they will forward their decision to the Graduate Admissions Office which in turn will issue the official decision. Please note if the graduate program is a Direct Receipt Program (http://www.grad.usf.edu/graduate-admissions-direct-receipt.asp). For Direct Receipt Programs application materials should be sent directly to the program (NOT to the Office of Graduate Admissions.) All inquiries regarding application status should also be directed to the program. If you are a foreign graduate applicant, the International Services Office (http://global.usf.edu/isss/prospect.html) will evaluate your financial statement after you are admitted to determine your eligibility for a student visa. Each of these offices may request additional documents from you to make a decision.

For a complete list of graduate programs and deadline dates please visit the Graduate School website at http://www.grad.usf.edu/programs/programs.asp
Admission Application Deadlines

The University deadlines for admission follow below. **Colleges and programs may have earlier deadlines or may continue to process applications after the deadline if space exists within the program.** Admission applications and supporting materials must be received by the program and university deadlines as posted in the Graduate Catalog and online at: [http://www.grad.usf.edu/programs/programs.asp](http://www.grad.usf.edu/programs/programs.asp)  

*Note: Professional programs may have deadlines later than the University deadline if approved by Graduate Council.*

### Domestic Application Deadlines

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Spring Admission</td>
<td>October 15</td>
</tr>
<tr>
<td>Summer Admission</td>
<td>February 15</td>
</tr>
<tr>
<td>Fall Admission</td>
<td>February 15</td>
</tr>
<tr>
<td>Fall Admission to Professional Programs</td>
<td>June 1</td>
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### International Application Deadlines

**Living inside the United States**

- **Spring Admission**: refer to Domestic Deadlines
- **Summer Admission**: refer to Domestic Deadlines
- **Fall Admission**: refer to Domestic Deadlines

**Living outside the United States**

- **Spring Admission**: June 1
- **Summer Admission**: January 2
- **Fall Admission**: January 2

Foreign applicants who are outside the US are required to apply for a visa. Depending on the country, this may take a few months. So the deadlines for these international applicants are early. Foreign applicants who are in the U.S. are currently on a visa and may use the domestic application deadline dates.
Application Checklist (To-Do-List)
To assist you in the admissions process the following is your To-Do-List.

1. Graduate Application
2. Application Fee
3. Transcripts (including translations and evaluations for international transcripts)
4. Test Scores
5. Conduct Clearance Policy (Legal Disclosure Statement)
6. Residency Policy

☐ 1. Graduate Application:
All graduate applications to USF must be submitted online through FACTS.org (http://facts23.facts.org/admissions/user.do?officeCode=00015370000&application=R)

☐ 2. Application Fee:
All applicants are required to submit an application fee of $30.00 for EACH graduate program to which they seek admission (USF Regulation USF4-0107: Special Fees, Fines and Penalties http://generalcounsel.usf.edu/regulations/pdfs/regulation-usf4_0107.pdf) If they attended USF as a former degree seeking student or non-degree seeking student they will still be required to submit the application fee. Applicants have the option to pay their application fee by credit card (Discover, Master Card, Visa) or by E-Check (personal checking/savings account) through FACTS.org Graduate Online Application. ALL APPLICATION FEES SUBMITTED ARE NON-REFUNDABLE.

☐ 3. Transcripts:
One (1) official transcript from all institutions of higher learning where the applicant has earned a degree is required. Former USF students should not submit their USF transcript; it is already on file. Applicants may provide unofficial copies of transcripts to expedite the processing of their applications. Any offer of admissions based on unofficial transcripts will not be finalized until official transcripts are received in a sealed envelope from the Office of the Registrar where they attended. All transcripts must be in English; it is the applicant’s responsibility to have transcripts translated and evaluated* before submitting them as part of the graduate application packet. If they are applying while still completing an undergraduate degree, they must submit transcripts of at least six (6) semesters of completed undergraduate work. Final transcripts showing the award of a bachelor’s degree will be required if an applicant is admitted and enrolls.

*All foreign transcripts that are not in English must be accompanied by a certified English translation. Documents signed by a notary or other public official with no educational affiliation will not be accepted. Some graduate programs require a course-by-course evaluation. In the event that the university receives documentation that is questionable, or suspicious in any way, the university will require a course-by-course evaluation from a foreign transcript evaluation service. Refer to the Graduate Admissions’ website for a list of evaluation services (http://www.grad.usf.edu/graduate-admissions.asp).

☐ 4. Test Scores
GRE (Graduate Record Examination): http://www.gre.org
All applicants to programs requiring the GRE* must submit GRE test scores earned within five (5) years of the desired term of entry. Official scores must be submitted to USF directly from the Educational Testing Service, but applicants may provide unofficial copies of their test scores to expedite the processing of their applications. Any offer of admission based on unofficial scores will not be finalized until official scores from ETS are received. The institution code for USF is 5828 and applies to all tests administered by ETS.

*The GRE requirement may be waived at the discretion of individual graduate programs. Please contact your program of interest directly for additional information.
GMAT (Graduate Management Aptitude Test): [http://www.gmac.com](http://www.gmac.com)

Applicants to programs in the College of Business should submit GMAT** scores earned within five (5) years of the desired term of entry. Official scores must be submitted to USF directly from the Pearson VUE Testing Service, but applicants may provide unofficial copies of their test scores to expedite the processing of their applications. Any offer of admission based on unofficial scores will not be finalized until official scores from Pearson VUE are received. The following are the Pearson VUE institution codes for USF programs.

- VP9-M4-23 Ph.D. in Business Administration
- VP9-M4-04 Executive M.B.A.
- VP9-M4-97 M.B.A., Full Time
- VP9-M4-80 M.B.A., Part Time
- VP9-M4-21 M.B.A., USF Polytechnic Lakeland
- VP9-M4-01 M.B.A., USF Sarasota-Manatee
- VP9-M4-25 M.B.A., USF St. Petersburg
- VP9-M4-18 Masters in Accountancy
- VP9-M4-67 M.A. in Economics
- VP9-M4-86 M.S. in Finance
- VP9-M4-17 M.S. in Management
- VP9-M4-66 M.S. in Management Information Systems
- VP9-M4-40 MSM in Marketing
- VP9-M4-48 M.S. in Entrepreneur in Applied Technology
- VP9-4J-76 Health Administration, College of Public Health

** Applicants may not have to submit a GMAT if they have taken the GRE. Please contact your program of interest directly for additional information.

TOEFL (Test of English as a Foreign Language): [http://www.toefl.org](http://www.toefl.org)

Applicants whose native language is not English or who have not earned a degree in the United States must demonstrate proficiency in English by submitting TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, 213 on the computer-based test, or 550 on the paper-based test is required for admission to a graduate program. Applications submitted with TOEFL scores that do not meet the minimum requirements will be denied. The TOEFL requirement may be waived for admission if the applicant meets one of the following conditions:

- The applicant’s native language is English, or
- Has scored 500 or higher on the GRE Verbal Test, or
- Has earned a college degree at a U.S. institution of higher learning, or
- Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or
- Has scored 6.5 on International English Language Testing System (IELTS) [http://www.ielts.org/](http://www.ielts.org/)

PLEASE NOTE: International students whose native language is not English and who want to be considered for a teaching assistantship must show proficiency in spoken English even if their TOEFL has been waived for admission to a graduate program. They will need to score at least a 26 on the spoken portion of the Internet-based TOEFL (iBT) or a 50 on the SPEAK test administered through INTO-USF.

☐ 5. **Conduct Clearance Policy** (Legal Disclosure Statement): All graduate applicants are required to answer the Conduct Clearance questions of the graduate application. The applicant will not be notified of the admission decision until answers to the two questions have been
received and cleared by the Vice President of Student Affairs or his/her designee (Associate Dean of Students), if warranted.

6. Residency Policy:

EDITOR’s Note: New State Laws are in effect that impact Residency. Read more at: http://www.grad.usf.edu/graduate-admissions-residency.asp. Applicants desiring classification as Florida residents for tuition paying purposes must sign and complete the Florida Residents section of the Florida Residency Classification page of the Graduate Application. Incomplete or unsigned forms will be classified as non-Florida residents. The Office of Graduate Admissions will classify applicants as Florida residents if they have provided documentation that verifies they began living in Florida at least twelve months prior to the first day of classes of their admitted term of entry. Additional documentation other than what is required may be requested in some cases. All documentation is subject to verification. Applicants are responsible for checking their residency classification when admitted to the University of South Florida. The residency classification is noted on the official acceptance letter. If applicants feel that their initial classification is in error, they have until the last day of the term to contact the appropriate admissions office and request a re-evaluation. After students have completed their first semester of study they may seek to have their residency reconsidered. They may submit a Request for Reclassification Form with the Office of the Registrar. This must be filed by the 5th day of classes for the term being requested.

Independent Student:
A student who meets any one of the following criteria shall be classified as an independent student for the determination of residency for tuition purposes:

1. The student is 24 years of age or older by the first day of classes of the term for which residency status is sought at a Florida institution;
2. The student is married;
3. The student has children who receive more than half of their support from the student;
4. The student has other dependents who live with and receive more than half of their support from the student;
5. The student is a veteran of the United States Armed Forces or is currently serving on active duty in the United States Armed Forces for purposes other than training;
6. Both of the student’s parents are deceased or the student is or was (until age 18) a ward/dependent of the court;
7. The student is working on a master’s or doctoral degree during the term for which residency status is sought at a Florida institution; or
8. The student is classified as an independent by the financial aid office at the institution.

Evidence that the student meets one of these criteria will be requested by the higher education institution.

Florida residency statutes require at least two documents, dated 12 months prior to the first day of class for the entry term sought, to validate a claim for Florida residency for tuition purposes. Documents are classified in two tiers – at least one of the required documents must be from the First Tier.

FIRST TIER DOCUMENTATION (at least one of the two documents submitted must be from this list)

1. Florida Driver’s License (driver’s licenses from others states must be relinquished) or a State of Florida ID card (if there is no evidence of ties to another state)
2. Florida Voter’s Registration card
3. Florida Vehicle Registration (proof of previous registration can be obtained from the local tag office)
4. Declaration of Domicile in Florida (12 months from the date the document was sworn and subscribed as noted by the Clerk of the Circuit Court)
5. Proof of purchase of a permanent home in Florida that is occupied as a primary residence of the claimant
6. Proof of permanent full-time employment in Florida (one or more jobs for at least 30 hours per week for a 12-month period – letter from employer on official letterhead required)
7. Benefit histories from Florida agencies or public assistance programs

SECOND TIER DOCUMENTATION (may be used in conjunction with one document from First Tier)

1. Florida professional or occupational license
2. Florida incorporation
3. Proof of membership in Florida-based charitable or professional organizations
4. Utility bills and proof of 12 consecutive months of payments
5. Lease agreement and proof of 12 consecutive months of payments
6. State or court documents evidencing legal ties to Florida

Application Documents Access/Forward/Return Policy
No application, test scores, transcripts, letters of recommendations, or other documents submitted with the application packet will be returned to the applicant or forwarded to another institution/third party. The Office of Graduate Admissions applicant file is not to be released to the applicant or other third parties. Requests, subpoenas, or court orders are to be forwarded to the Office of the General Counsel after review by the Assistant Director of Graduate Admissions. Applicants once admitted and enrolled during the term of admission may request access to their student file at the Office of the Registrar. Letters of Recommendation that the applicant has waived the right to view (indicated on Request for Recommendation Form) are not to be given, copied or viewed by the applicant or third parties. Requests for degree/enrollment verification information should be referred to the Office of the Registrar.

The Office of Graduate Admissions graduate application files may be copied and released to USF staff conducting legitimate University business.

Additional Requirements of Programs (if applicable)
Many programs require additional application materials such as resumes, writing samples, or letters of recommendation. These items may be sent as part of the overall graduate application packet or directly to the appropriate department/program. These materials will be forwarded to the appropriate program if sent with the application packet, but they DO NOT become part of the applicant’s permanent file. Therefore, the Office of Graduate Admissions does not track them.

Final Admission Criteria
Applicants accepted for admissions whose official documents (transcripts and/or test scores) have been received by the Office of Graduate Admissions are admitted as “Final.” The admission file is complete.

Provisional Admission Criteria
Applicants accepted for admission whose official documents (transcripts and/or test scores) have not been received by the Office of Graduate Admissions are admitted provisionally pending receipt of these missing items. The required transcripts and/or test scores must be received before a second semester registration is permitted. During the first semester, the Office of Graduate Admissions will place a registration hold on the student’s file. When the missing documents are provided to the Office of Graduate Admissions the registration hold will be removed and the student’s admission status will become final.

Exception Admission Criteria
The University may admit up to 10% of new enrollees as exceptions to the Board of Trustees minimum requirements. To be considered for an exception, applicants should present evidence that might account for the
previous academic record and demonstrate potential for academic success. Examples of this evidence include excellent letters of recommendation from trusted academicians, performance in graduate courses taken as a post-bachelor’s student, professional experience in the discipline for a period of time, etc. Each request for a 10% exception must include a statement describing the special circumstances of the applicant. It is the discretion of the program and college to accept exception application requests.

Conditional Admission Criteria
A program and/or college may admit applicants conditionally pending satisfaction of remedial or program requirements. These conditions may include receipt of satisfactory scores on standardized tests, attendance in and satisfactory grade in specific core or remedial courses, etc. It is the responsibility of the College/Graduate Program to track the student’s satisfactory completion of the conditions and to notify the Graduate Admissions Office when conditions are met. Failure to satisfy those conditions by the deadline established by the program will result in academic dismissal from the program. The College/Graduate Program will submit a Dismissal Form (http://www.grad.usf.edu/student-forms.asp) to the Graduate School.

Deferment of Admission Request
An applicant’s acceptance is granted for the semester and the particular program specified in the official acceptance notification. The applicant must validate that acceptance by enrolling for that semester. Applicants who fail to validate their admission may contact the Graduate Program Director and request a Deferment of Admission. This request must be made in writing within 12 months of the initial requested entry date. If a request for Deferment of Admission is not received in the specified time, a new application and fee must be submitted. Deferment requests must also be received no later than the program or University application deadline for the semester desired, whichever is earlier. Applicants who were admitted provisionally upon receipt of official test scores and/or transcripts must supply those missing items prior to having their deferment decision processed by the Office of Graduate Admissions. International applicants must also provide a new financial statement dated no earlier than 6 months before the requested date of entry.

Update of Admission Request
If admission has not been granted because of a late application or missing credentials, the applicant must request that the Office of Graduate Admissions update the application for a future semester and specify the new enrollment date. This request must be made in writing within 12 months of the initial requested entry date and must be received no later than the program or University application deadline for the semester desired, whichever is earlier. Applications are held for only 12 months. If a request for change in entry date is not received in the specified time, a new application and fee must be submitted. The Office of Graduate Admissions will not process any update requests without first receiving all official test scores and/or transcripts.

Denial of Admission / Appeal for Reconsideration Criteria
Applicants denied admission will be given timely notice by email or in writing. Denied applicants who meet the minimum standards may write the Graduate Program Director of the program to which they applied within 30 days of the date of denial to request reconsideration. The request should present additional evidence of potential for academic success at USF and contain reasons why reconsideration is warranted. Applicants denied admission to a degree program are eligible to enroll as special (non-degree seeking) students. Non-degree seeking applications must be submitted to the Office of the Registrar.

Readmission Policy
A graduate student who is not registered and enrolled for a minimum of six (6) credits in a 12 month period is automatically placed in inactive status. Students must be readmitted to the degree program to continue their studies. Readmission is at the discretion of the program and is not guaranteed.
Eligibility for readmission:

- Students who have been Academically Dismissed from the University for Academic Dishonesty may not apply to any graduate program at USF.
- Deadlines: The readmission application and all supporting materials must be submitted by the application deadline.

Additional Requirements:

- **Graduate Application:** In order to be considered for readmission, students must submit a new graduate application, application fee, and any required supporting materials.
- **Test Scores:** The Department may require new Test scores (GRE/GMAT/TOEFL) and transcripts.
- **Catalog Year:** Students who are readmitted must meet the admission standards and degree requirements and policies in the Graduate Catalog in effect at the time of readmission.
- **Prior Coursework taken at USF:** Coursework taken at USF prior to readmission may be accepted toward the degree requirements at the discretion of the Department. However, all coursework taken when previously enrolled as a graduate student is included in the overall GPA. Refer to the Time Limit Policy for time limits on coursework applied toward the degree. Students who completed required coursework and were previously in doctoral candidacy do not have to retake courses older than eight years unless determined by the program. Students may be required to take new coursework at the program’s discretion. The decision to accept courses previously transferred to USF and applied toward the degree is at the discretion of the program. There is no time limitation for waived hours from a completed master’s degree used toward a doctoral degree.
- **Enrollment:** Students must enroll for the semester in which their readmission is effective.
- **Doctoral Candidacy:** Students who are readmitted to a doctoral program who were previously admitted to doctoral candidacy may retain their candidacy status at the discretion of the Department, College, and Graduate School. Students must file an approved request for Readmission to Doctoral Candidacy Form through Graduate School procedures. Once approved, the Candidacy date is effective as of the semester of readmission.
- **Dissertation Hours:** Students must enroll for two hours of dissertation per the enrollment policy, plus an additional three dissertation hours for a total of five dissertation hours in their first semester. Programs may require additional hours.

The Readmission policy does NOT apply to inactive students wishing to enroll in a program other than the original admitting program. These students must submit an application for the new program of interest. Transcripts of any work completed while not attending USF may be required.

**Change of Program Request**
Change of Program Request will NOT be considered for graduate students in their first semester of study. Only a continuing graduate student enrolled for study in a particular program who wishes to change to another program at the same or lower level may complete the Change of Program Request. It is up to the discretion of the student’s new program to determine if a Change of Program is appropriate and will be granted. Students may obtain the form at [http://www.grad.usf.edu/student-forms.asp](http://www.grad.usf.edu/student-forms.asp). This form must be signed both by the current program and the new program, after which it must be submitted to the Graduate School for approval. If approved by the Graduate School, the change of program form is then sent to the Registrar for processing. **NOTE:** Some programs
may require another application to be submitted because the Change of Program Request Form does not contain sufficient information for them to make a decision. You should check with the new program before completing any paperwork.

**Students with Disabilities Policy**

Applicants with disabilities apply for admission under the same guidelines as other applicants. Applicants believing that a disability has had an impact on grades, course choice, or standardized admission test scores, should request consideration of this during the admissions process. Applicants requesting substitution of departmental guidelines will need to contact the appropriate department chairperson. Please submit supporting documentation when requesting a disability exception. Applicants bear the responsibility for providing documentation of their disabilities.

The University reviews documentation and determines if students are eligible for services and accommodations because of disabilities. The Office of Student Disability Services is charged with the task of determining eligibility. Accommodations and services are not provided on a retroactive basis. Approval must be given prior to receiving services or accommodations. The process begins when students provide documentation of disability and meet with a coordinator in the Office of Student Disability Services to request in writing services and accommodations. Any faculty members or students who have questions about this process are encouraged to contact the Office of Student Disability Services at (813) 974-4309 or visit the website at [http://www.sds.usf.edu/](http://www.sds.usf.edu/).
Section 5
Registration and General Information

Office of the Registrar

Website: http://www.registrar.usf.edu/
E-mail: regquest@admin.usf.edu
Phone: 813-974-2000
TTY: 813-974-4488

The Office of the Registrar maintains the official academic records for all students and course registrations for currently enrolled students. Students are encouraged to contact the Office of the Registrar about general questions concerning academic policies and procedures of their current registration or academic record. Note: Each student must be aware of the University's academic policies and procedures insofar as they affect him/her.

OASIS

Students use a self-selected personal identification number (PIN) in the University's Online Access Student Information System (OASIS) to:

- view registration appointment information
- view registration hold information
- view the Schedule of Classes
- register and drop/add courses
- view their grades
- request address changes
- request privacy
- request transcripts

Registration Information


Register for Classes

To register for classes students must login to the OASIS system. Current course offerings and registration requirements are listed in the Schedule of Classes. Note that some courses may require permits from the department for registration.

OASIS: http://usfonline.admin.usf.edu/
Schedule: http://www.registrar.usf.edu/ssearch/search.php

Late Registration

Degree-seeking students who do not register prior to the first day of classes may late-register the first week of classes. A late registration fee is charged during this week. To avoid cancellation of registration, fees and tuition are due and payable for all registered courses of record on the fifth day of classes (end of drop/add period). Students are responsible for verifying the accuracy of their course registration by the end of the drop/add period.
(i.e. by the fifth day of classes). In the event there are courses incorrectly listed or missing on the record, students should go into OASIS and make the necessary corrections. Course registration not corrected by the end of the fifth day of classes will result in liability of tuition and fees. If courses need to be added or dropped after the fifth day of classes, refer to the Add / Drop sections of the Catalog.

**Medical Requirements for Registration**

Student Health Services is charged with the responsibility of evaluating and maintaining medical requirements for registration for all University of South Florida students. Florida law (Section1006.69 Florida statute) requires that all admitted Florida university students be aware of MENINGOCOCCAL MENINGITIS and HEPATITIS B, two diseases that may be prevented by vaccination. The vaccines for each of these diseases are available at the University of South Florida Student Health Services. Please refer to [http://www.shs.usf.edu/immunization/medical-requirements-for-registration.aspx](http://www.shs.usf.edu/immunization/medical-requirements-for-registration.aspx) for further information. In addition, students residing in on-campus housing must present (a) proof of vaccination against MENINGOCOCCAL MENINGITIS, and (b) proof of vaccination against HEPATITIS B or sign a declination of HEPATITIS B proof.

Please refer to [http://www.shs.usf.edu/immunization/immunization-forms.aspx](http://www.shs.usf.edu/immunization/immunization-forms.aspx) to access the forms.

According to Florida Administrative Code Rule 6C-6.001(5) "Each student accepted for admissions shall, prior to registration, submit on a form, provided by the institution, a medical history signed by the student." As a prerequisite to matriculation or registration, the State University System of Florida requires all students born after 1956 to present documented proof of immunity to MEASLES (Rubeola) and RUBELLA (German Measles).

New admits will be provided a Medical History / Immunization Form with their admissions letter. Upon request, Student Health Services will mail or fax a Medical History/Immunization Form to you, or you may download a form from the Student Health Services Forms page and print it on a **laser or inkjet** printer. In order to register, this form must be completed, signed, and returned to:

Student Health Services  
University of South Florida  
4202 East Fowler Avenue, SHS 100  
Tampa, FL 33620-6750  
Fax: (813) 974-5888  
Telephone: (813) 974-4056

For Frequently Asked Questions on the Immunization requirements go to:  

**Administrative Holds**

A student may be placed on administrative hold by failure to meet obligations to the University. When a student is on administrative hold, he/she may not be allowed to register, receive a diploma, or receive a transcript. Settlement of financial accounts must be made at the University Cashier’s Office. Each student placed on administrative hold should determine from the Office of the Registrar which office placed him/her in this status and clear the obligation with that respective office.

**Cancellation of Registration for Non-Payment**

USF Regulation USF4-010, [http://generalcounsel.usf.edu/regulations/pdfs/regulation-usf4.010.pdf](http://generalcounsel.usf.edu/regulations/pdfs/regulation-usf4.010.pdf)
Equal Opportunity Policy

Diversity and Equal Opportunity: Discrimination and Harassment Policy:

DEO website: http://usfweb2.usf.edu/eoa/
Phone: 813-974-4373

The University of South Florida system (USF system) is a diverse community that values and expects respect and fair treatment of all people. The USF system strives to provide a work and study environment for faculty, staff and students that is free from discrimination and harassment on the basis of race, color, marital status, sex, religion, national origin, disability or age, as provided by law. The USF system protects its faculty, staff, and students from discrimination and harassment based on sexual orientation. The USF system is also committed to the employment and advancement of qualified veterans with disabilities and veterans of the Vietnam era. Discrimination, harassment and retaliation are prohibited at the University, and complaints of such conduct must be filed with the Diversity and Equal Opportunity Office (“DEO”). DEO will review such complaints and provide appropriate response including counseling, mediation, and/or referral for disciplinary action, up to and including termination from employment and/or expulsion from the University. A student or employee who believes that he or she has not been treated in accordance with the University’s Equal Educational and Employment Opportunity Policy or its Policy on Sexual Harassment may file an Equal Opportunity Complaint. Additional information about these procedures may be obtained from the Diversity and Equal Opportunity Office, ADM 172, or by calling 974-4373 or 813-974-1510 (TDD). It is prohibited for any administrator, supervisor, or other employee of USF to take any retaliatory action against an individual who, in good faith, has made a charge, testified, assisted, or participated in any manner in an investigation, proceeding, or hearing under provisions of applicable law.

Academic Term and Student Information

Semester System
USF operates on a semester system. Semesters begin in August and January with Summer Sessions beginning in May and June. See Academic Calendar for appropriate dates.

Academic Load
See Enrollment Requirements in the Academic Policies Section

Academic Standing

Class Standing - A student’s class standing is determined by the number of credits he/she has earned without relation to his/her GPA.

6M - Graduate student admitted to Master’s Degree Program
6A - Graduate student admitted to Specialist Degree Program
6D - Graduate student admitted to a Doctoral Degree Program (not eligible to register for dissertation hours)
6C - Graduate student admitted to Doctoral Candidacy (eligible to register for dissertation hours)
7A-7D 1st-4th year professional program (M.D.) or post-doctoral status

Also see “In good standing” in the Academic Policies Section

Student Definitions

Degree Seeking Students:
Students who have been accepted into a degree program
**Graduate Certificate Seeking Students:**
Students who have been accepted into a Graduate Certificate program. Students who are non-degree seeking, but who are admitted to a Graduate Certificate may register during the same registration period as Degree-Seeking Students. Up to 12 hours of the coursework taken as a Graduate Certificate Seeking Student may be applied to a degree program. For more information about Graduate Certificates and specific requirements, refer to Section 11 Graduate Certificates or go to the Graduate Certificate website at [http://www.outreach.usf.edu/gradcerts/](http://www.outreach.usf.edu/gradcerts/).

**Non-Degree Seeking Students:**
Students who have not been accepted into a degree or Graduate Certificate Program. Non-Degree Seeking students may enroll and enter classes on a space available basis by obtaining appropriate approval from the degree-granting college or academic unit in which the courses are offered. Non-Degree Seeking students must meet all prerequisites for courses in which they wish to enroll. Certain classes are available only to degree seeking students and may not be available for Non-Degree Seeking students.

Should a student be accepted into a graduate degree program, no more than 12 hours of USF credit earned as a Non-Degree Seeking student may be applied to satisfy graduate degree requirements. All coursework transferred into the graduate program must have a grade of B or better. Any application of such credit must be approved by the degree-granting college and must be appropriate to the program. For more information, refer to the Transfer of Credit policy in the Academic Policies Section. Prior to completing twelve (12) hours in a specific degree program it is strongly recommended that a Non-Degree Seeking Student apply for admission and be accepted to the degree program to continue taking courses in the program. Programs may have additional requirements, so check with the program of interest for more information.

**Transient Students:**
USF 10.001 Transient Student Policy:

The SUS Transient Student program enables a graduate student to take advantage of resources available on other SUS campuses. A Transient Student, by mutual agreement of the appropriate academic authorities in both the sponsoring and hosting institutions, receives a waiver of admission requirements and application fee at the host institution and a guarantee of acceptance of earned credits by the sponsoring institution. A graduate advisor, who will initiate a visiting arrangement with the appropriate faculty of the host institution, must recommend a Transient Student. USF degree-seeking students who wish to enroll at another regionally accredited institution MUST HAVE PRIOR WRITTEN APPROVAL from their college academic advisor to receive credit for courses taken. For more information, contact the Registrar’s Office at (813) 974-2000.

**Transient Student Form:** [http://www.registrar.usf.edu/forms/TSF2008-04-07_16_17_06.pdf](http://www.registrar.usf.edu/forms/TSF2008-04-07_16_17_06.pdf)

**Graduate Assistantships (GA), Research Assistantships (RA), and Teaching Assistantships (TA):**
Graduate Assistantships are intended to recruit quality students to graduate study at USF and to enhance the graduate learning experience. Graduate assistantships exist within academic departments or other university offices on campus. Graduate assistants may teach, conduct research, or perform other tasks that contribute to the student’s professional development. Graduate students may be classified as Graduate Assistants (GAs), Graduate Teaching Assistants/Associates (GTAs), Graduate Instructional Assistants (GIAs), and/or Graduate Research Assistants/Associates (GRAs). All graduate assistants at USF work under a contract negotiated by the Graduate Assistants United (GAU) and the USF Board of Trustees. The GAU is the labor union certified as the exclusive bargaining agent for graduate assistants at USF. To receive an assistantship, the graduate student must meet the following eligibility requirements:
- Accepted in a graduate degree program;
- Maintain an overall minimum grade point average (GPA) and degree program GPA of 3.00;
- Enrolled full-time during the semester(s) appointed as a graduate assistant;
- For teaching assistantships, demonstrate proficiency in spoken English (if student is not from an English speaking country).

Full-time enrollment is considered nine (9) graduate credit hours in the fall semester, nine (9) graduate credit hours in the spring semester, and six (6) graduate credit hours in the summer semester. If a graduate assistant is enrolled in the last semester of his/her program of study, the number of registered semester hours may be less than the full-time requirement. Graduate assistants must comply with all Graduate School enrollment requirements to retain their assistantship as stated in the Graduate School Catalog at http://www.grad.usf.edu/catalog.asp.


**Student Identification Card (USFCard) Policy**

University policy requires all students obtain and carry the USFCard while on campus. The USFCard is primarily used for identification, for verification of USF status, and for using University services, such as the Library, the purchase of parking decals, obtaining passes for University sporting and theatrical events, and other related events/services. USFCards may be obtained at the USFCard Center on each campus. Legal Identification (passport, driver’s license, or State/ Government Photo Identification card) must be presented to obtain a USFCard. For the issuance of a family card, the student (with their USFCard) must accompany the family member(s) who must also provide legal identification. All privileges extended to the family(s) are discontinued when the Sponsor is no longer a student. Use of the USFCard by anyone other than the person to whom it was issued is strictly prohibited. The cardholder is responsible for any and all losses associated with their card. Fees for issuance of the first and replacement cards are in accordance with USF 5.018. Refer to the fee schedule for costs of each additional family member card. Financial services, long distance telephone services, and other features are options available at the user’s discretion. USFCards are the property of the University of South Florida and must be returned on request.

**Student Records Policy**

Pursuant to the provisions of the Family Educational Rights and Privacy Act ("FERPA"); 20 USC Par. 1232g), 34 CFR Par. 99.1 et seq, Florida Statutes Sub. Par. 228.093 and 240.237 and USF Rule 6C4-2.0021, Florida Administrative Code, students have the right to:

1. Inspect and review their education records;
2. Privacy in their education records;
3. Challenge the accuracy of their education records; and
4. Report violations of FERPA to the FERPA Office, Department of Education, 400 Madison Avenue, SW, Washington, D.C. 20202 and/or bring actions in Florida Circuit Court for violations of USF 4-2.001, Florida Administrative Code.

Copies of the University’s student records policy, USF 2.0021, may be obtained from the Office of the Registrar or the General Counsel.
Academic Record
The student’s academic record shall not be changed after the student has graduated. Except in cases of administrative error, the student’s academic record shall not be changed once the semester has rolled.

Release of Student Information
Pursuant to requirements of the Family Educational Rights and Privacy Act (FERPA), the following types of information, designated by law as “directory information,” may be released via official media of USF (according to USF policy): Student name, local and permanent addresses, telephone listing, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, full- and part-time status, and the most recent previous educational agency or institution attended, and other similar information. The University Directory, published annually by the University, contains only the following information, however: student name, local and permanent address, telephone listing, classification, and major field of study. The Directory and other listings of “directory information” are circulated in the course of University business and, therefore, are accessible to the public, as well as to students, faculty, and staff. Students must inform the USF Office of the Registrar in writing (forms available for that purpose), if they wish directory information to be withheld. Such requests must be received within the first two (2) weeks of the semester and will remain in effect until the student has not been enrolled at USF for three (3) consecutive terms. Notification to the University of refusal to permit release of “directory information” via the University Directory must be received no later than the end of the first week of classes in the Fall Semester.

Exclusions
Members or former members of the faculty who hold or have held the rank of Assistant, Associate, or Full Professor are not eligible to be granted degrees from USF, except upon prior authorization of the Graduate School and the Provost. In cases where a member of the immediate family of a faculty member is enrolled in a graduate degree program, the faculty member may not serve on any advisory or examination committee or be involved in any determination of academic or financial status of that individual.

Course Information

Availability of Courses
USF does not commit itself to offer all the courses, programs, and majors listed in this catalog unless there is sufficient demand to justify them. Some courses may be offered only in alternate semesters or years, or even less frequently if there is little demand.

Course Attendance at First Class Meeting – Policy for Graduate Students
For structured courses, 6000 and above, the College/Campus Dean will set the first-day class attendance requirement. Check with the College for specific information. This policy is not applicable to courses in the following categories: Educational Outreach, Open University (TV), FEEDS Program, Community Experiential Learning (CEL), Cooperative Education Training, and courses that do not have regularly scheduled meeting days/times (such as, directed reading/research or study, individual research, thesis, dissertation, internship, practica, etc.). Students are responsible for dropping undesired courses in these categories by the 5th day of classes to avoid fee liability and academic penalty. (See USF Regulation – Registration - 4.0101, http://generalcounsel.usf.edu/regulations/pdfs/regulation-usf4.0101.pdf)

Attendance Policy for the Observance of Religious Days by Students
In accordance with Sections 1006.53 and 1001.74(10) (g) Florida Statutes and Board of Governors Regulation 6C-6.0115, the University of South Florida (University/USF) has established the following policy regarding religious observances: http://generalcounsel.usf.edu/policies-and-procedures/pdfs/policy-10-045.pdf.
Cross-listing 4000/6000 Courses

It is expected that the 4000 and 6000 courses will have distinct syllabi demonstrating different depth and breadth of the subject matter as reflected in the course requirements. The courses presuppose different audiences, and the intention is to offer them at distinct levels.

Course Descriptions

For a listing of the most current, approved course descriptions refer to the Search-a-Bull Database available online at http://www.ugs.usf.edu/sab/sabs.cfm or in the course description listing in the Graduate Catalog.

Adds

After a student has completed his/her registration on the date assigned, he/she may add a course(s) during the drop/add week (i.e. through the fifth day of classes) through the OASIS system. Courses may be added with instructor approval and verification up to the last day to withdraw without academic penalty. See Academic Calendar for deadlines. Courses may not be added after the deadline to withdraw without academic penalty or retroactively except in cases of University Administrative error.

Drops

A student may drop a course(s) during the following times:

1. **During regular registration and the drop/add periods (first five days of classes).** No entry of the course(s) will appear on any permanent academic records and full refund of fees is due for course(s) dropped within those periods.

2. **Between the second and tenth week of the semester (except for summer sessions - see the Summer Schedule of Classes for dates).** Registration fees and tuition must be paid for the course(s) and the academic record will reflect a “W” grade for the dropped course(s).

3. **Following the tenth week deadline if the request meets one of the following exceptions:**
   a) Illness of the student of such severity or duration to preclude completion of the course(s) as confirmed in writing by a physician (M.D.).
   b) Death of the student or death in the immediate family (parent, spouse, child or sibling) as confirmed by documentation (death certificate, obituary) indicating the student’s relationship to the deceased.
   c) Involuntary call to active military duty as confirmed by military orders.
   d) A situation in which the University is in error as confirmed by an appropriate University official.
   e) Other documented exceptional circumstances beyond the control of the student which precluded completion of the course(s) accompanied by explanatory letter and supporting documentation.

Courses may not be dropped after the last day of classes except in cases of University Administrative error.

Fee Adjustment Options

Students who receive approval to drop a course during the second through tenth week of classes are liable for tuition and fees. However, the student may apply for a Fee Adjustment through the Registrar’s Office if the student has any of the exceptional circumstances noted above in item 3. The Fee Adjustment form may be submitted after the petition to drop is approved and processed. The Registrar will determine if a fee/tuition refund is applicable.
Deletes
A “delete” completely removes the course from the record with no history that it was ever part of the record. Courses will not be deleted from a student’s record except in cases of University Administrative error. Requests for course deletions must be submitted only during the semester in which the error has occurred and only with written explanation from college faculty verifying the error. Such requests must be submitted by the last day of classes and approved by the College Dean or designee and the Graduate School Dean or designee. Retroactive requests for course deletions will not be approved. Faculty and students are encouraged to review course enrollment to verify accuracy of registration. In the event of extenuating circumstances such as documented medical emergencies, military leave or University error, students may request special consideration for deletions or retroactive deletions in writing to the Dean of the Graduate School.

Retroactive Actions
Requests for retroactive actions will no longer be considered / approved. Also see Academic Record.

Auditing Privileges and Fees
A student who wishes to sit in on a class to review the course material may do so; however, the student is not allowed to take exams, earn grades, or receive credit. The student’s status for that class is an audit and his/her presence in the classroom is as a listener. Audit status must be obtained only during the first five days of the term by filing an Audit Form and a date-stamped permit from the college/department on the campus where the course is being offered, with the Registrar’s Office. IN-STATE fees are assessed for all audit courses. Procedure and forms for requesting to audit are available on the Registrar’s website.

Cancellation of Registration before First Class Meeting
Students may cancel their registration by notifying the Office of the Registrar in writing prior to the first day of classes. If fees have already been paid, the student may request a full refund of fees and tuition from the Office of Purchasing and Financial Services.

Withdrawal (from course registration)
A student may withdraw from the University without academic penalty during the first nine weeks of any term (except for Summer Sessions). He/she must submit a completed Withdrawal Form to the Office of the Registrar. No entry is made on the academic record for withdrawals submitted during the first week of the term. All subsequent withdrawals (through the ninth week of classes in the fall and spring semesters; see the Academic Calendar for summer deadlines) are posted to the academic record with “W” grades assigned to the courses. Withdrawal deadlines for the summer sessions are listed in the Academic Calendar (http://www.registrar.usf.edu/enroll/regist/calendt.php#0910) and are published in the Schedule of Classes for the Summer Term. Students who withdraw may not continue to attend classes. Students who withdraw during the drop/add period as stated in the Academic Calendar may receive a full refund of fees and tuition. All refunds must be requested in writing from the Office of Purchasing and Financial Services. No refund is allowed after this period except for specified reasons.

Voluntary Withdrawal (from the program)
A student may voluntarily withdraw from their graduate degree program. A Voluntary Withdrawal cannot be retroactive. The effective date of the withdrawal will be entered into the student’s record by the Office of the Registrar as the first business day after the end of the semester. Students who wish to withdraw must submit a Voluntary Withdrawal Form, available from the Graduate School (www.grad.usf.edu). Once processed, the student’s status will be changed from Graduate Degree Seeking to Non-Degree Seeking. A change to Non-Degree Seeking status could adversely impact financial aid. Questions regarding this should be directed to the Financial Aid Department at (813) 974-4700. The student will remain financially and academically responsible for any course(s) they have registered for. The student may request to drop or delete courses they are registered for by submitting a Graduate School Petition.
Academic Dismissal

Students may be academically dismissed from their graduate degree program for a variety of reasons. Once processed, the student's status will be changed from Graduate Degree Seeking to Non-Degree Seeking. A change to Non-Degree Seeking status could adversely impact financial aid. Dismissal cannot be retroactive. The effective date will be entered into the student's record by the Office of the Registrar as the First Business Day after the end of the Semester, except in cases of academic dismissal due to academic dishonesty or disruption of academic process. Some of the reasons for academic dismissal include:

- Failure to successfully satisfy requirements to meet Conditional Admission by the deadline established by the program.
- Receiving an “FF” grade
- Failure to maintain “good standing”
- Failure to make satisfactory progress

To be readmitted, the student will need to reapply for admission, meeting the admission criteria in place at the time. Graduate students who are assigned an “FF” grade will be academically dismissed from the University and will not be eligible to apply to any graduate program at USF.

Parking Information and Campus Maps

For information on USF Parking Services, policies, and regulations, refer to:

USF Parking and Transportation Services website:  http://usfweb2.usf.edu/parking_services/default.asp
Campus maps are available online at:  http://usfweb2.usf.edu/parking_services/maps.asp

USF Regulations:
4.00210 through 4-00219
4-0023 through 4-0029, FAC, available at:  http://generalcounsel.usf.edu/regulations/current-regulations.asp
Section 6
Tuition, Fees, and Financial Information

Tuition Information

For tuition information refer to the link: http://usfweb2.usf.edu/finaid/09-10/0910_budget.htm. All tuition and fees are subject to change, without prior notice. For information on Residency for tuition purposes, refer to the Florida Residency Policy.

All registration fees and all courses added during the drop/add period must be paid in full by the payment deadline date specified in the current Schedule of Classes. Registration fee payment may be made in person or mailed to the Cashier’s office. Students not on an authorized deferred payment plan and who have not paid their registration fees in full by the published deadline will have their registrations canceled. A student will not receive credit for any courses taken during that semester. Students who are allowed to register in error may have their registration canceled. Any fees paid will be refunded or credited against any charges due the University.

Tuition Waivers, Non-Resident

Veteran Deferment Benefits

Students receiving VA benefits who apply in writing no later than the specified date for the 60-day deferment of fees from the Office of Veteran’s Services must pay registration fees in full by the date posted online. For more information contact USF Veteran’s Services: at (813) 974-2291 or http://usfweb2.usf.edu/vetserv/

Financial Aid

Financial assistance is available through the Office of Financial Aid. Students requiring such assistance should contact http://www.usf.edu/finaid for information. Students eligible for tuition waivers (through assistantships, or employee benefits, etc.) should contact the department and/or college providing the waiver for information. Also see USF Regulation USF 6-0121 and USF 6-012.

Office of Financial Aid Policy on Refunds and Repayments

Special Fees, Fines, and Penalties

USF Regulation USF4-017, at http://generalcounsel.usf.edu/regulations/pdfs/regulation-usf4.0107.pdf
**Section 7**  
**Academic Policies and Regulations**

**Academic Policy Information**

For USF Regulations refer to [http://generalcounsel.usf.edu/regulations/current-regulations.asp](http://generalcounsel.usf.edu/regulations/current-regulations.asp)  

**Student Responsibilities**

The University, the Colleges, and the degree programs have established certain academic requirements that must be met before a degree is granted. While advisors, directors, department chairpersons, and deans are available to assist the student meet these requirements, it is ultimately the responsibility of the student to be acquainted with all policies and regulations, and be responsible for completing requirements. If requirements for graduation have not been satisfied, the degree will not be granted. The information presented here represents the University Academic Policies. Colleges and departments may have additional requirements. Check with your College Graduate Coordinator or your Department Program Director for more information. Courses, programs, and requirements described in the Catalog may be suspended, deleted, restricted, supplemented, or changed at any time at the sole discretion of the University and the Board of Trustees. For a list of current course descriptions, refer to the Search-A-Bull database online at [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm).

**Student Conduct**

Members of the University community support high standards of individual conduct and human relations. Responsibility for one’s own conduct and respect for the rights of others are essential conditions for academic and personal freedom within the University. USF reserves the right to deny admission or refuse enrollment to students whose actions are contrary to the purposes of the University or impair the welfare or freedom of other members of the University community. Disciplinary procedures are followed when a student fails to exercise responsibility in an acceptable manner or commits an offense as outlined in the Student Conduct Code. Refer to the USF 6.0021, Student Code of Conduct at [http://generalcounsel.usf.edu/regulations/pdfs/regulation-usf6.0021.pdf](http://generalcounsel.usf.edu/regulations/pdfs/regulation-usf6.0021.pdf)

**Academic Integrity of Students**

Reference USF Regulation 3.027 - The following is the portion of the Regulation pertaining to graduate students.

To read the entire Regulation, including the sections pertaining to undergraduate students, go to: [http://generalcounsel.usf.edu/regulations/pdfs/regulation-usf3.027.pdf](http://generalcounsel.usf.edu/regulations/pdfs/regulation-usf3.027.pdf)
(1) **Fundamental principles:**

Academic integrity is the foundation of the University of South Florida’s (University/USF) commitment to the academic honesty and personal integrity of its University Community. Academic integrity is grounded in certain fundamental values, which include honesty, respect and fairness. Broadly defined, academic honesty is the completion of all academic endeavors and claims of scholarly knowledge as representative of one’s own efforts. Knowledge and maintenance of the academic standards of honesty and integrity as set forth by the University are the responsibility of the entire academic community, including the instructional faculty, staff and students.

(2) **General Policies:**

The following policies and procedures apply to all students, instructional faculty, and staff who participate in administration of academic classes, programs and research at the University of South Florida. This regulation asserts fairness in that it requires notice to any student accused of a violation of academic integrity and provides a directive for discussion between the instructor and student to seek a fair and equitable resolution. If a fair resolution is not accomplished in this discussion, this regulation allows the student continued rights of due process under the academic grievance procedures based upon the preponderance of the evidence. The policies described below are the only policies and procedures that govern violations of academic integrity at the University and supersede any previous policies or regulations.

(3) **Violations of Academic Integrity: Undergraduate and Graduate**

Behaviors that violate academic integrity are listed below, and are not intended to be all inclusive.

(a) **Cheating**

**Definition:** *Cheating* is using or attempting to use materials, information, notes, study aids, or other assistance in any type of examination or evaluation which have not been authorized by the instructor.

**Clarification:**

1. Students completing any type of examination or evaluation are prohibited from looking at or transmitting materials to another student (including electronic reproductions and transmissions) and from using external aids of any sort (e.g., books, notes, calculators, photographic images or conversation with others) unless the instructor has indicated specifically in advance that this will be allowed.

2. Students may not take examinations or evaluations in the place of other persons. Students may not allow other persons to take examinations or evaluations in their places.

3. Students may not acquire unauthorized information about an examination or evaluation and may not use any such information improperly acquired by others.

4. Instructors, programs and departments may establish, with the approval of the colleges, additional rules for exam environments and behavior. Such rules must be announced in advance in a course syllabus or other advance written notice to students.

(b) **Plagiarism**

**Definition:** *Plagiarism* is intentionally or carelessly presenting the work of another as one’s own. It includes submitting an assignment purporting to be the student’s original work which has wholly or in part been created by another person. It also includes the presentation of the work, ideas, representations, or words of another person without customary and proper acknowledgement of sources. Students must consult with their instructors for clarification in any situation in which the need for
documentation is an issue, and will have plagiarized in any situation in which their work is not properly documented.

Clarification:
1. Every direct quotation must be identified by quotation marks or appropriate indentation and must be properly acknowledged by parenthetical citation in the text or in a footnote or endnote.

2. When material from another source is paraphrased or summarized in whole or in part in one’s own words, that source must be acknowledged in a footnote or endnote, or by parenthetical citation in the text.

3. Information gained in reading or research that is not common professional knowledge must be acknowledged in a parenthetical citation in the text or in a footnote or endnote.

4. This prohibition includes, but is not limited to, the use of papers, reports, projects, and other such materials prepared by someone else.

(c) Fabrication, Forgery and Obstruction

Definitions:
Fabrication is the use of invented, counterfeited, altered or forged information in assignments of any type including those activities done in conjunction with academic courses that require students to be involved in out-of-classroom experiences.

Forgery is the imitating or counterfeiting of images, documents, signatures, and the like.

Obstruction is any behavior that limits the academic opportunities of other students by improperly impeding their work or their access to educational resources.

Clarification:
1. Fabricated or forged information may not be used in any laboratory experiment, report of research, or academic exercise. Invention for artistic purposes is legitimate under circumstances explicitly authorized by an instructor.

2. Students may not furnish to instructors fabricated or forged explanations of absences or of other aspects of their performance and behavior.

3. Students may not furnish, or attempt to furnish, fabricated, forged or misleading information to university officials on university records, or on records of agencies in which students are fulfilling academic assignments.

4. Students may not steal, change, or destroy another student’s work. Students may not impede the work of others by the theft, defacement, mutilation or obstruction of resources so as to deprive others of their use.

5. Obstruction does not include the content of statements or arguments that are germane to a class or other educational activity.

(d) Multiple Submissions
Definition: Multiple submissions are the submissions of the same or substantially the same work for credit in two or more courses. Multiple submissions shall include the use of any prior academic effort previously submitted for academic credit at this or a different institution. Multiple submissions shall not
include those situations where the prior written approval by the instructor in the current course is given to the student to use a prior academic work or endeavor.

Clarification:
1. Students may not normally submit any academic assignment, work, or endeavor in more than one course for academic credit of any sort. This will apply to submissions of the same or substantially the same work in the same semester or in different semesters.

2. Students may not normally submit the same or substantially the same work in two different classes for academic credit even if the work is being graded on different bases in the separate courses (e.g., graded for research effort and content versus grammar and spelling).

3. Students may resubmit a prior academic endeavor if there is substantial new work, research, or other appropriate additional effort. The student shall disclose the use of the prior work to the instructor and receive the instructor’s permission to use it PRIOR to the submission of the current endeavor.

4. Students may submit the same or substantially the same work in two or more courses with the prior written permission of all faculty involved. Instructors will specify the expected academic effort applicable to their courses and the overall endeavor shall reflect the same or additional academic effort as if separate assignments were submitted in each course. Failure by the student to obtain the written permission of each instructor shall be considered a multiple submission.

(e) Complicity
Definition: Complicity is assisting or attempting to assist another person in any act of academic dishonesty.

Clarification:
1. Students may not allow other students to copy from their papers during any type of examination.

2. Students may not assist other students in acts of academic dishonesty by providing material of any kind that one may have reason to believe will be misrepresented to an instructor or other university official.

3. Students may not provide substantive information about test questions or the material to be tested before a scheduled examination unless they have been specifically authorized to do so by the course instructor. This does not apply to examinations that have been administered and returned to students in previous semesters.

(f) Misconduct in Research and Creative Endeavors
Definition: Misconduct in research is serious deviation from the accepted professional practices within a discipline or from the policies of the university in carrying out, reporting, or exhibiting the results of research or in publishing, exhibiting, or performing creative endeavors. It includes the fabrication or falsification of data, plagiarism, and scientific or creative misrepresentation. It does not include honest error or honest disagreement about the interpretation of data.

Clarification:
1. Students may not invent or counterfeit information.

2. Students may not report results dishonestly, whether by altering data, by improperly revising data, by selective reporting or analysis of data, or by being grossly negligent in the collecting or analysis of data.
3. Students may not represent another person’s ideas, writing or data as their own.

4. Students may not appropriate or release the ideas or data of others when such data have been shared in the expectation of confidentiality.

5. Students may not publish, exhibit, or perform work in circumstances that will mislead others. They may not misrepresent the nature of the material or its originality, and they may not add or delete the names of authors without permission.

6. Students must adhere to all federal, state, municipal, and university regulations or policies for the protection of human and other animal subjects.

7. Students may not conceal or otherwise fail to report any misconduct involving research, professional conduct, or artistic performance of which they have knowledge.

8. Students must abide by the university’s policies on Misconduct in Research where applicable, which can be found in the University’s Policies and Procedures Manual at the General Counsel’s website.

(g) Computer Misuse

Definition: Misuse of computers includes unethical or illegal use of the computers of any person, institution or agency in which students are performing part of their academic program.

Clarification:
1. Students may not use the university computer system in support of any act of plagiarism.
2. Students may not monitor or tamper with another person’s electronic communications.

(h) Misuse of Intellectual Property

Definition: Misuse of intellectual property is the illegal use of copyright materials, trademarks, trade secrets or intellectual properties.

Clarification:
Students may not violate state or federal laws concerning the fair use of copies.

Sections (4) and (5): Violations and Sanctions for Undergraduate Students - are NOT LISTED HERE; (REFER TO REGULATION ONLINE TO READ)

(6) Violations and Sanctions for Graduate Students

The Graduate School holds academic integrity in the highest regard. Graduate students are responsible for being aware of and complying with University Regulations and Policies and must conduct themselves accordingly. Sanctions for Academic Dishonesty will depend on the seriousness of the offense and may range from the receipt of:

- An “F” or “Zero” grade on the subject paper, lab report, etc.

These policies apply to Graduate Students (students admitted to a graduate degree program or graduate certificate, and/or non-degree seeking students taking graduate coursework). Undergraduate students should refer to Section (4) and (5) Violations and Sanctions for Undergraduate Students.
• An “F” in the course or activity in which credit may be earned,
• An “FF” in the course (leading to expulsion from the University)
• Academic Dismissal for any violations of academic dishonesty policies or regulations
• Possible revocation of the degree or Graduate Certificate following a thorough investigation

Graduate students who are assigned an “FF” grade will be academically dismissed from the University and will not be eligible to apply to any graduate program at USF. Procedures regarding Academic Dishonesty and Academic Dismissal may be found on the Graduate School website.

(7) Additional Graduate Guidelines for Academic Dishonesty:

1. If a graduate student who has been accused of academic dishonesty drops the course, the student’s registration in the course will be reinstated until the issue is resolved.

2. Any assigned grade may be changed to an “FF”, “F”, or other grade depending on the instructor’s decision or the ultimate resolution of an academic grievance procedure. This includes any instance of academic dishonesty that is not detected until after the student has dropped or completed the course.

3. Notification to the graduate student of the “FF” grade and the option of appeal concerning the alleged academic dishonesty and academic dismissal remains with the instructor and/or department chair. (Refer to the University Academic Grievance Procedures.)

4. A graduate student who has been dismissed for reasons of academic dishonesty will have this reflected on the student’s transcript with the formal notation: Dismissed for Academic Dishonesty.

5. More serious violations of academic integrity may be referred to the Office of Students Rights and Responsibilities as a student conduct violation.

(8) Appeals: Undergraduate and Graduate

Once the initial violation of the academic integrity regulation has been documented and fairly discussed by the student and the instructor, the student may appeal the instructor’s decision that a violation has occurred. At that point the student will follow the procedures outlined in the University of South Florida’s student Academic Grievance Procedure Policy. For academic integrity violations that are reviewed at the department and college levels, the respective committees will consider all evidence available to determine if the instructor’s decision was correct. The student’s ability to proceed within an academic program while an Academic Grievance is in process will be determined by the individual academic program chair/director.

Authority: Art. IX, Sec. 7, Fla. Constitution and Resolutions issued by the FL Board of Governors History–New 12-11-08.

Disruption of Academic Process

Reference: USF Regulation 3.025
(1) Disruptive students in the academic setting hinder the educational process. Although disruptive student conduct is already prohibited by the University of South Florida (University/USF) Student Code of Conduct, the purpose of this regulation is to clarify what constitutes disruptive behavior in the academic setting, what actions faculty and relevant academic officers may take in response to disruptive conduct, and the authority of the Office of Student Rights and Responsibilities or designated office handling conduct issues in Student Affairs to initiate separate disciplinary proceedings against students for disruptive conduct.

(2) Disruption of the academic process is defined as the act, words, or general conduct of a student in a classroom or other academic environment which in the reasonable estimation of the instructor:

   (a) directs attention away from the academic matters at hand, such as noisy distractions, persistent, disrespectful or abusive interruption of lecture, exam, academic discussion, or general University operations, or

   (b) presents a danger to the health, safety or well-being of self or other persons.

References to classroom or academic area include all academic settings (live or online, and including field experiences) and references to Instructor include the course instructor, USF faculty, administrators, and staff. Misconduct occurring in other campus areas on University premises or which adversely affects the University community and/or the pursuit of its mission is already prohibited by the Student Code of Conduct and will be handled by those procedures. Academic discussion that includes disagreement with the course instructor during times when the instructor permits discussion is not in itself disruptive behavior and is not prohibited. Some disruptive students may have emotional or mental health disorders. Although such students may be considered disabled and are protected under the Rehabilitation Act/ADA, they are held to the same standards of conduct as any student.

The following applies to all campuses of the University of South Florida; however, non-substantive procedural modifications to reflect the particular circumstances of each regional campus are permitted. Information concerning these procedures is available through the Student Affairs Office at those regional campuses.

(3) Procedures for Handling Disruption of Academic Process

   (a) General Guidelines for Instructor:

      1. If a student is disruptive, the Instructor may ask the student to stop the disruptive behavior and/or warn the student that such disruptive behavior can result in academic and/or disciplinary action. Alleged disruptions of the academic process will be handled initially by the Instructor, who will discuss the incident with the student whenever possible. It must be noted that the Faculty Senate considers the traditional relationship between student and instructor as the primary means of settling disputes that may arise.

      2. The Instructor is authorized to ask a student to leave the classroom or academic area and desist from the disruptive behavior if the Instructor deems it necessary. If the Instructor does this, s/he will send an Academic Disruption Incident Report within 48 hours simultaneously to

         a. the department chair,
         b. the Assistant/Associate Dean of the College (as determined by the College),
c. the Office of Student Rights and Responsibilities (OSRR) or the regional campus’ designated office in Student Affairs, and
d. the student.

If the situation is deemed an emergency or circumstances require more immediate action, the instructor should notify the appropriate law enforcement agency, OSRR and other authorities as soon as possible. Any filed Incident Report can, and should, be updated if new information pertinent to the situation is obtained.

3. An Instructor may also further exclude the student from the classroom or other academic area pending resolution of the matter. If the Instructor recommends exclusion (temporary or permanent) from the classroom pending resolution, the student must be informed of the exclusion before the next scheduled class (either by phone, email or in person). That notice must:

   a. inform the student of the exclusion,
   b. inform the student of his/her right to request an expedited review of the exclusion within two days to the Chair of the Department.

If such academic exclusion occurs, and if the student requests a review, the Chair of the Department shall review the exclusion within two days of the date the student requests the review and decide if the student can return to the specific class and/or any academic setting. This decision may be appealed in writing by the student within two days to the Dean of Undergraduate Studies or Graduate Studies or the institutional designee (as appropriate) for review and decision within two days. Any decision rendered at that point must be in writing and will serve as the final and binding academic decision of the University.

Each academic decision or sanction must be communicated to the Office of Students Rights and Responsibilities or the regional campus’ designated office as soon as possible.

(b) Possible Academic Sanctions and Grading Guidelines:

Authority of an Instructor and the appropriate Chair or Assistant/Associate Dean’s Office may result in any of the following sanctions:

- Warning to the student
- Voluntary withdrawal by the student from the class(es)
- Temporary exclusion and/or permanent dismissal from the instructor’s classroom or academic area, program, or college, pending an expedited appeal
- Academic sanction, including assignment of a final grade -- If the final determination is a dismissal from class, the grade assigned for the class will depend on the student’s status at the time of dismissal. If the student had a passing grade in the class at the time of dismissal, a grade of “W” will be assigned for the course. If the student had a failing grade in the class at the time of dismissal, a grade of “F” will be assigned for the course. These grades will become a part of the student’s permanent record. In addition, if the academic disruption results in dismissal from more than one classroom or academic area of the incident, this grading policy may be applied in all classes affected.
(c) Documentation and Academic Disruption Incident Report:

Instructors should be aware that notes of the dates, times, witnesses and details of the incidents of disruption and the impact of the disruption on those present may be important in any future proceedings which may be necessary. Referrals to the Office of Student Rights and Responsibilities or designated office in Student Affairs require written documentation containing factual and descriptive information. The student is entitled to see this documentation.

The Academic Disruption Incident Report must be submitted by hardcopy (not email) simultaneously within 48 hours to

a) the Department chair,  
b) the Assistant/Associate Dean of the College (as determined by the College),  
c) the Office of Student Rights and Responsibilities or the regional campus’ designated office in Student Affairs, and  
d) the student.

The form can be downloaded from the designated website in Student Affairs or completed by way of memorandum containing the following information:

- Date of report  
- Student’s name  
- USF Student ID number  
- Instructor’s name  
- Instructor’s phone number  
- Instructor’s e-mail  
- Title of course, course number and section  
- Date/time/location of incident  
- Detailed summary of the incident, including a description of the disruptive behavior  
- Witnesses  
- Action, if any, taken by the instructor (e.g., student warned, asked to leave the class, etc.)  
- Recommended course of action and reasons for this recommendation  
- Instructor’s signature

(d) Possible Disciplinary Sanctions for Conduct by the Office of Student Rights and Responsibilities:

Upon receipt of the Academic Disruption Incident Report or other academic referral for disruptive conduct, the Office of Student Rights and Responsibilities or designated office in Student Affairs may initiate the disciplinary process resulting in the imposition of any of the following sanctions in addition to any academic sanctions imposed (in section b):

- Educational sanctions to include but not limited to educational programs/classes and written assignments  
- Disciplinary probation  
- Provisional suspension  
- Suspension
• Restriction from certain or all class(es), program, college, residence hall, or any part or all of USF campuses
• Expulsion

When an incident is being reviewed by OSRR or designated office in Student Affairs for possible disciplinary sanctions, current provisions affecting the student’s academic status (temporary or otherwise) will be communicated by the Office of Student Rights and Responsibilities or designated office in Student Affairs to the Instructor and appropriate academic administrators/instructors responsible for the student’s current academic standing as soon as possible, but within two weeks of the reported incident. Only final disciplinary sanctions that affect the academic status of the student will be communicated to the Instructor(s) and appropriate academic administrators after the disciplinary process is complete.

(e) Resources:

University Police (813) 974-2628
Advocacy Program (813) 974-5756
Counseling Center (813) 974-2831
General Counsel (813) 974-2131
Office of Student Rights and Responsibilities (USF Tampa) (813) 974-9443
Office of Student Rights and Responsibilities (USF-Sarasota-Manatee) (941) 359-4330
USF Polytechnic Student Affairs/Dean of Students (863) 667-7049
USF St. Petersburg Vice Chancellor for Student Affairs (727) 873-4162
Students with Disabilities Services (813) 974-4309
Assistant/Associate Dean’s office in schools and colleges, department chairs

Authority: Art. IX, Sec. 7, Fla. Constitution and Resolutions issued by the FL Board of Governors., 1006.60, 1006.61 F.S. History—New 12-11-08.

Student Academic Grievance Procedure

Reference: USF 10.002 Student Academic Grievance Procedure –

I. Introduction (Purpose and Intent)

The purpose of these procedures is to provide all undergraduate and graduate students taking courses within the University of South Florida system (University/USF) an opportunity for objective review of facts and events pertinent to the cause of the academic grievance. Such review will be accomplished in a collegial, non-judicial atmosphere rather than an adversarial one, and shall allow the parties involved to participate. All parties will be expected to act in a professional and civil manner.

The procedures that follow are designed to ensure objective and fair treatment of both students and instructors. These guidelines are meant to govern all colleges (exclusive of the College of Medicine which maintains its own procedures), however, as individual USF institutions, colleges or campuses may have
different levels of authority or titles, each student must obtain the specific designations used by each entity for levels of authority and titles in the process with appropriate designations of authority if necessary.

In the case of grade appeals, the University reserves the right to change a student’s grade if it is determined at the conclusion of the grievance process that the grade given was incorrect. In such circumstances, the Dean or Provost/Sr. Vice President for Academic Affairs, the Vice-Chancellor for Academic Affairs, or the Sr. Vice President, USF Health may file an administrative grade change. The term “incorrect” means the assigned grade was based on something other than performance in the course, or that the assignment of the grade was not consistent with the criteria for awarding of grades as described in the course syllabus or other materials distributed to the student. In the case of all other academic grievances, the University reserves the right to determine the final outcome based on the procedures detailed herein.

In the case of Academic Integrity (USF Regulation 3.027) violations, these Student Academic Grievance Procedures apply and include an Academic Integrity Review Process at the College Level as described in section III below.

II. Terms and Guidelines

An “academic grievance” is a claim that a specific academic decision or action that affects that student’s academic record or status has violated published policies and procedures, or has been applied to the grievant in a manner different from that used for other students. Grievances may relate to such decisions as the assignment of a grade seen by the student as incorrect or the dismissal or failure of a student for his or her action(s). Academic grievances will not deal with general student complaints.

“Instructor” shall mean any classroom instructor, thesis/dissertation/directed study supervisor, committee member or chair, or counselor/advisor who interacts with the student in an academic environment.

“Department Chair/Director” shall mean the academic head of a college department or the director of a program—or in all cases a “Department’s designee” appointed to handle academic grievances.

“Dean” shall mean a College Dean, or the Dean of Undergraduate Studies, or the Dean of the Graduate School, or the equivalent as indicated—or in all cases a “Dean’s designee” appointed to handle academic grievances for the unit.

“Time” shall mean “academic time,” that is, periods when University classes are in session. The person vested with authority at the appropriate level may extend any of the time periods contained herein for good cause. Any extensions must be communicated in writing to all parties. For the purposes of this policy, each step shall be afforded three (3) weeks as a standard time limit. When a department considers a grievance according to published departmental procedures approved by the College Dean and Provost or College Dean and Regional Vice Chancellor for Academic Affairs, as pertinent, the time line specified in this academic unit’s procedures will govern the process and no additional notice of time extension is needed.

“Written communication” shall mean communication by hard copy to the recipient’s address of record.

The “burden of proof” shall be upon the student such that the student challenging the decision, action or grade assigned has the burden of supplying evidence that proves that the instructor’s decision was incorrect, in all cases except alleged violations of academic integrity. In cases where the issue is academic integrity, the burden of proof shall be upon the instructor. In considering grievances, decisions will be based on the preponderance of the evidence.
Neither party shall be entitled to bring “legal representation” to any actual grievance proceeding as this is an internal review of an academic decision.

As some Colleges may not have departments or some campuses may use different titles, the next level that applies to that College shall be substituted. If the incident giving rise to a grievance occurs on the St. Petersburg campus, the approved policy on that campus shall govern.

III. Statement of Policy

A. Resolution at the Department Level

1. The student shall first make a reasonable effort to resolve his or her grievance with the instructor concerned, with the date of the incident triggering the start of the process (i.e. the issuance of a grade; the receipt of an assignment) and the instructor shall accommodate a reasonable request to discuss and attempt to resolve this issue.

2. If the situation cannot be resolved or the instructor is not available, the student shall file a notification letter within three weeks of the triggering incident to the department Chairperson/Director. This shall be a concise written statement of particulars and must include information pertaining to how, in the student’s opinion, University policies or procedures were violated. The department Chairperson/Director shall provide a copy of this statement to the instructor.

3. The department Chairperson/Director shall discuss the statement jointly or individually with the student and the instructor to see if the grievance can be resolved. If the department maintains its own grievance procedure,* it should be applied at this point. If the grievance can be resolved, the Chairperson/Director shall provide a statement to that effect to the student and the instructor with a copy to the College Dean.

4. If the grievance cannot be resolved, the department Chair/Director shall notify both the student and the instructor, informing the student of his/her right to file a written request within three weeks to advance the grievance to the College Level. The instructor may file a written response to the grievance petition. Upon receipt of the student’s request to move the process to the College Level and the instructor’s response to the grievance (if provided), the Chairperson/Director shall immediately notify the College Dean of the grievance, providing copies of the student’s initiating grievance statement, any instructor’s written response to the grievance, and the written request from the student to have the process advanced to the College Level (which may include additional responsive or final statements by the student). Should the student not file a written request to move the grievance to the College Level within the prescribed time, the grievance will end.

If the grievance concerns the Chairperson/Director or other officials of the department, the student has a right to bypass the departmental process and proceed directly to the College Level.

B. Resolution at the College Level

1. Upon receipt of the grievance, the College Dean shall either determine that the matter is not an academic grievance and dismiss it or within three weeks shall establish an Academic Grievance Committee. The membership of the Committee shall be constituted as follows:
a. Three (3) faculty members and two (2) students (undergraduate or graduate as appropriate to the case) shall be selected from the College by the Dean.

b. Wherever practical, the Committee shall not include members of the faculty or students of the department directly involved with the grievance, or faculty or students of the student’s major department. The student or faculty may address the committee. However, if requested by the committee; faculty or students from the department involved with the grievance or from the student’s major department may provide expert or other relevant testimony in the proceedings.

2. The Committee will operate in the following manner:

   a) The Committee Chairperson will be appointed by the College Dean from among the three faculty members appointed to the Committee.

   b) The Committee Chairperson shall be responsible for scheduling meetings, overseeing the deliberations of the committee and ensuring that full and fair consideration is provided to all parties. The Committee Chairperson shall vote on committee decisions only when required to break a tie.

   c) In Committee reviews involving Academic Integrity, the following Academic Integrity Review Process shall be followed:

      1) The Committee Chairperson shall notify the student and instructor of the date and time of the meeting.

      2) The student and instructor may submit a list of questions to the Committee Chairperson to be answered by the student and instructor. If submitted, the questions will be disseminated by the Committee Chairperson and the Committee Chairperson will ensure that the questions are answered in writing and submitted for review by the Committee, student, and instructor before the initial meeting.

      3) The student or instructor may request to attend a Committee meeting as designated by the Chairperson to present any final statement to the Committee and either may be present during the other’s final statement. Neither the student nor instructor may be present during the deliberations.

         The student or instructor may bring an advisor (not to act as legal counsel or to participate in the meetings) to the meeting.

      4) Students shall be permitted to remain in the course or program during the Academic Integrity Review Process. However, if the student is in a clinical or internship setting, the student may be removed from such setting until the issue of Academic Integrity is resolved. In such cases, the program will attempt to identify an alternative educational option to the clinical or internship to enable the student to continue progressing in the program.

   d) All deliberations shall be in private and held confidential by all members of the Committee. The recommendation of the Committee shall be based on the factual evidence presented to it.
e) Within three weeks of the Committee appointment, the Committee Chairperson shall deliver in writing to the student, instructor, department Chairperson/Director or Program Director, and College Dean a report of the findings and a recommended resolution.

f) Within three weeks of receipt of the Committee recommendation, the College Dean shall provide a decision in writing to all parties.

g) The student or the instructor may appeal the decision of the College Dean to the University Level only if the decision of the College Dean is contrary to the recommendation of the Committee or if there is a procedural violation of these Student Academic Grievance Procedures. Such an appeal must be made in writing to the Dean of Undergraduate Studies or Graduate School (as appropriate) within three weeks of receipt of the decision from the College Dean. Otherwise, the College Dean’s decision is final and not subject to further appeal within the University.

Resolution at the University Level

The Provost/Sr. Vice President for Academic Affairs or the Sr. Vice President, USF Health has delegated authority to the Dean of Undergraduate Studies to act in place of the Provost/Sr. Vice President in all academic grievance appeals involving undergraduate students unless the grievance occurred in a program within Undergraduate Studies, wherein it will go back to the Provost to redelegate. The Dean of Graduate School will act in place of the Provost/Sr. Vice President in all academic grievance appeals involving graduate students. The Regional Vice Chancellor for Academic Affairs at USF St. Petersburg may delegate authority to a designated academic administrator at USF St. Petersburg to hear the appeal at the University level.

1. The student or the instructor may appeal at the University Level within three weeks of the receipt of a decision made at the College Level, when (1) the decision by a College Dean is contrary to the recommendation of a college Grievance Committee, or (2) there is cause to think a procedural violation of these University Academic Grievance Procedures has been made. Within three weeks of receipt of the appeal to the decision, the Undergraduate/Graduate Dean in consultation with the Faculty Senate and the Student Senate, shall appoint an Appeals Committee consisting of three faculty members drawn from the University Undergraduate Council or Graduate Council (as appropriate), and two students, undergraduate or graduate (as appropriate).

2. The structure, functions and operating procedures of the Appeals Committee will be the same as those of the College Committee (i.e. chaired by one of the appointed faculty members appointed by the Undergraduate/Graduate Dean who will not vote except in the case of a tie, having no representation from either party’s respective departments, developing a recommendation to the Undergraduate/Graduate Dean, etc.).

3. Within three weeks of the appointment, the Committee Chairperson shall deliver in writing to the Undergraduate/Graduate Dean a report of the findings of the Committee and a recommended resolution.

4. Within three weeks of receipt of the Committee recommendation, the Undergraduate/Graduate Dean shall provide a decision in writing to all parties.
5. If the Undergraduate/Graduate Dean’s decision is that a grade change is merited, the Undergraduate/Graduate Dean shall initiate the grade change on the authority of the Provost and so inform all parties. In all academic grievance appeals, the Undergraduate/Graduate Dean’s decision is final and not subject to further appeal within the University.

These procedures shall take effect commencing (February 10, 2009) and shall supersede all other academic grievance procedures currently in effect, with the exception of the procedures of the College of Medicine.

*Departments may develop their own formal procedures for considering grievances. Such procedures must be considered and approved by the College Dean and the Provost, and published on the Department’s web site. When such procedures exist, the Department’s examination of the grievance will unfold as specified in the procedures. If the Departmental process upholds the student’s grievance, the Department Chair will work with the College, the student and the instructor to remedy the situation. If the Department does not uphold the grievance, the Chair will report the fact to the Dean. The student may, in such cases, request the College Level review as outlined in these University procedures.

Graduate Catalog

USF Regulation USF1.009, [http://generalcounsel.usf.edu/regulations/pdfs/regulation-usf1.009.pdf](http://generalcounsel.usf.edu/regulations/pdfs/regulation-usf1.009.pdf)

The USF Tampa Graduate Catalog, including college and program requirements, and program and course descriptions, is available on the web at [http://www.grad.usf.edu](http://www.grad.usf.edu). Each Catalog is published and in effect for the academic term(s) noted on the title page.

Student’s Program Degree Requirements

In order to graduate, students must meet all requirements specified in the USF Catalog of their choice, except as noted below. As the University is dynamic, changes and updates to the catalog are anticipated. In contract to program requirements, which are tied to a specific catalog, all students must comply with University policies and procedures that come into effect each catalog year.

- Students cannot choose a USF Catalog published prior to admission (or readmission) or during an academic year in which they did not complete at least two terms. If a student is dropped from the system and must be reinstated, the student’s choice of Catalog is limited to the USF Catalog in effect at the time of readmission or any one Catalog published during their continuous re-enrollment.

- If state law or certification requirements change, the student must comply with the most current standard or criteria.

- If the College or Department makes fundamental changes to the program that necessitates changes in the degree requirements of enrolled students, the needs of those students will be explicitly addressed in the proposal for change and scrutinized by the Graduate School.

- USF policies and procedures not related to degree requirements such as academic grievance procedures, student conduct code and other procedural processes and definitions may be updated each year and the student will be held to the most current catalog and procedures available.

- USF does not commit itself to offer all the courses, programs, and majors listed in this Catalog. If the student cannot meet all of the graduation requirements specified in the Catalog of choice as a result of
decisions and changes made by the University, appropriate substitutions will be determined by the program to ensure that the student is not penalized.

Student’s Program of Study
It is recommended that the Department or College establish a program of study for the student at the time of admission into the graduate program, outlining the requirements for the degree sought. In the event state mandates, accreditation requirements, etc., make changes to the degree requirements necessary, it is recommended that the program provide an addendum to the program of study outlining what is required for degree completion.

Assistantships
Graduate Assistantships (GA), Research Assistantships (RA), and Teaching Assistantships (TA) Graduate Assistantships are intended to recruit quality students to graduate study at USF and to enhance the graduate learning experience. Graduate assistantships exist within academic departments or other university offices on campus. Graduate assistants may teach, conduct research, or perform other tasks that contribute to the student’s professional development. Graduate students may be classified as Graduate Assistants (GAs), Graduate Teaching Assistants/Associates (GTAs), Graduate Instructional Assistants (GIAs), and/or Graduate Research Assistants/Associates (GRAs). All graduate assistants at USF work under a contract negotiated by the Graduate Assistants United (GAU) and the USF Board of Trustees. The GAU is the labor union certified as the exclusive bargaining agent for graduate assistants at USF.

To receive an assistantship, the graduate student must meet the following eligibility requirements:

- Accepted in a graduate degree program;
- Maintain an overall minimum grade point average (GPA) and degree program GPA of 3.00;
- Enrolled full-time during the semester(s) appointed as a graduate assistant.
- For Teaching Assistants, demonstrate proficiency in spoken English (if student is not from an English speaking country)

Full-time enrollment is considered nine (9) graduate credit hours in the fall semester, nine (9) graduate credit hours in the spring semester, and six (6) graduate credit hours in the summer semester. If a graduate assistant is enrolled in the last semester of his/her program of study, the number of registered semester hours may be less than the full-time requirement. Graduate assistants must comply with all Graduate School enrollment requirements to retain their assistantship as stated in the Graduate School Catalog at http://catalog.grad.usf.edu/.


Enrollment Requirements

Students receiving Veterans’ Administration benefits should confirm their enrollment requirements with the Office of Veterans’ Services or Veterans’ Coordinator.

Minimum University Regulations
USF Full-Time Student Definition
Students taking nine (9) or more hours toward their degree in the fall or spring semester, or taking six (6) or more hours in the summer semester, will be classified as Full-Time students for academic purposes. For financial aid requirements, contact the Office of Financial Aid.

Continuous Enrollment for All Graduate Students
All graduate degree-seeking students must be continuously enrolled. Continuous enrollment is defined as completing, with grades assigned, a minimum of 6 hours of graduate credit every three continuous semesters. Colleges and programs may have additional requirements. Students on an approved leave of absence are not subject to the enrollment requirement for the time approved for the leave. See also the Time Limitations Policy.

Readmission Following Non-enrollment
A graduate student who is not registered and enrolled for a minimum of six (6) credits in a 12 month period is automatically placed in non-degree seeking (i.e. inactive) status. Students must be readmitted to the degree program to continue their studies. Readmission is at the discretion of the program and is not guaranteed. Refer to the Readmission Policy in the Graduate Admissions Section for more information.

Enrollment during Comprehensive Exams and Admission to Candidacy
During the term in which students take the comprehensive exams, students must be enrolled for a minimum of two (2) hours of graduate credit. If the exam is taken between semesters, the student must enroll for a minimum of two (2) hours of graduate credit in the semester before or following the exam. Students must also be enrolled for a minimum of two (2) hours of graduate work in the semester of admission to doctoral candidacy.

Dissertation Hours
Students working on a dissertation must enroll for a minimum of two (2) hours of dissertation every semester, starting with the semester following Admission to Doctoral Candidacy, up to and including the semester the dissertation is submitted to and approved by the Graduate School. Dissertation hours may apply to the Continuous Enrollment Requirement. Colleges and programs may have additional requirements. Students who are dropped from degree-seeking status and formally readmitted to the program must enroll in a minimum of 5 dissertation hours in the semester that the readmission is effective. Refer to the Readmission Policy in the Graduate Admissions Section for more information.

Enrollment during Semester of Thesis Submission
Students must be enrolled for a minimum of two (2) thesis hours during the semester that the thesis is submitted and approved by the Graduate School, usually the semester of graduation. Students not enrolled for the minimum requirement will not have the thesis/dissertation approved and therefore may not be certified for graduation.

Enrollment during Semester of Graduation
Students must be enrolled for a minimum of two (2) graduate hours during the semester of graduation.

Enrollment for Graduate Teaching and Research Assistants
Graduate Teaching and Research Assistants should be full-time students. Exceptions must be approved by the College Dean and the Dean of the Graduate School.

Leaves of Absence (LOA)
Leaves of absence may be granted to students under exceptional and unavoidable circumstances. Students requesting a LOA must specify the reasons for the leave, as well as the duration. Requested LOA may be approved for up to two years. Students requiring less than three (3) consecutive terms of absence do not need an approved LOA if they meet the continuous enrollment requirement.
Students with an approved LOA must be enrolled in the first semester after the leave expires. To request an LOA, the student must complete the form available from the Graduate School website. The LOA must be approved by the Major Professor, the Program, the College, and the Graduate School, and is noted in the student’s record. If the LOA is granted, the time absent does not count against the student’s time limit to obtain the degree.

Students returning from an approved LOA must reactivate their status by contacting the Graduate School for procedures. Doctoral candidates returning from a LOA must also have their candidacy status reactivated.

Academic Standards and Grades

Minimum University Requirements

In Good Standing
To be considered a student in good standing, graduate students must
- Maintain an overall minimum grade point average (GPA) of 3.00 (on a 4.00 scale) in all courses taken as a graduate student, and
- Maintain an overall minimum grade point average (GPA) of 3.00 (on a 4.00 scale) in all courses taken in each of the student’s degree-seeking programs.

No grade of C- or below will be accepted toward a graduate degree. Students must meet the requirements to be in good standing to graduate. All “I” and “M” grades must be cleared for graduation to be certified. Students who fail to maintain good standing may be placed on probation or academically dismissed.

Grade Point Average (GPA)
The GPA is computed by dividing the total number of quality points by the total number of graded (A-F) hours completed. The total quality points are figured by multiplying the number of credits assigned to each course by the quality point value of the grade given. The GPA is truncated to two decimals (3.48) and is not rounded up.

Credit hours for courses with grades of I, IU, M, MU, N, S, U, Q and grades which are preceded by T (Transfer) are subtracted from the total hours attempted before the GPA is calculated. Graduate students are not eligible for grade forgiveness. All grades earned, regardless of course level, will be posted on the transcript. If a student retakes a course, both grades will be used in the determination of the GPA. Courses taken at USF as non-degree-seeking are not computed in the GPA unless the courses are transferred in and applied to the degree requirements. The program and the college must approve such actions.

Grades for transfer credits accepted toward the degree program will not be counted in the GPA unless the coursework in question was taken as a non-degree-seeking student at USF and meets the requirements stated above (see Institution Based Credit/Transfer of Credit section).

Graduate Grading System

Plus/Minus Grading:
Effective fall semester 2000, graduate and undergraduate grades will be assigned quality points in the Grade Point Average (GPA) grading system. The +/- designation must be included in the syllabus provided at the beginning of the course. The use of the +/- grading system is at the discretion of the instructor. The syllabus policy is available in the office of the Provost.
Letter grade = number of grade points
A+ 4.00
A 4.00
A- 3.67
B+ 3.33
B 3.00
B- 2.67
C+ 2.33
C 2.00
C- 1.67
D+ 1.33
D 1.00
D- .67
F 0.00
FF Failure due to academic dishonesty
IA Incomplete, grade points not applicable
IB Incomplete, grade points not applicable
IC Incomplete, grade points not applicable
ID Incomplete, grade points not applicable
IF Incomplete, grade points not applicable
M Missing grade/no grade reported by instructor, grade points not applicable
MF Missing grade changed to F, 0.00 grade points
MU Missing grade changed to U, grade points not applicable
N Audit, grade points not applicable
S/U Satisfactory/Unsatisfactory, grade points not applicable
W Withdrawal or drop from course without penalty, grade points not applicable
Z Continuing registration in multi-semester internship or Thesis/Dissertation courses, grade points not applicable

*Incomplete grade policy change effective fall 08. IF grades earned and posted prior to fall 2008 do not calculate in the GPA; IF grades earned as of fall 2008 forward do not calculate in the GPA. Refer to Incomplete Grade Policy for more information.

Satisfactory (S)/ Unsatisfactory (U)
Graduate students may not take courses in the major on an S/U (satisfactory / unsatisfactory) basis unless courses are specifically designated S/U in the Catalog. Students may take courses outside of the major on an S/U basis with prior approval of the course professor, major professor or advisor, and the Dean of the College in which the student is seeking a degree. The student may apply a maximum of six (6) hours of such credit (excluding those courses for which S/U is designated in the Catalog) toward a master’s degree. Directed Research, Thesis, and Dissertation courses are designated as variable credit and are graded on an S/U basis only. Before a student begins work under Directed Research, a written agreement must be completed between the student and the professor concerned, setting forth in detail the requirements of the course.

Incomplete (I)
Definition: An Incomplete grade (“I”) is exceptional and granted at the instructor’s discretion only when students are unable to complete course requirements due to illness or other circumstances beyond their control. This applies to all gradable courses, including pass/fail (S/U).

3 Graduate Students who receive an FF will be academically dismissed from the University and will not be eligible to apply to any graduate program at USF. See section on Academic Dishonesty and Graduate School Policy on Academic Integrity for more information.
Students may only be eligible for an “I” when:

- majority of the student’s work for a course has been completed before the end of the semester
- the work that has been completed must be qualitatively satisfactory
- the student has requested consideration for an “I” grade as soon as possible but no later than the last day of finals week.

The student must request consideration for an Incomplete grade and obtain an “I” Grade Contract from the instructor of record. Even though the student may meet the eligibility requirements for this grade, the course instructor retains the right to make the final decision on granting a student’s request for an Incomplete. The course instructor and student must complete and sign the “I” Grade Contract Form that describes the work to be completed, the date it is due, and the grade the student would earn factoring in a zero for all incomplete assignments. The due date can be negotiated and extended by student/instructor as long as it does not exceed one semester from the original date grades were due for that course.

The instructor must file a copy of the “I” Grade Contract in the department that offered the course and the Graduate School by the date grades are due. The instructor must not require students to either re-register for the course or audit the course in order to complete the “I” grade. Students may register to audit the course, with the instructor’s approval, but cannot re-take the course for credit until the I grade is cleared.

An I grade not cleared within the next academic semester (including summer semester) will revert to the grade noted on the contract. I grades are not computed in the GPA, but the grade noted on the contract will be computed in the GPA, retroactive to the semester the course was taken, if the contract is not fulfilled by the specified date. When the final grade is assigned, if applicable, the student will be placed on academic probation or academically dismissed (refer to Automated Academic Probation Procedures for information). Students cannot be admitted to doctoral candidacy or certified for graduation with an “I” grade.

**Example:**

Current Semester
- student has a “B” in the course, not including the grade for the missing assignment, therefore is eligible for an “I”
- student’s grade, including a zero for the missed work, would be an “D”
- student and instructor complete the “I” Grade Contract, assigning an “ID” (Incomplete +D grade)

Deadline Agreed Upon in Contract (e.g. two weeks)*

If the student completes the work as agreed upon in the Contract by the noted deadline
- instructor submits a change of grade
- student earns final grade comprised of all completed course work

If the student does not complete the work as agreed upon in the Contract by the noted deadline
- “I” automatically drops off and the grade of “D” remains.
- GPA is recalculated for the current semester and retroactively recalculated for the semester in which the “I” was granted.

*Although the instructor establishes the deadline for completion of the work, the deadline may only extend through the end of the subsequent semester.
**Missing (M)**

The University policy is to issue an M grade automatically when the instructor does not submit any grade for a graduate student (undergraduate rules apply to undergraduate and non-degree-seeking students). Until it is removed, the M is not computed in the GPA. An M grade which is not cleared within the next academic semester (including summer semester) will be converted to MF or MU, whichever is appropriate. MF grades are calculated in the GPA and if applicable, the student will be placed on academic probation or academically dismissed. To resolve the missing grade, students receiving an M grade must contact their instructor. If the instructor is not available, the student must contact the instructor’s department chair. Students cannot be admitted to doctoral candidacy or certified for graduation with an M grade.

**Continuing Registration Grades (Z)**

The Z grade shall be used to indicate continuing registration in multi-semester internship or thesis/dissertation courses where the final grade to be assigned will indicate the complete sequence of courses or satisfactory completion of the thesis/dissertation. Upon satisfactory completion of a multi-semester internship or thesis/dissertation, the final grade assigned will be an S. The Graduate School submits the change of grade for the last registration of thesis/dissertation courses once the thesis/dissertation has been accepted for publication.

*Note:* Graduation will not be certified until all courses have been satisfactorily completed. No grade changes will be processed after the student has graduated except in the case of university error. Procedures requiring petitions are processed through the Graduate School.

**Probation**

Any student who is not in good standing at the end of a semester shall be considered on probation as of the following semester. The college or program may also place students on probation for other reasons as designated by the college or program. Notification of probation shall be made to the student in writing by the department, with a copy to the College Dean. At the end of each probationary semester, the department shall recommend, in writing, to the College Dean one of the following:

1. Removal of probation
2. Continued probation; OR
3. Dismissal from the degree program.

Students with a GPA below 3.00 for two consecutive semesters will be prevented from registering for courses without the permission of the College Dean. The College Dean will notify the Dean of the Graduate School in cases of academic dismissal. To be readmitted, the student will need to reapply for admission, meeting the admission criteria in place at the time. For information on the Automated Probation Process go to [www.grad.usf.edu/policies.asp](http://www.grad.usf.edu/policies.asp)

**Voluntary Withdrawal**

A student may withdraw from the university without grade penalty by the University deadline. Information on the different types of withdrawal (i.e., withdrawing from a single class – see the Drop section, an entire semester, or from the degree program itself) can be obtained from the Registrar’s Office. Appropriate alternative calendar dates may apply. Students who withdraw may not continue to attend classes.

**Transfer of Credit**

USF has two degree-granting institutions: USF-Tampa (which includes USF Polytechnic and USF Sarasota-Manatee) and USF-St. Petersburg. Students may, with the approval of their graduate program, earn credits at any of the USF institutions. However, the majority of credits needed for a degree must be earned through instruction offered by the institution granting the degree. Students may request a transfer of credit toward their degree program. There are two types of transfer of credit:
Internal Institution Transfer of Credit
Credits earned from USF Tampa, USF Polytechnic, or USF Sarasota-Manatee.

External Institution Transfer of Credit
Credits earned from USF-St. Petersburg or other regionally accredited institutions

Requirements for Transfer of Credit:
- **Hours:** Credits may be transferred as indicated on the appropriate tables below
- **GPA:** Credits transferred in must have a grade of B or better
  - For Internal Institution Credits, the grade of the transferred course(s)
    - Are calculated in the GPA at USF
    - Are noted on the transcript as the grade earned
  - For External Institution Credits, the grade of the transferred course(s)
    - Are not calculated in the GPA at USF
    - Are noted on the transcript by a N/A if from a USF Regionally accredited institution*
- **Evaluation/Approval:** The graduate program / department will be responsible for evaluating, approving, and initiating the transfer as soon as possible following admission.
- **Time Limits:** All coursework transferred into a graduate program can be no older than
  - seven (7) years at the time of graduation for a master’s and Ed.S. program
  - seven (7) years at the time of graduation for a doctoral program.
  - There is no time limitation for courses from a completed master’s degree or professional degree used toward a doctoral degree.
  - For readmission, refer to the Readmission Policy.

*USF accepts credits from all regionally accredited institutions in the nation.
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<th><strong>INTERNAL INSTITUTION</strong> (Tampa / Sarasota- Manatee/ Polytechnic)</th>
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<th>To Masters or Ed.S. Degree</th>
<th>To Doctoral Degree**</th>
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<tr>
<td>Completed Certificate</td>
<td>Up to one graduate course (1 course may be applied to up to 2 certificates)</td>
<td>Up to 12 graduate hours*</td>
<td>Up to 12 graduate hours*</td>
</tr>
<tr>
<td>Uncompleted Master’s or Ed.S. Degree</td>
<td>Discretion of the Program</td>
<td>Discretion of the Program</td>
<td>Discretion of the Program</td>
</tr>
<tr>
<td>Completed Master’s or Ed.S. Degree</td>
<td>Discretion of the Program</td>
<td>Specific course requirements in common across both degree programs may be waived with the substitution of other approved coursework at the discretion of the program.</td>
<td>Up to 50% of the doctoral program requirement for total course hours (excluding dissertation hours)</td>
</tr>
<tr>
<td>Uncompleted Doctoral or completed Professional Degree</td>
<td>Discretion of the Program</td>
<td>Specific course requirements in common across both degree programs may be waived with the substitution of other approved coursework at the discretion of the program.</td>
<td>Up to 50% of the doctoral program requirement for total course hours (excluding dissertation hours)</td>
</tr>
<tr>
<td>Completed Doctoral Degree</td>
<td>Discretion of the Program</td>
<td>Specific course requirements in common across both degree programs may be waived with the substitution of other approved coursework at the discretion of the program.</td>
<td>Specific course requirements in common across both degree programs may be waived with the substitution of other approved coursework at the discretion of the program.</td>
</tr>
</tbody>
</table>

*a maximum of twelve (12) internal credits can be transferred to a degree regardless of the source(s)

**Programs that wish to transfer credit from a completed doctoral program to a professional program must submit the proposal to the Graduate School for approval.
<table>
<thead>
<tr>
<th>EXTERNAL INSTITUTION</th>
<th>To Graduate Certificates</th>
<th>To Masters or Ed.S. Degree</th>
<th>To Doctoral Degree**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses (equivalent to 4000 and above) taken as an undergraduate but not applied to undergraduate degrees</td>
<td>Up to one graduate course</td>
<td>Up to 12 hours</td>
<td>Up to 12 hours</td>
</tr>
<tr>
<td>Graduate Courses applied to undergraduate degrees</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Non-degree Seeking Status</td>
<td>Up to one graduate course</td>
<td>Up to 12 graduate hours*</td>
<td>Up to 12 graduate hours*</td>
</tr>
<tr>
<td>Uncompleted Certificate (Graduate Degree Seeking Students)</td>
<td>Up to one graduate course</td>
<td>Up to 12 graduate hours*</td>
<td>Up to 12 graduate hours*</td>
</tr>
<tr>
<td>Completed Certificate</td>
<td>Up to one graduate course</td>
<td>Up to 12 graduate hours*</td>
<td>Up to 12 graduate hours*</td>
</tr>
<tr>
<td>Uncompleted Master’s or Ed.S. Degree</td>
<td>Up to one graduate course</td>
<td>Up to 40% of the USF program</td>
<td>Up to 40% of the USF program</td>
</tr>
<tr>
<td>Completed Master’s or Ed.S. Degree</td>
<td>Up to one graduate course. Specific course requirements in common across both programs may be waived with the substitution of other coursework at the discretion of the program.</td>
<td>Specific course requirements in common across both degree programs may be waived with the substitution of other approved coursework at the discretion of the program.</td>
<td>Up to 40% of the USF doctoral program requirement for total course hours (excluding dissertation hours)</td>
</tr>
<tr>
<td>Uncompleted Doctoral or completed Professional Degree</td>
<td>Up to one graduate course</td>
<td>Up to 40% of the USF program</td>
<td>Up to 40% of the USF doctoral program requirement for total course hours (excluding dissertation hours)</td>
</tr>
<tr>
<td>Completed Doctoral Degree</td>
<td>Up to one graduate course. Specific course requirements in common across both programs may be waived with the substitution of other coursework at the discretion of the program.</td>
<td>Specific course requirements in common across both degree programs may be waived with the substitution of other approved coursework at the discretion of the program.</td>
<td>Specific course requirements in common across both degree programs may be waived with the substitution of other approved coursework at the discretion of the program.</td>
</tr>
</tbody>
</table>

*a maximum of twelve (12) credits can be transferred to a degree regardless of the source(s)

**Programs that wish to transfer credit from a completed doctoral program to a professional program must submit the proposal to the Graduate School for approval.

**Change of Graduate Degree Program**

Students who wish to change from one degree program to another (at the same level) must obtain a Graduate Change of Program Application from the Office of the Registrar or their college advising office. The new department will consider the Change of Program request as a new application. The Deans of the Colleges involved and the Dean of the Graduate School must approve the Change of Degree. The new department may elect to accept all, some, or none of the graduate courses previously taken by the student and only those courses accepted
will be computed in the GPA. Students desiring to change program levels (e.g. from a Master’s program to Doctoral program) must submit a new application for admission.

**Accelerated Program Guidelines**

Programs who desire to offer Accelerated Degree Programs must establish guidelines that define the following. The guidelines must then be submitted and approved by the Policy Committee of the Graduate Council. These guidelines are used in the development of a new Accelerated Program.

In clearly defined written policy, programs will:

- Define the number of shared credits: No more than ½ of the required graduate program credits can be completed while in undergraduate status.
- Develop a program of study in which shared coursework and the degree requirements for both degrees are clearly stated.
- Define when the student will receive the bachelor’s degree: either at the completion of 120 credits earned or at the completion of the 5 year program.
- Formally admit students into accelerated 5 year programs through a defined admission process. Students should be admitted into a 5 year program at the beginning of the senior year.
- Advise students about the financial aid implications of the 5 year program and will refer students to the Office of Financial Aid for advice.
- Review the student’s academic record prior to entering graduate status in the 5 year program. Students must receive a grade of B or above in graduate level courses taken while in undergraduate status.
- Permit students to formally withdraw from the 5 year program and receive the bachelor’s degree, as long as the student has met the undergraduate requirements for the specified program.

Acceptance into the 5 year program is contingent upon final approval by the Dean of the Graduate School.

**Dual Degree Programs**

A student may wish to pursue two degrees simultaneously. Upon approval by the appropriate College Dean(s) and Dean of the Graduate School, a prescribed number of courses (generally no more than nine (9) hours of core or basic courses) required for one degree may be applied to another degree that requires the same courses, without repetition or alternative courses. Procedures for applying for a Dual degree program are available on the Graduate School website.

**Off-Campus Courses and Programs**

Graduate courses and programs are offered at locations other than the Tampa, Sarasota, St. Petersburg, and Lakeland campuses. Information on course enrollment procedures for off-campus courses and programs may be obtained from the College in which the courses or programs are offered.
Section 8

University Degree Requirements

Degree Requirements

The following sections describe the University requirements established by the Graduate School for the Master’s, Education Specialist, and Doctoral degrees. However, individual programs and colleges may establish additional or more stringent requirements.

Student Responsibilities

The University of South Florida and all colleges, departments and programs therein establish certain academic requirements that must be met before a degree is granted. These requirements concern such things as curricula and courses, majors and minors, and academic residence. Faculty and graduate program directors are available to help the student understand and arrange to meet these requirements, but the student is responsible for fulfilling them. At the end of a student's course of study, if all requirements for graduation have not been satisfied, the degree will not be granted. For this reason, it is important for students to acquaint themselves with all regulations and to remain currently informed throughout their college careers. Courses, programs, and requirements described in the catalog may be suspended, deleted, restricted, supplemented, or changed in any other manner at any time at the sole discretion of the University and the USF Board of Trustees.

Graduate Faculty Definition

The University of South Florida recognizes Graduate Faculty and Affiliate Graduate Faculty.

Graduate Faculty is defined to consist of all tenure-track or tenured faculty appointed at the Assistant, Associate, or Professor rank, who hold a terminal degree or equivalent in their discipline.

Graduate Faculty members

- are eligible to teach graduate courses and
- may direct and serve on master’s, specialist, and doctoral level committees.

To chair a doctoral level committee, a Graduate Faculty member must engage in current and sustained scholarly, creative, or research activities, such as publications, performances, exhibitions, patents, inventions and research grants.

Affiliate Graduate Faculty membership may be granted by the Graduate School Dean to individuals whose skills or expertise meet criteria established by the College. Affiliate Graduate Faculty membership is in effect for a specified period of time and specific purposes.

Affiliate members may be eligible

- to teach graduate courses,
- to serve on master’s, specialist, and doctoral level committees,
- to direct master’s and specialist’s level committees, and
• to co-direct doctoral level committees, at the discretion of the College.

Emeritus Professors and retired or recently resigned professors may also be appointed as Affiliate Graduate Faculty with the approval of the College and Graduate School Dean.

**Graduate Faculty Approval** – Graduate faculty is defined as noted above; Colleges and Departments may have additional requirements. The Graduate School will maintain a list of Graduate Faculty along with approval guidelines from the Colleges and Departments. For a current list of Graduate Faculty and Affiliate Graduate Faculty in any program contact the program director or coordinator. Also see **Section 3 Faculty and Research Interests**.

**Graduate School Requirements**


**Master’s Degree Requirements**

**Minimum Hours**
A minimum of thirty (30) hours is required for a master’s degree, at least sixteen (16) hours of which must be at the 6000 level. At least twenty (20) hours must be in formal, regularly scheduled course work, ten (10) of which must be at the 6000 level. Up to six (6) hours of 4000-level courses may be taken as part of a planned degree program. Additional graduate credit may be earned in 4000-level courses only if specifically approved by the appropriate College Dean. Students enrolled in undergraduate courses as part of a planned degree program are expected to demonstrate a superior level of performance. Graduate students may not enroll for more than 18 hours in any semester without written permission from the College Dean.

**Institutional Enrollment Requirement**
The majority of credits toward a graduate degree must be earned through instruction offered by the institution (e.g., USF Tampa, USF St. Petersburg, USF Polytechnic, USF Sarasota-Manatee) granting the degree. For information about the minimum number of credit hours required for the degree refer to the degree requirements in the program listing and the Transfer of Credit Policy.

**Time Limitations**
Master’s and Ed.S. degrees must be completed within five (5) years from the student’s date of admission for graduate study. Courses taken prior to admission to the USF graduate program, for example as non-degree seeking or from other institutions that were transferred in, can be no older than seven years at the time of graduation. Master and Ed.S. degrees (including dual degree programs) that require course work in excess of 50 credit hours may be granted a longer statute of limitations by the University Graduate Council.

**Time Limit Extensions**
In the event that a student nears the end of the time limitation as specified above, but the student needs more time to complete the degree, the student may submit a request for an extension using the **Time Limit Extension Request Form**, available on the Graduate School website [http://www.grad.usf.edu/student-forms.asp](http://www.grad.usf.edu/student-forms.asp). Requests must include

- the reasons for the delay in completion,
- the anticipated time needed for completion,
- and endorsements from the graduate faculty advisor, graduate program, and College Dean or designee,
- a detailed plan of study and timeline for the remaining requirements for the degree prior to submission to the Graduate School for approval.
If approved, the time limit extension also applies to courses applied toward the degree. However, programs may require additional or repeat coursework as part of the condition of the time limit extension. Students who exceed the time limitations may have their registration placed on hold until a request for extension has been approved. Only one time limit extension request is permitted. Students who are temporarily unable to continue the program should submit a Leave of Absence Request, which extends the time limit for the duration of the approved Leave (see the section on Leave of Absence in the Enrollment Requirements section.).

Enrollment Requirements
Refer to the Academic Policies Section

Major Professor
The Major Professor serves as the student’s advisor and mentor. Students should confer with the department to confirm the internal process and timeline for the selection and appointment of the Major Professor. The student must identify a major professor and receive that person’s agreement to serve as major professor. The selection of the Major Professor must be approved and appointed by the department as soon as possible, but no later than the time the student has completed 50% of the program. Students must have a major professor in order to maintain Satisfactory Academic Progress. If a major professor cannot be identified or in the event a major professor is unable or unwilling to continue serving on the student’s committee, the student is responsible for finding another major professor. Students who are unable to find a replacement major professor should confer with the Program Director for available options (including converting to a non-thesis program if available.) If no other options exist the student may be requested to voluntarily withdraw from the program or may be honorably withdrawn in good academic standing. The student and major professor should plan a program of study which, when completed, will satisfy the degree requirements specified. A copy of this program, signed by the student and professor, must be maintained in the student’s department file.

Major Professors must meet the following requirements:

- Be graduate faculty, as defined by the University. Faculty who do not meet this definition may serve as Co-Major Professor with faculty who do.
- Be engaged in current and sustained scholarly, creative, or research activities and have met departmental (or equivalent) requirements.
- Have been approved by the Department Chair (or equivalent) to serve as a Major Professor or Co-Major Professor.

The membership of graduate faculty will be based upon criteria developed within the appropriate program or department and approved at the college level. These criteria must be forwarded to the Dean of the Graduate School.

In the event a Major Professor leaves the University (i.e., for an appointment at another university, due to retirement, etc.) and the Major Professor is willing to continue serving on the student’s committee, the Major Professor then becomes a Co-Major Professor on the committee and another faculty is appointed as the other Co-Major Professor. It is important that one of the Co-Major Professors be accessible on the university campus for the student to make satisfactory progress on the thesis/dissertation. In the event a Major Professor is on temporary leave (e.g. sabbatical, research, etc.); the Major Professor shall coordinate with the Program Director to facilitate the needs of the student. In some instances a student may choose to have two professors serve as Major Professor. In this situation the faculty are approved as “Co-Major Professors” and jointly serve in that role.
Consequently both faculty must sign approval on paperwork pertaining to the student’s processing (i.e. committee form, change of committee form, etc.)

Appointment of a (Co)-Major Professor(s) may be rescinded by the Department Chair (or equivalent), with the approval of the appropriate Department (or equivalent) faculty committee (separate from student advisory committee.)

( Co-) Major Professor(s) of the Graduate Student Supervisory Committee Responsibilities
Available on the Graduate School Website: http://www.grad.usf.edu/newsite/policies.asp

Thesis Committee
Students working toward a thesis degree will have the benefit of a committee of members of the graduate faculty. The committee will approve the course of study for the student and plan for research, supervise the research and any comprehensive qualifying exams, and read and approve the thesis for content and format.

Composition
The committee will consist of the major professor and at least two other members or co-major professors and at least one other member of the department or area of interest in which the degree is sought. (Colleges and Programs may require additional committee members and specify characteristics.)

Member Definition
All graduate faculty, as defined by the University and the College/Department, and approved by their department and college, are assumed by the Graduate School as qualified to be a member of and/or supervise a committee. Persons desiring to serve on a Graduate committee who are not defined as Graduate Faculty (i.e. visiting faculty, professionals, etc.) by the University and the College/Department must submit a curriculum vitae and be approved by the Department, College, and, as needed, the Graduate School, for each committee.

Committee members must meet the following requirements:
- Be graduate or affiliate graduate faculty, as defined by the University
- Have the background and expertise that contributes to the success of the student.

In addition to the requirements specified in the Graduate Faculty definition, committee membership will be based upon criteria developed within the appropriate program or department and approved at the college level. These criteria must be forwarded to the Dean of the Graduate School.

Approval
Once a committee has been determined, a Supervisory Committee Form needs to be completed by the student and submitted to the Committee Members for original signatures. Check with the College for instructions and forms. The original appointment form and two (2) copies should be submitted to the College Associate Dean’s office for approval. A copy of the approved form should be kept in the student’s file. An approved and current Committee Form must be on file in the program/college before graduation may be certified. Committee forms need to be processed as early in the program as possible, but no later than the semester prior to graduation. (Colleges and departments may institute additional requirements for membership on Supervisory Committees.)

Changes to Committee
Changes to a Supervisory Committee must be submitted on a Change of Committee Form. Check with the College for instructions and forms. Original signatures of faculty being added to the Committee, along with the approval signature of the (Co-) Major Professor(s), must be on the form. Faxed signatures are acceptable. Faculty who are removed from the Committee are not required to sign the form, provided
that the (Co-) Major Professor(s) has signed. In such instances the signature of the (Co-) Major Professor(s) indicate(s) approval of the change, as well as acknowledgement and approval of the change by the removed member. Any non-faculty being added to a committee must submit a Curriculum Vitae (CV) for college approval. Change of Committee Forms should be submitted for approval as soon as the change takes place. Changes to a Committee are official only once approved and filed by the program and college.

Masters Comprehensive Examination
Prior to clearance for the degree, candidates must perform satisfactorily on a comprehensive examination or an alternative method designated by the academic unit to measure student competency in the major area. Students must be enrolled for a minimum of two (2) hours of graduate credit during the semester when the comprehensive examination is taken. If the exam is taken between semesters, the student must be enrolled for a minimum of two (2) hours of graduate credit in the semester before or following the exam.

Thesis
If a thesis is required, it must conform to the guidelines of the University. Refer to the Thesis and Dissertation Guidelines, available on the web at http://www.grad.usf.edu/thesis.asp for complete information about requirements, procedures, and deadlines. For enrollment requirements, refer to the Academic Policies section in the Catalog.

Format
The Thesis must conform to one of two formats:

Option 1 – a traditional format\textsuperscript{4} inclusive of:

Part I: Preliminary Pages
Title Page
Dedication (optional page)
Acknowledgments (optional page)
Table of Contents
List of Tables (if applicable)
List of Figures (if applicable)
Abstract

Part II: Text (divided by chapter or section headings)

Part III: References / Bibliography\textsuperscript{5}
Appendices Title Page
Appendix Sections (if applicable)

Option 2 – a collection of articles/papers instead of chapters. References may be at the end of each section or at the end of the entire document. Copyright permissions (if applicable) must be noted on the Acknowledgements page

Part I: Preliminary Pages
Title Page

\textsuperscript{4} Deviations from the available format are acceptable if approved in advance by the Supervisory Committee and Graduate School.

\textsuperscript{5} Include either References or a Bibliography, as specified by your style guide.
Dedication (optional page)
Acknowledgments and copyright permission (if applicable)
Table of Contents
Abstract
Introduction Chapter Overview

Part II: Collection of Articles/Papers

Part III: References / Bibliography  
Appendices Title Page
Appendix Sections (if applicable)

**Directed Research**
Directed Research hours may satisfy up to 50% of the thesis hour requirement.

**Manuscript Processing Fee**
Students participating in the thesis/dissertation process are required to pay a processing fee. More information is available on the Thesis and Dissertation website.

**Exchange of Thesis for Non-Thesis Credit**
If a student changes from thesis to non-thesis during a semester and is currently enrolled in thesis credit, the current thesis credits may be exchanged without academic penalty if a Graduate School Petition is filed with the Graduate School no later than the last day to withdraw without Academic Penalty. If a student enrolled in a thesis required program has taken thesis credits but elects to change to non-thesis track or program, the accumulated thesis credits may not be exchanged or converted to another non-structured credit. The thesis hours will remain on the transcript and will retain the “Z” grade.

**Thesis Defense**
Policies and procedures for the thesis defense are handled within the College and Program. Contact the College and Program for requirements.

**Thesis Final Submission Guidelines**
Information on requirements for submission of the finished and approved manuscript copies is available online at the Thesis and Dissertation website [http://www.grad.usf.edu/thesis.asp](http://www.grad.usf.edu/thesis.asp). Students who fail to submit the final copy of a thesis by the posted submission deadline will be considered for graduation in the following semester and must therefore apply for graduation by the posted deadline, enroll in a minimum of two (2) thesis hours for that subsequent semester, and meet the submission requirements as posted on the Thesis/Dissertation website. Only after the Graduate School has approved the manuscript can the student be certified for the degree.

**Mandatory Electronic Submission**
Students are required to submit the thesis in an electronic format (ETD). Requirements and procedures are available at the Graduate School website [http://www.grad.usf.edu/thesis.asp](http://www.grad.usf.edu/thesis.asp).

**Submission to Pro-Quest**
All theses will be submitted to Pro-Quest for microfilming and archiving, effective Fall 2010.

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6 Include either References or a Bibliography, as specified by your style guide.
**Changes after Publication**
Once a thesis is approved and accepted by the Graduate School for publication, it cannot be changed.

**Release of Thesis Publications**
The University recognizes the benefits from collaboration with sponsors on research projects but also recognizes the possibility of conflicts of interest in the disclosure of the results of the collaborations. While the sponsor’s economic interests in the restriction of disclosure should be considered, the University has a primary mission to extend knowledge and disseminate it to the public and the broader academic community. The University’s “Statement of Policy Regarding Inventions and Works” acknowledges the possible need for delays in publication of sponsored research to protect the sponsor’s interests, but it provides no definite guidelines for the restrictions of publication beyond the statement: “Disclosure delays mutually acceptable to the Inventor, the Vice President for Research, and the sponsor, if any, are authorized in order to allow patent applications to be filled prior to publication, thereby preserving patent rights...”?

To protect the University’s primary goal from un-due compromise, the University has adopted the following guidelines:

1. The recommendations of sponsors, regarding publication of research results should be considered advisory rather than mandatory.

2. In support of academic discourse and the mission to promote and share academic works, Theses will be released for worldwide access once submitted to and approved by the USF Graduate School. In the event that a patent or copyright application provides reason to delay the release of the Thesis, a petition to request a one year delay may be submitted to the Graduate School for consideration. Such requests must be received by the format check of the thesis.

3. Students should not be delayed in the final defense of their theses by agreements involving publication delays.

**Duty to Disclose New Inventions and Works**
For information about the requirements of this policy contact the Division of Patents and Licensing at (813) 974-0994.

**Thesis Change of Grade**
In the semester in which the final manuscript has been received, reviewed, and certified for permanent filing in the University Library, the Graduate School submits the change of grade from “Z’ to “S” for the last registration of thesis courses to the office of the registrar when all grades are due at the end of the semester.

**Education Specialist Degree (Ed.S.) Requirements**

**Ed.S. Thesis**

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Students who are required to submit an Ed.S. Thesis must meet all of the requirements for the thesis, as specified in the Master’s Degree section of this publication. For specific degree program information, refer to the College of Education.

Ed.S. Project
Students who are required to submit an Ed.S. Non-Thesis project must meet all of the requirements as specified by the College of Education. A project does not need to meet the requirements of a thesis and is not submitted to the Graduate School for approval and archiving.

Doctoral Degree Requirements

The doctoral degree is granted in recognition of high attainment in a specific field of knowledge. It is a research degree and is not conferred solely upon the earning of credit, the completion of courses, or the acquiring of a number of terms of residency, but also the successful completion of scholarly work. The length of residency and the requirements below are minimums; programs/colleges may elect to establish more rigorous requirements. The degree will be granted after the student has shown proficiency and distinctive achievement in a specified field, has demonstrated the ability to do original, independent investigation, and has presented these findings with a high degree of literary skill in a dissertation. A major professor will be appointed as soon as possible but no later than the time the student has completed 50% of the program. The advisor will advise on any specific subject matter deficiencies and assist in the choice of a major professor and area of research.

Minimum Hours
Because the doctoral degree is earned on the basis of advancement to doctoral candidacy status and satisfactory completion of the dissertation, the Graduate School does not specify any minimum number of courses or credit hours that must be completed for award of the degree. However, programs with formally approved concentrations must have core major requirements that all students must successfully complete. Students must comply with general enrollment requirements and also institutional residency requirements. All doctoral students must have at least one gradable (A-F) graduate course taken at USF to satisfy the GPA minimum requirements. No undergraduate courses may be used for the doctoral course requirements with the exception of courses included in the master’s degree.

Time Limitations
Doctoral degrees must be completed within seven (7) years from the student’s original date of admission for doctoral study. All courses applied to the doctoral degree must be completed within seven (7) years, including courses taken

1) prior to admission to the USF doctoral program,
2) taken as non-degree seeking, or
3) transferred in from other institutions.

There is no time limitation for courses from a completed master’s degree used toward a doctoral degree. For students who are readmitted, see Readmission Policy. Typically a student will reach candidacy within four years, but this may vary per discipline.

Time Limit Extensions
In the event that a student nears the end of the time limitation as specified above, but the student needs more time to complete the degree, the student may submit a request for an extension using the Time Limit Extension Request Form, available on the Graduate School website http://www.grad.usf.edu/student-forms.asp.
Requests must include

- the reasons for the delay in completion,
- the anticipated time needed for completion,
- and endorsements from the graduate faculty advisor, graduate program, and College Dean or designee,
- a detailed plan of study and timeline for the remaining requirements for the degree

Prior to submission to the Graduate School for approval. If approved, the time limit extension also applies to courses applied toward the degree. However, programs may require additional or repeat coursework as part of the condition of the time limit extension. Students who exceed the time limitations may have their registration placed on hold until a request for extension has been approved. Only one time limit extension request is permitted. Students who are temporarily unable to continue the program should submit a Leave of Absence Request, which extends the time limit for the duration of the approved Leave (see Leave of Absence in the Enrollment Requirements section for information; the Leave of Absence Request Form is available online at: http://www.grad.usf.edu/student-forms.asp).

Enrollment Requirements
See Academic Policies Section

Institutional Enrollment Requirement
The majority of credits toward a graduate degree must be earned through instruction offered by the institution (e.g. USF Tampa, USF St. Petersburg, USF Polytechnic, USF Sarasota-Manatee) granting the degree. For information about the minimum number of credit hours required for the degree refer to the degree requirements in the program listing and the Transfer of Credit Policy.

Major Professor
The Major Professor serves as the student's advisor and mentor. Students should confer with the department to confirm the internal process and timeline for the selection and appointment of the Major Professor. The student must identify a major professor and receive that person’s agreement to serve as major professor. The selection of the Major Professor must be approved and appointed by the department as soon as possible, but no later than the time the student has completed 50% of the program. Students must have a major professor in order to maintain Satisfactory Academic Progress. If a Major Professor cannot be identified or in the event a Major Professor is unable or unwilling to continue serving on the student’s committee, the student is responsible for finding another Major Professor. Students who are unable to find a replacement Major Professor should confer with the Program Director for available options. If no other options exist the student may be requested to voluntarily withdraw from the program or may be honorably withdrawn in good academic standing. The student and Major Professor should plan a program of study which, when completed, will satisfy the degree requirements specified. A copy of this program, signed by the student and professor, should be maintained in the student’s department file.

Major Professors must meet the following requirements:

- Be active in scholarly pursuits as evidenced by at least one referred publication in the last three years.
- Be graduate faculty, as defined by the University. Faculty who do not meet this definition may serve as Co-Major Professor with faculty who do
- Be engaged in current and sustained scholarly, creative, or research activities and have met departmental (or equivalent) requirements
- Have been approved by the Department Chair (or equivalent) to serve as a Major Professor or Co-Major Professor
The membership of graduate faculty will be based upon criteria developed within the appropriate program or department and approved at the college level. These criteria must be forwarded to the Dean of the Graduate School.

In the event a Major Professor leaves the University (i.e. for an appointment at another university, due to retirement, etc.) and the Major Professor is willing to continue serving on the student’s committee, the Major Professor then becomes a Co-Major Professor on the committee and another faculty is appointed as the other Co-Major Professor. It is important that one of the Co-Major Professors be accessible on the university campus for the student to make satisfactory progress on the thesis/dissertation. In the event a Major Professor is on temporary leave (e.g. sabbatical, research, etc.); the Major Professor shall coordinate with the Program Director to facilitate the needs of the student. In some instances a student may choose to have two professors serve as Major Professor. In this situation the faculty are approved as “Co-Major Professors” and jointly serve in that role. Consequently both faculty must sign approval on paperwork pertaining to the student’s processing (i.e. committee form, change of committee form, admission to candidacy, etc.).

Appointment of a (Co)-Major Professor(s) may be rescinded by the Department Chair (or equivalent), with the approval of the appropriate Department (or equivalent) faculty committee (separate from student advisory committee.)

(Co-) Major Professor(s) of the Graduate Student Supervisory Committee Responsibilities
Available on the Graduate School Website:  http://www.grad.usf.edu/policies.asp.

Doctoral Committee
As soon as an area of research is determined and a major professor is selected, a Doctoral Supervisory Committee will be appointed and approved for the student. The department will request approval of the Doctoral Committee from the Dean of the College and, as needed, the Dean of the Graduate School. The Doctoral Committee will approve the student’s course of study and plan for research, supervise the research, grade the written comprehensive qualifying examination, read and approve the dissertation, and conduct the dissertation defense.

Composition
The Doctoral Committee will consist of at least four members, three of whom must come from the academic area in which the major work for the degree will be done.

Member Definition
All graduate faculty, as defined by the University and the College/Department, and approved by their department and college, are assumed by the Graduate School as qualified to be a member of and/or supervise a doctoral committee. Persons desiring to serve on a committee who are not defined as Graduate Faculty (i.e. visiting faculty, professionals, etc.) by the University and the College/Department must submit a curriculum vitae and be approved by the Department, College, and Graduate School, for each committee.

Committee members must meet the following requirements:

- Be graduate or affiliate graduate faculty, as defined by the University
- Have the background and expertise that contributes to the success of the student.

In addition to the requirements specified in the Graduate Faculty definition, committee membership will be based upon criteria developed within the appropriate program or department and approved at the college level. These criteria must be forwarded to the Dean of the Graduate School.
Approval
Once a committee has been determined, a Supervisory Committee Form needs to be completed by the student and submitted to the Committee Members for original signature. Check with the College for instructions and forms. To insure uniformity of excellence across the colleges, (Co-)Major Professor(s) of Ph.D. Dissertation Committees will need to submit a current curriculum vitae (equivalent to an NIH Bio, approximately two pages long with the last three [3] years of scholarly activity included) with the committee appointment form to the College Dean or designee. This approval is in addition to the approval from their department chairperson. (Colleges and departments may institute additional requirements for membership on Supervisory Committees.) Once approved, the original form and the approved Curriculum Vitae (CV) are placed in the student’s file. An approved and current Committee Form must be on file in the program/college before graduation may be certified. Committee forms need to be processed as early in the program as possible, but no later than the semester prior to graduation.

Changes to Committee
Changes to a Supervisory Committee must be submitted on a Change of Committee Form. Check with the College for instructions and forms. Original signatures of faculty being added to the Committee, along with the approval signature of the (Co-) Major Professor(s), must be on the form. Faxed signatures are acceptable. Faculty who are removed from the Committee are not required to sign the form, provided that the (Co-) Major Professor(s) has signed. In such instances the signature of the (Co-) Major Professor(s) indicate(s) approval of the change, as well as acknowledgement and approval of the change by the removed member. Any non-faculty being added to a committee must submit a CV for approval. If a faculty member is being added as a Co-Major Professor, or if there is an appointment change to the Major Professor position, a CV must be included for the faculty member who is being added to that position. Change of Committee Forms should be submitted for approval as soon as the change takes place. Changes to a Committee are official only once approved and filed by the program and college. An approved and current Committee Form must be on file before graduation may be certified.

Doctoral Qualifying Examination
As soon as the substantial majority of the course work is completed, the student must pass a written qualifying examination covering the subject matter in the major and related fields. This examination may be supplemented by an oral examination. Students must be enrolled for a minimum of two (2) hours of graduate credit in their discipline at the time they take the qualifying examination. If the exam is taken between semesters, students must be enrolled for a minimum of two (2) hours of graduate credit in the semester before or following the exam.

Admission to Candidacy
In order to be admitted to doctoral candidacy, students must meet the following requirements at USF:
1. admission to a doctoral program
2. appointment of a Doctoral Committee
3. attainment of an overall and degree program Grade Point Average (GPA) of 3.00 at USF at the time of candidacy. (All “I” and “M” grades, including “IF” and “MF”, must be cleared before candidacy may be finalized.)
4. successful completion of a qualifying examination
5. certification by the Doctoral Committee that the above qualifications have been successfully completed.

The Admission to Candidacy form should be submitted for approval during the semester that the qualifying exams were completed, but no later than the semester following the successful completion of the exam. The form will be approved by the Dean of the College and forwarded to the Dean of the Graduate School for final approval. Doctoral Candidacy is effective as of the day that the Graduate School approves of the request and changes the student’s status to 6C. For procedures and processing deadlines refer to the Graduate School website at www.grad.usf.edu.
Once candidacy status is approved, students with approved candidacy are eligible to enroll in dissertation hours (7980) in the semester that immediately follows the last business day of the approval window. For example, students approved during the Fall approval window may enroll in the Spring. Students approved during the Spring approval window may enroll in the summer and students approved during the Summer approval window may enroll in the Fall. Students may NOT enroll in dissertation hours prior to being admitted to doctoral candidacy.

Each degree program has a required number of dissertation hours for completion of the degree. Departments may, with College approval, apply Directed Research hours toward the total number of dissertation hours required. Directed Research hours shall not exceed 50% of the dissertation hour requirement. No directed research hours will be converted to dissertation hours (i.e. a directed research course dropped and a dissertation course added) prior to or during the approval window. For more information refer to Enrollment Requirements in the Academic Policies section.

Dissertation
Dissertation requirements are for the academic degrees of Ph.D. and Ed.D. For the professional degrees of Au.D. and D.P.T., contact the professional school for doctoral project requirements. The Dissertation must conform to the guidelines of the University. Refer to the Thesis and Dissertation Guidelines, available on the web at http://www.grad.usf.edu/thesis.asp for information about requirements, procedures, and deadlines. For enrollment requirements, refer to the Academic Policies section in the Catalog.

Format
The Dissertation must conform one of two available formats

Option 1 - traditional format\(^8\) inclusive of:
Part I: Preliminary Pages
  - Title Page
  - Dedication (optional page)
  - Acknowledgments (optional page)
  - Table of Contents
  - List of Tables (if applicable)
  - List of Figures (if applicable)
  - Abstract

Part II: Text (divided by chapter or section headings)

Part III: References / Bibliography\(^9\)
  - Appendices Title Page
  - Appendix Sections (if applicable)

Part IV: About the Author (required for dissertations)

\(^8\) Deviations from the two available formats are acceptable if approved in advance by the Supervisory Committee and Graduate School.
\(^9\) Include either References or a Bibliography, as specified by your style guide.
Option 2 — collection of articles/papers instead of chapters. References may be at the end of each section or at the end of the entire document. Copyright permissions (if applicable) must be noted on the Acknowledgements page.

Part I: Preliminary Pages
- Title Page
- Dedication (optional page)
- Acknowledgments and copyright permission (if applicable)
- Table of Contents
- Abstract

Part II: Collection of Articles/Papers

Part III: References / Bibliography
- Appendices Title Page
- Appendix Sections (if applicable)

Directed Research
Directed Research hours taken with the (Co) Major Professor(s) prior to approval to doctoral candidacy by the Graduate School may satisfy up to 50% of the dissertation hour requirement, with program approval.

Manuscript Processing Fee
Students participating in the thesis/dissertation process are required to pay a processing fee. More information is available on the website at http://www.grad.usf.edu/thesis.asp.

Dissertation Defense
After the Doctoral Committee has determined that the final draft of the dissertation is suitable for presentation; the Committee will request the scheduling and announcement of the Dissertation Defense (also called Final Oral Examination or Oral Defense.) Check with the College and program for college and program specific procedures for this process. A copy of the announcement should be sent to the Graduate School, preferably two weeks in advance of the defense date. The announcement must also be posted in a public forum for a minimum of twenty-four hours to comply with statute requirements for a public meeting. A student must successfully defend the dissertation in order to be able to proceed and complete the final submission process.

Outside Chair of the Dissertation Defense
The Dissertation Defense (or Final Oral Examination) shall be presided over by a senior and distinguished scholar from outside the department, nominated by the Major Professor. If the chair is from another institution, this individual should have the equivalent qualifications necessary to chair a dissertation in the subject area at the University of South Florida. Note that the Major Professor may not serve as the “Outside Chair.”

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10 Include either References or a Bibliography, as specified by your style guide.
**Procedures for Conducting the Oral Defense**

1. The oral defense should be conducted to allow for the student to make any necessary corrections following the defense and still meet the final copy deadline for turning in the dissertation to the Office of Graduate School.

2. It is required that all members of the Dissertation Committee be present for the examination unless an absence is approved prior to the defense taking place by the Graduate School Dean. In the event that a member cannot attend in person, participation is permissible via speakerphone or video conference. A minimum of three members, including the Major Professor is required to proceed with the defense. The Outside Chair is not considered as part of the Committee.

3. The presentation should be considered an important function in the department and all graduate students and faculty be encouraged to attend.

4. The presentation and defense are open to the public and as such, must meet the requirements of the Sunshine Laws for the State of Florida. The voting is not public.

5. The room selected for the examination should have adequate seating with an alternate room selected in case of problems.

6. The Outside Chair should open the proceedings by introducing the candidate and the Dissertation Committee.

7. The examination should begin with a presentation by the candidate designed to summarize the dissertation.

8. The remainder of the examination may take place in a different setting and will consist of questions about the research by the Outside Chair and the Dissertation Committee and by other interested persons. It is suggested that questioning should be limited to about 15 minutes for each person with subsequent rounds of questioning as necessary.

9. Questions from the faculty-at-large and/or the public may be allowed at the end of the committee’s questioning.

10. The length of the examination period will generally not exceed three hours. Throughout this time the Outside Chair is to be in charge of all proceedings and, ideally, is expected to play a balancing role between advocacy and contention. The Outside Chair, at anytime during the course of the examination, may request all visitors to leave.

11. Following the completion of these proceedings, the Outside Chair will ask all visitors and the candidate to leave and will re-convene the Dissertation Committee only. The Outside Chair may share his/her impressions and opinions of the candidate and the dissertation. The Outside Chair will preside over the deliberations and voting of the committee, but is not to participate in the voting. The voting is to be limited to “pass” and “fail” votes. The Outside Chair has the responsibility of tallying the votes and of informing the candidate of the final decision. The vote of the Dissertation Committee must be unanimous and recorded on the Successful Defense form.
College Graduate Dean will resolve substitutions and disagreements within the committee.

12. The Outside chair will convey the decision of the Dissertation Committee (Successful Defense form) to the Department/College Graduate office to be kept in the student’s file.

**Suggested Guide for Dissertation Defense Proceedings**

1. Introduction of Candidate and Committee Members.
2. Presentation by Candidate.
3. Questions by Committee Members.
4. Questions from other faculty and/or other observers.
5. Candidate and observers leave the examination room.
6. Deliberation and voting by the committee, only; sign documentation (to be determined by College/Department) if defense is successful.
7. The candidate shall be informed of the vote.
8. The record of the successful defense (to be determined by the College or Department) is forwarded to the College/Department for the student’s file.

**Dissertation Final Submission Guidelines**

Information on requirements for submission of the finished and approved manuscript copies is available online at the Thesis and Dissertation website [http://www.grad.usf.edu/thesis.asp](http://www.grad.usf.edu/thesis.asp). Students who fail to submit the final copy of a dissertation by the posted submission deadline will not be considered for graduation. The student may be considered for graduation in the following semester and must therefore apply for the degree (graduation) by the posted deadline, enroll in a minimum of two (2) dissertation hours for that subsequent semester, and meet the submission requirements as posted on the Thesis/Dissertation website. Only after the Graduate School has approved the manuscript can the student be certified for the degree.

**Mandatory Electronic Submission**

Students are required to submit the dissertation in an electronic format (ETD). Requirements and procedures are available at the Graduate School website [http://www.grad.usf.edu/thesis.asp](http://www.grad.usf.edu/thesis.asp).

**Submission to Pro-Quest**

All dissertations are submitted to Pro-Quest for microfilming and archiving.

**Changes after Publication**

Once a dissertation is approved and accepted by the Graduate School for publication, it cannot be changed.

**Release of Dissertation Publications**

The University recognizes the benefits from collaboration with sponsors on research projects but also recognizes the possibility of conflicts of interest in the disclosure of the results of the collaborations. While the sponsor’s economic interests in the restriction of disclosure should be considered, the University has a primary mission to extend knowledge and disseminate it to the public and the broader academic community. The University’s “Statement of Policy Regarding Inventions and Works” acknowledges the possible need for delays in publication of sponsored research to protect the sponsor’s interests, but it provides no definite guidelines for the restrictions of publication beyond the statement: “Disclosure delays mutually acceptable to the Inventor, the Vice President for Research, and the sponsor,
if any, are authorized in order to allow patent applications to be filed prior to publication, thereby preserving patent rights." 11

To protect the University’s primary goal from un‐due compromise, the University has adopted the following guidelines:

1. The recommendations of sponsors, regarding publication of research results should be considered advisory rather than mandatory.

2. In support of academic discourse and the mission to promote and share academic works, Dissertations will be released for worldwide access once submitted to and approved by the USF Graduate School. In the event that a patent or copyright application provides reason to delay the release of the Dissertation, a petition to request a one year delay may be submitted to the Graduate School for consideration. Such requests must be received by the format check of the dissertation.

3. Students should not be delayed in the final defense of their dissertations by agreements involving publication delays.

Duty to Disclose New Inventions and Works
For information about the requirements of this policy contact the Division of Patents and Licensing at (813) 974‐0994.

Dissertation Change of Grade
In the semester in which the final manuscript has been received, reviewed, and certified for permanent filing in the University Library, the Graduate School submits the change of grade from “Z” to “S” for the last registration of dissertation courses to the office of the registrar when all grades are due at the end of the semester.

The Use of “Ph.D.” in Credentials and Publication
Students may only use the credential of “Ph.D.” after degree conferral is granted. It is inappropriate to use the credential until it is officially and formally granted. The use of the abbreviation “Ph.D.” in university publications, correspondence, etc., including websites and other electronic media, shall be upper case “P”, lower case “h” followed by a period, an upper case “D” and another period. It shall not be used in the format of all upper case letters without periods, as in “PHD”.

Section 9

Graduation Information and Opportunities

Application for Degree (Graduation)

To graduate, a student must submit the Application for Degree through their College. This application must be submitted in the term of expected graduation by the deadline noted in the academic calendar. If a student applies for graduation and is not approved, a new Application for Degree must be submitted by the deadline in a new term. In order for the degree statement to appear on a student’s academic record, the student must file the aforementioned application whether or not participation in the commencement ceremony is desired.

The application for a graduate degree is online at [http://www.registrar.usf.edu/forms/GraduateDegreeApp22010-04-16_15_30_30.pdf](http://www.registrar.usf.edu/forms/GraduateDegreeApp22010-04-16_15_30_30.pdf). The application must be submitted to the College advising office prior to the graduation application deadline. Inquiries concerning approval or denial of graduation should be made to the appropriate college. It is the student’s responsibility to clear all “I” (Incomplete) and “M” (Missing) grades in all courses and to provide official transcripts of all transferred course work needed for graduation at least three weeks prior to the end of the term in which he/she expects to graduate.

Graduation Requirements

It is the student’s responsibility to make sure that he/she has met all degree requirements as specified in the Degree Requirements section of this publication, as well as any College and Program requirements for the degree.

Commencement

Graduate students may not participate in commencement exercises until all requirements for the degree sought have been fulfilled. Students graduating from programs based from the Tampa campus (despite location, i.e. may be located in St. Petersburg, Sarasota, Lakeland, etc., such as students in Marine Science) participate in commencement exercises on the Tampa campus. All doctoral graduates receive degree conferral from the Tampa campus and therefore participate in commencement exercises in Tampa.

Diplomas

Diplomas are mailed to the student’s permanent address approximately six (6) weeks after commencement. Students with a change of address need to fill out a change of address form at the Registrar’s office. Questions regarding diplomas and degree certification should be directed to the Registrar’s office at 974-2000.
Letters of Certification

Students in need of verification of the degree prior to receiving their diploma may request a Letter of Certification. This letter specifies that the student has finished all of the requirements for the degree and the date the degree will be conferred on. The letter must include the student’s social security number, name of degree program and official name of the degree. The Major Professor, the College Dean (or designee), the Coordinator (or designee) in the Graduate School, and the Registrar must sign the Letter of Certification. A template for the Certification Letter is available on the Graduate School website at http://www.grad.usf.edu/student-forms.asp.

Posthumous Degrees or Degrees in Memoriam

The University may award a posthumous master’s or doctoral (and medical) degree to a student who was in good standing at the University at the time of his or her death and who had completed all substantive requirements for the degree. The University may also award masters, doctoral and medical degrees in memoriam to a student who was in good standing at the University at the time of his or her death.

To award a non-thesis degree, the student would need to have completed all courses required for the degree. Courses required for the degree, in which the student is enrolled at the time of his or her death, must have been completed to the satisfaction of the faculty so that passing grades might be posted. All other requirements (e.g., grade point average, tests, etc.) must have been satisfied as well.

To award a thesis degree, all courses must be completed as described above and the thesis must be sufficiently complete to the satisfaction of the faculty so that certification of completion may be posted to the student’s record.

Procedures for Award of Posthumous Degrees or Degrees in Memoriam

The Chairperson of a Department, on his or her own initiative or upon the request of the family of the student, may recommend a posthumous degree, or a degree in memoriam, by forwarding the recommendation to the respective College Dean and then to the Graduate School Dean.* If approved by the Graduate School Dean, the recommendation with supporting documentation will be forwarded to the Provost for approval. If the Provost approves the recommendations, the Office of the Registrar will be notified and the degree will be awarded at the next commencement ceremony or will be presented to the student’s family in an appropriate setting.

*Procedure change 5/13/11

Diplomas for posthumous degrees will be identical to other degrees awarded in the same colleges and majors. Diplomas for Degrees in Memoriam will be prepared to read “Master of Arts in Memoriam, Master of Science in Memoriam,” “Doctor of Philosophy in Memoriam,” etc., depending upon the degree the student was pursuing at the time of his or her death.

Transcripts

Transcripts of a student’s USF academic record may be requested by the student through the Office of the Registrar. A student’s academic record can only be released upon authorization of the student. Students requesting transcripts may do so in person or by writing to the Office of the Registrar. By law, the request must include the student’s signature and date. For transcripts to be issued, the student must have no financial obligations to the University. Procedures for requesting a transcript are available on the Office of the Registrar’s website at http://www.registrar.usf.edu/. Degree statements are posted approximately five weeks after the graduation ceremony. Current term grades are posted approximately one week after the final exams end. If grades for the current term are needed, clearly indicate that the transcript request is to be held for grades.
Office of Postdoctoral Affairs

The Office of Postdoctoral Affairs (OPA) serves as an administrative and academic center of excellence for postdoctoral scholars, and ensures they have an exemplary professional and personal development experience while at USF. It fosters a robust postdoctoral community, provides opportunities to enhance the postdoctoral experience and future success of its constituents, and serves as a dedicated resource for postdoctoral scholars, faculty, and administrators.

Objectives of the OPA:
- Provide guidance to colleges and postdoctoral scholars throughout the hiring process.
- Establish, maintain, and evaluate postdoctoral policies.
- Build collaboration among postdoctoral scholars, colleges, and graduate students.
- Offer professional development workshops for postdoctoral scholars and their mentors.
- Maintain a detailed database of current and alumni postdoctoral scholars.
- Submit postdoctoral data for university, state, national, and international reports.
- Facilitate the development of a USF Postdoctoral Association.

For more information, please see www.grad.usf.edu/postdoc
Section 10

Degrees, Programs, and Concentrations

New graduate degrees, programs and concentrations are continually under development and may now be approved and available. Check the website for recently approved programs and for information on which programs are currently accepting applications and which are currently closed for admission. For the most current list of authorized degrees, programs and concentrations, Accelerated Degree Programs, and Dual Degree Programs, go to http://www.grad.usf.edu/programs/programs.asp. As of the date of this publication, the University is authorized to offer 49 different degrees with graduate programs (majors) offered as follows:

<table>
<thead>
<tr>
<th>Type of Program</th>
<th>Number of Programs</th>
<th>Concentrations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s programs</td>
<td>126</td>
<td>238</td>
</tr>
<tr>
<td>Education Specialist programs</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Doctoral programs*</td>
<td>44</td>
<td>110</td>
</tr>
</tbody>
</table>

*including the Ph.D., Ed.D., Au.D., D.N.P., Dr.P.H., D.P.T., and M.D.

**How to understand Degrees, versus Programs, versus Concentrations.**

The University offers a number of degrees (e.g. M.A., M.S.E.S., Ph.D., etc.) under which various programs (a.k.a. majors) are offered – for example Biology. Concentrations are formalized areas of study available within the program – for example Conservation Biology. Definitions are noted on the following page.

Some programs are offered as the area of study presented. Other programs are offered through a variety of concentrations within the program. The Degree is awarded in the Program, e.g. M.S. in Nursing. USF offers over 300 Concentrations within the 170 Programs that are authorized. For example:

**Adult Education (Curriculum and Instruction) M.Ed. Education**

Would translate to: M.Ed. in Curriculum and Instruction with a Concentration in Adult Education

- M.Ed. = the name of the degree - “Master of Education”
- Curriculum and Instruction = the name of the program of study the degree is awarded in
- Adult Education = the name of the concentration within the program

To learn more about the program or concentration, refer to the corresponding college section of the catalog. Depending on the College, the information may be listed under the concentration name (as is the case for the College of Education) or the program name (as is the case for the College of Arts and Sciences.). Note: Programs may also offer plans, tracks, or areas of study which are informal groupings within a program or concentration.

Questions about degrees and concentrations may be directed to the Graduate School.
Degrees

A degree program is defined as an organized curriculum leading to a college degree in an area of study recognized as an academic discipline by the higher education community, as demonstrated by assignment of a Classification of Instructional Programs (CIP) code by the National Center for Educational Statistics, or as demonstrated by similar programs existing at other colleges and universities, and having designated faculty and instructional resources. Each degree program will be assigned a CIP code and included in the State University System Academic Degree Program Inventory.

Example: Doctor of Philosophy (Ph.D.)

Graduate Program (Major) [ref: BOG Regulation 6C-8.011]

An organized curriculum offered as a major area of study that is part of an existing or proposed degree program and does not constitute sufficient distinct coursework, faculty, and instructional resources to be considered a separate degree program. A Program Major must be reasonably associated with the degree program under which it is offered and share common core or prerequisite courses with other majors within the same degree program. A Program Major will not be assigned a CIP Code, will not be included in the State University System Academic Degree Program Inventory, and will not be recognized as a standalone degree program at the University. The number of credit hours for a Program Major will be established by the University for each degree level.

Example: Curriculum and Instruction

Concentration (approved by Graduate Council 3/15/10)

A Concentration is a coordinated set of courses in conjunction with examinations, thesis and/or dissertation, sub-curriculum that is applicable to one or more existing graduate programs. The total number of credit hours must not equal or exceed the number of credit hours established for the Degree Program(s). Concentrations must be approved by the Department (or equivalent), College, and Graduate Council. Concentrations are listed on a student’s transcript, but not on the diploma. Also reference BOG Regulation 6C-8.011.

Example: Adult Education

Full Example:

Doctor of Philosophy (Ph.D.) in Curriculum and Instruction (program) with a Concentration in Adult Education
List of Authorized Degrees and Graduate Programs – By Degree and Level

<table>
<thead>
<tr>
<th>Degree Code</th>
<th>Degree Description</th>
<th>Graduate Programs Offered Under That Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
<td>Adult Education</td>
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<td></td>
<td></td>
<td>American Studies</td>
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<td></td>
<td></td>
<td>Applied Anthropology</td>
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<td></td>
<td>Applied Behavior Analysis</td>
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<td></td>
<td>Art History</td>
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<td></td>
<td>Business Economics</td>
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<td></td>
<td></td>
<td>Career and Technical Education</td>
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<td></td>
<td></td>
<td>Chemistry (non-thesis option)</td>
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<tr>
<td></td>
<td></td>
<td>Classics: Latin/Greek</td>
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<td></td>
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<td>College Teaching</td>
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<td>Communication</td>
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<td>Counselor Education</td>
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<td>Criminal Justice Administration</td>
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<td>Criminology</td>
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<td>Early Childhood Education</td>
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<td>Elementary Education</td>
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<td>English</td>
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<td>English Education</td>
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<td></td>
<td>Exceptional Student Education</td>
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<td>Foreign Language Education</td>
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<td>French</td>
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<td>Geography</td>
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<td>Gerontology</td>
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<td>Global Sustainability</td>
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<td>History</td>
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<td>Latin American, Caribbean and Latino Studies</td>
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<td>Library and Information Science</td>
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<td>Linguistics</td>
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<td>Linguistics: English as a Second Language</td>
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<td>Mass Communications</td>
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<td>Mathematics</td>
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<td>Mathematics Education</td>
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<td>Music Education</td>
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<td>Philosophy</td>
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<td>Physical Education</td>
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<td>Political Science</td>
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<td>Psychology</td>
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<td>Reading Education</td>
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<td></td>
<td>Rehabilitation and Mental Health Counseling (5 yr)</td>
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<td></td>
<td>Rehabilitation and Mental Health Counseling (Post Baccalaureate)</td>
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<td>Religious Studies</td>
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<td>M.S.E.M.</td>
<td>Master of Science in Engineering Management</td>
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</table>
| M.S.E.S.    | Master of Science in Engineering Science               | • Biomedical Engineering  
• Chemical Engineering  
• Civil Engineering  
• Electrical Engineering  
• Engineering Science (5 year program)  
• Environmental Engineering  
• Mechanical Engineering |
| M.S.E.V.    | Master of Science in Environmental Engineering         | • Environmental Engineering                                                     |
| M.S.I.E.    | Master of Science in Industrial Engineering            | • Industrial Engineering                                                        |
| M.S.M.      | Master of Science in Marketing                        | • Marketing                                                                     |
| M.S.M.E.    | Master of Science in Mechanical Engineering            | • Mechanical Engineering                                                        |
| M.S.M.S.    | Master of Science in Medical Sciences                 | • Medical Sciences                                                              |
| M.S.P.H.    | Master of Science in Public Health                    | • Public Health                                                                 |
| M.S.R.E.    | Master of Science in Real Estate                      | • Real Estate                                                                   |
| M.S.W.      | Master of Social Work                                  | • Social Work                                                                   |
| M.U.C.D.    | Master of Urban and Community Design                  | • Urban and Community Design                                                    |
| M.U.R.P.    | Master of Urban & Regional Planning                   | • Urban and Regional Planning                                                   |
|             | **EDUCATION SPECIALIST DEGREES**                       |                                                                                  |
| Ed.S.       | Education Specialist                                   | • Curriculum and Instruction  
• Educational Leadership                                                           |
<p>|             | <strong>DOCTORATE DEGREES</strong>                                  |                                                                                  |
| Au.D.       | Doctor of Audiology                                   | • Audiology                                                                     |
| D.N.P.      | Doctor of Nursing Practice                            | • Nursing                                                                       |
| D.P.T.      | Doctor of Physical Therapy                            | • Physical Therapy                                                              |
| Dr.P.H.     | Doctor of Public Health                               | • Public Health                                                                 |
| Ed.D.       | Doctor of Education                                   | • Educational Leadership                                                        |</p>
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- Aging Studies
- Applied Anthropology
- Biology
- Biomedical Engineering
- Business Administration
- Cancer Biology
- Chemical Engineering
- Chemistry
- Civil Engineering
- Communication
- Communication Sciences and Disorders
- Computer Science and Engineering
- Criminology
- Curriculum and Instruction
- Economics (New!)
- Electrical Engineering
- Engineering Science
- English
- Geography and Environmental Science and Policy
- Geology
- Government
- History
- Industrial Engineering
- Marine Science
- Mathematics
- Mechanical Engineering
- Medical Sciences
- Music
- Nursing Science
- Philosophy
- Physics, Applied
- Psychology
- Public Health
- School Psychology
- Second Language Acquisition and Instructional Technology
- Social Work
- Sociology

List is accurate as of 7/7/10. To view the most current list and available concentration areas within the degree programs go to: [http://www.grad.usf.edu/programs/programs.asp](http://www.grad.usf.edu/programs/programs.asp)
### List of Authorized Graduate Degree Programs – By Program

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<th>MASTERS PROGRAMS</th>
<th>DEGREE</th>
<th>DEGREE DESCRIPTION</th>
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<tr>
<td>2. Adult Education</td>
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<td>3. American Studies</td>
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<td>4. Applied Anthropology</td>
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<td>5. Applied Behavior Analysis</td>
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<td>7. Art</td>
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<td>8. Art History</td>
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<td>12. Bioinformatics and Computational Biology</td>
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<td>M.S.E.S. Master of Science in Engineering Science</td>
</tr>
<tr>
<td>88</td>
<td>Mechanical Engineering (M.S.E.S.)</td>
<td>M.S.M.E. Master of Science in Mechanical Engineering</td>
</tr>
<tr>
<td>Degree Code</td>
<td>Degree Type</td>
<td>Degree Description</td>
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<tr>
<td>-------------</td>
<td>-------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>M.S.M.S.</td>
<td>M.S.</td>
<td>Master of Science in Medical Sciences</td>
</tr>
<tr>
<td>M.S.</td>
<td>Master of Science</td>
<td></td>
</tr>
<tr>
<td>M.A.T.</td>
<td>Master of Arts in Teaching</td>
<td></td>
</tr>
<tr>
<td>M.M.</td>
<td>Master of Music</td>
<td></td>
</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
<td></td>
</tr>
<tr>
<td>M.S.</td>
<td>Master of Science</td>
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</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
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</tr>
<tr>
<td>M.S.</td>
<td>Master of Science</td>
<td></td>
</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
<td></td>
</tr>
<tr>
<td>M.P.A.</td>
<td>Master of Public Administration</td>
<td></td>
</tr>
<tr>
<td>M.P.H.</td>
<td>Master of Public Health</td>
<td></td>
</tr>
<tr>
<td>M.S.P.H.</td>
<td>Master of Science in Public Health</td>
<td></td>
</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
<td></td>
</tr>
<tr>
<td>M.S.R.E.</td>
<td>Master of Science in Real Estate</td>
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</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
<td></td>
</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
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</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
<td></td>
</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts in Teaching</td>
<td></td>
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<tr>
<td>M.A.</td>
<td>Master of Arts</td>
<td></td>
</tr>
<tr>
<td>M.S.W.</td>
<td>Master of Social Work</td>
<td></td>
</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
<td></td>
</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
<td></td>
</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
<td></td>
</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
<td></td>
</tr>
<tr>
<td>M.A.</td>
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<td></td>
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<tr>
<td>M.A.</td>
<td>Master of Arts</td>
<td></td>
</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
<td></td>
</tr>
<tr>
<td>M.S.</td>
<td>Master of Science</td>
<td></td>
</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
<td></td>
</tr>
<tr>
<td>M.U.C.D.</td>
<td>Master of Urban and Community Design</td>
<td></td>
</tr>
<tr>
<td>M.U.R.P.</td>
<td>Master of Urban &amp; Regional Planning</td>
<td></td>
</tr>
<tr>
<td>M.A.</td>
<td>Master of Arts</td>
<td></td>
</tr>
</tbody>
</table>

**EDUCATION SPECIALIST PROGRAMS**

- Curriculum and Instruction: Ed.S. Education Specialist
- Educational Leadership: Ed.S. Education Specialist

**DOCTORATE PROGRAMS**

1. Aging Studies: Ph.D. Doctor of Philosophy
2. Applied Anthropology: Ph.D. Doctor of Philosophy
<table>
<thead>
<tr>
<th>Degree Program</th>
<th>Degree Type</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audiology</td>
<td>Au.D.</td>
<td>Doctor of Audiology</td>
</tr>
<tr>
<td>Biology</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Biomedical Engineering</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Business Administration</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Cancer Biology</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Communication</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Communication Sciences and Disorders</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Computer Science and Engineering</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Criminology</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Curriculum and Instruction</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Economics</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Educational Leadership</td>
<td>Ed.D.</td>
<td>Doctor of Education</td>
</tr>
<tr>
<td>Educational Program Development</td>
<td>Ed.D.</td>
<td>Doctor of Education</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Engineering Science</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>English</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Geography and Environmental Science and Policy</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Geology</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Government</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>History</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Industrial Engineering</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Marine Science</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Medical Sciences</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Medicine</td>
<td>M.D.</td>
<td>Doctor of Medicine</td>
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<tr>
<td>Music</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Nursing Practice</td>
<td>D.N.P.</td>
<td>Doctor of Nursing Practice</td>
</tr>
<tr>
<td>Nursing Science</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Philosophy</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>D.P.T.</td>
<td>Doctor of Physical Therapy</td>
</tr>
<tr>
<td>Physics, Applied</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Psychology</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Public Health</td>
<td>Dr.P.H.</td>
<td>Doctor of Public Health</td>
</tr>
<tr>
<td>Public Health</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>School Psychology</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Second Language Acquisition and Instructional Technology</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Social Work</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>Sociology</td>
<td>Ph.D.</td>
<td>Doctor of Philosophy</td>
</tr>
</tbody>
</table>
### Accelerated Graduate Degree Programs

The following lists some of the Accelerated Graduate Degree Programs offered through U.S.F. New accelerated programs may have been approved since the publication of this list, others may now be inactive. For a current list, refer to: [www.grad.usf.edu](http://www.grad.usf.edu) or contact the program of interest. At the time of publication there were 23 Accelerated Graduate Degree Programs.

<table>
<thead>
<tr>
<th>Program College(s)</th>
<th>Name of Program (Major) or Concentration (Specialization)</th>
<th>Degree</th>
<th>Program</th>
<th>Comments about the program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral and Community Sciences</td>
<td>Addictions and Substance Abuse Counseling (Rehabilitation and Mental Health Counseling)</td>
<td>M.A.</td>
<td>5 Year Program Concentration</td>
<td>3 plus 2 accelerates to the MA</td>
</tr>
<tr>
<td>Arts and Sciences</td>
<td>Biology</td>
<td>M.S.</td>
<td>5 Year Program Concentration</td>
<td>BS/MS in CMMB 3 plus 2 – awards simultaneous degrees</td>
</tr>
<tr>
<td>Arts and Sciences</td>
<td>Chemistry</td>
<td>BA/MA</td>
<td>5 Year Program</td>
<td>3 plus 2 – awards simultaneous degrees</td>
</tr>
<tr>
<td>Arts and Sciences and Public Health</td>
<td>Environmental Science and Policy and Public Health</td>
<td>BS / MPH or MSPH</td>
<td>3 plus 2 BS and MPH or MSPH</td>
<td></td>
</tr>
<tr>
<td>Behavioral and Community Sciences</td>
<td>Marriage and Family Therapy (Rehabilitation and Mental Health Counseling)</td>
<td>M.A.</td>
<td>5 Year Program Concentration</td>
<td>3 plus 2 accelerates to the MA</td>
</tr>
<tr>
<td>Arts and Sciences</td>
<td>Mathematics</td>
<td>BA/MA</td>
<td>5 Year Program</td>
<td>3 plus 2 – awards simultaneous degrees</td>
</tr>
<tr>
<td>Behavioral and Community Sciences</td>
<td>Rehabilitation and Mental Health Counseling</td>
<td>B.A/M.A.</td>
<td>5 Year Program</td>
<td>3 plus 2 accelerates to the MA</td>
</tr>
<tr>
<td>Behavioral and Community Sciences</td>
<td>Speech – Pathology - INACTIVE</td>
<td>M.S.</td>
<td>5 Year Program –</td>
<td>3 plus 2 accelerates to the MS - Inactivated</td>
</tr>
<tr>
<td>Arts and Sciences and Business Administration</td>
<td>Arts and Sciences and Business</td>
<td>BA or BS/MBA</td>
<td>5 Year Program</td>
<td>3 plus 2 may be mapped to most UG departments in AS and awards a BA or BS &amp; MBA simultaneously</td>
</tr>
<tr>
<td>Arts and Sciences and Education</td>
<td>French and Master of Teaching</td>
<td>BA/ MAT</td>
<td>5 year Program</td>
<td>3 plus 2—BA and MAT</td>
</tr>
<tr>
<td>Arts and Sciences and Education</td>
<td>Interdisciplinary Natural Science and Master of Teaching</td>
<td>BS/MAT</td>
<td>5 year Program</td>
<td>3 plus 2—BS and MAT</td>
</tr>
<tr>
<td>Arts and Sciences and Education</td>
<td>Interdisciplinary Social Sciences and Master of Teaching</td>
<td>BA/ MAT</td>
<td>5 Year Program</td>
<td>3 plus 2—BA and MAT</td>
</tr>
<tr>
<td>Arts and Sciences and Education</td>
<td>Spanish and Master of Teaching</td>
<td>BA/ MAT</td>
<td>5 Year Program</td>
<td>3 plus 2—BA and MAT</td>
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<tr>
<td>Business and Honors College</td>
<td>Business and Honors College</td>
<td>B.A./ M.B.A.</td>
<td>5 Year Program</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>Special Education, Varying Exceptionalities</td>
<td>BS/MA</td>
<td>5 Year Program</td>
<td>3 plus 2 – awards simultaneous degrees</td>
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<tr>
<td>Engineering</td>
<td>Engineering</td>
<td>M.E., M.S.</td>
<td>5 Year Program</td>
<td>3 plus 2 may be mapped to any Engineering department</td>
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<tr>
<td>Program</td>
<td>Degree/Concentration</td>
<td>Degree/Concentration</td>
<td>Program Description</td>
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<tr>
<td>----------------------------------------------</td>
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<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Medicine and Honors College Medicine / Honors</td>
<td>BA/M.D.</td>
<td>7 Year Program</td>
<td>Medicine has an accelerated program agreement with the Honors College. The BA is awarded after the 4th year then the student accelerates to the 2nd year as a medical student.</td>
<td></td>
</tr>
<tr>
<td>Medicine and Honors College School of Physical Therapy and Honors College</td>
<td>B.A. / D.P.T.</td>
<td>6 Year Program</td>
<td>UG with an AS in nursing progressing toward the MS in nursing - BS/MS simultaneous degrees</td>
<td></td>
</tr>
<tr>
<td>Nursing</td>
<td>Nursing</td>
<td>BS/MS</td>
<td>5 Year Program</td>
<td></td>
</tr>
<tr>
<td>Nursing</td>
<td>Nursing Education (Nursing)</td>
<td>M.S.</td>
<td>5 Year Program Concentration</td>
<td></td>
</tr>
<tr>
<td>Public Health</td>
<td>Public Health</td>
<td>BS/MPH</td>
<td>5 Year Program</td>
<td></td>
</tr>
<tr>
<td>Public Health and Arts and Sciences</td>
<td>Environmental Science and Policy and Public Health</td>
<td>BA / MPH or MSPH</td>
<td>Concentrations in Public Health Education admits UG students at 90 hours, PHC, and accelerates to the master degree</td>
<td></td>
</tr>
<tr>
<td>School of Architecture and Community Design</td>
<td>Architecture</td>
<td>M.Arc.</td>
<td>Accelerated Year Program 2 plus 4 accelerated to the M.Arc. degree</td>
<td></td>
</tr>
</tbody>
</table>
Dual Degree Programs

Reference: Section 7 Academic Policies:

**Dual Degree Programs**

A student may wish to pursue two degrees simultaneously. Upon approval by the appropriate College Dean(s) and Dean of the Graduate School, a prescribed number of courses (generally no more than nine (9) hours of core or basic courses) required for one degree may be applied to another degree that requires the same courses, without repetition or alternative courses. Procedures for applying for a Dual degree program are available on the Graduate School website.

The following lists some of the formalized Dual Degree Programs offered through the University of South Florida. New Dual Degree programs may have been approved since the publication of this list; others may now be closed to new admissions. If the program you are interested in is not listed below, contact the program of interest to see if your program qualifies for a Dual Degree option. Information about the degree requirements for these dual degrees may be found in the corresponding college sections of the catalog. Students may also enroll in non-formalized Dual Degree Programs by obtaining approval from the two programs of interest and the Graduate School. To apply for either a formalized Dual Degree, or to apply for a non-formalized Dual Degree, students must complete the Dual Degree Application, available online at: [http://www.grad.usf.edu/student-forms.asp](http://www.grad.usf.edu/student-forms.asp). At the time of publication there were fifteen (15) formalized Dual Degree Programs, Dual Concentrations, and combined programs. Some Colleges also offer Dual Concentrations. For information on these, check the College Sections of the Catalog or contact the College.

<table>
<thead>
<tr>
<th>Program</th>
<th>Name of Dual Degree Programs</th>
<th>Dual/Joint Program</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts and Sciences Public Health</td>
<td>Anthropology and Public Health</td>
<td>Dual Degree</td>
<td>M.A./M.P.H.</td>
</tr>
<tr>
<td>Arts and Sciences Engineering</td>
<td>Engineering Science and Physics</td>
<td>Joint Degree</td>
<td>M.A.</td>
</tr>
<tr>
<td>Arts and Sciences Engineering</td>
<td>Engineering Science and Physics</td>
<td>Joint Degree</td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Public Health</td>
<td>Epidemiology and Biostatistics</td>
<td>Dual Concentration</td>
<td></td>
</tr>
<tr>
<td>Arts and Sciences Education Engineering</td>
<td>Physics and Engineering Science</td>
<td>Joint Degree</td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Arts and Sciences Education</td>
<td>Religious Studies and Education -</td>
<td>Dual Degree</td>
<td>M.A.</td>
</tr>
<tr>
<td>Arts and Sciences Public Health</td>
<td>Anthropology and Public Health</td>
<td>Dual Degree</td>
<td>Ph.D./M.P.H.</td>
</tr>
<tr>
<td>Arts and Sciences Public Health</td>
<td>Maternal and Child Health and Clinical Social Work</td>
<td>Dual Degree</td>
<td>M.P.H. / M.S.W.</td>
</tr>
<tr>
<td>Engineering Business</td>
<td>Biomedical Engineering and Entrepreneurship in Applied Technologies</td>
<td>Dual Degree</td>
<td>M.S./M.S.</td>
</tr>
<tr>
<td>Medicine Public Health</td>
<td>Physical Therapy and Public Health</td>
<td>Dual Degree</td>
<td>D.P.T./M.P.H.</td>
</tr>
<tr>
<td>Medicine Business</td>
<td>Biotechnology and Entrepreneurship in Applied Technologies</td>
<td>Dual Degree</td>
<td>M.S./M.S.</td>
</tr>
<tr>
<td>Public Health</td>
<td>Public Health and Law</td>
<td>Dual Degree</td>
<td>M.P.H./J.D.</td>
</tr>
<tr>
<td>Stetson Law School</td>
<td>Medicine and Biomedical Engineering</td>
<td>Dual Degree</td>
<td>M.D./Ph.D.</td>
</tr>
<tr>
<td>Medicine Engineering</td>
<td>Medicine and Medical Sciences</td>
<td>Dual Degree</td>
<td>M.D./Ph.D.</td>
</tr>
<tr>
<td>Medicine Stetson Law School</td>
<td>Medicine and Law</td>
<td>Dual Degree</td>
<td>M.D./J.D.</td>
</tr>
</tbody>
</table>
Section 11

Graduate Certificates

Office of Graduate Certificates

University of South Florida
4202 E. Fowler Ave., SVC 1072
Tampa, FL 33620-8470

Web address: www.gradcerts.usf.edu
Email address: gradcerts@admin.usf.edu
Phone: 813-974-2442
Fax: 813-974-7061

Director: Lagretta Lenker
Coordinator: Kathy Barnes

Certificates Offered

Following is an alphabetical list of Graduate Certificates offered at USF. Some certificates may be currently inactive and new certificates may now be available. For information about Graduate Certificates currently offered and certificate requirements, go to the Graduate Certificate website at: www.gradcerts.usf.edu

- Addictions and Substance Abuse Counseling
- Africana Studies
- Aging and Neuroscience
- Autism Spectrum Disorder (ASD)
- Behavioral Health Counseling*
- Biochemistry and Molecular Biology
- Bioinformatics
- Biomedical Ethics
- Biostatistics
- Biotechnology
- Cardiovascular Engineering
- Career Counseling*
- Children’s Mental Health**
- Clinical Investigation**
- College Teaching*
- Community Design and Development
- Community Development
- Comparative Literary Studies
- Creative Writing
- Criminal Justice Administration*
- Cuban Studies
- Diasporas and Health Disparities
- Digital Music Education**
- Disabilities Education: Severe and/or Profound
- Disaster Management**
- Diversity
- English Education
- Entrepreneurship*
- Environmental Health
- Environmental Policy and Management
- Epidemiology
- ESOL**
- Foreign Language Education: Professional
- Foreign Language Education: Culture and Content
- Genocide and Human Rights
- Geographical Information Systems
- Geriatric Social Work/Clinical Gerontology
- Gerontology
- Gifted Education**
- Global Health and Latin American and Caribbean Studies
- Global Health Practice
- Globalization Studies
- Health Care Risk Management & Patient Safety
- Health Management and Leadership*
- Health Sciences
- Hearing Specialist: Early Intervention
- Homeland Security**
Hospice, Palliative Care and End of Life Studies
Humanitarian Assistance**
Hydrogeology
Infection Control
Informal Science Institutions Environmental Ed.
Instructional Technology: Distance Education**
Instructional Technology: Florida Digital Educator**
Instructional Technology: Instructional Design*
Instructional Technology: Multimedia Design
Instructional Technology: Web Design**
Interdisciplinary Transportation
Latin American & Caribbean Studies
Leadership in Developing Human Resources
Marriage and Family Therapy
Materials Science and Engineering
Maternal and Child Health
Mathematics
Mathematics Education
Medical Biochemistry, Microbiology & Immunology
Medicine and Gender
Mental Health Counseling*
Mental Health Planning, Evaluation and Accountability
Metabolic and Nutritional Medicine
Molecular Medicine
Multimedia Journalism*
Museum Studies
Music
Nonprofit Management
Nursing Education
Nursing and Healthcare Informatics*
Occupational Health Nursing**
Pharmacy Sciences**
Play Therapy
Political Science
Positive Behavior Support
Post-Masters Clinical Nurse Leader
Post Masters in Higher Education Leadership
Post Master’s Nurse Practitioner
Post Master’s Educational Leadership (K-12)
Professional Engineering Excellence (APEX)
Post-Master’s: Library and Information Science*
Public Health Generalist**
Public Health Policy and Programs**
Public Management
Reading *
Regulatory Affairs – Medical Devices**
Rehabilitation Technology
Research Methods*
Safety Management
Science Education
School Counseling Post-Masters
School Library Media Specialist*
Social Marketing & Public Health
Social Science Education
Statistical Data Analysis
Systems Engineering**
Teacher Education
Teaching Composition
Teaching English as a Second Language (TESL)
Technology Management**
Total Quality Management**
Transportation Systems Analysis**
Violence and Injury: Prevention and Intervention
Water, Health and Sustainability
Wireless Engineering**
Women’s Health
Women’s Studies

* Partially online
**Fully online
Graduate Certificate Policies

The areas of study for the graduate certificates are created within the mission of graduate education. Students will be awarded certificates upon completion of specific course work, which has been approved by the Graduate Council. The graduate certificate is not defined as a degree by the Graduate School; rather, it is a focused collection of courses that, when completed, affords the student some record of distinct academic accomplishment in a given discipline or set of related disciplines. Moreover, the graduate certificate is not viewed as a guaranteed means of entry into a graduate degree program. While the courses comprising a graduate certificate may be used as evidence in support of a student’s application for admission to a degree program, the certificate itself is not considered to be a prerequisite.

Process of Approval for New Graduate Certificates
Proposals for new areas of study for graduate certificates are created and submitted by the academic unit that wishes to offer such a certificate. Proposals must be accompanied by endorsement from the department heads and deans of the colleges/schools in which the contributing course work is offered as well as from the academic unit or units whose students or degree programs could be impacted by the creation of the graduate certificate. The Graduate Council will consider all the proposals for new graduate certificates to assure proposal guidelines have been followed and that repetition and redundancy across areas of study for certificates are not evident. Those meeting the criteria set forth by Graduate Council will then be recommended to the Provost for approval.

Criteria for Approval
The general principles applied to the assessment of the academic quality of proposals for new graduate areas of study for certificate include:

1. The proposed sequence of course work must offer a clear and appropriate educational objective at the post-baccalaureate level.
2. The proposed curriculum will achieve its educational objective in an efficient and well-defined manner.
3. A perceived need for such a certificate should exist. This provision might be defined in terms of either external markets (i.e., external demand for the skills associated with such a certificate) or internal academic means (i.e., the need for a critical mass of students in a given discipline).
4. An appropriate number of credit hours must comprise the area of study for the certificate. The number of graduate credits cannot be less than nine (9) or more than one-half of the credits necessary for a related master’s degree from the Graduate School.
5. If the area of study for a certificate requires new courses, those courses must be approved by the appropriate College bodies or offices and the Graduate Council.

Student Eligibility and Admission Criteria
Student must apply and be accepted into the graduate certificate area of study to be eligible to receive a certificate. The prerequisites and general criteria of eligibility for admission to any graduate certificate area of study include:

1. An earned baccalaureate degree or its equivalent from a regionally accredited college or university or enrollment in a USF five-year academic program is required. Students in five-year academic programs may be admitted upon completion of 120 semester hours.
2. Each graduate area of study sets the requirements for admission, including minimum grade point average, standardized test scores, and other similar criteria as part of the application. However, prospective
non-degree seeking graduate certificate students must meet University graduate admissions grade point average requirements.

Students who wish to pursue a graduate certificate must apply and be admitted to the certificate area. Students are encouraged to contact the coordinator prior to applying. All students who wish to pursue approved graduate certificates must be admitted to such areas of study before a second graduate certificate course is completed.

3. Certificate-seeking-students not currently enrolled in a degree-granting graduate program, will be admitted into a separate classification within the University, and will be classified as “Graduate Certificate Students.” This separate classification will permit the University to monitor statistical and enrollment data for certificate areas of study, and will allow inclusion of such efforts in the annual reports and academic planning. The Graduate Certificate Office will note successful completion of a certificate on the student’s transcript upon completion.

4. Students pursuing a graduate certificate will be required to meet the same academic requirements as those defined for degree-seeking students to remain in “good standing”.

5. All graduate certificate students may apply one graduate course to two graduate certificates.

6. All graduate certificate students must meet all prerequisites for courses in which they wish to enroll. Should a graduate certificate student subsequently apply and be accepted to a degree-granting program, up to twelve (12) hours of USF credit earned as a graduate certificate student may be applied to satisfy graduate degree requirements. Any application of such credit must be approved by the degree-granting college and must be appropriate to the program. See the Transfer of Credit Policy for more information.

7. For information on transfer of credit policies pertaining to Graduate Certificates, refer to the transfer of credit policy in Section 7, Academic Policies, of this catalog.

Certificate Requirements
To receive a graduate certificate:

1. Students must successfully complete certificate requirements as established by the university.

2. Students must submit a completion form. Degree-seeking students must submit this form before graduating from their degree program. Non-degree-seeking students must submit this form no later than one semester after completing their certificate course work.

3. Students must have been awarded a bachelor’s or higher degree.
SECTION 12

COLLEGE OF ARTS AND SCIENCES

http://www.cas.usf.edu/
Changes to Note

The follow curricular changes for the College of Arts and Sciences were approved by the USF-Tampa Graduate Council on the date noted.

**New Programs**
Economics (Ph.D.)  
10/05/09 (GC)  
12/3/09 (BOT)  
6/18/10 (BOG)

**New Accelerated Programs**
M.S./Biology (Non-Thesis)  
4/5/10

**Concentration Changes**
English (M.A.)
Rhetoric and Composition / Change curriculum  
3/1/10

English (Ph.D.)
Rhetoric and Composition / Change curriculum  
3/1/10

**New Courses**
ENC 6422  New Media Production  
5/3/10
ENC 6730  Contemporary Rhetorics  
5/3/10
LIS 5566  Multicultural Materials for Children and Young Adults  
4/19/10
SYA 7933  Selected Topics for Ph.D. Students  
5/3/10

**Other Revisions:**
Move of Business Economics (M.A.) into College of Arts and Sciences Section
Government – corrected deadline dates
Library and Information Science – revised their admission deadline and added electives (approval not needed)
Physics M.S. – add in missing concentration - Applied Physics (APM)
Psychology M.A. and Ph.D. – correct course title
Sociology M.A. and Ph.D. – minor edits and corrections
Women’s Studies – corrected dept name
University of South Florida  
College of Arts and Sciences  
4202 E. Fowler Ave SOC107  
Tampa, FL 33620

Web address: [http://www.cas.usf.edu/](http://www.cas.usf.edu/)  
Email: see individual department listings  
Phone: 813-974-6957  
Fax: 813-974-4075

College Dean: Eric Eisenberg  
Associate Dean: Robert Potter  
Graduate Coordinator: Robert Potter

Accreditation:  
The Commission on Colleges of the Southern Association of College and Schools. Contact college for other accreditation information

College Structure:  
The College of Arts and Sciences is USF’s largest college with more than 2,100 graduate students. The college is comprised of three schools including the School of Social Sciences, the School of Natural Sciences & Mathematics, and the School of Humanities, all with strong interdisciplinary connections among them and throughout the university.

Mission Statement:  
The College of Arts and Sciences is a community of scholars dedicated to the idea that educated people are the basis of a just and free society. The essences of education are a capacity for the appreciation of social change within a context of prior human achievement. The faculty of the Arts and Sciences strive to instill in their students a history of human ideas, a love of learning, and an understanding of the means that scholars have used in their search for beauty and order in the natural world. The education provided by the disciplines of the Arts and Sciences is the foundation upon which the lives and professions of our students are built, and the basis from which personal growth occurs.

The College of Arts and Sciences takes as its goal a melding of the natural, humanistic and social philosophies into a comprehensive whole that encourages the development of new ideas and new approaches to the understanding of our universe. It is the responsibility of scholars to share their discoveries for the betterment of society. Thus, the Arts and Sciences embrace the disciplines that strive to make immediate use of knowledge in the service of social goals as well as the disciplines whose discoveries contribute to the fund of basic information that is the stepping stone of applied knowledge.

Major Research Areas:  
See individual departments.

Types of Degrees Offered:  
- Master of Arts (M.A.)  
- Master of Fine Arts (M.F.A.)  
- Master of Liberal Arts (M.L.A.)  
- Master of Public Administration (M.P.A.)  
- Master of Science (M.S.)  
- Master of Urban and Regional Planning (M.U.R.P.)  
- Doctor of Philosophy (Ph.D.)

[http://www.cas.usf.edu/](http://www.cas.usf.edu/)
Name of Programs Offered:

Master of Arts - M.A

M.A. Programs for Secondary School Teachers and Jr. College Teachers (offered with College of Education)
Master of Fine Arts – M.F.A. – Creative Writing

Master of Liberal Arts - M.L.A
Master of Public Administration - M.P.A.

Master of Science - M.S.
Biology, Chemistry, Environmental Science and Policy, Geology, Microbiology, Physics

Master of Science in Materials Science and Engineering – M.S.M.S.E.
Master of Urban and Regional Planning – M.U.R.P.

Doctor of Philosophy -Ph.D.
Applied Anthropology, Biology, Cancer Biology, Chemistry, Communication, Economics, English, Geography and Environmental Science and Policy, Geology, Government, History, Mathematics, Philosophy, Physics (Applied), Psychology, Second Language Acquisition & Instructional Technology (offered through the Department of Secondary Education), Sociology

Concentrations:
Africana Studies
American History
Analytical Chemistry
Ancient History
Atmospheric Physics
Atomic and Molecular Physics
Biochemistry
Bio-Cultural Medical Anthropology
Cell Biology and Molecular Biology
Cell Biology, Microbiology and Molecular Biology
Clinical Psychology
Cognition, Neuroscience, and Social Psychology
Computational Chemistry
Cultural Resource Management
Ecology and Evolution
Economic, Social and Planning Issues in Urban Environment
Environmental and Ecological Microbiology
Environmental Chemistry
European History
Fiction
Film Studies
Florida Studies*
Geographic Information Systems and Spatial Analysis
Heritage Studies
Humanities
Industrial and Organizational Psychology
Inorganic Chemistry
Journalism Studies (at St. Petersburg)
Laser Physics
Latin American History
Latin/Greek: co-op program with U.F.
Liberal Studies
Literature
Materials Physics
Media Studies
Medical Physics
Medieval History
Multimedia Journalism
Natural/Technological Hazards and Environmental Justice
Optical Physics
Organic Chemistry
Philosophy and Religion
Physical Chemistry
Physiology and Morphology
Poetry
Polymer Chemistry
Pure and Applied (Math)
Rhetoric and Composition
Semiconductor Physics
Social and Political Thought
Solid State Physics
Statistics (inactivated effective 200608)
Strategic Communication Management

Graduate Certificates Offered:
See Graduate Certificates Section

COLLEGE REQUIREMENTS

Thesis Enrollment
Upon successful completion of all M.A./M.S. degree requirements except for thesis, Arts and Sciences graduate students must enroll in a minimum of two (2) credit hours of Thesis each semester (except Summers) until the completion of the master’s degree.

Dissertation Enrollment
Doctoral students who have been admitted to candidacy, are required to accumulate a minimum of six (6) credit hours of Dissertation during each previous 12-month period (previous three (3) terms, e.g., Fall, Spring, Summer) until the degree is granted.
About the Catalog

The University of South Florida Graduate Catalog is organized with the degree programs offered listed in the section of the college that offers them. For example, the Master of Science degree with a “program” (also known as major) in Biology is listed in the College of Arts and Sciences section. Some colleges offer areas of specialization, or “concentrations” within a degree program.

EXAMPLE OF PROGRAM PAGE

AGING STUDIES PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

EXAMPLE OF CONCENTRATION PAGE

ADULT EDUCATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in Curriculum and Instruction Program

Concentration: Adult Education

DEGREE INFORMATION

The Program and Concentration are listed on the official transcript. Other areas, such as application track, are not listed on the transcript.
AMERICAN STUDIES PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:

<table>
<thead>
<tr>
<th>Fall</th>
<th>February 15</th>
</tr>
</thead>
</table>

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 05.0102
Dept Code: AMS
Program (Major/College) AMS AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Humanities and Cultural Studies

Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The Master of Arts in American Studies offers students the opportunity to study the social relations and cultural patterns that have both unified and divided Americans over time. Topics cover include popular and elite cultures; the material and technological foundations of American society; cultural heroines and heroes; and the values, ideals, and lifestyles of ordinary people as well as those of recognized historical figures. Students learn how to analyze a broad range of texts, including literature, art, film, and material culture, for evidence of these patterns in American life and culture.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- 3.00 upper division undergraduate GPA
- an official transcript
- GRE required with a verbal score of 500 or higher and an analytical writing score of not less than 4.5
- an academic writing sample

DEGREE PROGRAM REQUIREMENTS

Total required hours (33)

CORE REQUIREMENTS (12 hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 6156</td>
<td>Theories and Methods of Cultural Studies</td>
<td>(3)</td>
</tr>
<tr>
<td>AMS 6254</td>
<td>Cultural Era</td>
<td>(3)</td>
</tr>
<tr>
<td>AMS 6805</td>
<td>Major Ideas in American Civilization</td>
<td>(3)</td>
</tr>
<tr>
<td>AMS 6938</td>
<td>Seminar in American Studies</td>
<td>(3)</td>
</tr>
</tbody>
</table>
Electives (15 hours)
To be selected from 5000 or 6000 level courses in American Studies and/or related departments, such as: English, History, Humanities, Philosophy, Religious Studies, Sociology, and Women’s Studies. No more than 6 hours from any one department may be credited toward the degree without written consent from the Graduate Director. Work in AMS 6002 American Lives (3), AMS 6375 The American South (3), AMS 6901 Directed Readings in American Studies (1-3), AMS 6915 Directed Research (1-12), AMS 6934 Selected Topics (1-3), and AMS 6940 Internship in American Studies (1-3) may be included.

Thesis (6 hours)
AMS 6971 - During the semester immediately following completion of required course work, each student will select a thesis topic, constitute a thesis committee, and write and orally defend a thesis proposal. The student will then write a 40 to 80 page thesis. The thesis is an extended research project within a specific area of Concentration, culminating in a written academic analysis. Upon completion of the thesis, the subject of which must be determined in consultation with the Graduate Director, the student must schedule an oral defense.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
APPLIED ANTHROPOLOGY PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: December 15
Fall admission only
Minimum Total Hours: 40
Program Level: Masters
CIP Code: 45.0201
Dept Code: ANT
Program (Major/College): APA AS

Concentrations:
Bio-cultural Medical Anthropology
Cultural Resource Management
Heritage Studies

CONTACT INFORMATION

College: Arts and Sciences
Department: Anthropology
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The M.A. program, initiated in 1974, was the first in the country to focus on career training for the practice of Applied Anthropology. Faculty at USF specialize in various areas including medical anthropology, biological anthropology, urban policy and community development, education, archaeology, cultural resource management (CRM), economic development, immigration, linguistics, media, and issues pertaining to race, gender, and ethnicity. Geographic specializations emphasize the Caribbean, Latin America, Sub-Saharan Africa, and the United States. More than 200 graduates have received an education in anthropology and its practical uses, leading to employment in government and private sector agencies and organizations. For many, the MA is a terminal degree that qualifies them for professional careers in administration, program evaluation, planning, research, and cultural resource management. Others have gone on to earn doctoral degrees and have gained employment in academic or higher level nonacademic positions. There are three graduate concentrations: Bio-cultural Medical Anthropology, Cultural Resource Management, and Heritage Studies.

Master’s level anthropology at USF has three tracks, all leading to the M.A. in Applied Anthropology but with emphases in cultural anthropology, biological anthropology, and archaeology. Although these three tracks share some common requirements, and are bound by general rules of the USF Graduate School, they have different curricula and employment trajectories. Anthropology graduates typically enter careers in contract archaeology, or public and private agencies and museums responsible for managing archaeological resources. The cultural focus of the M.A. in Applied Anthropology is designed to lead to employment in diverse areas that include health care, education, urban planning, human services, private sector consulting and research, and non-governmental community organizations. Museum and heritage programming represent an area of overlap between the two emphases. Students who wish to pursue these kinds of specialties will develop curricula that draw from both applied and public archaeology requirements in consultation with their advisors. Biological Anthropology students are trained to work in health care, law enforcement, private sector consulting and research, and non-governmental organizations. M.A. students can select elective courses to fulfill a concentration in Bio-cultural Medical Anthropology, Cultural Resource Management, Heritage Studies.

For information regarding the dual degree M.A./MPH program with the College of Public Health, refer to the separate listing under Applied Anthropology or Public Health.
Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
Biocultural medical research in the U.S., Latin America, and Africa including nutrition, population genetics, forensics, maternal and child health, and HIV/AIDS; media and visual anthropology; urban anthropology; Florida archaeology; Mesoamerican archaeology; archaeological science; cultural resource management; language shift and revitalization; bilingualism; heritage studies.

ADMISSION INFORMATION
Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Must meet all admissions criteria established by USF. While the GRE is required, there is no minimum score for admission into the program. Other admission requirements include:

- a statement of purpose
- a signed Research Ethics statement
- at least three letters of recommendation
- a resume or curriculum vitae
- graduate assistant application form (optional)
- optional writing sample

DEGREE PROGRAM REQUIREMENTS
Total required hours (40)

Core Requirements:

1. **Applied Anthropology cultural track**
   M.A. students are required to take
   - ANG 6705 (Foundation of Applied Anthropology)
   - ANG 6701 (Contemporary Applied Anthropology)
   - ANG 5486 (Quantitative Methods) (or equivalent in another department), and
   - ANG 6766 (Research Methods in Applied Anthropology)
   plus five (5) elective graduate seminars in Anthropology and
   one (1) graduate seminar outside the Anthropology Department

2. **Applied Anthropology archaeology track**
   M.A. students are required to take
   - ANG 6705 (Foundation of Applied Anthropology)
   - ANG 6198 (Regional Problems in Methods of Public Archaeology)
   - ANG 6110 (Archaeological Theory and Current Issues)
   - ANG 5486 (Quantitative Methods) (or equivalent in another department), and
   - ANG 6197 (Public Archaeology)
   plus two (2) electives in archaeology
   one (1) elective in biological anthropology
   one (1) elective from any graduate seminar in Anthropology, and
   one (1) graduate seminar outside the Anthropology Department

3. **Applied Anthropology biological track**
   M.A. students are required to take
   - ANG 6705 (Foundations of Applied Anthropology)
   - ANG 5486 (Quantitative Methods) (or equivalent in another department)
ANG 6701 (Contemporary Applied Anthropology)
ANG 6766 (Research Methods in Applied Anthropology)
ANG 6511 (Human Variation)
ANG 6469 (Selected Topics in Medical Anthropology)/ANG6511 (Seminar in Physical Anthropology) Theory and Methods in Applied Bioanthropology
plus three (3) additional graduate seminars in Anthropology and one (1) graduate seminar outside the Department

4. ANG 6915 Directed Research in Internship: M.A. Internship, 4 credit hours minimum.

5. ANG 6971: Thesis (6 credit hours), at least 2 credit hours per semester until thesis is accepted.

CONCENTRATION REQUIREMENTS
Students select one of the following concentrations:

Concentration in Bio-cultural Medical Anthropology
Graduate students in the M.A., Ph.D., or dual degree programs can select three graduate medical anthropology elective courses with the ANG prefix, one of which must be cross-listed with ANG 6511 (Seminar in Physical Anthropology). The following courses are regularly offered and can be taken as bi-cultural medical electives:

ANG 6465 Regional Problems in Medical Anthropology
ANG 6739 Applied Anthropology and International Health
ANG 6469 Selected Topics in Medical Anthropology

Anthropology (recent selected topics courses include Nutritional Anthropology, Ethnicity and Health Care, Community and Health Care, Social Epidemiology of AIDS, Cross-cultural Aspects of Aging, Forensic Anthropology (Cross listed with ANG 6511), Human Biology of Afro-Cuban Populations (cross-listed with ANG 6511), Theories and Methods in Applied Bio-anthropology. Other electives as approved by advisor.

Graduate students pursuing a concentration in Bio-cultural Medical Anthropology must take the basic course requirements of their graduate program.

Concentration in Cultural Resource Management (9 hours)
Graduate students in the M.A. or Ph.D. degree programs, regardless of track, may select this 9-credit concentration. Two courses:

ANG 6197 Public Archaeology (3)
ANG 6115 Special Topics in Archaeology (3)
(When topic is Current Issues and Techniques in Cultural Resources Management, 3 cr.)

Third 3-credit class will be selected from the following options:
ANG 6448 Regional Problems in Urban Anthropology (when topic is Issues in Heritage Tourism, or other as approved by Graduate Director)
ANG 6115 Topics in Public Archaeology (when topic is Historical Archaeology, Florida Archaeology, Southeastern Archaeology, Museum Methods, or other as approved by Graduate Director)

Graduate class in Geographic Information Systems, whether offered in Anthropology or another department. Graduate students pursuing a concentration in Cultural Resource Management must take the basic course requirements of their graduate program.
Concentration in Heritage Studies

The concentration in Heritage Studies allows M.A. and Ph.D. students to create a focused plan of study around issues of cultural heritage preservation, interpretation, and representation. Students will learn to identify, document, and critically interpret the significance of cultural heritage in urban, rural, and non-US settings, with a particular emphasis on community-based and collaborative approaches to these issues. One course, ANG 7708 (Selected Topics in Applied Anthropology: Issues in Heritage Studies, 3 cr.) is required. In addition, students select two electives from among the following options:

- ANG 5395 Visual Anthropology
- ANG 6081 Museum Methods 4 cr.
- ANG 6197 Public Archaeology 3 cr.
- ANG 6436 Issues in Heritage Tourism 3 cr.
- ANG 6448 Regional Problems in Urban Anthropology 3 cr. (topics include ‘Ethnohistory,’ ‘Museums in Culture,’ ‘Ethnicity and Public Policy,’ ‘Heritage Research and Management,’ ‘Culture and Environmental Resources,’)
- ANG 6676 Seminar in Anthropological Linguistics 3 cr. (when the topic is ‘Language and Culture’ or ‘Language and Racism’)
- ANG 7487 Quantitative Research Methods

Comprehensive Exam

The comprehensive exam requirement is satisfied upon successful completion of Foundation of Applied Anthropology (ANG 6705). Successful completion entails earning a final grade of “B” or better in this course.

COURSES

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
APPLIED ANTHROPOLOGY AND PUBLIC HEALTH PROGRAMS

Dual Degree Program
Master of Arts (M.A.)/Master of Public Health (MPH) Degrees

DEGREE INFORMATION

Program Admission Deadlines:
Fall: December 15
Fall admissions only

Minimum Total Hours:
Applied Anthropology 37
Public Health 42

Program Level:
Masters

CIP Code:
Applied Anthropology: 45.0201
Public Health: 51.2201

Dept Codes:
ANT, DEA

Program (Major/College):
ANT AS / MPH PH

CONCENTRATIONS:
Bio-cultural Medical Anthropology
Cultural Resource Management
Heritage Studies

CONTACT INFORMATION

Colleges:
Arts and Sciences
Public Health

Contact Information:
www.grad.usf.edu

Other Resources:
www.usf4you.usf.edu

PROGRAM INFORMATION

The two programs review applicants independently. Application forms for Anthropology and Public Health are completed with each listing both as major areas or study. The review process may begin in either college. The timing of application should take into consideration that the COPH admits students three times a year (Fall, Spring, and Summer) and the Department of Anthropology admits students annually in the Fall. Once the applicant has been accepted into one program, the application is forwarded to the other program for review.

After admission to both programs, the Graduate Admissions office instructs the Registrar’s Office to classify the student as dually enrolled in anthropology and public health. In choosing which program to apply to first, students should take into consideration the following: requirements in Anthropology for admission are different than in Public Health; admission to one program does not guarantee admission to the other; and of course, the student’s interests and career plans. Upon completion of all requirements for the dual degree program, the student submits separate applications for graduation to Anthropology and Public Health, and is certified for graduation by both programs and receives two diplomas. Dual degree students can also select elective courses to fulfill a concentration in Bio-cultural Medical Anthropology.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.
Program Admission Requirements
Must meet all admissions criteria established by USF with the exception that applicants must have a 3.20 undergraduate GPA. The GRE is required for consideration in both programs, but there is no minimum score for admission into Anthropology. Admission requirements for the M.P.H. in Public Health include at least 3.20 GPA at both the undergraduate and graduate levels, and a GRE of 550V and 620Q, 4.0 A.W. In addition, admission to any of the dual programs will consider letters of recommendation, past experience, goal statement, and availability of faculty. Other admission requirements include:

- a statement of purpose
- a signed Research Ethics statement
- at least three letters of recommendation
- a resume or curriculum vitae
- graduate assistant application form (optional)
- optional writing sample

DEGREE PROGRAM REQUIREMENTS

M.A. in Applied Anthropology (40 hours)

1. ANG 6705 Foundation of Applied Anthropology 3
2. ANG 6701 Contemporary Applied Anthropology 3
3. ANG 6766 Research Methods in Applied Anthropology 3
4. Graduate level statistics course fulfilled by PHC 6050 Biostatistics I or ANG 5486 Quantitative Methods
5. Four graduate level seminars (variable topics) in Anthropology, at least two in the area of medical anthropology (often ANG 6469 Selected Topics in Medical Anthropology); one of these fulfilled by taking in public health PHC 6410 Social and Behavioral Sciences Applied to Health or PHC 6931 Advanced Seminar in SBS Applied to Health
6. One graduate level course outside the Department of Anthropology fulfilled by public health courses
7. Comprehensive examination requirement met by successfully completing ANG 6705 (Foundation of Applied Anthropology). Successful completion entails earning a final grade of “B” or better in this course.
8. Internship: ANG 6915: one semester, full-time after completion of course requirements, in the field of public health to dually fulfill MPH requirement for Supervised Field Experience PHC 6945, 4 credit hours minimum
9. Thesis: ANG 6971: dually fulfills MPH requirement for Special Project, PHC 6977, 6 credit hours minimum

MPH in Public Health (42 hours)
Requirements include public health core courses, concentration area courses, electives, supervised field placement, comprehensive exam, and special project. For specific information please refer to the Catalog listing for the MPH in Public Health

Concentration in Bio-cultural Medical Anthropology
Graduate students in the M.A., Ph.D., or dual degree programs can select three graduate medical anthropology elective courses with the ANG prefix, one of which must be cross-listed with ANG 6511 (Seminar in Physical Anthropology). The following courses are regularly offered and can be taken as bio-cultural medical electives:

ANG 6465 Regional Problems in Medical Anthropology
ANG 6739 Applied Anthropology and International Health (3)
ANG 6469 Selected Topics in Medical Anthropology

http://www.cas.usf.edu/
recent selected topics courses include Nutritional Anthropology, Ethnicity and Health Care, Community and Health Care, Socio-Cultural Aspects of AIDS, Reproductive Health, Cross-cultural Aspects of Aging, Forensic Anthropology (Cross listed with ANG 6511), Human Biology of Afro-Cuban Populations (cross-listed with ANG 6511), Theories and Methods in Applied Bio-anthropology. Other electives as approved by advisor.

Graduate students pursuing a concentration in Bio-cultural Medical Anthropology must take the basic course requirements of their graduate program.

Concentration in Cultural Resource Management (9 hours)
Graduate students in the M.A. or Ph.D. degree programs, regardless of track, may select this 9-credit concentration.
Two courses:
   ANG 6197   Public Archaeology (3)
   ANG 6115   Seminar in Anthropology: Special Topics in Archaeology (3)
(When topic is Current Issues and Techniques in Cultural Resources Management, (3)

Third 3-credit class will be selected from the following options:
   ANG 6448   Regional Problems in Urban Anthropology (when topic is Issues in Heritage Tourism, or other as approved by Graduate Director)
   ANG 6115   Seminar in Anthropology: Special Topics in Public Archaeology (when topic is Historical Archaeology, Florida Archaeology, Southeastern Archaeology, Museum Methods, or other as approved by Graduate Director)

Graduate class in Geographic Information Systems, whether offered in Anthropology or another department. Graduate students pursuing a concentration in Cultural Resource Management must take the basic course requirements of their graduate program.

Concentration in Heritage Studies
The concentration in Heritage Studies allows M.A. and Ph.D. students to create a focused plan of study around issues of cultural heritage preservation, interpretation, and representation. Students will learn to identify, document, and critically interpret the significance of cultural heritage in urban, rural, and non-US settings, with a particular emphasis on community-based and collaborative approaches to these issues. One course, ANG 7708 (Issues in Heritage Studies, 3 cr.) is required. In addition, students select two electives from among the following options:
   ANG 5395   Visual Anthropology (3)
   ANG 6081   Museum Methods (4)
   ANG 6197   Public Archaeology (3)
   ANG 6436   Issues in Heritage Tourism (3)
   ANG 6448   Regional Problems in Urban Anthropology (3)
(topics include ‘Ethnohistory,’ ‘Museums in Culture,’ ‘Ethnicity and Public Policy,’ ‘Heritage Research and Management,’ ‘Culture and Environmental Resources,’)
   ANG 6495   Oral History and Life History: Approaches to Qualitative Research (3)
   ANG 6676   Seminar in Anthropological Linguistics
   (when the topic is ‘Language and Culture’ or ‘Language and Racism’)
   ANG 7487   Qualitative Research Methods (formerly Research Methods in Applied Anthropology)(3)

COURSES - See http://www.ugs.usf.edu/sab/sabs.cfm
APPLIED ANTHROPOLOGY PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
  Fall: December 15
  Fall admission only

Minimum Total Hours: 46 beyond MA
Program Level: Doctoral
CIP Code: 45.0201
Dept Code: ANT
Program (Major/College): APA AS

Concentrations:
Bio-cultural Medical Anthropology
Cultural Resource Management
Heritage Studies

CONTACT INFORMATION

College: Arts and Sciences
Department: Anthropology
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The Ph.D. program in Applied Anthropology, initiated in 1984, was the first doctoral program of its kind. Its primary focus is to prepare students in the theories, methods, skills and techniques of applied anthropology. The program is designed to prepare students to conduct research, teach, and practice applied anthropology in both academic and nonacademic settings. Students participate in either a structured research internship or independent field research for two consecutive semesters. Ph.D. students can select elective courses to fulfill a concentration in Bio-cultural Medical Anthropology, Cultural Resource Management and/or Heritage Studies.

For information regarding the dual degree Ph.D./MPH program with the College of Public Health, see the separate listing under Anthropology or Public Health.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools

Major Research Areas:
Biocultural medical research in the U.S., Latin America, and Africa, including nutrition, population genetics, forensics, maternal and child health, and HIV/AIDS; media and visual anthropology; urban anthropology; Florida archaeology; Mesoamerican archaeology; archaeological science; cultural resource management; language shift and revitalization, bilingualism; heritage studies.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Must meet all admissions criteria established by USF. Applicants must take the GRE, and provide the results in the application process. GRE scores will be a factor in the overall admissions decision. Dual degree applicants (Anthropology/Public Health) will be required to meet any GRE requirements specific to the College of Public Health.
Applicants must also provide:

- a statement of purpose
- a signed Research Ethics statement
- at least 3 letters of recommendation
- a resume or curriculum vitae
- graduate assistant application form (optional)
- optional writing sample

**DEGREE PROGRAM REQUIREMENTS**

Total required hours: 46 hours beyond the M.A.

**CORE REQUIREMENTS**

**Course requirements**

Upon completion of any prerequisites: ANG 6705 (Foundations of Applied Anthropology).

1. Must receive a grade of “B” or better; satisfies preliminary examinations in four subfields. Ph.D. students with a recent (within the past five years) M.A. in Anthropology are not required to take Foundations of Applied Anthropology, although they may do so if their advisor recommends it. Students who opt not to take Foundations must substitute an elective class.

2. For cultural track, five additional required courses within the Department of Anthropology:

   ANG 6490 (Seminar in Cultural Anthropology) (when topic is Anthropological Theory Today)
   ANG 6701 (Contemporary Applied Anthropology)
   ANG 6766 (Research Methods in Applied Anthropology)
   ANG 7704 (Legal and Ethical Aspects of Applied Anthropology)
   ANG 7487 (Quantitative Research Methods)

3. For archaeology track:

   ANG 6198 (Archaeological Methods)
   ANG 6110 (Archaeological Theory and Current Issues)
   ANG 6197 (Public Archaeology) and
   ANG 7487 (Quantitative Research Methods and
   ANG 6115 (Seminar in Archaeology) (when the topic is Advanced Archaeological Theory).

4. For biological track, required courses include:

   ANG 7487 (Quantitative Research Methods)
   ANG 6701 (Contemporary Applied Anthropology)
   ANG 6511 (Seminar in Physical Anthropology)/ANG 6588 (Human Variation), and
   ANG 6469/ANG 6511 (when topic is Theory and Methods in Applied Bioanthropology)
   ANG 6766 (Research Methods in Applied Anthropology)

5. Three elective graduate level Anthropology courses.

**External Curriculum Requirement**

The external curriculum requirement is designed to promote interdisciplinary perspectives. Students are expected to enroll in a minimum of two (2) or a maximum of three (3) graduate level courses in departments other than Anthropology, selected on the basis of professional interests and in consultation with the major advisor. Students who enter the Ph.D. program with post-baccalaureate degrees in disciplines other than Anthropology may be able to use up to nine (9) credits completed for that degree to satisfy the requirement, after consultation with the major advisor and approval of the Graduate Director. In these cases, the remaining credit hours will be fulfilled through additional coursework in Anthropology.
CORE REQUIREMENTS
Students select one of the following concentrations:

Concentration in Bio-cultural Medical Anthropology
Graduate students in the M.A., Ph.D., or dual degree programs can select three graduate medical anthropology elective courses with the ANG prefix, one of which must be cross-listed with ANG 6511 (Seminar in Physical Anthropology). The following courses are regularly offered and can be taken as bio-medical electives:

- ANG 6565 Regional Problems in Medical Anthropology
- ANG 6739 Applied Anthropology and International Health (3)
- ANG 6469 Selected Topics in Medical Anthropology

Anthropology (recent selected topics courses include Nutritional Anthropology, Ethnicity and Health Care, Community and Health Care, Socio-cultural Aspects of AIDS, Reproductive Health, Cross-cultural Aspects of Aging, Forensic Anthropology (Cross listed with ANG 6511), Human Biology of Afro-Cuban Populations (cross-listed with ANG 6511), Theories and Methods in Applied Bio-anthropology. Other electives as approved by advisor.

Graduate students pursuing a concentration in Bio-cultural Medical Anthropology must take the basic course requirements of their graduate program.

Concentration in Cultural Resource Management
Graduate students in the M.A. or Ph.D. degree programs, regardless of track, may select this 9-credit concentration.

Two courses
- ANG 6197 Public Archaeology (3)
- ANG 6115 Seminar in Archaeology (3) (when topic is Current Issues and Techniques in Cultural Resources Management, 3 cr.)

Third 3-credit class will be selected from the following options:

- ANG 6448 Regional Problems in Urban Anthropology (when topic is Issues in Heritage Tourism, or other as approved by Graduate Director) (3)
- ANG 6115 Seminar in Archaeology (when topic is Historical Archaeology, Florida Archaeology, Southeastern Archaeology, Museum Methods, or other as approved by Graduate Director)

Graduate class in Geographic Information Systems, whether offered in Anthropology or another department.

Graduate students pursuing a concentration in Cultural Resource Management must take the basic course requirements of their graduate program.

Concentration in Heritage Studies
The concentration in Heritage Studies allows M.A. and Ph.D. students to create a focused plan of study around issues of cultural heritage preservation, interpretation, and representation. Students will learn to identify, document, and critically interpret the significance of cultural heritage in urban, rural, and non-US settings, with a particular emphasis on community-based and collaborative approaches to these issues. One course, ANG 7708, ANG 7708 (Issues in Heritage Studies, 3 cr., is required.

In addition, students select two electives from among the following options:

- ANG 5395 Visual Anthropology (3)
- ANG 6081 Museum Methods (4)
- ANG 6197 Public Archaeology (3)
ANG 6436  Issues in Heritage Tourism (3)
ANG 6448  Regional Problems in Urban Anthropology (topics include 'Ethnohistory,' 'Museum in Culture,' 'Ethnicity and Public Policy,' 'Heritage Research and Management,' 'Culture and Environmental Resources') (3)
ANG 6495  Oral History and Life History: Approaches to Qualitative Research 3
ANG 6676  Seminar in Anthropological Linguistics (when the topics is 'Language and Culture' or 'Language and Racism') (3)
ANG 7487  Quantitative Research Methods (Qualitative Research Methods - (formerly Research Methods in Applied Anthropology) (3)

Language Requirement
All Ph.D. students are required to demonstrate proficiency in a foreign language, the specifics to be determined by the student and the supervisory committee, taking into account the nature of the student’s research. Minimal proficiency is demonstrated by the ability to satisfactorily translate a selection of the scholarly literature in the foreign language, with the occasional aid of a dictionary. The supervisory committee may require additional levels of proficiency depending on the nature of individual student research. The language requirement must be satisfied no later than the date of the dissertation defense.

Qualifying examination covering area of specialization within applied anthropology and external specialization.
Two-semester internship or dissertation research ANG 7940 (Doctoral Internship in Applied Anthropology, minimum of 4 credit hours).

Dissertation (6 credits)
Dissertation, based on research or internship ANG 7980 (Doctoral Dissertation, minimum of 6 credit hours).

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
APPLIED ANTHROPOLOGY AND PUBLIC HEALTH PROGRAMS

Dual Degree Program
Doctor of Philosophy (Ph.D.)/Master of Public Health (MPH) Degrees

DEGREE INFORMATION

Program Admission Deadlines:
Fall: December 15
Fall admissions only

Minimum Total Hours:
Applied Anthropology 46
Public Health 42

Program Level:
Doctoral and Masters

CIP Code:
45.0201
Applied Anthropology:
Public Health: 51.2201

Dept Code:
ANT, DEA

Program (Major/College):
APA AS, MPH PH

Concentrations:
Bio-cultural Medical Anthropology
Cultural Resource Management
Heritage Studies

CONTACT INFORMATION

Colleges: Arts and Sciences
Public Health

Departments: Anthropology, Public Health

Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Students interested in combining a program of study leading to a doctorate plus master’s degree have two choices: they may obtain a Ph.D. in Applied Anthropology with an M.P.H. in a Public Health concentration; or they may obtain a Ph.D. in Public Health with an M.A. in Applied Anthropology. For the doctoral/master’s combination, students develop individual programs of study in consultation with an interdisciplinary academic advisory committee. The committee must approve the plan of study as well as the proposal to fulfill the thesis and dissertation requirements or dissertation and special project requirements through a single project.

The two programs review applicants independently. The review process may begin in either college. The timing of application should take into consideration that the COPH admits MPH students three times a year (Fall, Spring, and Summer) (the Ph.D. program only has a fall admission) and the Department of Anthropology admits students annually in the Fall. Once the applicant has been accepted into one program, the application is forwarded to the other program for review.

After admission to both programs, the Graduate Admissions office instructs the Registrar’s Office to classify the student as dually enrolled in anthropology and public health. In choosing which program to apply to first, students should take into consideration the following: requirements in Anthropology for admission are different than in Public Health; admission to one program does not guarantee admission to the other; and of course, the student’s interests and career plans. Upon completion of all requirements for the dual degree program, the student submits separate applications for graduation to Anthropology and Public Health, and is certified for graduation by both programs and receives two diplomas. Dual degree students can also select elective courses to fulfill a concentration in Bio-cultural Medical Anthropology.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.
ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

Must meet all admissions criteria established by USF. The GRE is required for consideration in both programs, but there is no minimum score for admission into Anthropology. Admission requirements for the M.P.H. in Public Health include at least a 3.20 GPA at both the undergraduate and graduate levels, and a GRE of 550V and 620Q, 4.0 AW. In addition, admission to any of the dual degree programs will consider letters of recommendation, past experience, goal statement and availability of faculty. Other admission requirements include:

- a statement of purpose
- a signed Research Ethics statement
- at least 3 letters of recommendation
- a resume or curriculum vitae
- graduate assistant application form (optional)
- optional writing sample

Admission requirements for the Ph.D. in Public Health include at least a 3.20 GPA at both the undergraduate and graduate levels, and a GRE of 550V and 620Q, 4.0 AW. In addition, admission to any of the dual degree programs will consider letters of recommendation, past experience, goal statement and availability of faculty.

DEGREE PROGRAM REQUIREMENTS

Ph.D. in Applied Anthropology (46 hours beyond the M.A.)

CORE REQUIREMENTS

Course requirements

Upon completion of any prerequisites: ANG 6705 (Foundations of Applied Anthropology)

1. Must receive a grade of “B” or better, satisfies preliminary examinations in four subfields.

2. For cultural track, five additional required courses within the Department of Anthropology: ANG 6490 (Seminar in Cultural Anthropology) (when topics is Anthropological Theory Today), ANG 6701 (Contemporary Applied Anthropology), ANG 6766 (Research Methods in Applied Anthropology), ANG 7704 (Legal and Ethical aspects of Applied Anthropology), ANG 7487 (Quantitative Research Methods)

3. For biological track, required courses include: ANG 7487 (Quantitative Research Methods, ANG 6701 (Contemporary Applied Anthropology), ANG 6511 (Seminar in Physical Anthropology/6588 (Human Variation), ANG 6469/ANG 6511 (when topic is Theory and Methods in Applied Bioanthropology), and ANG 6766 (Research Methods in Applied Anthropology).

4. Three elective graduate level Anthropology courses.

External Curriculum Requirement

The external curriculum requirement is designed to promote interdisciplinary perspectives. Students are expected to enroll in a minimum of two (2) or a maximum of three (3) graduate level courses in departments other than Anthropology, selected on the basis of professional interests and in consultation with the major advisor. Students who enter the Ph.D. program with post-baccalaureate degrees in disciplines other than Anthropology may be able to use up to 9 credits completed for that degree to satisfy the requirement, after consultation with the major advisor and approval of the Graduate Director. In these cases, the remaining credit hours will be fulfilled through additional coursework in Anthropology.
Language Requirement
All Ph.D. students are required to demonstrate proficiency in a foreign language, the specifics to be determined by the student and the supervisory committee, taking into account the nature of the student’s research. Minimal proficiency is demonstrated by the ability to satisfactorily translate a selection of the scholarly literature in the foreign language, with the occasional aid of a dictionary. The supervisory committee may require additional levels of proficiency depending on the nature of individual student research. The language requirement must be satisfied no later than the date of the dissertation defense.

Qualifying examination covering area of specialization within applied anthropology and external specialization.

Internship
Two-semester internship of dissertation research
ANG 7940 (Doctoral Internship in Applied Anthropology, minimum of 4 credit hours)

Dissertation, based on research or internship
ANG 7980 (Doctoral Dissertation, minimum of 6 credit hours)

MPH in Public Health (42 hours)

Requirements include public health core courses, concentration area courses, concentration area courses, electives, supervised field placement, comprehensive exam, and special project.

1. Public Health Core Courses (15 hours, required for all concentration areas):
   a) PHC 6410 Social and Behavioral Sciences Applied to Health (3)
   b) PHC 6000 Epidemiology (3)
   c) PHC 6050 Biostatistics I or ANG 5488 Statistics
   d) PHC 6102 Principles of Health Policy and Management (3)
   e) PHC 6357 Environmental and Occupational Health (3)

2. Concentration Area Courses
   a) Health Policies and Programs
   b) Health Care Organizations and Management
   c) International Health Management
   d) Epidemiology
   e) Environmental Health
   f) Tropical Public Health/Communicable Disease
   g) Maternal and Child Health
   h) Public Health Education

For program descriptions and requirements, please see College of Public Health.

CONCENTRATION REQUIREMENTS

Concentration in Bio-cultural Medical Anthropology
Graduate students in the M.A., Ph.D., or dual degree programs can select three graduate medical anthropology elective courses with the ANG prefix, one of which must be cross-listed with ANG 6511 (Seminar in Physical Anthropology). The following courses are regularly offered and can be taken as biomedical electives:

- ANG 6465 Regional Problems in Medical Anthropology 3
- ANG 6739 Applied Anthropology and International Health 3
- ANG 6469 Selected Topics in Medical Anthropology 3

Anthropology (recent selected topics courses include Nutritional Anthropology, Ethnicity and Health Care, Community and Health Care, Social Epidemiology of AIDS, Cross-cultural Aspects of Aging, Forensic
Anthropology (Cross listed with ANG 6511), Human Biology of Afro-Cuban Populations (cross-listed with ANG 6511), Theories and Methods in Applied Bio-anthropology. Other electives as approved by advisor.

Graduate students pursuing a concentration in Bio-cultural Medical Anthropology must take the basic course requirements of their graduate program.

Concentration in Cultural Resource Management
Graduate students in the M.A. or Ph.D. degree programs, regardless of track, may select this 9-credit concentration.

Two courses
ANG 6197 Public Archaeology (3)
ANG 6115 Seminar in Archaeology (3) (when topic is Current Issues and Techniques in Cultural Resources Management, 3 cr.)

Third 3-credit class will be selected from the following options:

ANG 6448 Regional Problems in Urban Anthropology (when topic is Issues in Heritage Tourism, or other as approved by Graduate Director) 3
ANG 6115 Seminar in Archaeology (when topic is Historical Archaeology, Florida Archaeology, Southeastern Archaeology, Museum Methods, or other as approved by Graduate Director)

Graduate class in Geographic Information Systems, whether offered in Anthropology or another department.

Graduate students pursuing a concentration in Cultural Resource Management must take the basic course requirements of their graduate program.

Concentration in Heritage Studies
The concentration in Heritage Studies allows M.A. and Ph.D. students to create a focused plan of study around issues of cultural heritage preservation, interpretation, and representation. Students will learn to identify, document, and critically interpret the significance of cultural heritage in urban, rural, and non-US settings, with a particular emphasis on community-based and collaborative approaches to these issues. One course, ANG 7708 (Issues in Heritage Studies, 3 cr., is required.)

In addition, students select two electives from among the following options:

ANG 5395 Visual Anthropology 3
ANG 6081 Museum Methods 4
ANG 6197 Public Archaeology 3
ANG 6436 Issues in Heritage Tourism (3)
ANG 6448 Regional Problems in Urban Anthropology (topics include ‘Ethnohistory,’ ‘Museum in Culture,’ ‘Ethnicity and Public Policy,’ ‘Heritage Research and Management,’ ‘Culture and Environmental Resources’) 3
ANG 6495 Oral History and Life History: Approaches to Qualitative Research 3
ANG 6676 Seminar in Anthropological Linguistics (when the topics is ‘Language and Culture’ or ‘Language and Racism’) 3
ANG 7487 Quantitative Research Methods

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
BIOLOGY PROGRAM

Master of Science (M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tr>
<td>January 1 for full consideration; however applications are accepted to February 15 (U.S. Applicants)</td>
<td>August 1 (U.S. Applicants)</td>
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<tr>
<td>January 1 (International)</td>
<td>July 1 (International)</td>
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Minimum Total Hours: 30
Program Level: Masters
CIP Code: 26.0101
Dept Code: BIO
Program (Major/College): BIO AS

Concentrations:
Cell Biology and Molecular Biology (CMB)
Ecology and Evolution (EEV)
Environmental and Ecological Microbiology (EVM)
Physiology and Morphology (PMY)

CONTACT INFORMATION

College: Arts and Sciences
Departments: Cell Biology, Molecular Biology and Microbiology (CMMB) and Integrated Biology (IB)
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The Department of Biology was expanded into the Department of Cell Biology, Molecular Biology and Microbiology (CMMB) and the Department of Integrated Biology (IB) in 2009. Each Department has its own Chair and Graduate Director and offers students a Master of Science in Biology with a specific concentration associated with either CMMB or IB. There is no general Biology MS degree program. The CMMB and IB Departments are located in two modern, well-equipped buildings. Most research in the CMMB Department is done by faculty housed in the Bio-Science Faculty building (BSF), and most of the research within the IB Department is conducted by faculty housed in the Science Center building (SCA). In addition, the department has common research facilities in two nearby buildings. Because of the interdisciplinary aspect of most research projects, faculty and graduate students often work together on broad training research projects that bring together many of the traditionally separate areas of biology. Many of the faculty within CMMB and IB are involved in cooperative research with their colleagues in Chemistry, Public Health, Nursing, Medicine, Geology, Psychology, Geography, Marine Science, and Environmental Science. Often CMMB and IB graduate students have faculty members from these other areas of USF as members of their graduate committees.

Because of the many undergraduate courses that require hands-on experimental laboratories, both CMMB and IB support many graduate students as Teaching Assistants. CMMB and IB values high quality teaching at all levels of instruction. Research Assistant positions also are available to support research with specific faculty members depending on an individual faculty members funding. Numerous scholarship opportunities are also offered on a competitive basis through the USF Graduate School.

Application to the Biology Program is through one of the two departments, with students selecting a formal Concentration. Refer to the Concentration listing in the Catalog for specific information and requirements.
Applying to the Department of Cell Biology, Microbiology and Molecular Biology

Students interested in attending graduate school within the CMMB Department should visit the CMMB website that can be accessed from the main USF site and review the current CMMB faculty. It is recommended that potential students consider at least 2-3 CMMB faculty that they would be interested in working with and communicate this information in their letter of application. It is also recommended that potential students contact the CMMB Graduate Director as well as the individual faculty members they are interested in working with via email. Such communication will facilitate the assignment of the laboratory rotations that CMMB students will participate in during their first semester of residency and also allow the applicant to determine whether the desired faculty member has positions available in the laboratory. All students admitted to the Masters concentration in Cell Biology and Molecular Biology must establish a Graduate Supervisory Committee. The Graduate Committee shall constitute the major professor and at least two additional credentialed faculty. At least one of the committee members must be a faculty member at USF. Supervisory committee must be formed within two semesters after matriculation. Refer to Committee information in the University Requirements Section of the Catalog for more information.

The CMMB Graduate Director, CMMB Chair, and the College Associate Dean (or designee) must approve the Graduate Committee. Once a major professor has been assigned and/or a student occupies or utilizes significant space or facilities for research or analogous scholarly activity directly pertinent to the generation of a thesis, the student shall enroll for two (2) hours of research credit each semester (other than summer semester), until eligible to enroll in thesis credits.

Applying to the Department of Integrative Biology

Students interested in attending graduate school within the IB Department should contact potential major professors to communicate their research ideas and establish that the professor will consider the student’s application. The IB Department requires that all students admitted into the MS program have the approval of a major professor. Applicants should contact faculty conducting research in the student’s area of interest well in advance of the application deadline.

For all master’s students, the major professor and at least two additional faculty constitute the student’s supervisory committee, the major professor and at least one of the committee members must be from the Biology Department. Supervisory committees must be established within two semesters after matriculation. Failure to do so will be cause for dismissal.

The IB Graduate Director, IB Chair, and the College Associate Dean (or designee) must approve the Supervisory Committee. Once a major professor has been assigned and/or a student occupies or utilizes significant space or facilities for research or analogous scholarly activity directly pertinent to the generation of a thesis, the student shall enroll for a minimum of two (2) hours of research credit each semester (other than summer semester), until eligible to enroll in thesis credits.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: Cell Biology, Molecular Biology, Signal Transduction and Gene Regulation, Cancer Biology, Developmental Biology, Microbiology, Ecology and Evolution, Environmental and Ecological Microbiology, Physiology and Morphology

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Prospective students must apply to a specific Biology MS program concentration via the online application process through the USF Graduate School.
- Must have 3.00 GPA last 60 hours of B.S. degree
• Must have 500V, 600Q, 4.5AW on GRE

• All international students are required to submit the TOEFL test. Non-native English speaking graduate students must score a minimum of at least 570 on the paper based test or a minimum total score of 79 on the internet based test on the TOEFL and at least 50 on the TSE to be eligible for a teaching assistantship.

• For acceptance into the IB Department, acceptance by a faculty member in IB is MANDATORY. IB encourages applicants to contact faculty via email to indicate an interest in the research being conducted in their laboratory. IB will make every effort to pair potential graduate students with appropriate faculty; however, it is recommended that applicants make direct contact with individual faculty.

• It is expected that candidates for the M.S. degrees will have completed courses equivalent to those required for the B.S. in Biology at U.S.F.

Materials necessary for a complete application are listed below.

The following items should be submitted in the envelope provided to:

Integrative Biology Graduate Office
Attention: IB Graduate Director
University of South Florida
4202 E. Fowler Ave – SCA110
Tampa, FL 33620-5150

CMMB Graduate Office
Attention: CMMB Graduate Director
University of South Florida
4202 E. Fowler Ave – BSF 218
Tampa, FL 33620-5150

1. Two official transcripts in a sealed envelope from each post-secondary institution. Transcripts of work completed at USF will be secured by the Office of Admissions. Thus, applicants need only to secure transcripts from other institutions for your application packet.

2. Three letters of recommendation from faculty in sealed envelopes (on their university letterhead) with the envelope seal signed by the recommender. Students shall complete a Student Recommendation Form that can be found on the CMMB and IB website and submit it to the recommenders.

3. A brief essay stating your intended field of research and professional goals. Please indicate your specific research interests, in order that we may refer your application to appropriate CMMB or IB faculty members. In the essay please list 2-3 CMMB or IB faculty members that you would like to have review your file. Acceptance into the IB graduate program requires the identification of specific faculty who are willing to direct your research. This final requirement does not apply to students wishing to study in the CMMB Department.

4. Applicant must complete the Application for Teaching Assistantship (TA) Form that can be found on the CMMB or IB website if they wish to be considered for a TA position. Applicants who do not return this form will not be considered for a teaching position. Applicants should attach a resume to the Application for Teaching Assistantship (TA) Form that highlights any previous teaching experience.

OFFICIAL test scores must be sent to USF directly from the testing agency. The University of South Florida’s 4-Digit Institution Code is: 5828

Official GRE scores. This exam must have been taken within the last five years.
DEGREE PROGRAM REQUIREMENTS

The thesis based M.S. degree requires successful completion of the following:
1. structured coursework
2. an oral qualifying exam
3. research thesis
4. comprehensive final examination

The Master’s Degree Requirements should be completed in two to three years. The CMMB and IB Departments require all graduate work applied toward the completion of degree requirements be completed within a five year period after matriculation. Thesis research should be publishable and students are encouraged to publish their findings. Students must choose a specific concentration in the MS degree that will be completed within either the CMMB or IB Department. The specific requirements for the Master of Science (M.S.) and the specific concentrations are provided below.

1) Credit hour requirement a total of 30 semester hour credits beyond the Baccalaureate Degree is required.
   (including BSC 6910, BSC 6971, BSC 6935, and other structured and unstructured courses approved by CMMB or IB)
2) Students admitted to the CMMB Department must complete three laboratory rotations during their first semester of residency.
3) Successful completion of the oral comprehensive qualifying examination. The exam should be taken at the end of the first year, or early in the second year of study. The examination is administered and evaluated by the student’s graduate committee.
4) Submission of a thesis proposal and approval by the major professor, graduate committee and graduate director.
5) A minimum of eight (8) thesis research credit hours (BSC 6971).
6) Seminar requirement: one presentation, excluding the thesis seminar and defense. Students should present posters or oral presentations based on their thesis research at national/regional professional meetings. The student’s graduate committee must approve the presentation.
7) Submission of an acceptable thesis.
8) Presentation of the thesis seminar (BSC 6935) and successful defense of the thesis.

Degree Progress
A student must be registered for an appropriate load (in no case fewer than two [2] graduate hours) in the college for the semester in which all degree requirements are satisfactorily completed. A student who receives three grades below "B" in structured courses required by the advisory committee will be dropped from the program. Registration in courses entitled Directed Research, Thesis must be with the approval of the major professor and must be commensurate with each student’s research plan. Students may not register in Thesis: Master’s until a Supervisory Committee has been formed and completed the oral qualifying examination. A student who enrolls in courses entitled Thesis: Master’s but does not submit a thesis will not be certified for graduation.

CORE REQUIREMENTS

MS in Biology Core (4 credit hrs)
BSC 6930 Lectures in Contemporary Biology (1)

Enrollment in this course is required for at least two semesters of residency. (Note: Students in the Integrated Biology Department are required to enroll in this course for an additional semester for a total of three semesters)

Concentration Requirements
Refer to the individual Concentration listings for information and requirements.
MS in Biology Non-Thesis Option

Non-Thesis - For students enrolled in the non-thesis program, a 30-hour minimum is required at the 5000-6000 level; 26 hours must be in formally structured courses, 16 hours must be at the 6000 level; 15 structured hours must be offered by Biology. A review paper of a topic approved by the supervisory committee is required as well as successful completion of the comprehensive oral qualifying exam after all course work has been completed. For non-thesis masters students, this exam will occur at the end of the program of study.

Comprehensive Oral Qualifying Examination. A comprehensive examination (thesis proposal, seminar/presentation and defense of thesis proposal) is required for all master’s students. This examination is open to all departmental faculty. Students must take their comprehensive exam within two semesters of matriculation and the exam is normally taken after the completion of all formal course work. Thesis students must take the examination at least one semester before the thesis is presented. Any graduate work counted toward the requirement for the M.S. degree must be completed within five (5) years after matriculation.

All thesis-based Master’s Degree students must present a seminar to the Department of Biology and must be enrolled in BSC 6935, during the final semester. The seminar should be a concise summary of the research completed to satisfy the requirements for the M.S. Degree. The seminar is open to the general public and must be announced two weeks prior to the presentation. Upon completion of the seminar, the general public will be invited to ask questions. At the discretion of the student’s graduate committee, members of the committee may continue to question the graduate student after the general public has departed the seminar room. Each student is expected to defend his/her research to the unanimous satisfaction of the graduate committee.

COURSES
For updated list of courses see: http://www.ugs.usf.edu/sab/sabs.cfm
BIOLOGY PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: January 1 for full consideration; however applications are accepted to February 15 (U.S. Applicants) January 1 (International)
Spring: August 1 (U.S. Applicants) July 1 (International)

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 26.0101
Dept Code: BIO
Program (Major/College): BIO AS

Concentrations:
Cell Biology, Microbiology and Molecular Biology (CMMB)
Ecology and Evolution (EEV)
Environmental and Ecological Microbiology (EVM)
Physiology and Morphology (PMY)

CONTACT INFORMATION

College: Arts and Sciences
Departments: Cell Biology, Molecular Biology and Microbiology (CMMB) Integrated Biology (IB)

Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The Department of Biology was expanded into the Department of Cell Biology, Molecular Biology and Microbiology (CMMB) and the Department of Integrated Biology (IB) in 2009. Each Department has its own Chair and Graduate Director and offers students a Ph.D. degree in Biology with a specific concentration associated with either CMMB or IB. There is no general Biology PhD degree program. The CMMB and IB Departments are located in two modern, well-equipped buildings. Most research in CMMB Department is done by faculty housed in the Bio-Science Facility building (BSF), and most of the research within the IB Department is conducted by faculty housed in the Science Center building (SCA). In addition, the Department have common research facilities in two nearby buildings. Because of the interdisciplinary aspect of most research projects, faculty and graduate students often work together on broad ranging research projects that bring together many of the traditionally separate areas of biology. Many of the faculty within CMMB and IB are involved in cooperative research with their colleagues in Chemistry, Public health, Nursing, Medicine, Geology, Psychology, Geography, Marine Science, and Environmental Science. Often CMMB and IB graduate students have faculty members from these other areas of USF as members of their graduate committees.

Because of the many undergraduate courses that require hands-on experimental laboratories, both CMMB and IB supports many graduate students as Teaching Assistants. CMMB and IB values high quality teaching at all levels of instruction. Research Assistant positions also are available to support research with specific faculty members depending on an individual faculty members funding. Numerous scholarship opportunities are also offered on a competitive basis through the USF Graduate School.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.
**Major Research Areas:** Cell Biology, Molecular Biology, Cancer Biology, Signal Transduction and Gene Regulation, Developmental Biology, Ecology and Evolution, Environmental and Ecological, Microbiology and Physiology and Morphology, Applied and General Microbiology, Conservation Biology and Coastal Marine Biology, Ecology and Evolution, Environment and Ecological Microbiology, Physiology and Morphology

**ADMISSION INFORMATION**

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

**Applying to the Department of Cell Biology, Microbiology and Molecular Biology**

Students interested in attending graduate school within the CMMB Department should visit the CMMB website that can be accessed from the main USF site and review the current CMMB faculty. It is recommended that potential students consider at least 2-3 CMMB faculty that they would be interested in working with and communicate this information in their letter of application. It is also recommended that potential students contact the CMMB Graduate Director as well as the individual faculty members they are interested in working with via email. Such communication will facilitate the assignment of the laboratory rotations that CMMB students will participate in during their first semester of residency and also allow the applicant to determine whether the desired faculty member has positions available in the laboratory. All students admitted to the PhD concentration in Cell Biology, Microbiology and Molecular Biology must establish a supervisory committee. The supervisory committee shall constitute the major professor and at least three additional credentialed faculty. At least two of the committee members must be faculty members at USF. The supervisory committee must be formed within two semesters after matriculation. The CMMB Graduate Director, CMMB Chair, and the College Associate Dean (or designee) must approve the Supervisory Committee.

**Applying to the Department of Integrative Biology**

Students interested in attending graduate school within the IB Department should contact potential major professors to communicate their research ideas and establish that the professor will consider the student’s application. The IB Department requires that all students admitted into the PhD program have the approval of a major professor. Applicants should contact faculty conducting research in the student’s area of interest well in advance of the application deadline. All doctoral degree seeking students must form a Graduate Supervisory committee that consists of four faculty members. The major professor and at least two committee members must be from the IB Department. The Committee must be established within two semesters after matriculation. Failure to do so may be cause for dismissal. The IB Graduate Director, IB Chair, and the College Associate Dean (or designee) must approve the Supervisory Committee.

**Program Admission Requirements**

- Prospective students must apply to a specific Biology Ph.D. program concentration via the online application process through the USF Graduate School.
- Must have 3.00 GPA last 60 hours of B.S. degree.
- Must have 500V, 600Q, 4.5 AW on GRE.
- All international students are required to submit the TOEFL test. Non-native English speaking graduate students must score a minimum of at least 570 on the paper based or a minimum total score of 79 on the internet-based test TOEFL and at least 50 on the TSE to be eligible for a teaching assistantship.
- For acceptance into the IB Department, acceptance by a faculty member in IB is MANDATORY. IB encourages applicants to contact faculty via email to indicate an interest in the research being conducted in their laboratory. IB will make every effort to pair potential graduate students with appropriate faculty; however it is recommended that applicants make direct contact with individual faculty.
- It is expected that candidates for the PhD degree will have completed courses equivalent to those required for the B.S. in Biology at U.S.F.
DEGREE PROGRAM REQUIREMENTS

The Ph.D. degree requires successful completion of:
1. structured coursework
2. qualifying exam (dissertation proposal, presentation/seminar and defense of dissertation proposal)
3. oral qualifying exam and Admission to Candidacy
4. oral Defense and submission of approved Dissertation

Coursework
A total of 90 credits beyond the baccalaureate must be earned: this includes any graduate credit earned prior to admission to the doctoral program. A minimum of three years of graduate work beyond the Baccalaureate Degree is required.

Twelve (12) hours of graduate work completed while a non-degree seeking student at this institution may be transferred to the doctoral program, with approval of the supervisory committee. At least one academic year of residence must be on the campus. A year of residence is enrollment in a minimum of nine (9) semester credits for two consecutive semesters. The direction and immediate supervision of graduate work for doctoral students resides with the major professor and student’s Graduate Supervisory Committee. Graduate students are not admitted to IB unless a major professor has agreed to serve as the student’s supervisor. The University imposes limitations on the time period between admission to candidacy and successful completion of degree requirements. **EDITOR’S NOTE: University policy for time limits may be viewed in the Degree Requirements Section of this catalog.**

The CMMB and IB Departments requires that all graduate work applied toward the completion of degree requirements be completed within a seven year period after matriculation. Doctoral students are encouraged to gain teaching experience in at least two undergraduate courses in the department. Overall degree requirements for the Doctor of Philosophy are as follows:

1. **Credit hour requirement:** A total of 90 semester hour credits beyond the Baccalaureate degree is required. *(including BSC 7910, BSC 7971, BSC 7980 and other structured and unstructured courses approved by CMMB or IB)*

2. **Students admitted to the CMMB Department must complete three laboratory rotations during their first semester of residency.**

3. **A minimum of twenty-four (24) dissertation research credit hours (BSC 7980) is required.**

4. **Submission of a doctoral proposal and approval by major professor, graduate committee, and graduate director**

5. **Successful completion of the dissertation proposal, presentation/seminar and preliminary doctoral examination.**

6. **Presentation requirement:** two presentations, excluding the doctoral seminar and defense. Students are expected to present posters or oral presentations based on their dissertation research at national/regional professional meetings. The graduate committee must approve the presentation.

7. **Publication requirement:** one research paper must be submitted for publication to a refereed scientific journal by the date of the Doctoral Seminar and Defense. The paper may be sole or coauthored, but it must be based on the dissertation research. The student’s supervisory committee must approve the paper prior to submission.

8. **Submission of an acceptable dissertation**

9. **Presentation of the doctoral seminar (BSC 7936) and successful defense of the dissertation.**
**Degree Progress**

A student must be registered no fewer than two [2] credit hours in the college for the semester in which all degree requirements are satisfactorily completed. A student who receives three grades below “B” in structured courses required by the Graduate Supervisory committee will be dropped from the program. Registration in courses entitled Directed Research, or Dissertation must be with the approval of the major professor and must be commensurate with each student’s research plan. Students may not register in Dissertation: Doctoral (BSC 7980) until a Supervisory Committee has been formed and a approved Admission to Candidacy on file with the Graduate School. A student who enrolls in courses entitled Dissertation: Doctoral but does not submit a dissertation will not be certified for graduation.

**PhD in Biology Course Requirements**

**Ph.D. in Biology Core (6 credit hrs.)**

BSC 6930 Lectures in Contemporary Biology (1)

*Enrollment in this course is required during four semesters of residency*

BSC 7980 Dissertation (24 hours)

**Concentration Requirements**

*Refer to the individual Concentration listings for information and requirements.*

**CMMB Written Qualifying Exam**

All students in the CMMB PhD degree concentration must complete a written qualifying examination. The exam shall be in the format of a grant proposal and contain the following sections;

- Abstract [300 words]
- Specific Aims [1 page]
- Background and Significance of topics [4-5 pages]
- Proposed research program (conducted over 3 year period) [9-10 pages]
- Bibliography (no page limit)

The length of the proposal shall be no more than 15 pages (the abstract and bibliography does not count in the page limit). The topic of the exam shall meet the following guidelines:

- The written proposal *cannot be based in the same model organism* that the student will use to carry out their dissertation research
- The written proposal *cannot be based on the analysis of the same gene/protein* that the student will investigate during their dissertation research
- The written proposal *cannot be based on the analysis of the same pathway* that the student will investigate during their dissertation research

Student shall submit potential topics during the Advances in Scientific Writing course. The Instructor of record will provide deadlines for the submission of these topics as well as the required format. The student’s Ph.D. dissertation committee and major professor will approve the topic. No work can be done on the exam until the topic is approved and returned to the student.

Students are required to have an approved topic and complete the SPECIFIC AIMS section of the written qualifying exam during the Advances in Scientific Writing course. This will be during the student’s second semester (for those admitted in the fall) or third semester (for those student’s admitted in the spring). Successful completion of Advances in Scientific Writing course is required for the student to continue working on the written qualifying exam; otherwise, they must retake the course in a subsequent semester. For students that successfully complete the course, the final version of the written qualifying exam will be due in electronic form to the CMMB Graduate Director no later than OCTOBER 15th of the student’s third semester (for those admitted in the fall) or fourth semester (for those student’s admitted in the spring). *The proposal is to be an original document prepared and edited by the student.*
Each proposal will be made available to the CMMB faculty. The CMMB Graduate Committee will assign individual proposals to at least a primary and secondary reviewer. The primary reviewer may not be the dissertation advisor of the student that wrote the proposal. When appropriate, a third reviewer may also be utilized. An evaluation rubric will be utilized to assign each proposal an initial “score”. Final grading of the proposal will be carried out during a panel discussion of all faculty involved in the review. The CMMB Graduate Director will serve as the mediator of the meeting and will be responsible for distributing the graded exam and faculty comments to the student. Students that do not pass the written exam shall be provided one chance to complete the exam successfully. The timeline and format of any remediation will be determined during the panel discussion.

**IB Qualifying Exam**
All students in the IB PhD degree concentration must complete a qualifying examination. Successful completion of the preliminary doctoral examination by the end of the 4th semester. The exam consists of 3 parts:

1. Dissertation proposal
2. Seminar/presentation of proposal
3. Defense of dissertation proposal

**Admission to Candidacy**
The doctoral student is eligible for admission to candidacy after completing structured course requirements, passing the qualifying examination and approval by the supervisory committee. Appropriate forms to document promotion to candidacy must be completed and to the Graduate School. Following admission to candidacy, a student must enroll in BSC 7980 when engaged in research, data collection, or writing activities relevant to the doctoral dissertation. Advisors should assign the number of credits in this course in accordance with policy and appropriate to the demands made on faculty, staff, and University facilities, but in no event will the total number of earned dissertation credits be fewer than 16. Students not admitted to candidacy are not eligible to enroll in BSC 7980.

**Additional Requirements**
Any graduate work counted toward fulfilling the requirements for the Ph.D. degree must be completed within seven (7) years after matriculation.

**Doctoral Seminar and Defense.**
All doctoral students must present a public seminar to the CMMB or IB Department and must be enrolled in BSC 7980, during the semester in which the seminar is given. The seminar should be a concise summary of the research completed to satisfy the requirements for the Ph.D. The seminar is open to the general public and must be announced two weeks prior to the presentation. Upon completion of the seminar, the general public will be invited to ask questions. At the discretion of the student’s graduate committee, members of the committee may continue to question the graduate student after the general public has departed the seminar room. Each student is expected to defend his/her research to the unanimous satisfaction of the graduate committee. Following the defense, students will make any editorial modifications to the dissertation as recommended by the supervisory committee and submit the dissertation to the Graduate School.

**COURSES**
For an updated list of course offerings see: [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
CANCER BIOLOGY PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: U.S. February 1
- International: January 2

Minimum Total Hours: 96

Program Level: Doctoral

CIP Code: 26.0911

Dept Code: GRS

Program (Major/College): CNB GS

CONTACT INFORMATION

College: Arts and Sciences
Department: Cancer Biology

Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The Moffitt Cancer Center and the University of South Florida have joined together to establish a graduate program focused specifically on Cancer Biology. Tremendous advancement in the detection and treatment of cancer has occurred over the last decade, yet cancer continues to adversely affect millions of people worldwide in terms of quality of life, life span and economic burden.

The Moffitt Cancer Center at the University of South Florida is a leading institution of basic research, clinical research and patient treatment. The Moffitt Cancer Center has received national acclaim and is officially designated as a Comprehensive Cancer Center by the National Cancer Institute of the National Institutes of Health. The Cancer Biology Ph.D. Program's goal is to train the next generation of Cancer researchers. Studies of cancer require specific knowledge in multiple fields that have traditionally been independent. Our Cancer Biology Ph.D. program emulates the Moffitt Cancer Center and eliminates these boundaries. Students will receive cancer-oriented training in: molecular biology, immunology, functional genomics, bioinformatics, drug discovery & development, cancer genetics, cancer prevention & control, cancer therapeutics, cell biology, biochemistry, proteomics chemistry.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- Extensive background in field of biology or chemistry
- GRE required for full consideration;
- GPA of at least 3.0 or greater;
- Advanced coursework and research experience preferred
DEGREE PROGRAM REQUIREMENTS

Course Requirements:
All students are required to successfully complete the Cancer Biology Program Core Courses. In addition, students must successfully complete at least one elective course that have been approved by the Cancer Biology Education Committee. These elective courses are offered through Departments within the College of Medicine, Engineering, and Arts and Sciences. Dissertation Committees may also require students to take additional course work if needed to correct deficiencies. In special circumstances the Cancer Biology Education Committee can waive course requirements, if the student has recently completed identical coursework elsewhere. Students are required to achieve a minimum GPA of B in all Cancer Biology Core courses and an overall GPA of 3.0 (B) in order to remain in good standing.

Stipends:
All Cancer Biology Ph.D. students in good standing will receive a highly competitive stipend ($22,600 for 2008 first year students) An annual cost of living increase is provided to students starting in their second year of study. Please visit the Program’s website for current stipend levels. Students also receive health insurance coverage and direct payment in full of all required tuition and required fees. All students are highly encouraged to apply for funding from outside sources.

Total Minimum Hours: 96

CORE REQUIREMENTS

Required Cancer Biology Core Courses (15 hours minimum)
- BSC 6056 Cancer Research Techniques
- PCB 6230 Cancer Biology I (4)
- PCB 6231 Cancer Biology II (4)
- PCB 6910 Cancer Laboratory Rotations (1-3)
- BSC 7911 Directed Research (1-12)
- PCB 6931 Advances in Cancer Biology (2)
- PCB 6930 Current Topics in Oncology (2)
- BSC 6939 Selected Topics in Cancer Biology- Cancer Genetics (1)

Qualifying Exam

Dissertation

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
CELL BIOLOGY AND MOLECULAR BIOLOGY CONCENTRATION

Master of Science (M.S.) degree in the Biology Program
With a concentration in Cell Biology and Molecular Biology

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: January 1 for full consideration; however, applications are accepted to February 15 (U.S. Applicants) and January 1 (International)
- Spring: August 1 (U.S. Applicants) and July 1 (International)

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 26.0101
Dept Code: BIO
Program (Major/College): BIO AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Cell Biology, Molecular Biology and Microbiology (CMMB)
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

For program information refer to the Biology Program (M.S.) listing.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: Cell Biology, Molecular Biology, Signal Transduction and Gene Regulation, Cancer Biology, Developmental Biology, Microbiology

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Applying to the Department of Cell Biology, Microbiology and Molecular Biology
Students interested in attending graduate school within the CMMB Department should visit the CMMB website that can be accessed from the main USF site and review the current CMMB faculty. It is recommended that potential students consider at least 2-3 CMMB faculty that they would be interested in working with and communicate this information in their letter of application. It is also recommended that potential students contact the CMMB Graduate Director as well as the individual faculty members they are interested in working with via email. Such communication will facilitate the assignment of the laboratory rotations that CMMB students will participate in during their first semester of residency and also allow the applicant to determine whether the desired faculty member has positions available in the laboratory. All students admitted to the Masters concentration in Cell Biology and Molecular Biology must establish a supervisory committee. The supervisory committee shall constitute the major professor and at least two additional credentialed faculty. At least one of the committee members must be a faculty member at USF. Supervisory committee must be formed within two semesters after matriculation.
The CMMB Graduate Director, CMMB Chair, and the College Associate Dean (or designee) must approve the Supervisory Committee. Once a major professor has been assigned and/or a student occupies or utilizes significant space or facilities for research or analogous scholarly activity directly pertinent to the generation of a thesis, the student shall enroll for two (2) hours of research credit each semester (other than summer semester), until eligible to enroll in thesis credits.

Program Admission Requirements

- Prospective students must apply to a specific Biology MS program concentration via the online application process through the USF Graduate School.
- Must have 3.00 GPA last 60 hours of B.S. degree
- Must have 500V, 600Q, 4.5AW on GRE
- All international students are required to submit the TOEFL test. Non-native English speaking graduate students must score at least 570 on the TOEFL and at least 50 on the TSE to be eligible for a teaching assistantship.
- It is expected that candidates for the M.S. degrees will have completed courses equivalent to those required for the B.S. in Biology at U.S.F.

Materials necessary for a complete application are listed below:

The following items should be submitted in the envelope provided to:

CMMB Graduate Office
Attention: CMMB Graduate Director
University of South Florida
4202 E. Fowler Ave – BSF 218
Tampa, FL 33620-5150

1. **Transcripts.** Two official transcripts in a sealed envelope from each post-secondary institution. Transcripts of work completed at USF will be secured by the Office of Admissions. Thus, applicants only to secure transcripts from other institutions for your application packet.

2. **Letters of Recommendation.** Three letters of recommendation from faculty in sealed envelopes (on their university letterhead) with the envelope seal signed by the recommender. Students shall complete a Student Recommendation Form that can be found on the CMMB and IB website and submit it to the recommenders.

3. **Essay.** A brief essay stating your intended field of research and professional goals. Please indicate your specific research interests, in order that we may refer your application to appropriate CMMB faculty members. In the essay please list 2-3 CMMB faculty members that you would like to have review your file. Acceptance into the IB graduate program requires the identification of specific faculty who are willing to direct your research. This final requirement does not apply to students wishing to study in the CMMB Department.

4. **TA Application.** Applicant must complete the Application for Teaching Assistantship (TA) Form that can be found on the CMMB website if they wish to be considered for a TA position. Applicants who do not return this form will not be considered for a teaching position. Applicants should attach a resume to the Application for Teaching Assistantship (TA) Form that highlights any previous teaching experience.

5. **GRE Scores.** Official GRE scores. This exam must have been taken within the last five years. OFFICIAL test scores must be sent to USF directly from the testing agency. The University of South Florida’s 4-Digit Institution Code is: 5828
DEGREE PROGRAM REQUIREMENTS

The thesis based M.S. degree requires successful completion of the following:
1. structured coursework
2. an oral qualifying exam
3. research thesis
4. comprehensive final examination

The Master’s Degree Requirements should be completed in two to three years. The CMMB Department requires all graduate work applied toward the completion of degree requirements be completed within a five year period after matriculation. Thesis research should be publishable and students are encouraged to publish their findings. Students must choose a specific concentration in the MS degree that will be completed within either the CMMB or IB Department. The specific requirements for the Master of Science (M.S.) and the specific concentrations are provided below.

1) Credit hour requirement: a total of 30 semester hour credits beyond the Baccalaureate Degree is required. *(including BSC 6910, BSC 6971, BSC 6935, and other structured and unstructured courses approved by CMMB)*

2) Students admitted to the CMMB Department must complete three laboratory rotations during their first semester of residency.

3) Successful completion of the oral comprehensive qualifying examination. The exam should be taken at the end of the first year, or early in the second year of study. The examination is administered and evaluated by the student’s graduate committee.

4) Submission of a thesis proposal and approval by the major professor, graduate committee and graduate director.

5) A minimum of eight (8) thesis research credit hours (BSC 6971).

6) Seminar requirement: one presentation, excluding the thesis seminar and defense. Students should present posters or oral presentations based on their thesis research at national/regional professional meetings. The student’s graduate committee must approve the presentation.

7) Submission of an acceptable thesis.

8) Presentation of the thesis seminar (BSC 6935) and successful defense of the thesis.

Degree Progress
A student must be registered for an appropriate load (in no case fewer than two [2] graduate hours) in the college for the semester in which all degree requirements are satisfactorily completed. A student who receives three grades below “B” in structured courses required by the advisory committee will be dropped from the program. Registration in courses entitled Directed Research, Thesis must be with the approval of the major professor and must be commensurate with each student’s research plan. Students may not register in Thesis: Master’s until a Supervisory Committee has been formed and completed the oral qualifying examination. A student who enrolls in courses entitled Thesis: Master’s but does not submit a thesis will not be certified for graduation.

CORE REQUIREMENTS
MS in Biology Core (4 credit hrs)
   BSC 6930 Lectures in Contemporary Biology (1)
   *Enrollment in this course is required during each semester of residency.*

CONCENTRATION REQUIREMENTS
Concentration in Cell Biology and Molecular Biology Requirements (5 credit hrs)
   BSC 6932 Advances in Scientific Review (2)
   BSC 6932 Advances in Scientific Writing (2)
   PCB 6930 Advances in Cell and Molecular Biology (1)
**Electives***(minimum of 6 credit hrs)*

MCB 5206 Public Health and Pathogenic Microbiology (3)
MCB 5655 Applied and Environmental Microbiology (3)
PCB 5235 Principles of Immunology (3)
PCB 6236 Advanced Immunology (3)
MCB 5815 Medical Mycology (3)
BSC 5931 Molecular Microbial Ecology (3)
BSC 5931 Prokaryotic Molecular Genetics (3)
MCB 5410 Cellular Microbiology (3)
PCB 5256 Developmental Mechanisms (3)
BSC 5425 Genetic Engineering and Recombinant DNA Technology (3)
PCB 5616 Molecular Phylogenetics (3)
PCB 5525 Molecular Genetics (3)
PCB 6107 Advanced Cell Biology (4)
BSC 5931 Eukaryotic Genomics (3)

*The supervisory committee may approve additional courses not listed here.

**MS in Biology Non-Thesis Option**

**Non-Thesis** - For students enrolled in the non-thesis program, a 30-hour minimum is required at the 5000-6000 level; 26 hours must be in formally structured courses, 16 hours must be at the 6000 level; 15 structured hours must be offered by CMMB. A review paper of a topic approved by the supervisory committee is required as well as successful completion of the comprehensive oral qualifying exam after all course work has been completed. For non-thesis masters students, this exam will occur at the end of the program of study.

**Comprehensive Oral Qualifying Examination.** A comprehensive examination is required for all master’s students. This examination is open to all departmental faculty. Students must take their comprehensive exam within two years of matriculation and the exam is normally taken after the completion of all formal course work. Thesis students must take the examination at least one semester before the thesis is presented. Any graduate work counted toward the requirement for the M.S. degree must be completed within five (5) years after matriculation.

All thesis-based Master’s Degree students must present a seminar to the Department of Biology and must be enrolled in BSC 6935, during the final semester. The seminar should be a concise summary of the research completed to satisfy the requirements for the M.S. Degree. The seminar is open to the general public and must be announced two weeks prior to the presentation. Upon completion of the seminar, the general public will be invited to ask questions. At the discretion of the student’s graduate committee, members of the committee may continue to question the graduate student after the general public has departed the seminar room. Each student is expected to defend his/her research to the unanimous satisfaction of the graduate committee.

**Accelerated Non-Thesis BS/MS Program**

This program allows B.S. majors to take graduate courses for the elective part of the Biology degree and apply them to a non-thesis M.S. degree in Biology. Successful students will be able to earn the M.S. degree in two additional semesters beyond the completion of the B.S. degree. This accelerated program shares 12 credits between already existing degrees/concentrations:

B.S. in Biology, Concentration in Cell and Molecular Biology (submitted)
M.S in Biology, Concentration in Cell and Molecular Biology (non-thesis option)

**Description and Requirements**

Biology majors who have completed the following courses may apply to this program:
PCB3023 Cell Biology
PCB3063 Genetics
MCB3410 Cell Metabolism
PCB4024 Molecular Biology of the Cell or PCB4026 Molecular Biology of the Gene
Students who have been admitted to the program but subsequently fail to achieve a 3.0 GPA in the last 60 hours of their B.S. degree, or who do not complete at least 30 of their last 60 hours at USF, will be dismissed from the program.

Once accepted, students must meet with BioAdvise (the advising office for biological sciences within the College of Arts and Sciences) to prepare an action plan to complete the B.S./M.S. accelerated program. This requires them to take all the courses required for the B.S. in Biology: Concentration in Cell and Molecular Biology. Students may take up to 12 credits of graduate courses as electives in CMMB and apply those courses to both the B.S. and M.S. degrees. They will not be admitted as graduate students until they have completed their B.S. degree and met all the requirements for admission to CMMB as graduate students. The action plan should include a schedule of coursework to complete their B.S. degrees and a date in their last year in the B.S. program to take the GRE.

For fall admission to the M.S. portion of the accelerated program, all application materials must be received by February 15 of the same year. For spring admission, the deadline is August 1 of the previous year. Application materials are the same as the M.S. in Biology:
1. Two official transcripts of undergraduate work from other institutions. Applicants need not supply USF transcripts.
2. Three letters of recommendation
3. A brief essay stating your professional goals
4. GRE scores must be sent to USF directly from the testing agency (USF institution code is 5828).

Graduate Degree Requirements
Students admitted into the M.S. portion of the program must complete all the requirements for the M.S. degree (non-thesis) within three semesters of admission. The requirement is 30 hours of graduate work with at least 16 of these hours completed at the 6000 level; 26 hours must be formally structured courses; and at least 15 hours must be in CMMB courses. Students will be required to take 3 core-courses from the list below as part of these 26 hours. Of the required 26 hours, 9 hours will be derived from the core-CMMB graduate courses listed below (see associated curriculum). These requirements can be partially met by up to 12 hours of graduate courses taken as undergraduates. Any graduate class taken outside of CMMB must be approved by the CMMB Graduate Director. Students should be aware that a B grade or better is required for every graduate class applied to the M5 portion of their degree. In addition, students will be required to pass an oral qualifying exam based on a review paper submitted in their final semester. Students must form a committee as part of their action plan to complete their graduate work. This committee will be comprised of at least 3 CMMB faculty, and will serve as the examination committee for the review paper required as part of the M5 portion of their degree. Upon approval of that paper, students must successfully complete a comprehensive oral exam by their committee.

Timeline and benchmarks:

1. Completion of prerequisite upper division courses and application to the accelerated program. Typically students will be in their junior year.
2. Acceptance into the program and an action plan within a semester of application.
3. Students will take up to 12 credits of graduate credit in CMMB courses following acceptance into the program. Typically these courses will be taken in the latter half of the junior year and in the senior year. BioAdvise will monitor the progress of the students and ensure they follow their action plan. Students who do not complete at least 9 hours of graduate work by graduation will be dropped from the accelerated M.S. program.
4. GRE exams will be taken in a timely manner so scores will be available for admission to the M.S. portion of the program. Students who do not complete the GRE in time will not be admitted to the accelerated M.S. program.
5. Students must apply for admission to the M.S. portion of the program in a timely manner (Fall admission deadline is February 15, Spring deadline is August 1).
6. Students admitted to the accelerated program must form a committee prior to the beginning of their first semester in the M.S. portion of the program and must continue to follow the action plan which will be monitored by Bioadvise.
7. Students admitted to the accelerated M.S. program must complete the requirements within three semesters or will be dismissed from the program.
Model Curriculum for Accelerated Non-thesis MS/BS

Year 1
BSC 2010, BSC 2011 with labs 8

Year 2
MCB 3410-Cell Metabolism 3
PCB 3063-Genetics and lab 4
PCB 3023-Cell Biology and lab 4

Year 3
PCB 4024-Molecular Biology of the Cell 3
PCB 4026-Molecular Biology of the Gene 3
3 hr graduate elective structured course (5000) 3

Year 4
9 hr graduate elective courses (5000 or 6000) 9

Year 5
18 hr graduate courses
9 hr of which must be derived from the list below

BSC6932 Bioinformatics
BSC6932 Virology
PCB5525 Molecular Genetics
BSC5425 Genetic Engineering
PCB6236 Advanced Immunology
BSC6932 Prokaryotic Molecular Genetics

4 hr non-structured (seminar, independent study, laboratory research)
Oral exam and review paper done at the end of year 5

COURSES
For updated list of courses see: http://www.ugs.usf.edu/sab/sabs.cfm
CELL BIOLOGY, MICROBIOLOGY, AND MOLECULAR BIOLOGY CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Biology Program with a Concentration in Cell Biology, Microbiology, and Molecular Biology

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: January 1 for full consideration; however applications are accepted to February 15 (U.S. Applicants) January 1 (International)
- Spring: August 1 (U.S. Applicants) July 1 (International)

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 26.0101
Dept Code: BIO
Program (Major/College): BIO AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Cell Biology, Molecular Biology and Microbiology (CMMB)

Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

For program information refer to the Biology Program (Ph.D.) listing.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: Cell Biology, Molecular Biology, Cancer Biology, Signal Transduction and Gene Regulation, Developmental Biology, Applied and General Microbiology, Conservation

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Applying to the Department of Cell Biology, Microbiology and Molecular Biology
Students interested in attending graduate school within the CMMB Department should visit the CMMB website that can be accessed from the main USF site and review the current CMMB faculty. It is recommended that potential students consider at least 2-3 CMMB faculty that they would be interested in working with and communicate this information in their letter of application. It is also recommended that potential students contact the CMMB Graduate Director as well as the individual faculty members they are interested in working with via email. Such communication will facilitate the assignment of the laboratory rotations that CMMB students will participate in during their first semester of residency and also allow the applicant to determine whether the desired faculty member has positions available in the laboratory.

All students admitted to the PhD concentration in Cell Biology, Microbiology and Molecular Biology must establish a supervisory committee. The supervisory committee shall constitute the major professor and at least three additional credentialed faculty. At least two of the committee members must be faculty members at USF. The supervisory committee must be formed within two semesters after matriculation.

http://www.cas.usf.edu/
The CMMB Graduate Director, CMMB Chair, and the College Associate Dean (or designee) must approve the Supervisory Committee. Once a major professor has been assigned and/or a student occupies or utilizes significant space or facilities for research or analogous scholarly activity directly pertinent to the generation of a thesis, the student shall enroll for two (2) hours of research credit each semester (other than summer semester), until eligible to enroll in thesis credits.

Program Admission Requirements

- Prospective students must apply to a specific Biology PhD program concentration via the online application process through the USF Graduate School.
- Must have 3.00 GPA last 60 hours of B.S. degree.
- Must have 500V, 600Q, 4.5 AW on GRE.
- All international students are required to submit the TOEFL test. Non-native English speaking graduate students must score at least 570 on the TOEFL and at least 50 on the TSE to be eligible for a teaching assistantship.
- It is expected that candidates for the PhD degree will have completed courses equivalent to those required for the B.S. in Biology at U.S.F.

DEGREE PROGRAM REQUIREMENTS

The Ph.D. degree requires successful completion of:
1. structured coursework
2. written qualifying exam
3. oral qualifying exam and Admission to Candidacy
4. oral Defense and submission of approved Dissertation

Coursework
A total of 90 credits beyond the baccalaureate must be earned: this includes any graduate credit earned prior to admission to the doctoral program. A minimum of three years of graduate work beyond the Baccalaureate Degree is required.

Twelve (12) hours of graduate work completed while a non-degree seeking student at this institution may be transferred to the doctoral program, with approval of the supervisory committee. At least one academic year of residence must be on the campus. A year of residence is enrollment in a minimum of nine (9) semester credits for two consecutive semesters. The direction and immediate supervision of graduate work for doctoral students resides with the major professor and student’s graduate committee. Graduate students are not admitted unless a major professor has agreed to serve as the student’s supervisor. The University imposes limitations on the time period between admission to candidacy and successful completion of degree requirements. EDITOR’S NOTE: University policy for time limits may be viewed in the Degree Requirements Section of this catalog.

The CMMB Department requires that all graduate work applied toward the completion of degree requirements be completed within a seven year period after matriculation. Doctoral students are encouraged to gain teaching experience in at least two undergraduate courses in the department. Overall degree requirements for the Doctor of Philosophy are as follows:

1. Credit hour requirement: A total of 90 semester hour credits beyond the Baccalaureate degree is required. (including BSC 7910, BSC 7971, BSC 7980 and other structured and unstructured courses approved by CMMB or IB)
2. Students admitted to the CMMB Department must complete three laboratory rotation during their first semester of residency.
3. A minimum of twenty-four (24) dissertation research credit hours (BSC 7980) is required.
4. Submission of a doctoral proposal and approval by major professor, graduate committee, and graduate director.

5. Successful completion of the preliminary doctoral examination. The exam consists of a written and oral portion. The specific of the written exam are provided below.

6. Presentation requirement: two presentations, excluding the doctoral seminar and defense. Students are expected to present posters or oral presentations based on their dissertation research at national/regional professional meetings. The graduate committee must approve the presentation.

7. Publication requirement: one research paper must be submitted for publication to a refereed scientific journal by the date of the Doctoral Seminar and Defense. The paper may be sole or coauthored, but it must be based on the dissertation research. The student’s supervisory committee must approve the paper prior to submission.


9. Presentation of the doctoral seminar (BSC 7936) and successful defense of the dissertation.

Degree Progress
A student must be registered for an appropriate load (in no case fewer than two [2] graduate hours) in the college for the semester in which all degree requirements are satisfactorily completed. A student who receives three grades below “B” in structured courses required by the advisory committee will be dropped from the program. Registration in courses entitled Directed Research, or Dissertation must be with the approval of the major professor and must be commensurate with each student’s research plan. Students may not register in Dissertation: Doctoral (BSC 7980) until a Supervisory Committee has been formed and a approved Admission to Candidacy on file with the Graduate School. A student who enrolls in courses entitled Dissertation: Doctoral but does not submit a dissertation will not be certified for graduation.

CORE REQUIREMENTS
PhD in Biology Core (6 credit hrs.)
BSC 6930 Lectures in Contemporary Biology (1)
   Enrollment in this course is required during each semester of residency

CONCENTRATION REQUIREMENTS
Concentration in Cell Biology and Molecular Biology Requirements (5 credit hrs)
BSC 6932 Advances in Scientific Review (2)
BSC 6932 Advances in Scientific Writing (2)
PCB 6930 Advances in Cell and Molecular Biology (1)

Electives* (minimum of 6 credit hrs)
MCB 5206 Public Health and Pathogenic Microbiology (3)
MCB 5655 Applied and Environmental Microbiology (3)
PCB 5235 Principles of Immunology (3)
PCB 6236 Advanced Immunology (3)
MCB 5815 Medical Mycology (3)
BSC 5931 Molecular Microbial Ecology (3)
BSC 5931 Prokaryotic Molecular Genetics (3)
MCB 5410 Cellular Microbiology (3)
PCB 5256 Developmental Mechanisms (3)
BSC 5425 Genetic Engineering and Recombinant DNA Technology (3)
PCB 5616 Molecular Phylogenetics (3)
PCB 5525 Molecular Genetics (3)
PCB 6107 Advanced Cell Biology (4)
BSC 5931 Eukaryotic Genomics (3)

*The supervisory committee may approve additional courses not listed here.
Written Qualifying Exam
All students in the CMMB PhD degree concentration must complete a written qualifying examination. The exam shall be in the format of a grant proposal and contain the following sections:

- Abstract (300 words)
- Specific Aims [1 page]
- Background and Significance of topics [4-5 pages]
- Proposed research program (conducted over 3 year period) [9-10 pages]
- Bibliography (no page limit)

The length of the proposal shall be no more than 15 pages (the abstract and bibliography does not count in the page limit). The topic of the exam shall meet the following guidelines:

- The written proposal cannot be based on the same model organism that the student will use to carry out their dissertation research
- The written proposal cannot be based on the analysis of the same gene/protein that the student will investigate during their dissertation research
- The written proposal cannot be based on the analysis of the same pathway that the student will investigate during their dissertation research

Student shall submit potential topics during the Advances in Scientific Writing course. The Instructor of record will provide deadlines for the submission of these topics as well as the required format. The student’s PhD dissertation committee and major professor will approve the topic. No work can be done on the exam until the topic is approved and returned to the student.

Students are required to have an approved topic and complete the SPECIFIC AIMS section of the written qualifying exam during the Advances in Scientific Writing course. This will be during the student’s second semester (for those admitted in the fall) or third semester (for those student’s admitted in the spring). Successful completion of Advances in Scientific Writing course is required for the student to continue working on the written qualifying exam; otherwise, they must retake the course in a subsequent semester. For students that successfully complete the course, the final version of the written qualifying exam will be due in electronic form to the CMMB Graduate Director no later than OCTOBER 15th of the student’s third semester (for those admitted in the fall) or fourth semester (for those student’s admitted in the spring). The proposal is to be an original document prepared and edited by the student.

Each proposal will be made available to the CMMB faculty. The CMMB Graduate Committee will assign individual proposals to at least a primary and secondary reviewer. The primary reviewer may not be the dissertation advisor of the student that wrote the proposal. When appropriate, a third reviewer may also be utilized. An evaluation rubric will be utilized to assign each proposal an initial “score”. Final grading of the proposal will be carried out during a panel discussion of all faculty involved in the review. The CMMB Graduate Director will serve as the mediator of the meeting and will be responsible for distributing the graded exam and faculty comments to the student. Students that do not pass the written exam shall be provided one chance to complete the exam successfully. The timeline and format of any remediation will be determined during the panel discussion.

Admission to Candidacy
The doctoral student is eligible for admission to candidacy after completing structured course requirements, passing the written and oral qualifying examination and, approval by the supervisory committee. Appropriate forms to document promotion to candidacy must be completed and to the Graduate School. Following admission to candidacy, a student must enroll in BSC 7980 when engaged in research, data collection, or writing activities relevant to the doctoral dissertation. Advisors should assign the number of credits in this course in accordance with policy and appropriate to the demands made on faculty, staff, and University facilities, but in no event will the total number of earned dissertation credits be fewer than sixteen (16). Students not admitted to candidacy are not eligible to enroll in BSC 7980.

Additional Requirements
Any graduate work counted toward fulfilling the requirements for the Ph.D. degree must be completed within seven (7) years after matriculation.
Doctoral Seminar and Defense.
All doctoral students must present a public seminar to the CMMB Department and must be enrolled in BSC 7980, during the semester in which the seminar is given. The seminar should be a concise summary of the research completed to satisfy the requirements for the Ph.D. The seminar is open to the general public and must be announced two weeks prior to the presentation. Upon completion of the seminar, the general public will be invited to ask questions. At the discretion of the student’s graduate committee, members of the committee may continue to question the graduate student after the general public has departed the seminar room. Each student is expected to defend his/her research to the unanimous satisfaction of the graduate committee. Following the defense, students will make any editorial modifications to the dissertation as recommended by the supervisory committee and submit the dissertation to the Graduate School.

COURSES
For an updated list of course offerings see: http://www.ugs.usf.edu/sab/sabs.cfm
CHEMISTRY PROGRAM (NON-THESIS OPTION)

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
   Fall: February 15
   Spring: October 1

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 40.0501
Dept Code: CHM
Program (Major/College): CHA AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Chemistry
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu http://chemistry.usf.edu

PROGRAM INFORMATION

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
In addition to the five (5) traditional areas, research opportunities also are available in such interdisciplinary and specialized areas as Bio-organic and Bio-inorganic Chemistry, Environmental Chemistry, Nuclear Magnetic Resonance Spectroscopy, Computer Modeling, Polymers, Photochemistry, Marine Chemistry, Medicinal Chemistry, Electrochemistry, Nucleic Acid Chemistry, and Enzymology.

The Department of Chemistry offers Doctor of Philosophy, Master of Science, and Non-thesis Master of Arts degrees. The Chemistry graduate faculty is comprised of 24 full-time senior faculty members, all holding the Ph.D. degree. The combination of a large and strong faculty with a wide variety of courses and electives provides students with programs of study that can be tailored to fit individual needs, while maintaining a sound background in all general aspects of Chemistry. The excellent research facilities and very low student-faculty ratio combine to afford unique opportunities for advanced study in Chemistry.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Applicants must have earned a BA or BS degree in Chemistry.* In addition, applicants must have

- a combined score of 430V, 570Q, 3.0AW on the GRE. Subject exam is recommended, but not required.
- a minimum of a 3.00 grade point average in the last two years of chemistry coursework

*In addition, applicants must have
• letters of recommendation from at least three or more people who know the student’s academic background

• and for applicants whose native language is not English, a minimum of 550 on the TOEFL exam and for such applicants a minimum of 50 on the TSE if also applying for an assistantship.

*Applicants with other degrees will be considered on a case by case basis.

International students follow USF International Admissions deadlines. Domestic students rolling admission.

DEGREE PROGRAM REQUIREMENTS

General Program Requirements
Graduate students must maintain an overall grade point average (GPA) of 3.00 (B) in all courses. Any graduate student who falls below a 3.00 GPA at the end of any given semester will be placed on academic probation and has the next two semesters (excluding summers) to remedy the situation before being dismissed from the program. No grade below “C” will be accepted toward a graduate degree, but will be used in the computation of the overall GPA.

Enforcement of Minimum Standards
The Graduate Council shall be responsible for ensuring that all graduate students meet the minimum standards as set down in the Graduate Student Handbook. The Graduate Coordinator will periodically review the standing of each student with regard to grade point average (GPA), academic progress, and (in the case of teaching assistants) teaching performance and notify the Graduate Council as necessary. Should disciplinary action appear in order, the student’s major professor will be consulted (in order to obtain as many relevant facts as possible) before such action is taken.

Probation
Students who fail to meet the minimum GPA (3.00 for all graduate courses) shall be placed on probation. The student’s GPA must meet the minimum of 3.00 by the end of the semester in which probation was initiated or termination from the graduate program will result.

Appeals
In actions based on departmental requirements, petitions and appeals shall be directed to the Chemistry Graduate Council through the student’s major professor. (In case of a student who has not yet selected a major professor, the appeal may be carried out through the Graduate Coordinator or through some other chemistry faculty member selected by the student.) Unsuccessful appeals to the Chemistry Graduate Council may be further carried to the chemistry faculty as a whole, and from there to the Dean of the College and then to the University Graduate Council if necessary.

Minimum Grades in Courses
Although all grades in graduate level courses will be used in computing the student’s GPA, no grade below “C” may be counted toward fulfillment of the approved course of study. Consequently, any such course in which a student receives a grade below “C” must be repeated, or have the requirement waived by the Supervisory Committee. A student who receives three grades lower than a “B” in structured courses required by his supervisory committee to meet the structured course requirement will be dropped from the program. A student who receives a grade of “U” while a chemistry graduate student will be placed on automatic probation. A second “U” grade is grounds for termination from the Program, and the Chemistry Graduate Council will automatically review the student’s status. Students on probation are not excluded from having a teaching assistantships during the probationary semester.

Seminars
All chemistry graduate students must satisfy the following minimum requirements for CHM 6935:

• enrollment every semester of the regular academic year during his/her career as a graduate student, or

• enrollment in seven (7) credit hours for the Ph.D.; four (4) credit hours for the Master’s degree. A maximum of two unexcused absences will be permitted each semester, whichever is less. Under
exceptional circumstances, students may petition for a waiver on a semester-by-semester basis if employment or other obligations conflict with the requirement.

Master’s Degree General Requirements
Students must meet all degree requirements as specified by the Graduate School. Study for the M.A and the M.S. should take between two and three calendar years beyond the baccalaureate degree to complete. Specific requirements include: a minimum of thirty (30) credit hours beyond the baccalaureate degree; sixteen (16) hours must be at the 6000 level.

M.A. in Chemistry (Non-Thesis Option)
Program Requirements
a) 26 hours must be in formally structured courses approved by the student’s committee.

b) Preparation of a review paper on a topic approved by the supervisory committee. The final paper must be approved by the supervisory committee.

COURSES
See http://www.ups.usf.edu/sab/sads.cfm
CHEMISTRY PROGRAM

Master of Science (M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 1

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 40.0501
Dept Code: CHM
Program (Major/College): CHM AS

Concentrations:
- Analytical Chemistry (ACH), Biochemistry (BCH),
- Computational Chemistry (CPC), Environmental Chemistry (EVC), Inorganic Chemistry (IOG),
- Organic Chemistry (OCH), Physical Chemistry (PCH), Polymer Chemistry (POC)

Also offered as a 5-year Program

CONTACT INFORMATION

College: Arts and Sciences
Department: Chemistry
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The Department of Chemistry offers Doctor of Philosophy, Master of Science, and Non-thesis Master of Arts degrees. The Chemistry graduate faculty is comprised of 24 full-time senior faculty members, all holding the Ph.D. degree. The combination of a large and strong faculty with a wide variety of courses and electives provides students with programs of study that can be tailored to fit individual needs, while maintaining a sound background in all general aspects of Chemistry. The excellent research facilities and very low student-faculty ratio combine to afford unique opportunities for advanced study in Chemistry.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
In addition to the five (5) traditional areas, research opportunities also are available in such interdisciplinary and specialized areas as Bio-organic and Bio-inorganic Chemistry, Environmental Chemistry, Nuclear Magnetic Resonance Spectroscopy, Computer Modeling, Polymers, Photochemistry, Marine Chemistry, Medicinal Chemistry, Electrochemistry, Nucleic Acid Chemistry, Enzymology, Materials Chemistry and Chemical Education.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Applicants must have earned a B.A. or BS degree in Chemistry.* In addition, applicants must have
- official transcripts
- a GRE score of 430V, 570Q, 3.0 AW The subject exam is recommended, but not required.
• a minimum of a 3.00 grade point average in the last two years of chemistry coursework

• letters of recommendation from at least three or more people who know the student’s academic background

• and for applicants whose native language is not English, a minimum of 550 on the TOEFL exam and for such applicants a minimum of 50 on the TSE if also applying for an assistantship.

*Applicants with other degrees will be considered on a case by case basis.

International students follow USF International Admissions deadlines. Domestic students rolling admission.

DEGREE PROGRAM REQUIREMENTS

General Program Requirements
Graduate students must maintain an overall grade point average (GPA) of 3.0 (B) in all courses. Any graduate student who falls below a 3.0 GPA at the end of any given semester will be placed on academic probation and has the next two semesters (excluding summers) to remedy the situation before being dismissed from the program. No grade below “C” will be accepted toward a graduate degree, but will be used in the computation of the overall GPA.

Enforcement of Minimum Standards
The Graduate Council shall be responsible for ensuring that all graduate students meet the minimum standards as set down in the Graduate Student Handbook. The Graduate Coordinator will periodically review the standing of each student with regard to grade point average (GPA), academic progress, and (in the case of teaching assistants) teaching performance and notify the Graduate Council as necessary. Should disciplinary action appear in order, the student’s major professor will be consulted (in order to obtain as many relevant facts as possible) before such action is taken.

Probation
Students who fail to meet the minimum GPA (3.0 for all graduate courses) shall be placed on probation. The student’s GPA must meet the minimum of 3.0 by the end of the semester in which probation was initiated or termination from the graduate program will result.

Appeals
In actions based on departmental requirements, petitions and appeals shall be directed to the Chemistry Graduate Council through the student’s major professor. (In case of a student who has not yet selected a major professor, the appeal may be carried out through the Graduate Coordinator or through some other chemistry faculty member selected by the student.) Unsuccessful appeals to the Chemistry Graduate Council may be further carried to the chemistry faculty as a whole, and from there to the Dean of the College and then to the University Graduate Council if necessary.

Minimum Grades in Courses
Although all grades in graduate level courses will be used in computing the student’s GPA, no grade below “C” may be counted toward fulfillment of the approved course of study. Consequently, any such course in which a student receives a grade below “C” must be repeated, or have the requirement waived by the Supervisory Committee. A student who receives three grades lower than a “B” in structured courses required by his supervisory committee to meet the structured course requirement will be dropped from the program. A student who receives a grade of “U” while a chemistry graduate student will be placed on automatic probation. A second “U” grade is grounds for termination from the Program, and the Chemistry Graduate Council will automatically review the student’s status. Students on probation are not excluded from having a teaching assistantships during the probationary semester.

Seminars
All chemistry graduate students must satisfy the following minimum requirements for CHM 6935: enrollment every semester of the regular academic year during his/her career as a graduate student, or enrollment in seven (7) credit hours for the Ph.D.; four (4) credit hours for the Master’s degree. A maximum of two unexcused absences will be permitted each semester, whichever is less. Under exceptional circumstances, students may petition for a waiver on a semester-by-semester basis if employment or other obligations conflict with the requirement.
Master’s Degree General Requirements
Students must meet all degree requirements as specified by the Graduate School. Study for the M.A and the M.S. should take between two and three calendar years beyond the baccalaureate degree to complete. Specific requirements include: a minimum of thirty (30) credit hours beyond the baccalaureate degree; sixteen (16) hours must be at the 6000 level.

Program Requirements
a) 20 hours of formally structured courses approved by the student’s committee
b) a research project resulting in a written thesis
c) an oral thesis defense, which will serve as the final comprehensive examination required by the Graduate School

A graduate student working on a master’s degree in a program that requires a thesis must register in course CHM 6973 or CHM 6971 when engaged in research, data collection, or writing activities relevant to the master’s thesis. The number of credits in these courses must be appropriate to the demands made on faculty, staff, and university facilities. Editor’s note: for information on the University’s enrollment policy relevant to a thesis, refer to the enrollment section of the Academic Policies in this catalog.

Final Thesis Defense
Each student should consult with their supervisory committee for deadlines in submitting the thesis prior to the defense. Thesis or dissertation defense are not normally scheduled during final exam week or during the weeks between regularly scheduled sessions. The thesis defense must be scheduled through the Chemistry Graduate Office at least two weeks in advance. The Chemistry Graduate Office will then announce the defense to the entire Chemistry Department. The candidate normally defends their thesis in the fourth or fifth year. EDITOR’S NOTE: these deadlines are in addition to those imposed by the Graduate School. The Graduate School sets deadlines pertaining to thesis/dissertations each semester.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
CHEMISTRY PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 1
- Summer: January 1

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 40.0501
Dept Code: CHM
Program (Major/College): CHM AS

Contact Information:
College: Arts and Sciences
Department: Chemistry
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

Concentrations:
- Analytical Chemistry (ACH)
- Biochemistry (BCH)
- Computational Chemistry (CPC)
- Environmental Chemistry (EVC)
- Inorganic Chemistry (IOG)
- Organic Chemistry (OCH)
- Physical Chemistry (PCH)
- Polymer Chemistry (POC)

PROGRAM INFORMATION

The Department of Chemistry offers Doctor of Philosophy, Master of Science, and Non-thesis Master of Arts degrees. The Chemistry graduate faculty is comprised of 19 full-time senior faculty members, all holding the Ph.D. degree. The combination of a large and strong faculty with a wide variety of courses and electives provides students with programs of study that can be tailored to fit individual needs, while maintaining a sound background in all general aspects of Chemistry. The excellent research facilities and very low student-faculty ratio combine to afford unique opportunities for advanced study in Chemistry.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
In addition to the 5 traditional areas, research opportunities also are available in such interdisciplinary and specialized areas as Bio-organic and Bio-inorganic Chemistry, Environmental Chemistry, Nuclear Magnetic Resonance Spectroscopy, Computer Modeling, Polymers, Photochemistry, Marine Chemistry, Medicinal Chemistry, Electrochemistry, Nucleic Acid Chemistry, and Enzymology.

The Department of Chemistry offers Doctor of Philosophy, Master of Science, and Non-thesis Master of Arts degrees. The Chemistry graduate faculty is comprised of 24 full-time senior faculty members, all holding the Ph.D. degree. The combination of a large and strong faculty with a wide variety of courses and electives provides students with programs of study that can be tailored to fit individual needs, while maintaining a sound background in all general aspects of Chemistry. The excellent research facilities and very low student-faculty ratio combine to afford unique opportunities for advanced study in Chemistry.
ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Applicants must have earned a B.A. or BS degree in Chemistry. Applicants with other degrees will be considered on a case by case basis. In addition, applicants must have

- official transcripts
- a GRE score of 430V, 570Q, 3.0 AW. The subject exam is recommended, but not required
- a minimum of a 3.00 grade point average in the last two years of chemistry coursework
- letters of recommendation from at least three or more people who know the student’s academic background
- and for applicants whose native language is not English, a minimum of 550 on the TOEFL exam and for such applicants a minimum of 50 on the TSE if also applying for an assistantship

International students follow USF International Admissions deadlines. Domestic students rolling admission.

DEGREE PROGRAM REQUIREMENTS

Students with only a Bachelors degree must take 4 ACS entrance exam (with an option to take Biochemistry or Analytical and a requirement to take core exams in Organic, Inorganic, and Physical Chemistry). They must obtain at least the national median ACS score in the required core exams to pass. If they fail, they have the option to retake the exam or remediate the deficiency by obtaining at least B (not a B-) in one of our upper-division undergraduate courses (or by taking the exams in the appropriate course and obtaining the equivalent grade) in the area of the deficiency before their candidacy exam. Students with a Masters degree may be required to adhere to the policy at the discretion of the Graduate Council at the time of acceptance. Entering students will have a Promotion to Candidacy Committee established upon entering the Ph.D. Program. The Committee advises students as to what courses they need to take in their first semester. There are no set course requirements, but the decision of the Committee is binding. Students will normally be expected to take the first semester of the first year covering “Tools of Research,” including literature search and analysis, proposal writing, oral presentation skills, and laboratory instrumental techniques. The second semester of the course may be required by a student’s promotion to Candidacy committee. Advanced courses in other subject areas may be assigned by the Committee, where appropriate. Final coursework decisions are made by the candidate’s research advisor.

Advisor Selection
Students need to choose a pre-Ph.D. candidate research adviser by the beginning of the second semester to begin pre-candidate research in that laboratory (See below). The student will then proceed to initiate a research project by the beginning of the second semester and through the first summer of study. Selection of a research advisor is one of the most important decisions a student will make during the graduate career. In order to avoid hasty or poorly founded decisions each student must discuss potential research projects with at least three members of the chemistry faculty. Appropriate forms can be obtained from the Chemistry Graduate Office and should be completed and returned no later than the end of the second semester (excluding summer semester) after entering the program.

Promotion to Candidacy
At the conclusion of the first year (before the start of the third semester), a written research document outlining progress to date and future plans is submitted to and approved by the Promotion to candidacy Committee. This proposal is subsequently defended in front of the committee. A successful defense results in Promotion to Ph.D. Candidacy, contingent upon the student being formally accepted into a research group. The committee must vote three quarters in favor of the candidate (for a four person committee) or two thirds in favor (for a three person committee) for a pass. A vote of two or four members (or one of three) in favor results in a conditional pass, and the committee must set conditions to be met to promote the student within 30 days of the first meeting. At the discretion of the committee, the student not promoted to candidacy may be given a pass at a J.M.A. level of competency and proceed to obtain a terminal research master’s degree or be terminated from the program. Appropriate forms to document promotion to candidacy must be completed and forwarded to the Graduate School. The forms may be obtained from the Chemistry Graduate Office.
Dissertation Committee
Upon promotion the candidate must formally choose and declare a research adviser and a dissertation committee must be established initially with at least three members. An additional committee member from outside the department or university must be added before the final defense. The research advisor chairs the committee.

Original Research Proposal
An original research proposal must be written and defended by the end of the first semester of the third year. At the discretion of the research adviser, the student’s original research proposal may or may not be related to the student’s current or future research. The student must be informed of the research adviser’s preference in advance of seeking approval for the thesis topic. The dissertation committee formally approves the proposal and its defense. The candidate should meet with the dissertation committee members (individually or as a group) to discuss the proposal topic. The original research proposal should follow the format of a major federal granting agency appropriate to the nature of the proposed research. The format of the proposal, in conjunction with the topic, should be approved in advance by the dissertation committee. The written proposal must be given to the dissertation committee members two weeks in advance of the scheduled defense. After the defense, the committee must vote three quarters in favor of the candidate (for a four person committee) or two thirds in favor (for a three person committee) for a pass. A vote of two of four members (or one of three) in favor results in a conditional pass, and the committee must set conditions to be met to pass the candidate within 30 days of the first meeting. Students not passing will normally be terminated from the Ph.D. program.

Research Data Presentation and Dissertation
By the end of the fourth year, a research data presentation must be made to dissertation committee and the committee formally advises the candidate on research milestones that need to be met before permission to “write up” the dissertation is granted. The permission to “write up” the dissertation can be given at any subsequent time. A peer-reviewed publication based upon the dissertation research is required to obtain the degree of Ph.D. Note: Extenuating circumstances will be reviewed on a cases-by-case basis. Further, students have to wait a minimum of 6 months after successful completion of the Research Data Presentation (aka Data Defense) (and the associated online data base forms) before they will be permitted to defend their dissertation. This rule can only be waived by the Department Chair with the written approval of the majority of the Thesis Committee in the case of exceptional circumstances.

Final Dissertation Defense
Each student should consult with their supervisory committee for deadlines in submitting the dissertation prior to the defense. Thesis or dissertation defense are not normally scheduled during final exam week or during the weeks between regularly scheduled sessions. The dissertation defense must be scheduled through the Chemistry Graduate Office at least two weeks in advance. The Chemistry Graduate Office will then announce the defense to the entire Chemistry Department. The candidate normally defends their dissertation in the fourth or fifth year. NOTE: these deadlines are in addition to those imposed by the Graduate School. The Graduate School sets deadlines pertaining to thesis/dissertations each semester.

Candidates may be offered a departmental TA position in year five given satisfactory progress in research as judged by the dissertation committee and approval of the Department Chair, TA’s are not normally awarded beyond year 5. RA’s are only permitted beyond year six in exceptional cases with the written approval of the department chair. It is important to note that the Graduate School will not award tuition waivers for credit hours beyond 120 for students entering with a baccalaureate degree and 90 for students entering with a master’s degree.

Supervisory Committees
The M.S. and M.A. supervisory committee should consist of at least three members including the major professor, and two other chemistry faculty members, at least one of whom is outside the student’s major area (analytical, biochemistry, etc.) According to University Regulations, the Ph.D. supervisory committee must consist of at least four (4) members, including the student’s research director. At least two (2) of the members must be from an area related to the student’s research.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
CLASSICS: LATIN/GREEK PROGRAM

Co-Op with University of Florida
Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Application is made through University of Florida

Minimum Total Hours: n/a
Program Level: Masters
CIP Code: 16.1200
Dept Code: WLE
Program (Major/College): CLS AS

CONTACT INFORMATION

College: Arts and Sciences
Department: World Language Education

Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Joint Co-op program with University of Florida

Accreditation:
Contact Program for information.

ADMISSION INFORMATION

Admission through the University of Florida.

DEGREE PROGRAM REQUIREMENTS

Check with Program for information.

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
COMMUNICATION PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: January 15
Fall admission only

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 23.1001
Dept Code: SPE
Program (Major/College): SPE AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Communication
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The Department of Communication offers a broad and integrated approach to communication studies that embraces the traditions of the humanities, the convergence of rhetorical and communication theory, and the relations among aesthetic, humanistic, and scientific approaches to inquiry. Students are encouraged to examine the pragmatics of rhetorical and communication theory in such settings as business and industry, government, education, medicine and health care, media, the arts, and the family. The department offers course work leading to the Master of Arts degree and the Doctor of Philosophy.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university requirements, plus
- two letters of recommendation;
- a writing sample,
- a statement of purpose.
- GRE Scores are required, with at least 500V
- TOEFL Scores
- Transcripts
- CV or resume

DEGREE PROGRAM REQUIREMENTS

Total minimum hours – 36

Core Requirements (3 hours)
COM 6001 (3)
This course must be taken the first time it is offered after the student is admitted to the graduate program.
Requirements

1) Establish a supervisory faculty committee consisting of a major professor and two additional members, at least one of whom is a member of the Department of Communication. The supervisory committee must be approved by the Director of Graduate Studies.

2) Select a program option, either Thesis or Non-Thesis.

Thesis Program (36 hours) - In addition to the three (3) hours of core requirements, each student must also take COM 7325 either Qualitative Methods OR Critical Methods and complete 24 hours of elective course work, six (6) hours of which may consist of a course or courses from other departments and must have advisor approval. Each student must complete at least six (6) hours of thesis credit (SPC 6971) and submit an approved thesis.

Non-Thesis Program (36 hours) - In addition to the three (3) hours of core requirements, 33 hours of elective course work are required, six (6) hours of which may consist of courses from other departments and must have advisor approval.

3) Prepare a Plan of Study approved by the student’s supervisory committee. The Plan of Study expresses the ways in which the student will show evidence of the following:
   a) expertise in one or more of the central domains of communication study
   b) expertise in the research methodologies needed to carry out original research in the specialized area of concentration (Thesis Program students only)

Comprehensive Exam Requirements - All Non-Thesis program students must pass both written and oral comprehensive examinations. Thesis Program students do not complete comprehensive exams.

Total Thesis Hours Required - A minimum of six (6) thesis hours are required (Thesis Program students only).

Thesis Requirements – In consultation with the major professor, Thesis Program students will select a thesis topic, constitute a thesis committee, and write orally defend a thesis proposal. The thesis is an extended research project within a specific area of communication research culminating in a written academic analysis. Upon completion of the thesis, the student must pass an oral defense.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
COMMUNICATION PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
  Fall: January 15
  Minimum Total Hours: 90

Program Level: Doctoral
CIP Code: 23.1001
Dept Code: SPE
Program (Major/College): SPE AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Communication
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The Department of Communication offers a broad and integrated approach to communication studies that embraces the traditions of the humanities, the convergence of rhetorical and communication theory, and the relations among aesthetic, humanistic, and scientific approaches to inquiry. Students are encouraged to examine the pragmatics of rhetorical and communication theory in such settings as business and industry, government, education, medicine and health care, media, the arts, and the family. The Department offers course work leading to the Master of Arts degree and the Doctor of Philosophy.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university requirements, plus
  • three letters of recommendation;
  • a writing sample,
  • a statement of purpose
  • GRE Scores are required with at least 500V
  • TOEFL Scores
  • Transcripts
  • CV or resume

DEGREE PROGRAM REQUIREMENTS

Core Requirements (6 hours)
COM 6001 (3) COM 7325 (3) either Qualitative Methods OR Critical Methods

In addition to the six (6) hours of core requirements, students are required to take a minimum of 39 hours of coursework beyond the M.A. degree (not counting credits for dissertation research).
1. Establish a supervisory faculty committee consisting of a major professor and at least two additional members from the Department of Communication and at least one member outside the Department of Communication. The supervisory committee must be approved by the Director of Graduate Studies.

2. Prepare a Plan of Study approved by the student’s supervisory committee. The Plan of Study expresses the ways in which the student will show evidence of the following:
   - expertise in one of the central domains of communication study;
   - expertise in the research methodologies needed to carry out original research in the specialized area of concentration and;
   - 6 hours of coursework in an area of study outside the department.

3. Enroll in and successfully complete a minimum of four (4) sections (12 hours) of COM 7933 classes designated as "Ph.D. seminars" during coursework.

4. In addition to COM 7325, complete an additional six (6) hours of coursework to fulfill the research tool requirement. If students elect to take both Qualitative and Critical Methods, they must take an additional methods course (3 hours) subject to the approval of their major professor.

Qualifying Exam Requirement – All students must pass a written and oral qualifying examination covering the student’s area of specialization and methodological competence. This examination will be prepared and evaluated by the student’s supervisory committee.

Total Dissertation Hours Required – A minimum of six (6) dissertation hours are required.

Dissertation Requirements - In consultation with the major professor and supervisory committee, students will select a dissertation topic and write and orally defend a dissertation proposal. Upon completion of the dissertation, the student must pass an oral defense.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
CREATIVE WRITING PROGRAM

Master of Fine Arts (M.F.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: January 15 for fall only

Minimum Total Hours: 45
Program Level: Masters
CIP Code: 23.0501
Dept Code: ENG
Program (Major/College): CWR AS

Contact Information:
College: Arts and Sciences
Department: English
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The Master of Fine Arts in Creative Writing is a graduate-level program offering concentrations in fiction and poetry (with the opportunity to study other genres of writing such as screenwriting and creative nonfiction). The program emphasizes the craft of writing and concentrates on the student’s original work. The MFA requires 45 hours of coursework and typically will take three years for the student to complete. Our goal is to help MFA students to produce publishable theses and secure teaching or editing positions upon graduation.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Application deadline: January 15th. Students accepted into the program will begin coursework in the fall. No applications will be considered for spring or summer admission. To be considered for admission to the Master of Fine Arts degree program in Creative Writing, the following requirements must be met:

- an undergraduate degree, preferably in English, from an accredited institution, with a 3.2 average, or its equivalent
- a score in the 73rd percentile or better on the verbal reasoning section of the Graduate Record Examination general test (typically 550 or better) and at least 4 on the analytical writing section. International applicants must also take the Test of English as a Foreign Language (TOEFL) and must score at least 600
- three letters of recommendation, preferably from former English instructors, assessing the student’s potential to do graduate level work
- a writing sample in one genre only: 12-20 pages of double-spaced fiction; 12-20 pages of double-spaced creative nonfiction, or 10-15 pages of single-spaced poetry
- a two-to-three page personal statement, describing the student's background, purpose for attending graduate school, and career goals
• a completed application submitted to the Graduate Admissions Office

All supplementary application materials (i.e., statement, writing sample, and letters of recommendation) should be submitted directly to the department at the following address:

Graduate Director  
Department of English, CPR107  
University of South Florida  
4204 Fowler Ave.  
Tampa, FL 33620-5550

Materials including GRE scores and transcripts must be received by the application deadline in order for students to be considered for admission. Graduates of USF do not need to order official transcripts. Applications are reviewed by an admissions committee after the deadline. Students will be notified by mail of the admissions decision with four to six weeks after the deadline.

DEGREE PROGRAM REQUIREMENTS
To complete the Master of Fine Arts in Creative Writing, students must satisfy the following requirements:

Total Minimum Hours: 45 hours  
Earn 45 credit hours with an overall grade point average of 3.0 or better in the required courses. The distribution of the requirements will be:

- 18 hours in writing workshops and craft seminars  
- 3 hours in pedagogy  
- 3 hours in bibliographic studies  
- 12 hours in literature courses, and  
- 9 hours in thesis studies (taken in the final year of the program).

Complete a book-length manuscript in creative nonfiction, fiction, or poetry that will meet departmental and university requirements for the thesis. The thesis shall consist of 48-64 pages of poems (single- or double-spaced), at least 100 pages of fiction (double-spaced) or at least 100 pages of creative nonfiction (double-spaced). All students must write a three- to ten-page introduction to their thesis that explains their goals for the work.

Six courses (18 hours) chosen from:

CRW 6130 Fiction Writing (3)*  
CRW 6331 Poetry Writing (3)*  
CRW 6236 Nonfiction Writing (3)*  
*may be taken up to three times for a maximum of 9 credits.

CRW 6025 The Craft of Fiction (3)—required for students admitted to the fiction concentration, optional for students admitted to the poetry concentration and nonfiction tracks.

CRW 6352 The Craft of Poetry (3)—required for students admitted to the poetry concentration; optional for students admitted to the fiction concentration and nonfiction tracks.

CRW 6025 The Craft of Nonfiction (3)—required for students admitted to the nonfiction track, optional for students admitted to the fiction and poetry concentrations.
CRW 6025 Special Topics in Creative Writing (3)—This new course might concentrate on screenwriting, translation, editing, creative writing pedagogy (with a community service component), or study of a particular genre or technique.

CRW 6025 Practice in Teaching Creative Writing (3)

ENG 6009 Introduction to Graduate Studies (3)—This course must be taken in the student's first or second semester of graduate studies.

Electives (12 hours)
Four courses in any combination of graduate-level (6000 and above) literature courses offered by the English Department. These courses are coded AML 6---, ENL 6---, and LIT 6---.

Sample courses include:

- AML 6017 Studies in American Literature to 1860 (3)
- AML 6018 Studies in American Literature 1860-1920 (3)
- AML 6027 Studies in Modern American Literature (3)
- AML 6608 Studies in African-American Literature (3)
- ENL 6206 Studies in Old English (3)
- ENL 6216 Studies in Middle English (3)
- ENL 6226 Studies in Sixteenth-Century British Literature (3)
- ENL 6228 Studies in Seventeenth-Century British Literature (3)
- ENL 6236 Studies in Restoration and Eighteenth-British Literature (3)
- ENL 6246 Studies of the English Romantic Period (3)
- ENL 6256 Studies in Victorian Literature (3)
- ENL 6276 Studies in Modern British Literature (3)
- LIT 6096 Studies in Contemporary Literature (3)
- LIT 6105 Studies in Continental Literature (3)
- LIT 6934 Selected Topics in English Studies (3)

Thesis (9 hours)
ENG 6971 Thesis: Master's (9 hours total) — taken in the student's final year of study. The student must be registered in at least 3 hours of ENG 6971 during the semester prior to graduation.

Graduate Certificate
For information on Graduate Certificates please visit http://www.outreach.usf.edu/gradcerts/

English Graduate Certificates Offered:

- Creative Writing — contact Professor Rita Ciresi at rciresi@cas.usf.edu
- Comparative and Interdisciplinary Literary Studies — contact Dr. Susan Mooney at smooney@cas.usf.edu
- Teaching Composition — contact Dr. Debra Jacobs at djacobs@cas.usf.edu

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ECOLOGY AND EVOLUTION CONCENTRATION

Master of Science (M.S.) Degree in the Biology Program with a Concentration in Ecology and Evolution

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: January 1 for full consideration; however, applications are accepted to February 15 (U.S. Applicants); January 1 (International)
- Spring: August 1 (U.S. Applicants); July 1 (International)

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 26.0101
Dept Code: BIO
Program (Major/College): BIO AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Integrated Biology (IB)
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

For program information refer to the Biology Program (M.S.) listing.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: Ecology and Evolution

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Applying to the Department of Integrative Biology
Students interested in attending graduate school within the IB Department should contact potential major professors to communicate their research ideas and establish that the professor will consider the student’s application. The IB Department requires that all students admitted into the MS program have the approval of a major professor. Applicants should contact faculty conducting research in the student’s area of interest well in advance of the application deadline. For all master’s students, the major professor and at least two additional faculty constitute the student’s supervisory committee, the major professor and at least one of the committee members must be from the Integrative Biology Department. Supervisory committees must be established within two semesters after matriculation. Failure to do so may be cause for dismissal.

The IB Graduate Director, IB Chair, and the College Associate Dean (or designee) must approve the Supervisory Committee. Once a major professor has been assigned and/or a student occupies or utilizes significant space or facilities for research or analogous scholarly activity directly pertinent to the generation of a thesis, the student shall enroll for a minimum of two (2) hours of research credit each semester (other than summer semester), until eligible to enroll in thesis credits.
**Program Admission Requirements**

- Prospective students must apply to a specific Integrative Biology MS program concentration via the online application process through the USF Graduate School.

- Must have 3.00 GPA last 60 hours of B.S. degree

- Must have 500V, 600Q, 4.5AW on GRE

- All international students are required to submit the TOEFL test. Non-native English speaking graduate students must score at a minimum of at least 570 on the paper based test or a minimum total score of 79 on the internet based test on the TOEFL and at least 50 on the TSE to be eligible for a teaching assistantship.

- For acceptance into the IB Department, acceptance by a faculty member in IB is MANDATORY. IB encourages applicants to contact faculty via email to indicate an interest in the research being conducted in their laboratory. IB will make every effort to pair potential graduate students with appropriate faculty, however, it is recommended that applicants make direct contact with individual faculty. The Graduate Director can assist student in selecting a potential Major Professor.

- It is expected that candidates for the M.S. degrees will have completed courses equivalent to those required for the B.S. in Biology at U.S.F.

**Materials necessary for a complete application are listed below:**

The following items should be submitted in the envelope provided to:

Integrative Biology Graduate Office
Attention: IB Graduate Director
University of South Florida
4202 E. Fowler Ave – SCA110
Tampa, FL 33620-5150

1. **Transcripts.** Two official transcripts in a sealed envelope from each post-secondary institution. Transcripts of work completed at USF will be secured by the Office of Admissions. Thus, applicants only to secure transcripts from other institutions for your application packet.

2. **Letters of Recommendation.** Three letters of recommendation from faculty in sealed envelopes (on their university letterhead) with the envelope seal signed by the recommender. Students shall complete a **Student Recommendation Form** that can be found on the IB website and submit it to the recommenders.

3. **Essay.** A brief 1-2 page essay stating your intended field of research and professional goals. Please indicate your specific research interests, in order that we may refer your application to appropriate IB faculty members. In the essay please list 2-3 IB faculty members that you would like to have review your file. **Acceptance into the IB graduate program requires the identification of specific faculty who are willing to direct your research.**

4. **TA Application.** Applicant must complete the Application for Teaching Assistantship (TA) Form that can be found on the CMBMB or IB website if they wish to be considered for a TA position. Applicants who do not return this form will not be considered for a teaching position. Applicants should attach a resume to the Application for Teaching Assistantship (TA) Form that highlights any previous teaching experience.

5. **Official GRE Scores.** This exam must have been taken within the last five years. OFFICIAL test scores must be sent to USF directly from the testing agency. The University of South Florida’s 4-Digit Institution Code is: 5828
DEGREE PROGRAM REQUIREMENTS

The thesis based M.S. degree requires successful completion of the following:

1. structured coursework
2. an oral qualifying exam
3. research thesis
4. defense of thesis examination

The Master’s Degree Requirements should be completed in two to three years. The IB Department requires all graduate work applied toward the completion of degree requirements be completed within a five year period after matriculation. Thesis research should be publishable and students are encouraged to publish their findings. The specific requirements for the Master of Science (M.S.) and the specific concentrations are provided below.

1) Credit hour requirement: a total of 30 semester hour credits beyond the Baccalaureate Degree is required. 
   (including BSC 6910, BSC 6971, BSC 6935, and other structured and unstructured courses approved by IB)

2) Successful completion of the oral comprehensive qualifying examination. The exam should be taken at the end of the first year, or early in the second year of study. The examination is administered and evaluated by the student’s graduate committee.

3) Submission of a thesis proposal and approval by the major professor, graduate committee and graduate director.

4) A minimum of eight (8) thesis research credit hours (BSC 6971).

5) Seminar requirement: one presentation, excluding the thesis seminar and defense. Students should present posters or oral presentations based on their thesis research at national/regional professional meetings. The student’s graduate committee must approve the presentation.

6) Submission of an acceptable thesis.

7) Presentation of the thesis seminar (BSC 6935) and successful defense of the thesis.

Degree Progress

A student must be registered for an appropriate load (in no case fewer than two [2] graduate hours) in the college for the semester in which all degree requirements are satisfactorily completed. A student who receives three grades below “B” in structured courses required by the advisory committee will be dropped from the program. Registration in courses entitled Directed Research, Thesis must be with the approval of the major professor and must be commensurate with each student’s research plan. Students may not register in Thesis: Master’s until a Supervisory Committee has been formed and completed the oral qualifying examination. A student who enrolls in courses entitled Thesis: Master’s but does not submit a thesis will not be certified for graduation.

Core Requirements

MS in Biology Core (3 credit hrs)
BSC 6930 Lectures in Contemporary Biology (1)

Enrollment in this course is required taken three times for credit)

Concentration Requirements (17 hrs)

Seventeen (17) credit hours of course work selected from the list below: The graduate student, major professor and Graduate committee will establish the specific courses for each graduate student. Other courses, not listed below, can be substituted if approved by the Graduate Committee. Specific course training beyond this point will be determined in each individual case by the special needs of the student as decided by the student’s Graduate Committee.

BSC 5931 – Conservation Biology (3 semester hours)
BOT 5185 – Marine Botany (4)
PCB 6455 – Statistical Ecology (3)
PCB 6456 – Biometry I (4)
PCB 6458 – Biometry II (3)
BSC 5931 – Comparative approaches in Evolution (3)
PCB 6426 – Population ecology (3)
ZOO 5463 – Herpetology (4)
ZOO 5456 - Ichthyology (4)
BSC 6932 – Advances in Population Biology (1)
BSC 6932 – Advances in Ichthyology (1)
BSC 6932 – Advances in Herpetology (1)
BSC 6932 – Advances in Marine Ecology (1)
BSC 6932 – Scientific Writing (2)
BSC 6932 – Restoration Ecology (3)
BSC 6447 - Community Ecology (3)
PCB 6933 – Seminar in Ecology (variable credit)

**Thesis (6971) 8 hours**
A minimum of eight thesis research credit hours is required.

**Non-Thesis** - For students enrolled in the non-thesis program, a 30-hour minimum is required at the 5000-6000 level; 26 hours must be in formally structured courses, 16 hours must be at the 6000 level; 15 structured hours must be offered by IB. A review paper of a topic approved by the supervisory committee is required as well as successful completion of the comprehensive oral qualifying exam after all course work has been completed. For non-thesis masters students, this exam will occur at the end of the program of study.

**Comprehensive Oral Qualifying Examination.** A comprehensive examination (thesis proposal, seminar/presentation and defense of thesis proposal) is required for all master’s students. This examination is open to all departmental faculty. Students must take their comprehensive exam within two semesters of matriculation and the exam is normally taken after the completion of all formal course work. Thesis students must take the examination at least one semester before the thesis is presented. Any graduate work counted toward the requirement for the M.S. degree must be completed within five (5) years after matriculation. Submission of a thesis proposal and approval by the major professor, graduate committee, and graduate director. All thesis-based Master’s Degree students must present a seminar to the Department of Biology and must be enrolled in BSC 6935, during the final semester. The seminar should be a concise summary of the research completed to satisfy the requirements for the M.S. Degree. The seminar is open to the general public and must be announced two weeks prior to the presentation. Upon completion of the seminar, the general public will be invited to ask questions. At the discretion of the student’s graduate committee, members of the committee may continue to question the graduate student after the general public has departed the seminar room. Each student is expected to defend his/her research to the unanimous satisfaction of the graduate committee.

**COURSES**
See: [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
ECOLOGY AND EVOLUTION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Biology Program with a Concentration in Ecology and Evolution

DEGREE INFORMATION

Program Admission Deadlines:

Fall: January 1 for full consideration; however applications are accepted to February 15 (U.S. Applicants) January 1 (International)

Spring: August 1 (U.S. Applicants) July 1 (International)

Minimum Total Hours: 90

Program Level: Doctoral

CIP Code: 26.0101

Dept Code: BIO

Program (Major/College): BIO AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Integrated Biology (IB)

Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

For program information refer to the Biology Program (Ph.D.) listing.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: Ecology and Evolution

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Applying to the Department of Integrative Biology

Students interested in attending graduate school within the IB Department should contact potential major professors to communicate their research ideas and establish that the professor will consider the student’s application. The IB Department requires that all students admitted into the PhD program have the approval of a major professor. Applicants should contact faculty conducting research in the student’s area of interest well in advance of the application deadline. All doctoral degree seeking students must form a Graduate Supervisory Committee. The Committee consists of four faculty. The major professor and at least two committee members must be from the IB Department and the committee must be established within two semesters after matriculation. Failure to do so will be cause for dismissal.

The IB Graduate Director, IB Chair, and the College Associate Dean (or designee) must approve the Supervisory Committee. Once a major professor has been assigned and/or a student occupies or utilizes significant space or facilities for research or analogous scholarly activity directly pertinent to the generation of a dissertation, the
student shall enroll for a minimum of two (2) hours of research credit each semester (other than summer), until eligible to enroll in dissertation credits.

**Program Admission Requirements**

- Prospective students must apply to a specific Biology PhD program concentration via the online application process through the USF Graduate School.
- Must have 3.00 GPA last 60 hours of B.S. degree.
- Must have 500V, 600Q, 4.5 AW on GRE.
- All international students are required to submit the TOEFL test. Non-native English speaking graduate students must score a minimum of at least 570 on the paper based test or a minimum total score of 79 on the internet base test on the TOEFL and at least 50 on the TSE to be eligible for a teaching assistantship.
- For acceptance into the IB Department, acceptance by a faculty member in IB is MANDATORY. IB encourages applicants to contact faculty via email to indicate an interest in the research being conducted in their laboratory. IB will make every effort to pair potential graduate students with appropriate faculty, however it is recommended that applicants make direct contact with individual faculty. The Graduate Director is available to assist students in identifying a potential Major Professor.
- It is expected that candidates for the PhD degree will have completed courses equivalent to those required for the B.S. in Biology at U.S.F.

**DEGREE PROGRAM REQUIREMENTS**

The Ph.D. degree requires successful completion of:

1. structured coursework
2. qualifying exam (dissertation proposal, presentation/seminar, and defense of dissertation proposal)
3. oral qualifying exam and Admission to Candidacy
4. oral Defense and submission of approved Dissertation

**Coursework**

A total of 90 credits beyond the baccalaureate must be earned: this includes any graduate credit earned prior to admission to the doctoral program. A minimum of three years of graduate work beyond the Baccalaureate Degree is required. Twelve (12) hours of graduate work completed while a non-degree seeking student at this institution may be transferred to the doctoral program, with approval of the supervisory committee. At least one academic year of residence must be on the campus. A year of residence is enrollment in a minimum of nine (9) semester credits for two consecutive semesters. The direction and immediate supervision of graduate work for doctoral students resides with the major professor and student’s graduate committee. Graduate students are not admitted unless a major professor has agreed to serve as the student’s supervisor. The University imposes limitations on the time period between admission to candidacy and successful completion of degree requirements. University policy for time limits may be viewed in the Degree Requirements Section of this catalog.

The IB Department requires that all graduate work applied toward the completion of degree requirements be completed within a seven year period after matriculation. Doctoral students are encouraged to gain teaching experience in at least two undergraduate courses in the department. Overall degree requirements for the Doctor of Philosophy are as follows:

1. Credit hour requirement: A total of 90 semester hour credits beyond the Baccalaureate degree is required. *(including BSC 7910, BSC 7971, BSC 7980 and other structured and unstructured courses)*
2. Submission of a doctoral proposal and approval by major professor, graduate committee, and graduate director

3. A minimum of twenty-four (24) dissertation research credit hours (BSC 7980) is required.

4. Successful completion of the dissertation proposal, presentation/seminar and preliminary doctoral examination. There is an oral exam.

5. Presentation requirement: two presentations, excluding the doctoral seminar and defense. Students are expected to present posters or oral presentations based on their dissertation research at national/regional professional meetings. The graduate committee must approve the presentation.

6. Publication requirement: one research paper must be submitted for publication to a refereed scientific journal by the date of the Doctoral Seminar and Defense. The paper may be sole or coauthored, but it must be based on the dissertation research. The student’s supervisory committee must approve the paper prior to submission.

7. Submission of an acceptable dissertation

8. Presentation of the doctoral seminar (BSC 7936) and successful defense of the dissertation.

Degree Progress
A student must be registered for an appropriate load (in no case fewer than two [2] graduate hours) in the college for the semester in which all degree requirements are satisfactorily completed. A student who receives three grades below “B” in structured courses required by the advisory committee will be dropped from the program. Registration in courses entitled Directed Research, or Dissertation must be with the approval of the major professor and must be commensurate with each student’s research plan. Students may not register in Dissertation: Doctoral (BSC 7980) until a Supervisory Committee has been formed and a approved Admission to Candidacy on file with the Graduate School. A student who enrolls in courses entitled Dissertation: Doctoral but does not submit a dissertation will not be certified for graduation.

CORE REQUIREMENTS
PhD in Biology Core (10 credit hrs.)

BSC 6930 Lectures in Contemporary Biology (1)
Repeated four times for 4 credit hours plus 6 additional hours of course work.

Concentration Requirements (6 hours) A minimum of two courses selected from the list below for a minimum of 6 credit hours. The graduate student, major professor and graduate committee will establish the specific courses for each graduate student. Other courses, not listed below, can be substituted if approved by the Graduate Committee. Specific course training beyond this point will be determined in each individual case by the special needs of the student as decided by the student’s Graduate Committee.

- BSC 5931 – Conservation Biology (3 semester hours)
- BOT 5185 – Marine Botany (4)
- PCB 6455 – Statistical Ecology (3)
- PCB 6456 – Biometry I (4)
- PCB 6458 – Biometry II (3)
- BSC 5931 – Comparative approaches in Evolution (3)
- PCB 6426 – Population ecology (3)
- ZOO 5463 – Herpetology (4)
- ZOO 5456 - Ichthyology (4)
- BSC 6932 – Advances in Population Biology (1)
- BSC 6932 – Advances in Ichthyology (1)
- BSC 6932 – Advances in Herpetology (1)
BSC 6932 – Advanced in Marine Ecology (1)
BSC 6932 – Scientific Writing (2)
BSC 6932 – Restoration Ecology (3)
BSC 6447 - Community Ecology (3)
PCB 6933 – Seminar in Ecology (variable credit)

Qualifying Examination
All students in the IB PhD degree concentration must complete a qualifying examination.
The exam consists of 3 parts:

1. Dissertation proposal
2. Seminar/presentation of proposal
3. Defense of dissertation proposal

Admission to Candidacy
The doctoral student is eligible for admission to candidacy after completing structured course requirements, passing an oral qualifying examination and, approval by the supervisory committee. Appropriate forms to document promotion to candidacy must be completed and to the Graduate School. Following admission to candidacy, a student must enroll in BSC 7980 when engaged in research, data collection, or writing activities relevant to the doctoral dissertation. Advisors should assign the number of credits in this course in accordance with policy and appropriate to the demands made on faculty, staff, and University facilities, but in no event will the total number of earned dissertation credits be fewer than 24. Students not admitted to candidacy are not eligible to enroll in BSC 7980.

Additional Requirements
Any graduate work counted toward fulfilling the requirements for the Ph.D. degree must be completed within seven (7) years after matriculation.

Dissertation
BSC 7980 – 24 hours minimum
Submission of a doctoral proposal and approval by major professor, graduate committee, and graduate director.
Successful completion of the Dissertation Defense Seminar and an oral exam administered by the Graduate Committee. Seminar requirement: two presentations, excluding the Doctoral Defense Seminar. Students should present posters or oral presentations based on their dissertation research at national/regional professional meetings. The graduate committee must approve the presentation.

Doctoral Seminar and Defense
All doctoral students must present a public seminar to the IB Department and must be enrolled in BSC 7980, during the semester in which the seminar is given. The seminar should be a concise summary of the research completed to satisfy the requirements for the Ph.D. The seminar is open to the general public and must be announced two weeks prior to the presentation. Upon completion of the seminar, the general public will be invited to ask questions. At the discretion of the student’s graduate committee, members of the committee may continue to question the graduate student after the general public has departed the seminar room. Each student is expected to defend his/her research to the unanimous satisfaction of the graduate committee. Following the defense, students will make any editorial modifications to the dissertation as recommended by the supervisory committee and submit the dissertation to the Graduate School.

Publication Requirement
One research paper must be submitted for publication to a refereed scientific journal by the date of the Doctoral Seminar and Defense. The paper may be sole or coauthored, but it must be based on the dissertation research. The graduate committee must approve the paper prior to submission.

COURSES
For a updated list of course offerings see: http://www.ugs.usf.edu/sab/sabs.cfm
BUSINESS ECONOMICS PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: June 1
- Spring: October 15
- Summer: No admission

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 45.0601
Dept Code: ECN
Program (Major/College): ECN AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Economics
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The M.A. in Economics prepares students for careers as professional economists in business and government. It is also excellent preparation for continued graduate study in economics.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools (SACS)

Major Research Areas:
Health economics, public economics, urban and regional economics, international trade, economic development, history of economic thought, industrial organization, advanced microeconomics, and advanced econometrics

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Must have a 3.00 or higher upper-level GPA.
- Must have a 500 or higher GMAT; or GRE score of 430 or higher verbal portion and 570 or higher quantitative portion.
- International applicants from non English-speaking countries must also have a TOEFL score of 550 or higher on the written version, a minimum score of 213 on the computer-based test or a 79 on the internet-based test.
- Must have at least a 3.0 GPA in prerequisite courses in intermediate microeconomics, intermediate macroeconomics, statistics, and calculus.
DEGREE PROGRAM REQUIREMENTS

All students are required to take courses in advanced economic theory and econometrics. Undergraduate economics majors at USF may complete the program in one year beyond the B.A. in the 5-Year B.A./M.A. Program. Students preparing for doctoral studies select from these and additional courses in economic theory, mathematics, and quantitative methods. Where appropriate students may select courses in other departments in the University.

Students must satisfy all University requirements for the M.A. degree. Departmental requirements include 30 hours of graduate credit selected with the approval of the department's graduate advisor. At least 24 hours must be in Economics not including Independent Study (ECO 6906) and Directed Research (ECO 6917). To graduate, a student must have at least an overall 3.0 GPA and at least a 3.0 GPA for all economics courses, and pass an oral examination.

Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 6115</td>
<td>Microeconomics I</td>
<td>3</td>
</tr>
<tr>
<td>ECO 6206</td>
<td>Aggregate Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 6405</td>
<td>Mathematical Economics I</td>
<td>3</td>
</tr>
<tr>
<td>ECO 6424</td>
<td>Econometrics I</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Economics electives must be drawn from the following set of graduate-level courses offered in the Department of Economics:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 6120</td>
<td>Economic Policy Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ECO 6305</td>
<td>History of Economic Thought</td>
<td>3</td>
</tr>
<tr>
<td>ECO 6425</td>
<td>Econometrics II</td>
<td>3</td>
</tr>
<tr>
<td>ECO 6505</td>
<td>Public Finance</td>
<td>3</td>
</tr>
<tr>
<td>ECO 6525</td>
<td>Public Sector Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 6706</td>
<td>International Trade: Theory and Policy</td>
<td>3</td>
</tr>
<tr>
<td>ECO 7116</td>
<td>Microeconomics II</td>
<td>3</td>
</tr>
<tr>
<td>ECO 7406</td>
<td>Mathematical Economics II</td>
<td>3</td>
</tr>
<tr>
<td>ECO 7426</td>
<td>Econometrics III</td>
<td>3</td>
</tr>
<tr>
<td>ECO 7427</td>
<td>Econometrics IV</td>
<td>3</td>
</tr>
<tr>
<td>ECP 6405</td>
<td>Industrial Organization I</td>
<td>3</td>
</tr>
<tr>
<td>ECP 6408</td>
<td>Economics of Organization</td>
<td>3</td>
</tr>
<tr>
<td>ECP 6536</td>
<td>Economics of Health Care I</td>
<td>3</td>
</tr>
<tr>
<td>ECP 6614</td>
<td>Urban Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECP 6624</td>
<td>Regional Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECP 7406</td>
<td>Industrial Organization II</td>
<td>3</td>
</tr>
<tr>
<td>ECP 7537</td>
<td>Economics of Health Care II</td>
<td>3</td>
</tr>
<tr>
<td>ECS 6015</td>
<td>Economic Development</td>
<td>3</td>
</tr>
</tbody>
</table>

With the approval of the Graduate Director, unrestricted elective courses may be satisfied either by graduate-level courses offered by any department within the University or by certain MBA courses taught within the Department of Economics.
In addition to completing the 30 hours of coursework with overall and major GPAs of at least 3.0, a student must pass an oral examination conducted by a panel of three faculty members who have taught courses in the student’s program. At least one faculty member must be drawn from those who teach the core courses. The oral examination provides a forum for the student to provide evidence that s/he has sufficient knowledge and breadth of fundamental economic concepts so as to be able to undertake rigorous economic analysis, both theoretical and empirical in nature.

Total minimum hours: 30

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ECONOMICS PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

<table>
<thead>
<tr>
<th>Program Admission Deadlines:</th>
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<tbody>
<tr>
<td>Fall:</td>
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<td></td>
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<tr>
<td>February 15</td>
</tr>
</tbody>
</table>

Minimum Total Hours: 69
Program Level: Doctoral
CIP Code: 45.0601
Dept Code: ECN
Program (Major/College): ECO/AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Economics
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The Doctor of Philosophy in Economics prepares students for careers as professional economists in academia, business and government.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.


ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- Bachelor’s degree or equivalent from a regionally accredited university or international equivalent
- 3.00 GPA or better in all upper division undergraduate classes
- Graduate Admissions Test taken within the preceding 5 years with minimum scores of 500 (V) and 660 (Q on the GRE and 575 on the GMAT
- Minimum of 2 courses in calculus*
- Minimum of 1 course in probability and statistics*
- Intermediate-level microeconomics and macroeconomics*
  *Applicants must earn a grade of B or better in each of these courses.

DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours: 69 hours

CORE REQUIREMENTS
- ECO 6405 Mathematical Economics I (3)
- ECO 7406 Mathematical Economics II (3)
Economics (Ph.D.)

ECO 6115 Microeconomics I (3)
ECO 7116 Microeconomics II (3)
ECO 6206 Aggregate Economics (3)
ECO 6424 Econometrics I (3)
ECO 6425 Econometrics II (3)
ECO 7426 Econometrics III (3)
ECO 6305 History of Economic Thought (3)

Fields (12 hours)
Select two pairs from the groupings below:

ECP 6536 Economics of Health Care I (3)
ECP 7537 Economics of Health Care II (3)
ECS 6015 Economic Development (3)
ECO 6706 International Trade: Theory and Policy (3)
ECP 6405 Industrial Organization (3)
ECP 7406 Industrial Organization II (3)
ECO 6505 Public Finance (3)
ECO 6525 Public Sector Economics (3)
ECP 6614 Urban Economics (3)
ECP 6624 Regional Economics (3)

Electives (9 hours)
Three graduate courses - secondary field outside of economics, as approved by the advisor

Qualifying Examination
Examinations in mathematical economic/microeconomics and econometrics

Dissertation (21 hours minimum)
ECO 7980 Dissertation

Graduation Requirements:
- Complete 27 credit hours of required coursework with required GPA
- Complete 12 credit hours of economics field coursework with required GPA
- Complete 9 hours of secondary field coursework with the required GPA
- Pass the qualifying examinations in mathematical economic/microeconomics and econometrics
- Write and successfully defend the doctoral dissertation proposal
- Complete at least 21 credit hours of dissertation coursework
- Write and successfully defend a doctoral dissertation.

COURSES
For an updated list of course offerings see: http://www.ugs.usf.edu/sab/sabs.cfm
ENGLISH PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:

Fall: February 1
Fall admission only

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 23.0101
Dept Code: ENG
Program (Major/College): ENG AS

Concentrations:
Literature (LIT)
Rhetoric and Composition (RAC)

PROGRAM INFORMATION

The MA in English with a concentration in Literature is a continuation of the BA with greater depth in literary knowledge and an introduction and implementation of methods, standards, and conventions of scholarship on literature. It is a generalist degree with broad-based distribution requirements, but it has the flexibility to study cutting-edge theories and newly emerging fields of interests (including cultural and comparative studies, ethnic literatures, and genre studies such as film). The option for PhD preparation will conclude with a portfolio of three 15-20 page essays and an oral defense; the option for teacher preparation will have two additional courses required, including one with pedagogical emphasis and a comprehensive examination.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: n/a

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

Literature:
• BA in English
• GRE general exam: 600V, 4.0 AW
• undergraduate major GPA 3.50, 3.30 last 2 years
• three (3) letters of recommendation
• a two-to-three page personal statement describing the student’s background, purpose for attending graduate school, and career goals
• a writing sample of no more than ten pages that demonstrates academic or disciplinary writing
Rhetoric and Composition:
- BA in English
- GRE general exam: 600V, 4.0AW
- undergraduate major GPA 3.5, 3.3 last 2 years
- three (3) letters of recommendation
- a two-to-three page personal statement describing the student’s background, purpose for attending graduate school, and career goals.
- a writing sample of no more than ten pages that demonstrates academic or disciplinary writing

DEGREE PROGRAM REQUIREMENTS

Program of Study 33 Credit Hours

CORE REQUIREMENTS:
ENG 6009 Introduction to Graduate Studies (3) (this should be taken in the first semester of coursework)

CONCENTRATION REQUIREMENTS:
In addition to the core requirements, students must complete the requirements below for the selected concentration:

Literature Concentration - OPTION I – Ph.D. Preparation

Required (3 credits)
ENG 6018 (3) or ENG 6019 (3)

Historical Distribution (12 credits)*: four courses chosen from the following:
1 Medieval or Renaissance (including 17th Century)
ENL 6206 (3)
ENL 6216 (3)
ENL 6226 (3)
ENL 6228 (3)

1 18th Century (Either British tradition or Literature of the Americas)
AML 6017
ENL 6236

1 19th Century (Either British tradition or Literature of the Americas):
AML 6017
AML 6018
ENL 6246
ENL 6256

1 20th Century (Either British traditions or Literature of the Americas):
AML 6027
ENL 6276
LIT 6096
Cultural & Critical Studies (6 credits)*: two courses in ethnic literature (including African-American, Latino/a, post-colonial), world literature, women’s literature or gender studies, critical theory, film, or genre
- AML 6608
- ENG 6018
- ENG 6019
- ENG 6067
- LIT 6934
- Or other courses as approved by the Graduate Director

*of the six courses in Historical Distribution and Cultural-Critical Studies, two must be from British traditions and two from American Traditions

Electives (6 credits)
Students taking ENC 6745 Teaching Practicum must use this as an elective if they count it toward the 33 credits in the degree. No CRW courses will be allowed in the literature track. Only one practicum will be allowed to satisfy degree requirements (including ENC 6745) in Option I. One Directed Study may be used to substitute for degree requirement with the approval of the Graduate Director.

Portfolio and Defense (3 credits)
Three directed study hours to prepare portfolio. In their fourth and final semester (excluding summer terms), MA students will submit a portfolio for review to a three-member faculty committee six weeks prior to the Graduate School deadline for thesis/dissertation submission. Upon submission, the student and chair of the committee will establish a defense date with the Graduate Program Specialist.

The portfolio will contain the following:
- An introductory first-person essay in which the student offers a self-evaluation of the contents of the portfolio and how it reflects his or her own process of revision, intellectual growth, plans for publication/dissemination, and professional development (minimum five pages, not to exceed fifteen).
- Three revised seminar papers 15-20 pages in length, including appropriate MLA or Chicago Style documentation.
  - Papers should represent three distinct literary periods, including at least one prior to 1800 and one after 1800. In addition, the contents of the portfolio should represent diversity on a national level, with at least one paper focusing on literature of the Americas and the other on literature from Britain (broadly construed) or its colonies.
  - Papers should be developed under the direction of three different faculty members from the English Department, who then will form the committee for the defense. One member of the committee will serve as the chair, who will coordinate the circulation of the portfolio, the scheduling of the defense, and the submission of evaluation forms to the graduate director within specified deadlines.

The portfolio will be reviewed and evaluated by this three-member faculty committee using the published assessment rubric.

Members of the portfolio committee will be asked to work with the student to revise the papers she/he wrote for class. The goal is to get the papers into a form that might reasonably be published.

Because this option is not a thesis, it does not have to be submitted to the Graduate School, and so it does not need to adhere to the Graduate School deadlines. Defenses should be concluded two weeks before the end of classes. The whole portfolio, along with the revised papers and the introductory essay, should be circulated two weeks prior to the defense, to give committee members an opportunity to read it through.

The MA Portfolio will be evaluated as “Pass Plus,” “Pass,” “Pass Minus,” or “Fail.”

Students earning a grade of “Fail” on the MA Portfolio will be placed on Academic Probation for the term following the exam. Probationary status can be removed by earning a passing grade (“Pass Minus” or higher) in the following semester, summer excluded. In the event that the student does not pass the defense in the
following semester (excluding summer) and probationary status is not removed, the student can be academically dismissed from the program. Graduate Assistants maintain eligibility for an assistantship.

After the defense, a copy of the final, revised portfolio will be submitted according to the requirements of the graduate school and proper documentation will be added to the student’s graduate program file.

**Oral Defense**
The committee chair convenes a meeting with the committee and student for 30 minutes; this oral examination provides the opportunity for faculty to question the student on various aspects of the portfolio, and it gives the student the opportunity to expand upon and refine ideas represented in writing. The defense also provides an opportunity for further suggestions on publication and revision. After 30 minutes, the committee will convene without the student to discuss a final assessment for the portfolio using the published rubric.

**Literature Concentration OPTION II – Teacher Enrichment**
Required:
ENG 6018 (3) or ENG 6019 (3)

**Historical Distribution (18 credits)**
- 1 Medieval or Renaissance Course (including 17th C):
  - ENL 6206
  - ENL 6216
  - ENL 6226
  - ENL 6228

- 1 18th Century Course (Either British traditions or Literature of the Americas):
  - AML 6017
  - ENL 6236

- 2 19th Century Courses (Either British traditions or Literature of the Americas):
  - AML 6017
  - AML 6018
  - ENL 6246
  - ENL 6256

- 1 20th Century Course (Either British traditions or Literature of the Americas):
  - AML 6027
  - ENL 6276
  - LIT 6096

**Cultural – Critical Studies (3 credits)**: one course in ethnic literature (including African-American, Latino/a, post-colonial), world literature, women’s literature or gender studies, critical theory, film, or genre
- AML 6608
- ENG 6018
- ENG 6019
- ENG 6067
- LIT 6934
  Or other courses as approved by the Graduate Director

*Of the seven courses from Historical Distribution and Cultural-Critical Studies, three must be from British traditions and three from American traditions
Pedagogical Emphasis (3 credits):
Choose one from the following:
- CRW 6025 Selected Topics: Practice in Teaching Creative Writing
- ENC 6700 Composition Theory
- ENC 6745 Teaching Practicum (TAs only)
- ENG 6067 History of the English Language
- LAE 6375 Contemporary Composition Studies
- LAE 6389 Practice in Teaching Literature
- LIT 6934 Selected Topics: Practice in Teaching Professional and Technical Writing
- LIT 6934 Selected Topics: Practice in Teaching Writing Center

Elective (3 credits)
Students taking ENC 6745 Teaching Practicum must use this as an elective if they count it toward the 33 credits in the degree. No CRW courses will be allowed in the literature track. Only one practicum will be allowed to satisfy degree requirements (including ENC 6745) in Option I. One Directed Study may be used to substitute for degree requirement with the approval of the Graduate Director.

Comprehensive Exam:
During their final term of coursework, students will take a comprehensive written exam on literature from the six areas of historical distribution:
1) Medieval and Early Modern
2) Eighteenth-century British and Early Literature of the Americas
3) Nineteenth-century British and colonies
4) Nineteenth-century Literature of the Americas
5) Twentieth-century British and postcolonial
6) Twentieth-century Literature of the Americas

Students will prepare for the exam by reading the list of identified works (available at the start of the program). The list will be established and published with a clear expiration date (five years); the succeeding list will be ready at least one year prior to implementation in the exam.

Rhetoric and Composition Concentration

Core Requirements: 12 credits
- ENC 6700 Studies in Composition Theory (3)
- ENC 6720 Studies in Composition Research (3)
- ENC 6421 Studies in Rhetoric and Technology (3)
- ENC 6336 Studies in the History of Rhetoric (3)

Electives: 15 credits
Three (3) electives within Literature or Rhetoric and Composition from the following (9 credit hours):
- ENC 6261 Advanced Technical Writing
- ENC 6266 Professional and Technical Communication
- ENC 6333 Contemporary Rhetorics
- ENC 6422 New Media Production
- ENC 6740 Theory and Development of Writing Programs
- LAE 6375 Contemporary Composition Studies
Outside Electives (6 credit hours)
Two electives in English or outside department, related to course of study

Thesis
ENG 6971 (3) - MA Thesis on a Rhetoric and Composition subject plus an oral defense

The M.A. thesis – 40-50 pages, typed body in 12 point Times New Roman font, double-spaced – should be based on student’s specialization in Rhetoric and Composition. This manuscript can be a revision and extension of a course paper or conference paper. It must contribute to the discipline by advancing scholarly discussion in Rhetoric and Composition studies and offering new knowledge.

Graduate Certificate Program
For information on Graduate Certificates please visit http://www.outreach.usf.edu/gradcerts/

English Graduate Certificates Offered:
Creative Writing – contact Professor Rita Ciresi at rciresi@usf.edu
Comparative and Interdisciplinary Literary Studies – contact Dr. Susan Mooney at smooney@usf.edu
Teaching Composition – contact Dr. Debra Jacobs at djacobs@usf.edu

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ENGLISH PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 1
  Fall admission only
Minimum Total Hours: 60 Post-Masters
Program Level: Doctoral
CIP Code: 23.0101
Dept Code: ENG
Program (Major/College): ENG AS

Concentrations:
- Literature (LIT)
- Rhetoric and Composition (RAC)

PROGRAM INFORMATION

The PhD program in English with a concentration in Literature seeks to produce teacher-scholars who have a sound general knowledge of British and American literature and a specialized knowledge of their fields of concentration. Each student in the program must take courses in teaching college English. These courses in teaching are practicums that include actual teaching experience.

The PhD program in English with a concentration in Rhetoric and Composition seeks to equip teacher-scholars with both a robust familiarity with critical, literary, and rhetorical theory and with the pedagogical experiences requisite for quality instruction. Students will specialize their studies toward a particular field of concentration.

The PhD in English involves a minimum of 30 hours of course work beyond the MA degree, exclusive of credits devoted to the foreign language requirement and to the doctoral dissertation after included in these hours must be ENG 6005 Scholarly Research and Writing, ENG 6018 or ENG 6019 and one other theory-rich course, and two courses designated as Doctoral Seminars, with an extra credit of ENG 7939. After completing the necessary course work, students must take a written qualifying exam with oral defense. Students passing this exam and fulfilling the foreign language requirement are then admitted to doctoral candidacy. Students who carry deficiencies on this exam for more than two terms, or who fail this exam more than once, are dismissed from the program. Upon the completion and approval of the dissertation, students will defend the dissertation in a oral examination. After successful completion of the dissertation and defense, students are awarded the doctoral degree.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Literature/Rhetoric and Composition-
- M.A. in English from an accredited university
- GRE general exam: 650 V, 4.0 AW
- GRE subject test in Literature in English; no minimum score (for literature applicants only)
• GPA – minimum 3.70 graduate GPA
• three (3) letters of recommendation, at least two of these letters should be from professors who have taught the applicant at the graduate level
• a two-to-three page personal statement describing the student’s background, purpose for attending graduate school, and career goals
• a critical paper representing the student’s work (unless published, this work should be a paper that the student has written for a university graduate English course, and it should be accompanied by a note from the professor confirming the course for which the paper was written)

DEGREE PROGRAM REQUIREMENTS

Total Minimum hours: (30) hours beyond the MA degree

CORE REQUIREMENTS
ENG 6005 — Scholarly Research and Writing (3)

CONCENTRATION REQUIREMENTS:

Literature Concentration

ENG 6018—Criticism & Theory I or ENG 6019—Criticism & Theory II (may have been taken at the MA level)

One theory-rich course chosen from the following (3 credits):
  ENC 6336 Studies in the History of Rhetoric
  ENG 6018 Criticism & Theory I
  ENG 6019 Criticism & Theory II
  Or other courses designated theory-rich in the department’s Graduate Bulletin or otherwise approved by the Graduate Director

ENG 7939 Doctoral Seminar (8 credits)
Must be taken twice (two credits total) in conjunction with a three-credit course; the two courses plus the two seminar credits total 8 credits

One practicum in teaching or in tutoring for the Writing Center (3 credits)
  ENC 6745 Teaching Practicum
  LAE 6375 Contemporary Composition Studies
  LAE 6389 Practice in Teaching Literature
  Or other courses as approved by the Graduate Director

Electives (10 credits)
  10 hours minimum from other courses in the Department of English

Other
Demonstrated proficiency in one foreign language by one of the following means:
  Place beyond Level IV in a language placement test (administered by World Language Education Department)
  Earn a B or better in one of the graduate courses Reading for French, Spanish, or German
  Earn a B or better in two semester courses of an intermediate foreign language (e.g., Spanish III and Spanish IV)
  Earn a B or better in a fourth semester language course (e.g., Spanish IV)
  Earn a B or better in a second semester Latin course

Qualifying Exam
Ph.D. qualifying exam (students may enroll in directed reading hours with exam committee members)

Dissertation
ENG 7980 Dissertation: Doctoral—Minimum of 10 dissertation hours (no maximum), plus oral defense

Rhetoric & Composition Concentration
Core Requirements (12 credits)

ENC 6700 Studies in Composition Theory
ENC 6720 Studies in Composition Research
ENC 6336 Studies in the History of Rhetoric
ENC 6421 Studies in Rhetoric and Technology

ENG 7939 Doctoral Seminar (8 credits)
Must be taken twice (two credits total) in conjunction with a three-credit course; the two courses plus the two seminar credits total 8 credits

Electives
(12-15 credits, dependent upon whether ENC 6745 was taken at the MA level)
Four or five elective courses in Rhetoric and Composition chosen from the following:
- ENC 6261 Advanced Technical Writing
- ENC 6266 Professional and Technical Communication
- ENC 6333 Contemporary Rhetorics
- ENC 6422 New Media Production
- ENC 6740 Theory and Development of Writing Programs
- LAE 6375 Contemporary Composition Studies

Other: Foreign Language Requirement
Demonstrated proficiency in one foreign language by one of the following means:
- Place beyond Level IV in a language placement test (administered by World Language Education)
- Earn a B or better in one of the graduate courses Reading for French, Spanish, or German
- Earn a B or better in two semester courses of an intermediate foreign language (e.g. Spanish III and Spanish IV)
- Earn a B or better in a fourth semester language course (e.g. Spanish IV)
- Earn a B or better in a second semester Latin course

Ph.D. Qualifying Exam
After completing 30 hours of coursework, the language requirement, and all incomplete grades, a student may take the Ph.D. examination. The standardized exam will be offered twice each academic year for all eligible students and consists of:
- A 24-hour take-home exam divided into four written sections (1,000 words apiece), the content of which corresponds to the four core courses: Composition Theory, Research Methods, Rhetoric and Technology, and historical Rhetorics. Questions will be picked up in the English office at 9:00 a.m. on the day of the exam. Questions will be digitally submitted to the exam chair by 9:00 a.m. on the following day for SafeAssign submission in Blackboard.
- A manuscript suitable for publication in a specified scholarly journal (7,000-8,500 words) to be turned in at the same time as the 24-hour exam. The topic of the manuscript should be based on the student's specialization in Rhetoric and Composition. This manuscript can be a revision of a course paper or conference paper or an extension of their project from the Scholarly Writing and Research class. It must
contribute to the discipline by advancing scholarly discussions in Rhetoric and Composition studies and offering new knowledge.

Both parts of the exam carry equal weight. All exams will be assessed by a rotating committee of at least 3 Rhetoric and Composition faculty representing different areas of disciplinary expertise. Every exam question will be graded by each member of the committee, although emphasis will be placed upon readers’ areas of specialization when determining the final score for each question.

Dissertation
ENG 7980 Dissertation: Doctoral—Minimum of 10 dissertation hours (no maximum), plus oral defense

Graduate Certificate Program
For information on Graduate Certificates please visit http://www.outreach.usf.edu/gradcerts/

English Graduate Certificates Offered:

- Creative Writing – contact Professor Rita Ciresi at rciresi@cas.usf.edu
- Comparative and Interdisciplinary Literary Studies – contact Dr. Susan Mooney at smooney@cas.usf.edu
- Teaching Composition – contact Dr. Debra Jacobs at d jacobs@cas.usf.edu

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ENVIRONMENTAL AND ECOLOGICAL MICROBIOLOGY CONCENTRATION

Master of Science (M.S.) Degree in the Biology Program with a Concentration in Environmental and Ecological Microbiology

DEGREE INFORMATION

Program Admission Deadlines:
Fall: January 1 for full consideration; however applications are accepted to February 15 (U.S. Applicants) January 1 (International)
Spring: August 1 (U.S. Applicants) July 1 (International)

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 26.0101
Dept Code: BIO
Program (Major/College): BIO AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Integrated Biology (IB)
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

For program information refer to the Biology Program (M.S.) listing.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: Environment and Ecological Microbiology

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Applying to the Department of Integrative Biology:
Students interested in attending graduate school within the IB Department should contact potential major professors to communicate their research ideas and establish that the professor will consider the student’s application. The IB Department requires that all students admitted into the MS program have the approval of a major professor. Applicants should contact faculty conducting research in the student’s area of interest well in advance of the application deadline. For all master’s students, the major professor and at least two additional faculty constitute the student’s supervisory committee, the major professor and at least one of the committee members must be from the Integrative Biology Department. Graduate Supervisory Committees must be established within two semesters after matriculation. Failure to do so will be cause for dismissal.

The IB Graduate Director, IB Chair, and the College Associate Dean (or designee) must approve the Graduate Supervisory Committee. Once a major professor has been assigned and/or a student occupies or utilizes significant space or facilities for research or analogous scholarly activity directly pertinent to the generation of a thesis, the student shall enroll for a minimum of two (2) hours of research credit each semester (other than summer semester), until eligible to enroll in thesis credits.
Program Admission Requirements

- Prospective students must apply to a specific Integrative Biology MS program concentration via the online application process through the USF Graduate School.
- Must have 3.00 GPA last 60 hours of B.S. degree
- Must have 500V, 600Q, 4.5AW on GRE
- All international students are required to submit the TOEFL test. Non-native English speaking graduate students must score a minimum of at least 570 on the paper based test or a minimum total score of 79 on the internet based test on the TOEFL and at least 50 on the TSE to be eligible for a teaching assistantship.
- For acceptance into the IB Department, acceptance by a faculty member in IB is MANDATORY. IB encourages applicants to contact faculty via email to indicate an interest in the research being conducted in their laboratory. IB will make every effort to pair potential graduate students with appropriate faculty, however, it is recommended that applicants make direct contact with individual faculty. The Graduate Director can assist the student in selecting a potential Major Professor.
- It is expected that candidates for the M.S. degrees will have completed courses equivalent to those required for the B.S. in Biology at U.S.F.

Materials necessary for a complete application are listed below:

The following items should be submitted in the envelope provided to:

Biology Graduate Office
Attention: (Integrative Biology)
University of South Florida
4202 E. Fowler Ave – SCA110
Tampa, Fl 33620-5150

1. **Transcripts.** Two official transcripts in a sealed envelope from each post-secondary institution. Transcripts of work completed at USF will be secured by the Office of Admissions. Thus, applicants need only to secure transcripts from other institutions for your application packet.

2. **Letters of Recommendation.** Three letters of recommendation from faculty in sealed envelopes (on their university letterhead) with the envelope seal signed by the recommender. Students shall complete a **Student Recommendation Form** that can be found on the IB website and submit it to the recommenders.

3. **Essay.** A 1-2 page essay stating your intended field of research and professional goals. Please indicate your specific research interests, in order that we may refer your application to appropriate IB faculty members. In the essay please list 2-3 IB faculty members that you would like to have review your file. **Acceptance into the IB graduate program requires the identification of specific faculty who are willing to direct your research.**

4. **TA Application.** Applicant must complete the Application for Teaching Assistantship (TA) Form that can be found on the IB website if they wish to be considered for a TA position. Applicants who **do not return this form will not** be considered for a teaching position. Applicants should attach a resume to the Application for Teaching Assistantship (TA) Form that highlights any previous teaching experience.

5. **OFFICIAL GRE test scores.** This exam must have been taken within the last five years. **Official Scores must be sent to USF directly from the testing agency. The University of South Florida’s 4-Digit Institution Code is: 5828**
DEGREE PROGRAM REQUIREMENTS

The thesis based M.S. degree requires successful completion of the following:

1. structured coursework
2. an oral qualifying exam
3. research thesis
4. defense of thesis examination

The Master’s Degree Requirements should be completed in two to three years. The IB Department requires all graduate work applied toward the completion of degree requirements be completed within a five year period after matriculation. Thesis research should be publishable and students are encouraged to publish their findings.

1) Credit hour requirement: a total of 30 semester hour credits beyond the Baccalaureate Degree is required. (Including BSC 6910, BSC 6971, BSC 6935, and other structured and unstructured courses approved by CMMB or IB)

2) Successful completion of the oral comprehensive qualifying examination. The exam should be taken at the end of the first year, or early in the second year of study. The examination is administered and evaluated by the student’s graduate committee.

3) Submission of a thesis proposal and approval by the major professor, graduate committee and graduate director.

4) A minimum of eight (8) thesis research credit hours (BSC 6971).

5) Seminar requirement: one presentation, excluding the thesis seminar and defense. Students should present posters or oral presentations based on their thesis research at national/regional professional meetings. The student’s graduate committee must approve the presentation.

6) Submission of an acceptable thesis.

7) Presentation of the thesis seminar (BSC 6935) and successful defense of the thesis.

Degree Progress
A student must be registered for an appropriate load (in no case fewer than two [2] graduate hours) in the college for the semester in which all degree requirements are satisfactorily completed. A student who receives three grades below “B” in structured courses required by the advisory committee will be dropped from the program. Registration in courses entitled Directed Research, Thesis must be with the approval of the major professor and must be commensurate with each student’s research plan. Students may not register in Thesis: Master’s until a Supervisory Committee has formed and completed the oral qualifying examination. A student who enrolls in courses entitled Thesis: Master’s but does not submit a thesis will not be certified for graduation.

CORE REQUIREMENTS

MS in Biology Core (3 credit hrs)
BSC 6930 Lectures in Contemporary Biology (1) Repeated three times for 3 credit hours

Concentration Requirements

A minimum of 17 credit hours of course work selected from the list below. The graduate student, major professor and graduate committee will establish the specific courses for each graduate student. Other courses, not listed below, can be substituted if approved by the Graduate Committee. Specific course training beyond this point will be determined in each individual case by the special needs of the student as decided by the student’s Graduate Committee. Graduate students concentrating in the area of Environmental and Ecological Microbiology will select from the following list of courses:
MCB 5206 – Public Health and Pathogenic Microbiology (3)
MCB 5655 – Applied and Environmental Microbiology (3)
PCB 5235 – Principles of Immunology (3)
MCB 6930 – Seminar in Applied and Ecological Microbiology (1)
PCB 5525 – Molecular Genetics (3)
BSC 5931 – Genomics (4)
PCB 6456 – Biometry I (4)
PCB 6458 – Biometry II (3)
PCB 6455 – Statistical Ecology (3)
BSC 6932 – Advances in Environmental Ecology (1)

**Thesis**
BSC 6971 Thesis – 8 hrs minimum
Submission of a thesis proposal and approval by the major professor, graduate committee, and graduate director.

**Non-Thesis** - For students enrolled in the non-thesis program, a 30-hour minimum is required at the 5000-6000 level; 26 hours must be in formally structured courses, 16 hours must be at the 6000 level; 15 structured hours must be offered by IB. A review paper of a topic approved by the supervisory committee is required as well as successful completion of the comprehensive oral qualifying exam after all course work has been completed. For non-thesis masters students, this exam will occur at the end of the program of study.

**Comprehensive Oral Qualifying Examination.** A comprehensive examination (thesis proposal, seminar/presentation and defense of thesis proposal) is required for all master’s students. This examination is open to all departmental faculty. Students must take their comprehensive exam within two semesters of matriculation and the exam is normally taken after the completion of all formal course work. The exam should be taken at the end of the first year, or early in the second year of study. The examination is administered and evaluated by the student’s graduate committee. Thesis students must take the examination at least one semester before the thesis is presented. Any graduate work counted toward the requirement for the M.S. degree must be completed within five (5) years after matriculation.

All thesis-based Master’s Degree students must present a seminar to the Department of Biology and must be enrolled in BSC 6935, during the final semester. The seminar should be a concise summary of the research completed to satisfy the requirements for the M.S. Degree. The seminar is open to the general public and must be announced two weeks prior to the presentation. Upon completion of the seminar, the general public will be invited to ask questions. At the discretion of the student’s graduate committee, members of the committee may continue to question the graduate student after the general public has departed the seminar room. Each student is expected to defend his/her research to the unanimous satisfaction of the graduate committee.

**COURSES**
See: [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
ENVIRONMENTAL AND ECOLOGICAL MICROBIOLOGY CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Biology Program with a concentration in Environmental and Ecological Microbiology

DEGREE INFORMATION

Program Admission Deadlines:
Fall: January 1 for full consideration; however applications are accepted to February 15 (U.S. Applicants) January 1 (International)
Spring: August 1 (U.S. Applicants) July 1 (International)

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 26.0101
Dept Code: BIO
Program (Major/College): BIO AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Integrated Biology (IB)
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

For program information refer to the Biology Program (Ph.D.) listing.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: Environment and Ecological Microbiology

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Applying to the Department of Integrative Biology

Students interested in attending graduate school within the IB Department should contact potential major professors to communicate their research ideas and establish that the professor will consider the student’s application. The IB Department requires that all students admitted into the PhD program have the approval of a major professor. Applicants should contact faculty conducting research in the student’s area of interest well in advance of the application deadline. All doctoral degree seeking students must form a supervisory committee. The Committee consists of four faculty. The major professor and at least two committee members must be from the IB Department and the committee must be established within two semesters after matriculation. Failure to do so may be cause for dismissal.

The IB Graduate Director, IB Chair, and the College Associate Dean (or designee) must approve the Graduate Supervisory Committee. Once a major professor has been assigned and/or a student occupies or utilizes significant space or facilities for research or analogous scholarly activity directly pertinent to the generation of a dissertation, the student shall enroll for a minimum of two (2) hours of research credit each semester (other than summer), until eligible to enroll in dissertation credits.

http://www.cas.usf.edu/
Program Admission Requirements

- Prospective students must apply to a specific Biology PhD program concentration via the online application process through the USF Graduate School.
- Must have 3.00 GPA last 60 hours of B.S. degree.
- Must have 500V, 600Q, 4.5 AW on GRE.
- All international students are required to submit the TOEFL test. Non-native English speaking graduate students must score a minimum of at least 570 on the paper based test or a minimum total score of 79 on the internet based test on the TOEFL and at least 50 on the TSE to be eligible for a teaching assistantship.
- For acceptance into the IB Department, acceptance by a faculty member in IB is MANDATORY. IB encourages applicants to contact faculty via email to indicate an interest in the research being conducted in their laboratory. IB will make every effort to pair potential graduate students with appropriate faculty, however it is recommended that applicants make direct contact with individual faculty. The Graduate Director is available to assist students to identify a potential Major Professor.
- It is expected that candidates for the PhD degree will have completed courses equivalent to those required for the B.S. in Biology at U.S.F.

DEGREE PROGRAM REQUIREMENTS

The Ph.D. degree requires successful completion of:

1. structured coursework
2. qualifying exam (dissertation proposal, presentation/seminar and defense of dissertation proposal)
3. oral qualifying exam and Admission to Candidacy
4. oral Defense and submission of approved Dissertation

Coursework
A total of 90 credits beyond the baccalaureate must be earned: this includes any graduate credit earned prior to admission to the doctoral program. A minimum of three years of graduate work beyond the Baccalaureate Degree is required. Twelve (12) hours of graduate work completed while a non-degree seeking student at this institution may be transferred to the doctoral program, with approval of the supervisory committee. At least one academic year of residence must be on the campus. A year of residence is enrollment in a minimum of nine (9) semester credits for two consecutive semesters. The direction and immediate supervision of graduate work for doctoral students resides with the major professor and student’s graduate committee. Graduate students are not admitted unless a major professor has agreed to serve as the student’s supervisor. The University imposes limitations on the time period between admission to candidacy and successful completion of degree requirements. University policy for time limits may be viewed in the Degree Requirements Section of this catalog.

The IB Department requires that all graduate work applied toward the completion of degree requirements be completed within a seven year period after matriculation. Doctoral students are encouraged to gain teaching experience in at least two undergraduate courses in the department. Overall degree requirements for the Doctor of Philosophy are as follows:

1. Credit hour requirement: A total of 90 semester hour credits beyond the Baccalaureate degree is required. (including BSC 7910, BSC 7971, BSC 7980 and other structured and unstructured courses)
2. A minimum of twenty-four (24) dissertation research credit hours (BSC 7980) is required.
3. Submission of a doctoral proposal and approval by major professor, graduate committee, and graduate director.

4. Successful completion of the dissertation proposal, presentation/seminar and preliminary doctoral examination. There is an oral exam.

5. Presentation requirement: two presentations, excluding the doctoral seminar and defense. Students are expected to present posters or oral presentations based on their dissertation research at national/regional professional meetings. The graduate committee must approve the presentation.

6. Publication requirement: one research paper must be submitted for publication to a refereed scientific journal by the date of the Doctoral Seminar and Defense. The paper may be sole or coauthored, but it must be based on the dissertation research. The student's supervisory committee must approve the paper prior to submission.

7. Submission of an acceptable dissertation

8. Presentation of the doctoral seminar (BSC 7936) and successful defense of the dissertation.

Degree Progress
A student must be registered for an appropriate load (in no case fewer than two [2] graduate hours) in the college for the semester in which all degree requirements are satisfactorily completed. A student who receives three grades below "B" in structured courses required by the advisory committee will be dropped from the program. Registration in courses entitled Directed Research, or Dissertation must be with the approval of the major professor and must be commensurate with each student's research plan. Students may not register in Dissertation: Doctoral (BSC 7980) until a Supervisory Committee has been formed and a approved Admission to Candidacy on file with the Graduate School. A student who enrolls in courses entitled Dissertation: Doctoral but does not submit a dissertation will not be certified for graduation.

CORE REQUIREMENTS
PhD in Biology Core (10 credit hrs.)
BSC 6930 Lectures in Contemporary Biology (1)
Repeated four times for 4 credit hours plus 6 additional hours of coursework.

Concentration Requirements
A minimum of two courses selected from the list below for a minimum of 6 credit hours. The graduate student, major professor and graduate committee will establish the specific courses for each graduate student. Other courses, not listed below, can be substituted if approved by the Graduate Committee. Specific course training beyond this point will be determined in each individual case by the special needs of the student as decided by the student’s Graduate Committee. Graduate students concentrating in the area of Environmental and Ecological Microbiology will select from the following list of courses:

MCB 5206 – Public Health and Pathogenic Microbiology (3)
MCB 5655 – Applied and Environmental Microbiology (3)
PCB 5235 – Principles of Immunology (3)
MCB 6930 – Seminar in Applied and Ecological Microbiology (1)
PCB 5525 – Molecular Genetics (3)
BSC 5931 – Genomics (4)
PCB 6456 – Biometry I (4)
PCB 6458 – Biometry II (3)
PCB 6455 – Statistical Ecology (3)
BSC 6932 – Advances in Environmental Ecology (1)
Qualifying Exam
All students in the IB PhD degree concentration must complete a qualifying examination. The exam consists of 3 parts:

1. Dissertation proposal
2. Seminar/presentation of proposal
3. Defense of dissertation proposal

Admission to Candidacy
The doctoral student is eligible for admission to candidacy after completing structured course requirements, passing an oral qualifying examination and, approval by the supervisory committee. Appropriate forms to document promotion to candidacy must be completed and to the Graduate School. Following admission to candidacy, a student must enroll in BSC 7980 when engaged in research, data collection, or writing activities relevant to the doctoral dissertation. Advisors should assign the number of credits in this course in accordance with policy and appropriate to the demands made on faculty, staff, and University facilities, but in no event will the total number of earned dissertation credits be fewer than 24. Students not admitted to candidacy are not eligible to enroll in BSC 7980.

Additional Requirements
Any graduate work counted toward fulfilling the requirements for the Ph.D. degree must be completed within seven (7) years after matriculation.

Doctoral Seminar and Defense.
All doctoral students must present a public seminar to the IB Department and must be enrolled in BSC 7980, during the semester in which the seminar is given. The seminar should be a concise summary of the research completed to satisfy the requirements for the Ph.D. The seminar is open to the general public and must be announced two weeks prior to the presentation. Upon completion of the seminar, the general public will be invited to ask questions. At the discretion of the student’s graduate committee, members of the committee may continue to question the graduate student after the general public has departed the seminar room. Each student is expected to defend his/her research to the unanimous satisfaction of the graduate committee. Following the defense, students will make any editorial modifications to the dissertation as recommended by the supervisory committee and submit the dissertation to the Graduate School.

COURSES
See: [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
ENVIRONMENTAL SCIENCE AND POLICY PROGRAM

Master of Science (M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
  Fall: February 15
  Spring: October 15

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 3.0104
Dept Code: ESP
Program (Major/College): ESP AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Geography
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Contact the program for information.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

- Applicant must hold B.S. or B.A. degree in a relevant subject area
- Applicant must submit transcripts of undergraduate degree and results of GRE taken at most five (5) years before the application.
- Applicant must submit a statement of interests, documenting capabilities, achievements, goals and intended area of academic and research concentration in the Department if admitted.
- Applicant must submit at least three (3) letters of recommendation from persons familiar with the applicant’s achievements, capabilities, and potential, including two persons qualified to judge the applicant’s academic performance.
- Program may have additional requirements; check before applying. It is strongly recommended that the applicant contact the Department’s Graduate Program Director for guidance in applying to the M.S. Degree Program.

Program Admission Requirements
Same as university requirements. Students must submit
- GRE scores
- have a GPA of at least 3.0 in his/her last 60 undergraduate hours
- if non-native English speaker, TOEFL of at least 600.
DEGREE PROGRAM REQUIREMENTS

The curriculum consists of 36 credits divided into three categories:

1) Core Requirements 15 credits
2) Elective Requirements 12 credits
3) Research Requirements 9 credits

Core Requirements (15 credits)

Applications/Tools: Students select a course whose primary objective is mastery of research tools or methods with applications to research in the environmental field, subject to the approval of the Graduate Director and the student’s Supervisory Committee. Courses that meet these criteria include:

a. GIS 5049 – Geographic Information Systems for Non-Majors
b. GIS 6100 – Advance Geographic Information Systems
c. STA 5166 – Computational Statistics I (or other statistics course approved by the Graduate Director such as PCB 6456 or GEO 6166)
d. PCB 6456 – Biometry
e. GEO 6166 – Multivariate Statistical Analysis

Advanced topics in Environmental Science - Students must complete both of the following courses:

a) GEO 6116 – Perspective in Environmental Thought
b) EVR 6922 – ES&P Capstone Seminar (taken after a minimum of 24 program hours have been completed)

Students must take two courses from the following list. At least one class must be an EVR course.

EVR 6934 Seminar in Environmental Science (varying special topics)
EVR 6937 Seminar in Environmental Science and Policy (varying special topics)
EVR 6216 Advances in Water Quality Policy and Management
EVR 6101 Geomorphology for Environmental Scientists
EVR 6408 Wildlife Ecology
GEO 6347 Natural Hazards
GEO 6288 Hydrologic Systems
GEO 6286 Advances in Water Resources
GEO 6263 Soils Seminar
GEO 6217 Karst Geomorphology Seminar
GEO 6215 Geomorphology Seminar
GEO 6209C Physical Geography Seminar
GEO 6345 Technological Hazards and Environmental Justice
PHC 6712 Air Pollution Research.

Elective Requirements (12 credits)

Students must complete 12 credit hours of elective courses within an area of concentration selected according to their interests and career goals. Students should select appropriate advanced coursework within their chosen area of concentration, in close consultation with their major professor and Supervisory Committee, to develop programs of study that fit their scholarly and career interests, and for thesis option students, the needs of their research. Students completing an approved (by the Graduate Director) graduate certificate as part of their programs can count 12 hours from the certificate program towards the M.S. degree elective requirements. Students completing the Environmental Policy and Management Certificate can apply GEO 6116 and EVR 6922 (or approved course substitutions) toward the M.S. degree core requirements. Additional certificate courses that meet M.S. degree core requirements will be applied to the core and remaining courses will be counted as electives in the MS program. Each student’s elective program of study is subject to the approval of the Graduate Director. Areas in which students may decide to complete their electives, where courses are supported by the ES&P Program and/or affiliated Departments, include:

1. Ecology. 12 credits primarily from courses offered within the ES&P Program in the Department of Geography, and courses in the Department of Biology, to be selected in consultation with the student’s major professor and Supervisory Committee. This area features a particular concentration in landscape
ecology, wildlife ecology and management, conservation biology, ecological modeling, and field methods, including the use of GIS, GPS, and remote sensing technologies.

2. Environmental Policy and Management. 15 credits (only 12 hours can be applied towards the MS program) guided by the guidelines for the Graduate Certificate in Environmental Policy and Management. Credits will be applied to the core and elective requirements for the M.S. program as described above.

3. Geology. 12 credits primarily from courses offered within the ES&P Program in the Department of Geography and courses in the Department of Geology to be selected in consultation with the student’s Supervisory Committee. This area features a particular concentration in karst geology and public policy planning in karstic environments: and a concentration in paleogeology.

4. Hydrogeology. 15 credits (only 12 hours can be applied towards the MS program) as required by the Graduate Certificate in Hydrogeology, as specified by the Department of Geology.

5. Hazards Assessment and Mitigation. 12 credits primarily from courses offered within the ES&P Program in the Department of Geography, and courses in the Department of Geology, and Civil Engineering, to be selected in consultation with the student’s major professor and Supervisory Committee.

6. Urban Environment. 12 credit hours primarily in the Department of Geography, to be selected in consultation with the student’s major professor and Supervisory Committee.

7. Water Quality and Policy. 12 credits drawn from relevant courses offered within the ES&P Program in the Department of Geography, and courses in the Department of Civil and Environmental Engineering, and Government and International Affairs, to be selected in consultation with the student’s major professor and Supervisory Committee. This area features a particular concentration in urban runoff water quality, watershed-based water quality assessment, and watershed planning and management for water quality protection.

8. Other. 12 credits in other areas of concentration are also considered. The student may select an area of concentration that is strongly supported by graduate studies at USF and by one or more faculty members in the Department of Geography. The student should be able to describe how the courses form a coherent area of concentration relevant to his or her scholarly interests, research objectives, and/or career goals, and prepare a brief statement to that effect for the approval of the Graduate Director. The student should then select courses in consultation with his/her major professor and Supervisory Committee.

Research Requirements (9 credits)
The M.S. in ES&P is a research-oriented degree. Thesis track students complete a Thesis which constitutes an original scholarly contribution and is conducted under the direction of a Major Professor and a 3- member Faculty Supervisory Committee (of which the Major Professor serves as chair). Students should form their Supervisory Committee before completion of 18 credits of coursework, typically near the end of their first full year in the Program. Students complete a Thesis Proposal subject to approval of the Supervisory Committee typically early in the second year of studies. Students defend their Thesis in an oral presentation, and submit a written document for the approval of the Supervisory Committee, which is then submitted to the University as a requirement for earning the degree.

The research requirements include the following coursework, for a minimum total of 9 credit hours:

1) Directed Research (Thesis Preparation, EVR (6920): Students complete at least 6 credit hours of thesis research under the direct supervision of their major professor, typically during the second year of studies. After completion of all Core and Elective requirements, students remain enrolled in at least 2 credit hours per semester of EVR 6920 until the completion and submittal of the Thesis which completes the requirements for the degree. Throughout this period students must work in close cooperation with their major professor and Supervisory Committee, and provide the Committee a summary of progress at least once per semester.
2) Research Methods/Design Preparation: All students selecting the Thesis option will complete a research methods/design course (GEO 6970 – Research Methods in Geography). Other courses may be substituted for this requirement with the permission of the student’s advisor and the Graduate Program Director.

3) Research Colloquium (EVR 6930), 1 credit hour

Thesis/Non-Thesis Options

There are two options to complete the M.S. Degree:

A. Thesis Option. The thesis option is a 36-hour program designed for students who wish to complete original research as part of their graduate studies. The thesis option is a viable option for all students. Those intending to continue graduate work to the Ph.D. level are strongly encouraged to complete a thesis.

B. Non-Thesis Option. Students complete a minimum of 36 hours, with 24 hours of electives, keeping in mind that a minimum degree requirement is 16 hours at the 6000 level. Students must pass a comprehensive written examination that is administered during the semester they plan to graduate.

Comprehensive Examination

Thesis Option:
1. The student is required to present his/her thesis research at a public thesis defense.

2. As part of the thesis defense, an oral comprehensive exam is also administered. The defense and oral exam is scheduled and organized by the student’s major professor, in consultation with the student’s Supervisory Committee and the Graduate Director. As part of this process, a Presentations Form (available in the department office) needs to be completed one week prior to the defense date.

3. The exam can be completed only during the spring and fall Semesters.

4. A copy of the thesis must be made available in the department office one week prior to the defense for public review.

Non-Thesis Option:
1. The examining committee will be comprised of the student’s Supervisory Committee.

2. Non-thesis students are required to complete a six-hour long, written, closed book, comprehensive exam, which typically consists of series of questions that are prepared by the examination committee. Students are not allowed any outside materials during the exam, which is to be hand-written on paper supplied by the examination committee.

3. The exam can be completed during the spring or fall semesters, but not during the summer.

4. Students are encouraged to complete the exam during the last semester of their coursework. The exam must be completed no later than one semester after the student completes the coursework for the degree. You must be registered for two credits in that semester in the semester that the exam is completed.

5. All non-thesis examinations will be scheduled for the same day each semester (i.e. all students will sit for the exam at the same time), the date being set by the Graduate Director. Students must coordinate with their major professors when they will take the exam.

6. Questions are solicited and organized by the student’s major professor in consultation with the student’s examination committee.
7. The answers to the questions are evaluated by the student’s Supervisory Committee within two weeks of the exam.

8. If the answer to any question is determined to be incorrect or incomplete, the student may be required to retake that portion of the exam in the form of an oral exam that is only open to the committee. Students are encouraged to complete the oral exam in the same semester they completed the first written exam.

9. If the student fails all portions of the exam, they will have one opportunity to retake the entire exam. This second exam must be completed no later than the semester after the student receives notification that a second exam is necessary.

10. If it is determined that the student did not successfully complete his/her comprehensive exam after their second attempt, he/she will be dismissed from the program.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
FRENCH PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

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<td>Spring: October 15</td>
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<td>Summer: February 15</td>
<td>Contact Information: <a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
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<td>Minimum Total Hours: 34</td>
<td>Other Resources: <a href="http://www.usf4you.usf.edu">www.usf4you.usf.edu</a></td>
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PROGRAM INFORMATION

Contact Program for Information.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university plus
• 2-3 letters of recommendation,
• a writing sample in French, and
• an oral interview in French (can be done by phone).
• The GRE is not required.

DEGREE PROGRAM REQUIREMENTS

Core requirements
1. Proficiency in a second foreign language.

2. Satisfactory completion of a written comprehensive examination on French language, literature, and civilization. This exam is based on a reading list.

3. FOW 6805 Bibliography for 1 credit hour

4. Course work following one of the plans listed below:
Plan A - 37 hours of graduate courses in French.
Students take the required FOW 6805 and select the remaining 12 French graduate courses as approved by the Graduate Program Director

Comprehensive Exam – 5 exams from a selected reading list the semester the student completes coursework

Thesis
This is a non-thesis option.

Plan B - 37 hours
Students take the required FOW 6805 and select the remaining graduate courses as approved by the Graduate Program Director. Nine to 10 of those courses will be in French and two to three will be graduate courses in another area/department (for a total of 12 courses), as approved by the French Graduate Program Director.

Comprehensive Exam – 5 exams from a selected reading list the semester the student completes coursework, with 4 exams in French and one in the selected other area/department

Thesis
This is a non-thesis option.

Plan C - 28 semester hours in French plus a thesis (6 credit hours)
Students take the required FOW 6805 and select the remaining 9 French graduate courses as approved by the Graduate Program Director.

Comprehensive Exam – 5 exams from a selected reading list the semester the student completes coursework

Thesis
Thesis, including 6 credit hours of FRE 6971 Thesis

Plan D - 28 semester hours plus a thesis (6 credit hours)
Students take the required FOW 6805 and select the remaining graduate courses as approved by the Graduate Program Director. Six to seven of those courses will be in French and two to three will be graduate courses in another area/department (for a total of 9 courses), as approved by the Graduate Program Director.

Comprehensive Exam – 5 exams from a selected reading list the semester the student completes coursework, with 4 exams in French and one in the selected other area/department

Thesis
Thesis, including 6 credit hours of FRE 6971 Thesis

OTHER INFORMATION

Special Programs Overseas
The Department of World Languages, in cooperation with the International Affairs Center, offers several study programs overseas. These include study in several locations in France and Canada. For complete details, contact the program advisors or the International Affairs Center.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
GEOGRAPHY PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15
Spring: October 15 (with or without GA application)

Minimum Total Hours:
30 Thesis Option
36 Non-Thesis Option

Program Level: Masters
CIP Code: 45.0701
Dept Code: GPY
Program (Major/College): GPY AS

Concentrations:
Geographic Information Systems and Spatial Analysis (TGP), Natural/Technological Hazards and Environmental Justice (EVG), Economic, Social and Planning Issues in the Urban Environment (USG)

Also offered as:

CONTACT INFORMATION

College: Arts and Sciences
Department: Geography
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Geography is the study of the human-environment relationship either in a global or more regional context. Physical geographers focus on physical/human interrelationships and the interconnections among the various physical environmental elements. Human geographers focus on human interactions with their own environmental constructions, both built and social. Physical and human geographers both rely on specific techniques, including cartography, geographic information systems, and field work, in their research. The Department of Geography provides the opportunity to pursue the study of geography with particular emphasis on applied work geared to help solve real world problems.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
Economics, Social, & Planning in the Urban Environment
Karst Science, Meteorology, Climatology and Climate Change
Physical Geography
Natural/Technological Hazards and Health
Landscape Ecology
Water Resources and Policy
Geographic Information Science
ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university plus
• At least two letters of recommendation,
• transcripts,
• a letter of intent, and
• a graduate assistant application if the applicant is applying for a GA position.
• The GRE is required.
• BA with 3.0 GPA

DEGREE PROGRAM REQUIREMENTS

The Department of Geography offers a Masters of Arts (M.A.) in Geography with a thesis and non-thesis option. Students must complete a minimum of 30 semester hours of graduate level course work for the thesis option and 36 hours for the non-thesis option.

Core Requirements (9 hours)
 Required Core Courses (Nine Hours)
All students must take the following core courses:
GEO 6058 Geographic Literature and History (3 hrs)
GEO 6970 Geographic Research Design (3 hrs)

Based upon the student’s area of interest, he/she must take one course from the following list of Quantitative or Qualitative course offerings:

Quantitative:
GEO 6166 Multivariate Statistical Analysis (3 hrs)
Another course can be substituted for GEO 6166 with the permission of the Graduate Program Director. Possible substitutions, based upon the student’s area of interest can include, but is not limited to the following:
Geology: GLY 5865 Statistical Models in Geology (3)
Biology: PCB 6455 Statistical Ecology (3 hrs)
Statistics: STA 5166 Computational Statistics I (3 hrs)
Sociology: SYA 6405 Sociological Statistics (3 hrs)

Qualitative:
American Studies: AMS 6156 Theories and Methods of Cultural Studies (3 hrs)
Anthropology: ANT 6766 Research Methods Applied Anthropology (3 hrs)
Communication: COM 6400 Communication Theory (3 hrs)
Philosophy: PHI 6305 Seminar in Epistemology (3 hrs)
Sociology: SYA 6315 Qualitative Research Methods (3 hrs)
Women’s Studies: WST 6001 Feminist Issues, Research, Methods (3 hrs)

Regional:
Students are strongly encouraged to complete at least one of the following regional courses:
GEA 6195 Seminar in Advanced Regional Geography (3 hrs)
GEA 6215 Seminar in North American Geography (3 hrs)
GEA 6252 Seminar in the Geography of the American South (3 hrs)
GEA 6406 Seminar in Latin American and Caribbean Geography (3 hrs)
GEA 6504 Seminar in European Geography (3 hrs)
GEA 6745 Asian Geography Seminar (3 hrs)
Concentration Requirements

Students specialize in one of the three concentrations (A, B, and C) that the department offers. Students must select a minimum of three courses (9 credits) from the selected concentration.

Thesis option students take six credit hours of electives at a level of 5000 or higher, keeping in mind that a minimum of ten hours is required at the 6000-level. At least one of the electives must be taken outside of the student’s concentration excluding GEO 6908, 6918, and 6944. Electives may also be selected from courses offered outside of the Department, with the consent of the student’s advisor and the graduate program director. A maximum of six approved hours taken outside the department can be used in the students degree program. The remaining 6 credit hours are taken as Thesis (GEO 6971). Students in the thesis option can only apply three credit hours of Internship (GEO 6944), and three credit hours of Directed Research (GEO 6918) or Independent Research (GEO 6908) toward the degree. Upon completion of a minimum of 15 hours students are required to defend a thesis proposal. Students must also complete a thesis defense during the semester they plan to graduate, and they must be enrolled in a minimum of 2 semester hours of thesis credit during the semester in which they submit their thesis to the Graduate School.

Non-thesis option students complete a total of 36 hours, with 27 hours of electives completed at a level of 5000 or higher, keeping in mind that a minimum degree requirement is 16 hours at the 6000 level. Students can also take up to nine hours outside the department with the consent of their advisor and the graduate program director, to apply toward their degree program. Students can apply three credit hours of Internship (GEO 6944), three credit hours of Directed Research (GEO 6918) and/or Independent Research (GEO 6908) toward their degree program. Students must pass a comprehensive written examination that is administered during the semester in which they plan to graduate.

Students select one of the following concentrations:

Concentration A: Economic, Social and Planning Issues in the Urban Environment

- GEO 6116 Perspective of Environmental Thought (3 hrs)
- GEO 6345 Technological Hazards and Environmental Justice (3 hrs)
- GEO 6347 Natural Hazards (3 hrs)
- GEO 6428 Seminar in Human Geography (3 hrs)
- GEO 6475 Political Geography Seminar (3 hrs)
- GEO 6605? Contemporary Urban Issues (3 hrs)
- GEO 6545 Economic Geography Seminar (3 hrs)
- GEO 6566 Site Feasibility Analysis (3 hrs)
- GEO 6704 Transportation Geography (3 hrs)
- GEO 7606? Seminar in Urban Environments (3 hrs)

Concentration B: Natural/Technological Hazards and Environmental Justice

- GEO 6116 Perspective of Environmental Thought (3 hrs)
- GEO 6178 Environmental Applications of GIS (3 hrs)
- GEO 6209C Physical Geography Seminar (3 hrs)
- GEO 6215 Geomorphology Seminar (3 hrs)
- GEO 6217 Karst Geomorphology (3 hrs)
- GEO 6263 Soils Seminar (3 hrs)
- GEO 6286 Water Resources (3 hrs)
- GEO 6288 Hydrological Systems (3 hrs)
- GEO 6345 Technological Hazards and Environmental Justice (3 hrs)
- GEO 6347 Natural Hazards (3 hrs)
- MET 6140 / Weather, Climate and Society (3 hrs)
- GEO 6255

Concentration C: Geographic Information Systems and Spatial Analysis

- GEO 5075 Global Positioning Systems (3 hrs)
- GEO 6115 Field Techniques (3 hrs)
- GEO 6119 Geographical Techniques and Methodology (3 hrs)
- GIS 6038C Remote Sensing (3 hrs)
- GIS 6039 Remote Sensing Seminar (3 hrs)
GIS 6100    Geographic Information Systems (3 hrs)
GIS 6307    GIS Seminar (3 hrs)
GEO 6166    Multivariate Statistical Analysis (3 hrs)
GIS 6355    Water Resources Applications of GIS (3 hrs)
GIS 6306    Environmental Applications of GIS (3 hrs)
GIS 6112    Spatial Database Development (3 hrs)
GIS 6103    Programming for GIS 93 hrs

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
GEOGRAPHY AND ENVIRONMENTAL SCIENCE AND POLICY PROGRAM

Doctor of Philosophy (Ph.D.)

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15

Minimum Total Hours: 60
Program Level: Doctoral
CIP Code: 45.0799
Dept Code: GEP
Program (Major/College): GEP AS

CONTACT INFORMATION

College: Arts and Sciences
Departments: Geography
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The Ph.D. degree in Geography and Environmental Science and Policy is an interdisciplinary program, the curriculum of which is designed to take advantage of the strengths of multiple University departments in critical areas of geography and the environment. Emphasis is placed on providing theoretical rigor and methodological skills enabling students to make significant and original research and policy contributions in an integrated interdisciplinary environment. In addition, the degree has a very strong applied component reflecting the Departments’ strong emphases in working on solutions to real-world geographical and environmental problems.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
Economics, Social, and Planning Issues in the Urban Environment
Karst Science and Climate Change
Natural/Technological Hazards and Health
Landscape Ecology
Water Resources and Policy

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below. Admission standards follow those of the M.S. programs in the constituting Departments.

Program Admission Requirements

- Undergraduate degree in relevant field, with preparation in both science and policy
- Graduate Record Exam is required – minimum of 500V 500Q
- GPA at least 3.20 in upper division undergraduate and graduate credits
- If non-native English speaker, TOEFL of at least 600
- Ability to conduct research in a field of current interest to departmental faculty

A minimum cumulative GPA of 3.20 at the undergraduate level or Masters’ Degree from an accredited institution of higher learning. Applicants whose first language is not English must also submit a score of at least 600 on the Tests of English as a Foreign Language (TOEFL). See Department guidelines for application materials expected and other expected qualifications for admittance.
DEGREE PROGRAM REQUIREMENTS

The curriculum consists of 60 semester hours past the master’s degree, or 90 hours past the bachelor’s degree, and allows distinct concentration either in Environmental Science and Policy or in Geography. The curriculum consists of the following requirements:

1. Core Requirements 9 credits
2. Area of Emphasis Electives 9 credits
3. Other Electives and Dissertation 42 credits

Core Requirements
Students must complete all the following courses

a. Seminar in Natural Environments 3 credits
b. Seminar in Urban Environments 3 credits
c. Doctoral Dissertation Preparation 3 credits

2. Area of Emphasis Elective Courses
Upon entering the Program, students select an area of emphasis from among the five Major Research Areas listed above. Students complete nine (9) credits of coursework within the area of emphasis as designated by the Graduate Director or by the student’s major professor and Faculty Supervisory Committee. The coursework should be selected in a way that supports the student’s intended dissertation research. A wide variety of advanced graduate courses are available at the University in each of the five areas of emphasis.

3. Other Electives and Dissertation Credits
Students complete 42 credit hours in the form of elective coursework, directed reading, independent study, or dissertation hours. The student’s major professor and Faculty Supervisory Committee will advise students on the selection of the proper mix of coursework and other study to support the agreed upon dissertation research. It is likely that students will include coursework from a variety of departments to support the elective requirements, and students may choose to complete a Graduate Certificate in a particular field, from another department, as part of their studies. Students entering the PhD program who have not completed a Masters Degree in either Geography or Environmental Science and Policy should expect to complete coursework equivalent to the requirements of one of those Masters programs.

Ph.D. Candidacy and Dissertation
A student will be admitted to candidacy following successful completion of comprehensive qualifying exams and the successful oral defense of a dissertation proposal. To complete the degree will require the full completion and oral defense of a comprehensive Ph.D. dissertation. See Program guidelines for detailed procedures on dissertation research, faculty supervision, structure of examinations and defenses, and completion of the dissertation. A minimum of 18 hours of Doctoral Dissertation Research (EVR 7980/GEO 7980) are required.

See Program guidelines for additional information.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
GEOLOGY PROGRAM

Master of Science (M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15
Spring: October 15*

Fall admission only
*Spring admission available only for students entering the Hydrogeology Internship field of study

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 40.0601
Dept Code: GLY
Program (Major/College): GLY AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Geology
Contact Information: [www.grad.usf.edu](http://www.grad.usf.edu)
Other Resources: [www.usf4you.usf.edu](http://www.usf4you.usf.edu)

*Deadline for students seeking assistantship/fellowship support is one month earlier. Foreign student applicants should provide their materials as early as is feasible to permit time to meet immigration and visa requirements if admitted.

PROGRAM INFORMATION

Geology incorporates the fundamentals of biology, chemistry, mathematics, and physics to study the earth and the processes that affect our planet.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: n/a

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university admission requirements plus

- 3 letters of recommendation,
- personal statement,
- listing of previous coursework,
- transcripts,
- GRE required, but no minimum specified.
DEGREE PROGRAM REQUIREMENTS

The Department of Geology requires a candidate for the thesis-track M.S. Degree to complete at least 30 graduate credit hours. These hours are subdivided into 24 hours of structured coursework, of which at least ten (10) must be at the 6000 level, and at least six (6) hours in thesis research (GLY 6971). The curriculum for a Geology graduate student varies depending on the area of research interest. Specific course work for the degree is determined via consultation between the student, his/her primary advisor and his/her student advisory committee. Other pertinent information regarding graduate study is contained in the Department’s Graduate Student Handbook, which is available upon request.

All degree candidates are required to maintain satisfactory academic progress at all times. Satisfactory academic progress in this program is defined as progress in course and thesis work. Evidence of academic progress includes timely completion of departmental requirements such as selecting a primary advisor, forming a student advisory committee, completion of any prerequisites or deficiencies, timely progress toward completion of the thesis, maintaining a satisfactory GPA, defending a thesis proposal, and making a public presentation. A schedule for meeting these requirements is contained in the Department’s Graduate Student Handbook.

Hydrogeology Internship
M.S. Option –
This program requires 30 hours of structured coursework, and a 3-credit internship project. A list of approved courses is available from the Department. Criteria for selecting appropriate internship projects are contained in the Geology Graduate handbook. Internship projects, which are supervised by Professional Geologists (PGs), must receive prior approval by the Internship Coordinator. The curriculum requires a comprehensive exit exam that is based on coursework and the internship project. Before the exit exam, the student must submit an Internship Project Report approved by the supervising PG. The hydrogeology internship committee determines the format of the exam. Normally, it is an oral examination following the student’s presentation of the results of the internship project to the hydrogeology internship committee.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
GEOLOGY PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15*
- Summer: February 15

Minimum Total Hours: 60
Program Level: Doctoral
CIP Code: 40.0601
Dept Code: GLY
Program (Major/College): GLY AS

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university admission requirements plus

- 3 letters of recommendation,
- personal statement,
- listing of previous coursework,
- transcripts,
- GRE is required, but no minimum specified.

CONTACT INFORMATION

College: Arts and Sciences
Department: Geology
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

*Deadline for students seeking assistantship/fellowship support is one month earlier. Foreign student applicants should provide their materials as early as is feasible to permit time to meet immigration and visa requirements if admitted.

PROGRAM INFORMATION

Geology incorporates the fundamentals of biology, chemistry, mathematics, and physics to study the earth and the processes that affect our planet.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: n/a
DEGREE PROGRAM REQUIREMENTS

The Ph.D. program in Geology requires a minimum of 15 semester hours of graduate (6000 level) structured course work after the Master’s or equivalent. Course requirements beyond this are at the discretion of the student’s committee. All doctoral students must maintain good standing in the Graduate School (overall GPA ≥ 3.0) and maintain satisfactory academic progress toward the degree. Any student who receives a C in a structured course will be placed on academic probation. This probation can be terminated by achieving grades of B or higher in the subsequent semester of full-time enrollment. If a second grade of C is received, the student is terminated from the doctoral program. Only courses in which the student receives at least a B may be counted toward the 15-hour, structured-course requirement. There is also a requirement that Ph.D. students have at least two semesters of full-time residence. While meeting the residency requirements, candidates must be full-time students in good academic standing.

General examinations and presentations of thesis proposals should be completed no later than the end of the second year in the doctoral program. The examining and dissertation committees are the same and will be comprised of no less than five members, at least three of which must be USF faculty, and at least one member from outside the department.

Admission to candidacy will be based on the results of a general examination administered by the student’s committee. The format of the exam will be determined by the committee at least one week prior to the onset of the examination. Normally, it will consist of a written section or sections, followed by an oral examination chaired by the student’s research advisor. After admission to candidacy, all doctoral students will make at least one formal presentation of their research prior to graduation. Any appropriate venue is acceptable, e.g., Dept. colloquium, oral or poster sessions at a scientific meeting of at least regional scope.

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
GOVERNMENT PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
  Fall admissions only

Minimum Total Hours: 57 (post-masters)
Program Level: Doctoral
CIP Code: 45.0901
Dept Code: GIA
Program (Major/College): GOV AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Government and International Affairs
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Students apply for admission directly into the Ph.D. program. Those who are interested in first earning a Masters in Political Science or a Masters in Public Administration need to apply to those programs separately.

Students must submit
- a completed application,
- 2 official transcripts from their undergraduate or graduate institutions,
- official GRE Scores,
- 3 letters of recommendation (from academic sources or from those able to judge the applicant’s academic abilities), and
- a 500 word personal statement expressing reasons for pursuing a Ph.D. in Political Science at the University of South Florida.
- Writing sample

At a minimum, students must have either a 3.3 or 1100 combined verbal and quantitative GRE score to be admitted. A Masters degree in Political Science, Public Administration, International Studies, or a related field will count favorably towards admission, but it is not a requirement for admission.
DEGREE PROGRAM REQUIREMENTS

The 57 credit hour post-M.A. program is as follows:

Interdisciplinary Professional Seminar

Disciplinary Core Requirements (9 hours required)

- INR 5012 Globalization 3 hours
- PAD 6041 Ethics in Public Service 3 hours
- POT 6007 Theories of Governance 3 hours

Tracks

Track 1: Public Affairs

Core Electives within Discipline (9 hours required)

- INR 6107 Comparative Foreign Policy 3 hours
- INR 6XXX International Law & Organizations 3 hours
- PAD 6XXX Budgeting and International Finance 3 hours
- PAD 5044 Environment of Public Administration 3 hours
- PAD 6060 Public Administration Theory 3 hours
- POS 6045 Seminar in American National Government 3 hours
- POS 6157 Seminar in Urban Government and Politics 3 hours

Track 2: Sustainable Political Communities

Core Electives within Discipline (9 hours required)

- CPO 5934 Area Studies in Comparative Politics (areas vary) 3 hours
- CPO 6036 Politics in Developing Areas 3 hours
- CPO 6XXX Comparative Environmental Politics 3 hours
- INR 6XXX Peace and Conflict Studies 3 hours

Core Electives in Linked Programs (12 hours required, in at least two different disciplines)

Anthropology

- ANG 6315 International Health and Applied Sociology 3 hours
- ANG 7936 Applied Anthropology and Human Problems 3 hours
- ANG 5937 Environmental Anthropology 3 hours
- ANG 6448 Regional Problems in Urban Anthropology 3 hours

Geography and Environmental Science

- GEO 5605 Contemporary Urban Issues 3 hours
- GEO 6408 Geography and Globalization: Remapping the World 3 hours
- GEO 6345 Technological Hazards and Environmental Justice 3 hours
- GEO 6119 Perspectives of Environmental Thought 3 hours
- EVR 6937 Seminar in Environmental Policy 3 hours

History

- HIS 6939 Colonialism and Culture 3 hours
- HIS 6939 U.S./Latin American Relations 3 hours
- HIS 6XXX Florida Environmental History 3 hours
- HIS 6XXX Environmental History 3 hours
- HIS 6XXX Immigration and Ethnicity in America 3 hours
- HIS 6XXX Rural Culture of the American South 3 hours
- HIS 6XXX Gender and Sexuality in US History 3 hours
Sociology
  SYD 6605 Community Analysis  3 hours
  SYD 6605 City and Community  3 hours
  SYD 6706 Race and Ethnicity  3 hours

[Note: additional courses from various disciplines will be added as they are developed and implemented]

Capstone Interdisciplinary Seminar (Required)  3 hours
Disciplinary Dissertation Research Proposal Preparation  6 hours
Dissertation  18 hours
Total Credit Hours (beyond the M.A.)  57 hours

Other Requirements
In addition to the course work hours described in Section IV-A, students must also complete the following to earn a Ph.D.

Comprehensive Exam
All students must pass two written comprehensive examinations. The first exam tests students in the general areas of political science and international studies, and the second exam test students on their chosen track. Both exams must be taken on the same day. A rotating committee of faculty members composes and grades those exams. The comprehensive examinations for the Ph.D. program are separate from the comprehensive examinations for the MA in Political Science program. Students may not substitute comprehensive examinations taken to fulfill a Masters degree for their Ph.D. comprehensive exams.

Foreign Language
All students must demonstrate competency in at least one foreign language. Students must pass the competency exam administrated by the World Language Education Department. Additionally, students, whose research focuses on a particular area of the world, must be proficient in language(s) native to that region.

Dissertation Proposal
Students must present their dissertation proposal in written and oral form to their dissertation committee. Dissertation committees must contain four members from the Department of Government & International Affairs, one of whom is the student’s major dissertation advisor. Students must also select a professor from outside the department. After passing this oral defense, students then research and write their dissertation. Students must present their dissertation at an oral defense, and their committees determine whether the students passed. Finally, students must submit written copies of their dissertations with the signatures of their committee members. All dissertations must conform to University of South Florida format rules.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
HISTORY PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: January 15
Fall admission only

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 54.0101
Dept Code: HTY
Program (Major/College): HTY AS

Concentrations:
American History (AHY)
Ancient History (AHS)
European History (EHS)
Latin American History (LAH)
Medieval History (MHS)

CONTACT INFORMATION

College: Arts and Sciences
Department: History
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The Department of History offers the M.A. degree. Members of the graduate faculty in History have earned recognition as teachers, scholars, and contributors to the community. The Department offers both a Master of Arts degree organized around the following fields:

Field 1: American History to 1877
Field 2: American History since 1877
Field 3: Ancient History
Field 4: Medieval History
Field 5: Early Modern Worlds
Field 6: Modern Europe since 1789
Field 7: Latin America

Across these fields, students can request, in consultation with their Major Professor, concentrations organized thematically or geographically.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.
ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university plus
• GPA of at least 3.0
• GRE Scores of at least 500 Verbal, 500 Quantitative, and 4.5 in writing. Only current scores within the last 5 years) will be accepted.
• Letters of Recommendation: Two letters of recommendation on behalf of the applicant are required. These letters should come from academic sources familiar with the quality of the applicant’s college-level work and indicate his/her graduate program potential. We require letters of Recommendation to be submitted in hard copy signed, and on official letterhead. Electronically submitted letters of recommendation (i.e. email) will not be accepted.
• Statement of Purpose: A two-page statement is required that delineates historical and intellectual areas of interest, proposed fields of study, educational and professional goals, the faculty the applicant is potentially interested in working with, and why the applicant sees him/herself as a good fit with our program.
• A Writing Sample: A sample of written work which indicates the applicant’s ability to write effectively and preferably, to conduct historical research and analysis must be submitted. The sample should be approximately 15 pages in length. Appropriate examples include a term paper, research paper, or thesis chapter.
• No application materials (e.g. letters, writing samples, statements of purposes) will be accepted electronically. The Letters of Recommendation, Statement of Purpose, and writing sample should be sent directly to
  Graduate Program Director
  University of South Florida
  Department of History
  4202 E. Fowler Ave., SOC 107
  Tampa, FL 3620-8100

A B.A. in history is preferred. The Department will consider applicants without a recent background in undergraduate history, but they may be required to complete Theory of History (HIS 4104) as well as several upper division and/or graduate level courses in relevant fields with a grade of “B” or higher. These should be chosen in consultation with the Graduate Program Director or Major Professor.

DEGREE PROGRAM REQUIREMENTS

In addition to the general requirements of the University, a candidate is required to complete a total of 36 hours in the following distribution:
Total Minimum Hours: 36

Core Requirements
Core Courses
HIS 6112 Analysis of Historical Knowledge 4

Major Field (16 hours)
HIS 6939 Seminar in 4
HIS 6925 Colloquium in 4
HIS 6908 Directed Research 1-19

Minor Field (8 hours)
HIS 6939 Seminar in History 4
HIS 6925 Colloquium in History 4
HIS 6908 Directed Research 1-19
Of the 36 hours required for the Master of Arts, at least 20 must be in formal, regularly scheduled course work. A minimum of 16 must be at the 6000 level. Subject to the satisfaction of above requirements, courses at the 5000 level are acceptable as part of a planned degree program. In special circumstances, major advisors may approve up to six (6) hours at the 4000 level with the understanding that additional and superior work will be required of the graduate student. Students may take a maximum of 8 hours in Directed Research and/or Independent Study and a maximum of 8 hours in “Colloquia” (HIS 6925).

After beginning course work, M.A. students select an advisor in their anticipated major field of study. Students arrange their programs and schedules of appropriate courses with their Major Professor. Additionally, the student in consultation with the advisor asks two other members (normally one from the major and one from the minor fields) to serve on a supervisory committee. The student is required to have completed successfully at least 4 credits of course work with each member of his/her committee. Students with two unresolved “Incomplete” grades (of any credit total) will not be permitted to register for additional history courses until at least one “Incomplete” grade is resolved.

**Thesis (HIS 6971) (8 hours)**

**Non-Thesis (8 hours)**

8 hours of 6000 level regularly scheduled history courses.

**Comprehensive Examinations:**

A six-hour written comprehensive examination will be in fields and consist of answering two questions in a major field and one in a minor field. In addition, at the discretion of the committee, an oral examination may be administrate red. The examination questions and student answers will form part of the student’s Department file. A student must have no “incomplete” grades and be enrolled for a minimum of two (2) hours during the term the comprehensive examination is taken.

**Transferring classes from other Institutions or from USF Tampa**

With approval, graduate courses taken at other institutions (including USF St. Petersburg and other separately accredited USF Institutions) or taken at USF Tampa may be transferred in or provide for a waiver of degree requirements. For the History Program at USF Tampa a student may transfer up to 9 credits of graduate level coursework from a non-completed degree from another institution (including separately accredited USF Institutions), or 12 credits from enrollment at USF Tampa (for instance as a non-degree seeking student). In all cases a grade of “B” or better is required. To view the entire baseline University Policy on what may be transferred or waived, refer to the Transfer of Credit Policy in the Graduate Catalog online at [www.grad.usf.edu/catalog](http://www.grad.usf.edu/catalog)

**Language Requirements:**

A reading proficiency in one foreign language most applicable to a student’s field of research (as determined by the Major Professor) must be demonstrated by all students in the M.A. program. The language requirement will be fulfilled in one of two ways:

1) A two-hour examination administrated by the Department. The student will be expected to translate satisfactorily a 500 word passage, with the assistance of a dictionary.

2) With the approval of the major professor, the student may take two semesters of an intermediate level foreign language. In order to fulfill the foreign language requirement, the student must receive a “B” or above in each semester’s course. Those students who have met these requirements as an undergraduate may have the language requirement waived by petitioning the Graduate Committee.

Students with a major field in American History and with a thesis topic that does not require use of a foreign language may substitute quantitative methods for the language requirements. The quantitative methods option will be fulfilled by successful completion with a grade of at least “B” in one of the following courses:

- **ANG 5486** Quantitative Methods in Anthropology 3
- **EDF 6407** Statistical Analysis in Educational Research, 4
- **POS 6736** Political Research Methods, 3
- **MAT 5932** Selected Topics, 3
Graduation and Master’s Thesis:
- A satisfactory performance in the core course, two fields, and the completion of a comprehensive examination are required of all M.A. students for graduation.
- In order to graduate, a student must submit an “Application for Degree” to the CAS Graduate/Undergraduate Office by the deadline noted in the Academic Calendar for the term during which graduation is anticipated.
- Students selecting the thesis option must follow the final submission process in the Graduate School to be considered for graduation. For information refer to the Graduate School website www.grad.usf.edu
- Students may not participate in commencement unless all requirements have been satisfactorily completed.
- All requirements for master’s degrees must be completed within five (5) calendar years from the student’s date of admission for graduate study.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
HISTORY PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: January 15
Fall admission only

Minimum Total Hours: 58 (post-masters)
Program Level: Doctoral
CIP Code: 54.0101
Dept Code: HTY
Program (Major/College): HTY AS

PROGRAM INFORMATION

Our Ph.D. program features an innovative model of doctoral education designed to insure broad interdisciplinary connection with related disciplines. Areas of specialization cover a number of fields, including Colonial through Modern US; the Ancient, Medieval, and Early Modern Worlds; Modern Europe; and Latin America.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
The minimum requirements for consideration for admission to the Ph.D. program in history include:

- **Master's Degree and Grade Point Average**: Applicants must have completed an M.A. in History or a related field (as determined by the admissions committee) with a G.P.A. in graduate level coursework of at least 3.5 as demonstrated by official transcripts.
- **GRE**: Applicants will have a minimum score of at least 600 Verbal and 500 Quantitative. Only current scores (within the last 5 years) will be accepted.
- **Letters of Recommendation**: Three Letters of Recommendation on behalf of the applicant are required. These letters should come from academic sources familiar with the quality of the applicant’s scholarly work and indicate his/her doctoral program potential. We accept only signed, hard copies, on official letterhead. No electronic letters of recommendation will be accepted.
- **Statement of Purpose**: A statement is required that delineates historical and intellectual areas of interest, proposed fields of study, educational and professional goals, faculty the applicant is potentially interested in working with, and why the applicant sees him/herself as a good fit with our program.
- **Sample of Writing**: A sample of written work which indicates the applicant’s ability to conduct primary source based research and to write effectively must be submitted. The sample may include a publication, seminar paper, or a thesis chapter.
- **Language**: Applicants will provide evidence of proficiency in the foreign language(s) of their primary field of study.
- **Further Information**: may be requested by the Department as necessary, possibly including a finalist interview.
The Letters of Recommendation, Statement of Purpose, and Writing Sample should be sent directly to:

Graduate Program Director
Department of History
University of South Florida
4202 E. Fowler Ave., SOC 107
Tampa, FL 33620-8100

Electronic submissions of application materials (including letters of recommendation) will not be accepted.

**DEGREE PROGRAM REQUIREMENTS**

Total Minimum Hours: 58

**Plan of Study**
In addition to the general requirements of the University as explained in the USF Graduate Catalog, a candidate is required to complete a total of 58 credit hours in the following distribution:

**Core Requirements**

**Interdisciplinary Professional Seminar**
3 hours
This course is as an Introduction to the interdisciplinary nature of this unique Ph.D. program, and will offer new students to the History program the opportunity to engage with their colleagues in Political Science and Sociology. This Pro-Seminar is organized around one common theme and focuses on the methodologies and theories of these related disciplines so that students gain a working knowledge of the complementary aspects of these fields.

**HIS 6112 Analysis of Historical Knowledge**
4 hours
*Analysis of Historical Knowledge* examines both the theories behind and the practical effects of varieties of methodological approaches to historical research. Students who have taken this course as part of a USF History M.A. will not be required to repeat it.

**HIS 7xxx Seminar in Comparative Studies**
4 hours
*Seminar in Comparative Studies* introduces doctoral candidates to the breadth of historical scholarship on social concepts such as globalization, imperialism, identity, urbanization, etc. These seminars will guide students through historical scholarship on various times and places, all organized and united around the same central concept, to demonstrate the different perspectives achieved by comparative study.

**Major Field Studies**
20 hours
Students will complete approximately five courses within the History department devoted to the study of their primary region and period of interest.

**Interdisciplinary Electives**
6-8 hours
Students will complete two courses chosen from the graduate course offerings in the Department of Sociology and/or the Department of Government and International Affairs.

**Government and International Affairs**
- INR 6036 Seminar in International Political Economy (3)
- CPO 6036 Politics of Developing Areas (3)
- INR 5012 Globalization (3)
- PAD 6041 Ethics and Public Service (3)
- CPO 6xxx Comparative Environmental Politics
Anthropology
ANG 6197  Public Archaeology
ANG 6447  Selected Topics in Urban Anthropology: Anthropology and Development (3)
ANG 6469  Selected Topics in Medical Anthropology: Foundations of Medical Anthropology (3)
ANG 6465  Regional Problems in Medical Anthropology (3)
ANG 6315  Applied Anthropology and International Health
ANG 7709  Applied Anthropology and Human Problems
ANG 5937  Seminar in Anthropology: Environmental Anthropology
ANG 6448  Regional Problems in Urban Anthropology (3)

Sociology
SYA 7475  Community Analysis
SYO 7420  Comparative Sociology of Health Care Systems
SYD 7237  Immigrants to America: Community Impacts
SYP 7111  Communities and Identity (3)
SYG 7209  City and Community
SYA 7930  Globalization and Cities
SYD 7505  Seminar in Urban Research
SYO 7435  Sociology of Disability in Urban Society (3)
SYD 6225  Seminar in the Sociology of Education and Inequalities
SYA 6008  Social Problems, Identities, and Communities (3)
SYP 6425  Sociology of Consumer Culture (3)
SYP 6425  Sociology of Consumer Culture: Social Movements in a Global Society
SYD 6706  Global Perspectives on Race and Ethnicity (3)

Capstone Seminar  3-4 hours
This course will act as the final participatory coursework of the Ph.D. candidates before they proceed to the dissertation writing stage.

Language Requirement for Ph.D. Students
Students must demonstrate proficiency in their primary language of research by the end of the first year of study. In fields where more than one language is required, students must complete their language exams before they can take the comprehensive exam. Language requirements must be fulfilled before students can progress to the dissertation stage. Written examinations to test a student’s language proficiency will be administered through the USF Dept. of World Languages in conjunction with the student’s Major Advisor. The precise format of the exam and the level of language competency needed to pass will be determined in each case by the student’s advisor.

Field        Language(s) Required
Ancient     Classical Greek, Classical Latin, French, and German
Asia        Primary Asian language of research plus one additional language
Byzantine   Byzantine Greek, Latin, French, and German
Early Modern Europe Primary European language of research plus one additional European language (Latin may be required in some cases)
Europe      Primary European language of research plus additional European languages
Latin America Spanish and Portuguese
Medieval Europe Medieval Latin, plus two additional European languages
Middle East Primary Middle Eastern language of research plus one additional language
United States Foreign language most pertinent to research agenda
Comprehensive Exam
- After admission to the Ph.D. program, the student must complete 40 hours (minimum) of coursework before taking written and oral comprehensive examinations in the applicable major and minor fields.
- If a student has satisfactorily completed the “Analysis” requirement at the MA level that is before admission to candidacy the student is eligible to take the comprehensive examination after a minimum of 36 hours of coursework.
- These exams will be conducted by the student’s Supervisory Committee. The oral exams shall be taken within one week after the written exams have been completed. Exams may be retaken once if necessary.

Dissertation Proposal
Students must complete an oral dissertation defense with the members of the dissertation committee. Dissertation committees must be composed of a minimum of four faculty members, one of whom may be drawn from an academic institution other than USF. Faculty from fields other than History may serve on dissertation committees upon approval of the student’s faculty advisor.

Dissertation Writing Hours
18 hours
These hours are intended to give students the opportunity to work closely with their dissertation committee and focus on research, writing, and revision.

Transferring classes from other Institutions or from USF Tampa
With approval, graduate courses taken at other institutions (including USF St. Petersburg and other separately accredited USF Institutions) or taken at USF Tampa may be transferred in or provide for a waiver of degree requirements. For the History Program at USF Tampa a student may transfer up to 9 credits of graduate level coursework from a non-completed degree from another institution (including separately accredited USF Institutions), or 12 credits from enrollment at USF Tampa (for instance as a non-degree seeking student). In all cases a grade of “B” or better is required. To view the entire baseline University Policy on what may be transferred or waived, refer to the Transfer of Credit Policy in the Graduate Catalog online at www.grad.usf.edu/catalog

Timeframe
All requirements must be completed within the university-mandated time frame after admission to the Ph.D. program.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
LATIN AMERICAN, CARIBBEAN, AND LATINO STUDIES PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

<table>
<thead>
<tr>
<th>Program Admission Deadlines:</th>
<th>CONTACT INFORMATION</th>
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</thead>
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<tr>
<td>Fall: February 15</td>
<td>College: Arts and Sciences</td>
</tr>
<tr>
<td>Spring: October 15</td>
<td>Department: Institute for the Study of Latin America and the Caribbean (ISLAC)</td>
</tr>
<tr>
<td>Summer: February 15</td>
<td>Contact Information: <a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
</tr>
</tbody>
</table>

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 5.0107
Dept Code: GIA
Program (Major/College): LAS AS

Other Resources: [www.usf4you.usf.edu](http://www.usf4you.usf.edu)

PROGRAM INFORMATION

The mission of ISLAC is to promote the study of Latin America and the Caribbean, to further USF’s strategic plan for internationalization. ISLAC is an academic unit devoted to interdisciplinary research and teaching focused on economic, social, political and cultural formations in Latin America and the Caribbean and among the Hispanic/Latino populations in North America, framing these issues in the broader context of human security in the Americas. ISLAC holds mini research awards for Affiliate Faculty. This is a way to encourage and support research, conference participation and course development in all fields related to Latin American, Caribbean and Latino Studies.

The Institute fosters greater knowledge of Latin America and the Caribbean and Latino issues, through partnerships with community organizations and USF departments to sponsor lectures and cultural events that are open to the public throughout the year. ISLAC faculty and staff are engaged with USF administration to strengthening communities and to advance the internationalization of USF programs, research, curricula, faculty and students.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Faculty Interests Include:
ISLAC 63 affiliate faculty members are drawn from a number of social science, humanities, arts, and human service fields, including, but not limited to History, Spanish-American and Caribbean Languages and Literature, Humanities, Anthropology, Political Science, Sociology, Economics, Business, Geography, Public Administration, Fine Arts, Public Health, Education, African Diaspora, Women’s Studies and Mental Health.

Research Areas:
Cuba, Caribbean, Southern Cone, Gulf Coast, Puerto Rico, Bolivia, Mexico, Ecuador, Peru, Guatemala, Nicaragua, Brazil, Costa Rica, Honduras, Meso and Central America.
ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as University in addition to: must have
- 3.00 GPA
- three letters of recommendation
- statement of purpose and
- resume
- GRE not required, but suggested for full financial consideration

DEGREE PROGRAM REQUIREMENTS

The Curriculum consists of 36 credits divided into three categories:

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Core requirements</td>
<td>9 credits (6 seminar, 3 methodology)</td>
</tr>
<tr>
<td>Major Field</td>
<td>12 credits</td>
</tr>
<tr>
<td>Minor Field</td>
<td>6 credits</td>
</tr>
<tr>
<td>Additional Elective</td>
<td>3 credits</td>
</tr>
<tr>
<td>Thesis or Electives</td>
<td>6 credits</td>
</tr>
</tbody>
</table>

Core Requirements
Students must take two interdisciplinary core seminars and a methods course upon entering the program. The core seminars, directed by a faculty member from one of the participating departments, will familiarize students with the literature, existing knowledge, and research approaches of the various fields of area studies and invited to acquaint students with faculty and their research. The purposes of the seminars are:

- to provide an interdisciplinary graduate experience
- to foster a community of scholars and learners focused on Latin American, Caribbean, and Latino experiences
- to encourage the integration of learners into the larger Latin communities of Tampa Bay, West Florida, and the hemisphere.

Students will also take a three (3) hour methodology course that acquaints them with particular research relevant to their discipline and when possible, Latin America and/or the Caribbean. This includes special approaches to finding documentation from Latin America and the Caribbean; newly-available search tools available on the internet; and an overview of how disciplines utilize different research materials.

Major and Minor Fields
With the concurrence of the ISLAC advisor, students will elect major and minor fields during their first semester. These fields will draw heavily on participating departments (e.g. Anthropology, History, Government and International Affairs, Art History). At that time the student will constitute a supervisory committee, made up of two professors from the major field and one from the minor field. The committee members will counsel the student and serve as members of the exam or thesis committees.

A large number of courses are available to fulfill the major and minor field requirements. These are listed separately and change somewhat from year to year. Departments who frequently work with ISLAC are Anthropology, Government and International Affairs, Sociology, Mass Communication, Geography, Social Work, Women Studies, Global Health, Philosophy, Economics, History, World Languages, Humanities and American Studies, Art History, and Africana Studies. Students may also request to have courses from other departments count toward major or minor fields.
Electives
Students can take one elective from outside the major and minor fields, in order to complement their core studies. These might be technical courses, study abroad courses, internships, math and science courses, methodology, or another unrelated field. In all cases, students must justify their elective hours and receive approval from their committees.

In addition, students opting for the non-thesis track must take one more course in each of their major and minor fields (2 courses total). Students considering teaching in community colleges are encouraged to take more classes in their major field.

Graduation Requirements
At the conclusion of their coursework, students who opted for thesis must gain approval of the thesis by the committee. All candidates for the degree must also demonstrate language proficiency either by examination or by completing a 3000-level course in Spanish or Portuguese with a B or better. Finally, all non-thesis candidates must pass a six (6) hour comprehensive written exam of three questions, which will be composed and graded by the committee. Students must also meet all College and University Graduation Requirements.

COURSES
See http://www.ups.usf.edu/sab/sabs.cfm or http://shell.cas.usf.edu/islac/
LIBERAL ARTS PROGRAM

Master of Liberal Arts (M.L.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 24.0101
Dept Code: HUM
Program (Major/College): MLA AS

Concentrations:
- Africana Studies (AFT)
- Film Studies (FLM)
- Florida Studies (Offered in St. Petersburg) (FST)
- Humanities (HTS)
- Liberal Studies (LSS) Currently closed for admissions
- Social and Political Thought (SPT)

CONTACT INFORMATION

College: Arts and Sciences
Department: Humanities and Cultural Studies
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The Master of Liberal Arts offers students an opportunity to study from an interdisciplinary perspective the ideas and works that have shaped world culture. Five program concentrations are available: the Liberal Studies Sequence, though broadly interdisciplinary, focuses on a concept, movement or idea. The Humanities Sequence requires a concentration in the Dept of Humanities and American Studies. The Social and Political Thought Sequence requires a program of study approved by a faculty committee. The Africana studies Sequence requires a concentration in Africana Studies. It is an interdisciplinary program that focuses on the study of African American, African, and African Diasporan culture and society. The Florida Studies Sequence allows students to build a program based on a broad array of Florida-based classes drawing on many programs, including History, English, Marine Science, Political Science, Journalism and Media Studies, Art, and Anthropology. All programs require a minimum of 27 credits of course work and a 6 credit thesis.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Upper division undergraduate GPA of 3.00
- a GRE required with least 500 V and 4.5 AW
- Contact individual concentration advisors for possible additional requirements (e.g., transcripts, recommendations, writing samples, etc.)
DEGREE PROGRAM REQUIREMENTS

Africana Studies Concentration – Total minimum required hours (33)
Courses – 30 hours from the approved course list.

Option I: Twenty-one hours must be in Africana Studies courses, which include 12 hours of Africana Studies core courses, 9 credits of Africana Studies elective credits, and 9 in approved outside electives; 3 thesis credits; satisfactory completion of written comprehensive examination and thesis.

Option II: Fifteen hours must be in Africana Studies courses, which include 12 credits of Africana Studies core courses, three credits of Africana Studies elective courses; 15 credits of outside courses leading to a Graduate Certificate in an applied skills area; 3 internship credits; satisfactory completion of a written comprehensive examination.

Courses (required):
AFA 6805 – African Historiography 3
AFA 6207 – African American Historiography 3
AFA 6120 – Social Theory and Social Thought 3
AFA 6355 – African American Community Research 3

Film Studies Concentration – Total minimum required hours (33)
Courses – 27 hours of coursework, including:
HUM 6801  Theories and Methods of Cultural Studies 3
HUM 6821  Film Theory 3
HUM 6815 or AMS 6815 Research Seminar 3
18 hours of additional coursework selected in consultation with the Graduate Director.

Thesis (6 hours)
After the completion of coursework, each student will select a thesis topic; constitute a thesis committee; and write and orally defend a thesis proposal. Each student will then write and orally defend a 40-80 page thesis. During the proposal and thesis writing stage, students are required to enroll for 6 thesis hours.

Comprehensive Exam
The submission and oral defense of the thesis proposal equates to the comprehensive exam.

Humanities Concentration – Total minimum required hours: (33)
Courses - 27 hours in courses from the approved list.

18 hrs. must be in Humanities courses, including HUM 6815 and HUM 6801, and up to 9 hrs. in approved outside electives. At least 15 hours must be at the 6000 level; 6 hours may be at the 4000 level. After the completion of coursework, each student will take a language translation examine in the language of their choosing; select a thesis topic; constitute a thesis committee; and write and orally defend a thesis proposal. Each student will then write and orally defend a 40 to 80 page thesis. During the proposal and thesis writing stage, students are required to enroll for 6 thesis credits.

Liberal Studies Concentration – Total minimum required hours: (33) Currently closed for admissions
Courses - 27 hours in courses chosen in consultation with the Graduate Director, including either HUM 6801, AMS 6156, or an equivalent methodology course pertinent to the student’s field of study; and either HUM 6815, AMS 6938, or an equivalent applied research seminar pertinent to the student’s field of study.

At least nine but no more than 12 hours must be taken in a single department. Six hours may be at the 4000 level. After the completion of coursework, each student will select a thesis topic; constitute a thesis committee; and...
write and orally defend a thesis proposal. Each student will then write and orally defend a 40 to 80 page thesis. During the proposal and thesis writing stage, students are required to enroll for 6 thesis hours.

Social and Political Thought Concentration—Total minimum required hours: (33)
Course - 27 hours of courses approved by a committee selected by the student from the program faculty.

Eight hours may be at the 4000 level. After the completion of coursework, each student will select a thesis topic; constitute a thesis committee; and write and orally defend a thesis proposal. Each student will then write and orally defend a 40 to 80 page thesis. During the proposal and thesis writing stage, students are required to enroll for 6 thesis hours.

Florida Studies Concentration (USF-St. Petersburg) - Total minimum required hours: (33)
Course - 27 hours of courses from an approved list.

At least 20 hours must be at the 6000 level; four hours may be at the 4000 level. After the completion of coursework, each student will select a thesis topic; constitute a thesis committee; and write and orally defend a thesis proposal. Each student will then write and orally defend a 40 to 80 page thesis. During the proposal and thesis writing stage, students are required to enroll for 6 thesis hours.

All Concentrations require the student to work closely with an assigned major professor. Prior to registration for the second semester in the Liberal Studies and Africana Studies sequences, the student must submit in writing to the Master of Liberal Arts Program Director (Liberal Studies Concentration) or the Director of Africana Studies (Africana Studies Concentration) a signed statement of intent to focus on a particular concept, idea, theme, or area of emphasis. This statement must be approved, dated, and signed by the Director and made a part of the student’s record. Subsequent courses selected for study are expected to center around this stated focus. Variation from the focus must be approved by the Director. Courses may be taken from any of the programs listed below:

American Studies
Anthropology
Art
Communication
Criminal Justice
English
Geography
History
Humanities
Interdisciplinary Social Science
Language
Mass Communications
Philosophy
Political Science
Religious Studies
Sociology

Specific course listings for each Concentration may be obtained from the MLA office, CPR 363.

COURSES
See http://www.ups.usf.edu/sab/sabs.cfm
LIBRARY AND INFORMATION SCIENCE PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: June 1
- Spring: October 15
- Summer: March 1

Minimum Total Hours: 39

Program Level: Masters

CIP Code: 25.0101

Dept Code: LIS

Program (Major/College): LIS AS

CONTACT INFORMATION

College: Arts and Sciences
Department: School of Library and Information Science

Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The mission of the School of Library and Information Science is to educate students for careers and leadership roles in library and information professions that serve the needs of a culturally diverse, technological society; to contribute to the body of theoretical and applied knowledge in the discipline; and to serve current and emerging needs in the University, the community, and the profession. For Goals, Objectives, and Student Learning Outcomes, refer to the program’s web page.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools and the American Library Association (ALA).

For students interested in School Library Media as a profession, completion of the USF/SUS program results in (1) a Master of Arts degree accredited by the American Library Association, which will allow the recipient to work in all types of libraries, (2) appropriate coursework for passing the state examination for certification as an Educational Media Specialist for Grades K-12 in the state of Florida. For more information, see http://slis.usf.edu/graduate/programs/media/

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
GRE is required with minimum scores of 550V, 450Q. However, the LIS program will waive the GRE requirement if the student meets one of the following criteria:

- a 3.5 or higher GPA in a completed master’s degree program from a regionally accredited institution
- a 3.25 or higher GPA in upper division undergraduate work from a regionally accredited institution.
- Doctoral degree (including professional degrees such as the JD and MD) from a regionally accredited institution.

All students not meeting one of the above criteria will be considered for conditional admission based on all of the following criteria:

- A minimum score of 550 on the Verbal section and 450 on the Quantitative section of the General GRE test.
• An academic writing sample
• Three written letters of recommendation

Conditional admission status will be converted to regular status upon completion of the first three LIS courses with a GPA of 3.5 or above. LIS 5020 must be included as one of these courses.

1. A satisfactory score on the TOEFL (79 on the internet-based test and 550 on the paper-based test) may be required for natives of non English-speaking countries.

2. All students are required to write a statement describing their purpose and goals in the LIS program

DEGREE PROGRAM REQUIREMENTS

A minimum of 39 semester hours is required for the Master’s degree program. Students must maintain a 3.0 grade point average of “B” or better and no more than two grades below “B” will be accepted. Transfer credit from other recognized graduate schools is limited to six semester hours taken within the last five years with grades of “B” or better. All transfers must be approved by the candidate’s faculty advisor. Transfer credits must be posted to a student’s permanent record no later than one full term prior to graduation.

Required Courses

The student must complete the following 39 hour program, including six core courses:

• LIS 5020 Foundations of Library and Information Science (3) or LIS 6260 Information Science in Librarianship (3)
• LIS 6271 Research Methods in Library and Information Science (3)
• LIS 6409 Introduction to Library Administration (3)
• LIS 6511 Collection Development and Maintenance (3)
• LIS 6603 Basic Information Sources and Services (3)
• LIS 6711 Organization of Knowledge I (3) or LIS 6735 Technical Services in Libraries (3)
• Elective courses totaling 21 credit hours. These courses must be approved by the student’s advisor.

Some options include:

LIS 5268 Microcomputer Applications Library and Information Centers  3
LIS 5315 Instructional Graphics  3
LIS 5333 TV in Schools and Libraries  3
LIS 5418 Health Informatics for Medical Librarians  3
LIS 5566 Multicultural Literature for Children and Young Adults  3
LIS 5937 Selected Topics in Library Studies  4-Jan
LIS 6110 History of Libraries  3
LIS 6111 History of Children’s Literature  3
LIS 6206 Adult Services in Libraries  3
LIS 6212 Reading Guidance Programs in Libraries and Classrooms  3
LIS 6225 Storytelling  3
LIS 6303 Preparing Instructional Media  3
LIS 6316 Visualization of Knowledge  3
LIS 6402 Advanced Library Administration  3
LIS 6432 Seminar in Academic Libraries  3
LIS 6445 Seminar in Public Libraries  3
LIS 6455  Organization and Administration of the School Media Center  3
LIS 6463  Library Networks and Systems  3
LIS 6464  Library Systems Analysis and Planning  3
LIS 6472  Seminar in Special Libraries  3
LIS 6473  Law Librarianship  3
LIS 6475  Health Sciences Librarianship  3
LIS 6542  The Curriculum and Instructional Technology  3
LIS 6565  Books and Related Materials for Young Adults  3
LIS 6585  Materials for Children  3
LIS 6609  Online Information Sources and Services  3
LIS 6610  Information Sources and Services in the Humanities  3
LIS 6620  Information Sources and Services in the Social Sciences  3
LIS 6624  Information Sources and Services in Business and Law  3
LIS 6630  Information Sources and Services in Science and Technology  3
LIS 6661  Government Documents  3
LIS 6724  Classification and Cataloging of Non-Book Materials  3
LIS 6726C  Indexing and Abstracting  3
LIS 6712  Organization of Knowledge II  3
LIS 6514  Digital Libraries  3

Courses Outside the School
Degree-seeking students are permitted to enroll in courses, usually limited to six semester hours, outside the School of Library and Information Science when, in the context of the development of a purposeful program, an interdisciplinary approach seems appropriate. Students must obtain the prior approval of their Faculty advisor.

Comprehensive Examination
Students must pass a written comprehensive examination. Students will take the comprehensive examination in their last semester. Students must be enrolled for a minimum of two credit hours during the semester in which they take the comprehensive examination. The School conducts comprehensive examinations only in the spring, summer, and fall semesters.
OTHER INFORMATION

ALA-USF, ASIST-USF, and SLA-USF are student chapters of the American Library Association, American Society for Information Science & Technology and Special Libraries Association linked with the School of Library and Information Science and are open to all members of the University community interested in information science or librarianship. All provide programs and guest speakers of interest to the campus community, maintain several discussion lists, and publish a newsletter for their members. These organizations are the voice of students in the school, and members of the associations are included on committees within the School.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
http://slis.usf.edu/
### DEGREE INFORMATION

<table>
<thead>
<tr>
<th>Program Admission Deadlines:</th>
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<td>Program Level:</td>
<td>Masters</td>
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<td>Dept Code:</td>
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<td>Program (Major/College):</td>
<td>LIN AS</td>
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### CONTACT INFORMATION

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<th>College:</th>
<th>Arts and Sciences</th>
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<tr>
<td>Department:</td>
<td>World Languages</td>
</tr>
<tr>
<td>Contact Information:</td>
<td><a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
</tr>
<tr>
<td>Other Resources:</td>
<td><a href="http://www.usf4you.usf.edu">www.usf4you.usf.edu</a></td>
</tr>
</tbody>
</table>

Currently, students are not being admitted to this program.
Linguistics is primarily an upper-level and graduate discipline with strong interdisciplinary concerns. The Linguistics Program offers two graduate tracks:

1. The Master of Arts in Linguistics (thesis) (currently inactive), and
2. The Master of Arts in Applied Linguistics (Teaching English as a Second Language); (non-thesis).

For information on the M.A. in Linguistics, refer to that Program listing.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
Language testing, curriculum development, second language learning and teaching.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university. GRE is also required but may be waived for applicants with a master’s degree. Scores at or above 430 V and 4.0 AW are generally considered acceptable. Also must have:

- three letters of recommendation,
- a two-page statement of purpose, written by the applicant.
- Students whose native language is other than English and whose bachelor’s degree was not earned in an English-medium university in an English speaking country must provide a TOEFL score of 600 (250 on the computerized version).

Applicants should note that proficiency in a second language is required by the time of graduation.
DEGREE PROGRAM REQUIREMENTS

Non-Thesis: Applied Linguistics (TESL)

Core Requirements (27 hours)
- LIN 5700 Applied Linguistics 3
- LIN 6081 Introduction to Graduate Studies in Linguistics 3
- LIN 6675 Grammatical Structure of American English 3
- LIN 6720 Second Language Acquisition 3
- LIN 6748 Contrastive Analysis 3
- TSL 5371 Methods of TESL 3
- TSL 5372 ESL Curriculum and Instruction 3
- TSL 5440 Language Testing 3
- TSL 5525 Cross-Cultural Issues in ESL 3

Electives (6 hours)
Six hours of approved electives Students select electives in consultation with the program adviser.

Internship (6 hours)
TSL 6945 – Internship

A three-part Exit Assessment consisting of a linguistic analysis of an ESL student, theory-to-practice paper and portfolio of major course assignments and other relevant items is required for the program. Students are required to demonstrate proficiency in a language other than their native language by the end of the program.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
MASS COMMUNICATIONS PROGRAM

Master of Arts (M.A) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February

Minimum Total Hours: 39
Program Level: Masters
CIP Code: 9.0102
Dept Code: MCM
Program (Major/College): COM AS

Concentrations:
- Media Studies (MCM)
- Strategic Communication Management (PRS)
- Multimedia Journalism (MMJ)

PROGRAM INFORMATION

The M.A. degree program in Mass Communications is designed for students who are seeking advanced studies in preparation for professional and academic careers in mass communications. The program offers one degree, the Master of Arts in Mass Communications.

The Media Studies Concentration emphasizes the theoretical principles and research methods of mass communications. The Strategic Communication Management Concentration emphasizes public relations management and social science research. The Multimedia Journalism Studies Concentration focuses on story telling through the integration of different delivery platforms, and on management issues in converged newsrooms.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools and the Accrediting Council on Education in Journalism and Mass Communications (ACEJMC)

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university except that the students are required to have

- both a 3.0 upper division GPA
- 500V, 500Q on the GRE
- a resume
- three letters of recommendation (academic recommendations preferred)
- a strong letter of intent
- an appropriate bachelors degree from an accredited institution
- Students who lack an appropriate background in the selected concentration may be required to take additional courses to meet concentration minimums.
DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours: 39

Core Requirements (12 hours):
- MMC 6920 – Introduction to Mass Communication Research (3)
- MMC 6401 – Mass Communication Theory (3)
- MMC 6421 – Research Methods (6)

Concentration Requirements (12 hours)

Concentration in Media Studies
This program requires 39 hours of course work, including 6 hours of thesis. At least twenty-four hours are taken in the School of Mass Communications. The remaining 9-12 hours may be taken in graduate-level courses offered in other departments of the University.

Concentration in Multimedia Journalism
The graduate concentration in Multimedia Journalism prepares students to take leadership positions in journalism through their knowledge of the field of mass communications, management in the media environment and the ability to combine storytelling skills in the areas of print, broadcast and electronic communication. The concentration requires a total of 39 hours of which 12 are core requirements, 12 are in the multimedia core, 6 are thesis or applied research project, 6 are electives in the Mass Communications graduate program and 3 are in an outside requirement.

Requirements (12 hrs):
- JOU 6501 Media Management (3)
- JOU 5344 Multimedia Journalism (3)
- JOU 6349 Advanced Multimedia Journalism (3)
- MMC 6612 Law and Mass Media (3)

Thesis OR MMC 6950 Applied Research Project – 6 hrs
Electives (6)
1 Outside Requirement (3): EME 6936 Web Design and Multimedia

Concentration in Strategic Communication Management
The Strategic Communication Management Concentration emphasizes the integration of organizational communication functions such as public relations and advertising into a single communication management function. This program requires 39 hours of course work, including six (6) hours of thesis or six (6) hours of an applied research project, twelve (12) hours of the mass communications core, fifteen (15) hours of the strategic communication core, three (3) hours in management or leadership studies, and six (6) hours of electives.

Students in these concentrations are required to take a comprehensive written examination after they have completed at least 21 hours of mass communications course work, including the required courses for each concentration of study.

Core Requirements: (15 hours)
- PUR 6603 Strategic Communication Campaigns (3)
- PUR 6607 Strategic Communication Management (3)
- PUR 5505 Introduction to Strategic Communication Theory and Research (3)
- MMC 6415 Strategic Communication Media (3)
- MMC 6418 Strategic Message Design (3)

Outside requirement (three hours): A course in organizational communication, management or leadership.
Thesis OR Applied research project (6) hours arranged with project committee chair.
Mass Communications or other electives (3 hours).

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
MATERIALS SCIENCE AND ENGINEERING PROGRAM

Master of Science in Materials Science and Engineering (M.S.M.S.E.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.1801
Dept Code: PHY/All Engineering Dept. except Computer Science and Engineering
Program (Major/College): MSE AS or MSE EN

CONTACT INFORMATION

Colleges: Arts and Sciences Engineering
Departments: Physics
Chemical Engineering
Civil Engineering
Electrical Engineering
Industrial Engineering
Mechanical Engineering

PROGRAM INFORMATION

The field of Materials Science and Engineering (MSE) applies the fundamental principles of physics and chemistry to engineering materials, with a focus on the interrelationship between material structure, their properties, and the means by which they are processed. MSE impacts multiple facets of our economy, such as aerospace, electronics, transportation, communication, construction, recreation, entertainment, environment and energy. It is, by its very nature, an interdisciplinary field. The goal of the MS program in Materials Science and Engineering is to provide a route for well-qualified undergraduate students who desire in-depth graduate-level work including structured courses and research experience, in preparation for work in industry or for entrance into a relevant science or engineering Ph.D. program.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Applicants should have a Bachelor’s degree in Engineering (Chemical, Mechanical, Industrial, Electrical, Civil, Materials Science, Ceramic, Metallurgy, Manufacturing, Polymer and related disciplines) or Natural Sciences (Physics, Chemistry or Biology) from an accredited institution.
- An applicant must have a cumulative GPA of 3.0 or higher during undergraduate studies.
- For specific GRE requirements all applicants should contact the admitting department
- At least 2 letters of reference
- Statement of objectives/purpose must be included with the application.
DEGREE PROGRAM REQUIREMENTS

Students will require a minimum of 30 total credit hours to qualify for the MS degree in MSE. The degree may be completed within 12 months by taking 12 credit hours in each of the fall and spring semesters followed by 6 credit hours during the summer. Students must take 15 credit hours of core courses (including a maximum of 3 credit hours for an interdisciplinary Graduate Materials Seminar), 9 hours of elective courses for the thesis option which requires an additional 6 hours of thesis research. For the non-thesis option, 6 additional hours of elective courses would be required in lieu of thesis hours. Courses taken for this program cannot be used to fulfill requirements of another Master’s degree program.

Core Requirements
Required Core Courses (15 credit hours)
EML/ECH 6931 and PHY 6938 Materials Characterization (3)
PHY/ENG 6935 Graduate Seminar Series in MSE (Min 2, Max 3)
And three of the following five courses (9 credit hours):
- EML/ECH 6930 Advanced Materials (3)
- PHY 6938 Materials Physics I (3)
- PHY 6938 Materials Physics 2 (3)
- ECH/EGN 6930 Diffusion, Transport and Kinetics in Solid Materials (3)
- PHZ 5405 Introduction to Solid State Physics (3)

Elective Courses (9 hours):
- EEL 6318 Characterization of Semiconductors (3)
- EEL 6335, 6354 Semiconductor Device Theory I and II (3, 3)
- CHE/EEL 6355 Compound Semiconductor Technology (3)
- PHY 6446 Lasers and Applications (3)
- PHY 6447 Physics of Lightwave Devices and Applications (3)
- EEL 6386, 6389 Principles of Semiconductor Device Modeling I, II (3, 3)
- EEL 6935 Microsystems and MEMS Technology (3)
- PHZ 5156C Computational Physics I
- EEL 6935/ECH 6391 Chemical/Biological Sensors and Microfabrication (3)
- ECH 6749 Biomaterials and Biocompatibility (3)
- PHZ 6426 Solid State Physics II (3)
- CGN 6933 Corrosion of Engineering Materials (3)
- CGN 6933 Durability Issues in Cementitious Materials (3)
- EML 6930 Failure Mechanisms in Material (3)
- PHZ 6136 Physical Applications of Group Theory (3)
- EEL 6937 Introduction to Nanotechnology (3)
- ECH/EEL 6935 Wide Band Gap Semiconductor Technology I (3)
- ECH/EEL 6931 Wide Band Gap Semiconductor Technology II (3)
- CES 6107 Advanced Mechanics of Materials II (3)
- EEL 6935 Characterization of Defects in Electronic Materials (3)
- EIN 6935 Statistical Quality Control (3)
- ESI 6247 Statistical Design Models (3) EML 6232 Laminated Composite Materials (3)
- EML 6653 Applied Elasticity (3)
- EEL 5382 Physical Basis of Microelectronics (3)
- ECH 6230 Advanced Mass Transfer (3)
- EEE 5356 Integrated Circuit Technology (3)
- EEL 6935 Advanced I.C. Technology (3)
- EEL 6936 Bioelectricity (3)
- EML 6930 Cellular Engineering (3)
- EIN 6934 Introduction to Haptic Interfaces for Virtual Environments (3)
- EML 6930 Micro and Nano Manufacturing (3)
- EEL 5000 Materials for Energy Applications (3)
- EEL 6936 SiC Technology (3)
Thesis/Non-Thesis Options (6 credits)
Thesis Hours (6 credit hours)
For Non-thesis Option six additional credit hours of elective courses is required in lieu of thesis hours.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
MATHEMATICS PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
For Teaching Assistants, International and Financial Aid Applicants:
  Fall: February 1
  Spring: August 1

For Domestic applicants (US citizens or permanent residents) without financial aid or Teaching Assistant applications:
  Fall: February 15
  Spring: October 1

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 27.0101
Dept Code: MTH
Program (Major/College): MTH AS

Concentrations: Pure and Applied (PAA)

Also offered as a 5-year program

CONTACT INFORMATION

College: Arts and Sciences
Department: Mathematics and Statistics
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The Department of Mathematics at the University of South Florida, Tampa Campus, is composed of approximately thirty faculty who do research in a variety of fields, and teach courses ranging from the freshman to the doctoral level.

The Department serves as the editorial base for the international journals: Abstract and Applied Analysis and Journal of Theoretical Probability. The Center for Mathematical Services within the department provides lectures, special programs for secondary students, and in service training programs in mathematics.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as general university requirements plus:
• a Bachelor’s degree or equivalent in mathematical sciences or related area
• at least a 650 quantitative score on the GRE
• at least a 3.0 GPA in undergraduate math courses
• A completed math department application form
• Statement of goals

Students with insufficient preparation in real analysis and/or abstract algebra will be required to take MAA 4211 and/or MAS 4301 before or during their first semester of study.

DEGREE PROGRAM REQUIREMENTS

In addition to the University and College requirements, the students must fulfill the following requirements:

Credit Hours: A candidate must complete at least 30 credit hours in Mathematics. Specifically:

Some graduate courses are organized into Core and Elective Sequences as follows:

Core Requirements
Sequences:

Algebra:
- MAS 5145 Advanced Linear Algebra 3
- MAS 5311 Algebra I 3
- MAS 5312 Algebra II 3

Analysis:
- MAA 5306 Real Analysis I 3
- MAA 5307 Real Analysis II 3
- MAA 6616 Abstract Integration 3

Mathematical Statistics:
- STA 5326 Mathematical Statistics I 3
- STA 6326

Topology:
- MTG 5316 Topology I 3
- MTG 5317 Topology II 3

Electives

Applied Mathematics: three courses, one from each group listed below:

(Group A)
- MAP 5407 Methods of Applied Mathematics 3
- MAP 5345 Applied Partial Differential Equations 3

(Group B)
- MAA 5405 Applied Complex Analysis 3
- MAT 5932 (MAD 4401) Selected Topics 1-4

(Group C)
- MAP 6205 Control Theory and Optimization 3
- MAT 6932 Selected Topics 1-4

Combinatorics:
- MAD 6206 Combinatorics I 3
- MAD 6207 Combinatorics II 3
### Complex Analysis:
- MAA 6406 Complex Analysis I 3
- MAA 6407 Complex Analysis II 3

### Statistical Methods:
- STA 5166 Statistical Methods I 3
- STA 6167 Statistical Methods II 3

### Dynamical Systems:
- MAT 5932 Selected Topics 1-4
- MAT 6932 Selected Topics 1-4

### Foundations:
- MHF 5306 Mathematical Logic and Foundations I 3
- MHF 6307 Mathematical Logic and Foundations II 3

### Linear Models and Multivariate Analysis:
- STA 6208 Linear Statistical Models 3
- STA 6356 3

### Nonlinear Analysis:
- MAP 5316 Ordinary Differential Equations I 3
- MAP 5317 Ordinary Differential Equations II 3

### Ordinary Differential Equations:
- MAP 6336 Theory Ordinary Differential Equations I 3
- MAT 5932 Selected Topics 1-4

### Partial Differential Equations:
- MAP 5345 Applied Partial Differential Equations 3
- MAP 6356 Partial Differential Equations 3

### Probability:
- STA 5446 Probability Theory I 3
- STA 6447 Probability Theory I 3

### Stochastical Processes and Time Series Analysis:
- STA 6206 Stochastic Processes 4
- STA 6876 Time Series Analysis 3

### Theory of Computing:
- MHF 5306 Mathematical Logic and Foundations I 3
- MAD 6616 Algebraic Automata Theory 3

For degree requirements, each course from the Elective Sequence list above counts towards only one Elective Sequence. A qualifying examination based on a Core Sequence is called a Core Qualifying Examination. The syllabus for each examination is available from the Department. Core Qualifying Examinations are offered in January, May and September. A student who passes a Core Qualifying Examination at Ph.D. level will be considered to have completed the corresponding Core Sequence. Credit hours of MAT 6908 Independent Study, MAT 6939 Graduate Seminar, and MAT 6911 / 7912 Directed Research, earned before passing two Core Qualifying Examinations at Ph.D. level, do not count towards M.A. or Ph.D. degree. These courses, MAT 6908, 6911, 6939 and 7912, however, can be taken by a student before passing two Core Qualifying Examinations at Ph.D. level, with an approval from the Graduate Program Director, and also from the Seminar Organizer for MAT 6939. The course work for more than one credit hour for MAT 6939 needs an approval from the Graduate Committee.
1. The Mathematics graduate courses of 5000 level or higher, offered regularly for mathematics majors from the Mathematics department, are counted towards the 30-hour requirement.

2. Up to 6 hours of 4000 level or higher courses, taken from our department or other departments at USF, may be counted towards the 30-hour requirement with approval by the Graduate Program Director and the Department Chairperson.

3. Completion of Sequences: A Candidate must complete two Core or Elective Sequences, at least one of which must be a Core Sequence, and receive at least a 3.0 average in each sequence.

4. Thesis or Examination Requirement: Each candidate for the M.A. degree must either be examined on a thesis or pass one of the written Core Qualifying Examinations.

A student who elects the thesis option must register for a minimum of six (6) credit hours in MAT 6971, only six (6) hours of which may be applied toward the 30-hour degree requirement. The comprehensive examination takes the form of an oral thesis defense, in which the candidate must demonstrate knowledge of the general subject area of the thesis.

A student who elects the exam option must pass one of the Core Qualifying Examinations at M.A. level. A student may repeat each examination once.

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
MATHEMATICS PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
For Teaching Assistants, International and Financial Aid Applicants:
- Fall: February 1
- Spring: August 1

For Domestic applicants (US citizens or permanent residents) without financial aid or Teaching Assistant applications:
- Fall: February 15
- Spring: October 1

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 27.0101
Dept Code: MTH
Program (Major/College): MTH AS
Concentrations: Pure and Applied (PAA) Statistics (STT)

CONTACT INFORMATION

College: Arts and Sciences
Department: Mathematics and Statistics
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The Department of Mathematics at the University of South Florida, Tampa Campus, is composed of approximately thirty faculty who do research in a variety of fields, and teach courses ranging from the freshman to the doctoral level. The Department serves as the editorial base for the international journals: Abstract and Applied Analysis and Journal of Theoretical Probability. The Center for Mathematical Services within the department provides lectures, special programs for secondary students, and in service training programs in mathematics.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

In addition to the M.A. program requirements, entrants to the Ph.D. Program must have a Master’s degree in Mathematics or a strong enough background as determined by the Graduate Admissions Committee, and three letters
of recommendation, at least two of which from mathematicians indicating an aptitude for doctoral study. See list below.

**Program Admission Requirements**
Same as general university requirements plus:

- a Bachelor’s degree or equivalent in mathematical sciences or related area
- at least a 650 quantitative score on the GRE
- at least a 3.5 GPA in graduate and/or upper undergraduate math courses
- three letters of recommendation (two of which should be from college level math professors)
- a completed math department application form
- a statement of goals

**DEGREE PROGRAM REQUIREMENTS**

In *addition* to the University and College requirements, the students must fulfill the following requirements. Some graduate courses are organized into Core and Elective Sequences as follows:

**Core Sequences:**
- Algebra: MAS 5125, 5311, 5312
- Analysis: MAA 5306, 5307, 6616
- Mathematical Statistics: STA 5326, 6326
- Topology: MTG 5316, 5317

**Elective Sequences:**
- Applied Mathematics: three courses, one from each group listed below.
  - (Group A) MAP 5407, 5345
  - (Group B) MAA 5405, MAT 5932 (MAA 4401)
  - (Group C) MAP 6205, MAT 6932 (Dynamical Sys II)
- Combinatorics: MAD 6206, 6207
- Complex Analysis: MAA 6406, 6407
- Statistical Methods: STA 5166, 6167
- Dynamical Systems: MAT 5932, 6932
- Foundations: MHF 5306, 6307
- Linear Models and Multivariate Analysis: STA 6208, 6356
- Nonlinear Analysis: MAP 5316, 5317
- Ordinary Differential Equations: MAP 6336, MAT 5932 (Dynamical Systems I)
- Partial Differential Equations: MAP 5345, 6356
- Probability: STA 5446, 6447
- Stochastical Processes and Time Series Analysis: STA 6206, 6876
- Theory of Computing: MHF 5306, MAD 6616

For degree requirements, each course from the Elective Sequence list above counts towards only one Elective Sequence. A qualifying examination based on a Core Sequence is called a Core Qualifying Examination. The syllabus for each examination is available from the Department. Core Qualifying Examinations are offered in January, May and September. A student who passes a Core Qualifying Examination at Ph.D. level will be considered to have completed the corresponding Core Sequence. Credit hours of MAT 6908 Independent Study, MAT 6939 Graduate Seminar, and MAT 6911 / 7912 Directed Research, earned before passing two Core Qualifying Examinations at Ph.D. level, do not count towards M.A. or Ph.D. degree. These courses, MAT 6908, 6911, 6939 and 7912, however, can be taken by a student before passing two Core Qualifying Examinations at Ph.D. level, with an approval from the Graduate Program Director, and also from the Seminar Organizer for MAT 6939. The course work for more than one credit hour for MAT 6939 needs an approval from the Graduate Committee.
1. **Core Qualifying Examinations:** The student is required to pass two of the Core Qualifying Examinations at Ph.D. Level. A student is expected to complete both within 13 months after entering the Ph.D. program unless an extension is granted by the Mathematics Graduate committee. A student may repeat each examination once.

2. **Elective Qualifying Examination:** After passing two Core Qualifying Examinations, the student will select a Dissertation Advisor and a Doctoral Committee will be appointed by the Department Chairperson. The Committee will determine a course of study leading to the written Elective Qualifying Examination, which may be based on one of the Elective Sequences above, possibly supplemented by other material. The syllabus for this examination, and the names of two examiners from the Faculty, must be approved by the Mathematics Graduate Program Director at least one semester before the examination is to take place. A student is expected to complete all three examinations within 25 months after entering the Ph.D. program unless an extension is granted by the Mathematics Graduate Committee. A student may repeat each examination once. The student will be admitted to candidacy after completion of the above two requirements.

3. **Completion of Four Sequences:** The student must complete four sequences from among Core and Elective Sequences with at least a 3.0 average in each sequence.

4. **Progress Evaluation:** Each Spring semester after admission to doctoral candidacy, the candidate shall give an oral presentation to the Doctoral Committee of the problem(s) under investigation. The presentation may also include a discussion of partial results. The Dissertation Advisor shall submit to the Department Chairperson a written report of the presentation.

5. **Dissertation:** Students admitted to doctoral candidacy are required to take at least 16 hours in MAT 7980 Doctoral Dissertation, with a minimum of 6 credits of dissertation hours accumulated during each previous 12-month period (previous 3 terms, e.g. Fall, Spring, Summer) until the degree is granted. The dissertation is expected to contain new mathematical results which are worthy of publication. Research towards the dissertation typically forms the major part of the work required for the Ph.D. in Mathematics.

6. **The Final Oral Examination:** The Final Oral Examination is also called the Dissertation Defense The department defers to the university requirements.

**COURSES**

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
MICROBIOLOGY PROGRAM

Master of Science (M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
U.S. Students:

    Fall: January 1 for full consideration; however applications are accepted to February 15 (U.S. Applicants)
    January 1 (International)

    Spring: August 1

International Students:

    Fall: January 1
    Spring: July 1

Application must be completed by January 1 by applicants who wish to be considered for assistantships.

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 26.0503
Dept Code: BIO
Program (Major/College): MIC AS

CONTACT INFORMATION

College: Arts and Sciences
Department: CMM Biology

Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The MS in microbiology degree is administered by the Department of Cell Biology, Molecular Biology and Microbiology (CMMB). Most research in the CMMB Department is done by faculty housed in the modern Bio-Science Facility building (BSF). In addition, the department has common research facilities in two nearby buildings. Due to the interdisciplinary aspect of most research projects, faculty and graduate students often work together on broad ranging research projects that bring together many of the traditionally separate areas of biology. Many of the faculty within CMMB are involved in cooperative research with their colleagues in Chemistry, Integrative Biology, Public Health, Nursing, Medicine, Geology, Psychology, Geography, Marine Science, and Environmental Science. Often CMMB graduate students have faculty members from these other areas of USF as members of their graduate committees.

Because of the many undergraduate courses that require hands-on experimental laboratories, the both CMMB and IB support many graduate students as Teaching Assistants. CMMB and IB value high quality teaching at all levels of instruction. Research Assistant positions may also be available to support research with specific faculty members depending on an individual faculty members funding. Numerous scholarship opportunities are also offered on a competitive basis through the USF Graduate School.

Applying to the Department of Cell Biology, Microbiology and Molecular Biology

Students interested in attending graduate school within the CMMB Department should visit the CMMB website that can be accessed from the main USF site and review the current CMMB faculty. It is recommended that potential students consider at least 2-3 CMMB faculty that they would be interested in working with and communicate this information in their letter of application. It is also recommended that potential students contact the CMMB Graduate Director as well as the individual faculty members they are interested in working with via email. Such communication will facilitate the assignment of the laboratory rotations that CMMB students
will participate in during their first semester of residency and also allow the applicant to determine whether the desired faculty member has positions available in the laboratory. All students admitted to the Masters concentration in Cell Biology and Molecular Biology must establish a supervisory committee. The supervisory committee shall constitute the major professor and at least two additional credentialed faculty. At least one of the committee members must be a faculty member at USF. Supervisory committee must be formed within two semesters after matriculation. The CMMB Graduate Director and CMMB Chair must approve the Supervisory Committee. Once a major professor has been assigned and/or a student occupies or utilizes significant space or facilities for research or analogous scholarly activity directly pertinent to the generation of a thesis, the student shall enroll for a minimum of two (2) hours of research credit each semester (other than summer semester), until eligible to enroll in thesis credits.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: Applied Microbiology, Pathogenic Microbiology, Cellular Microbiology, Molecular Microbiology, Ecological Microbiology

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Prospective students must apply to the Microbiology MS program via the online application process through the USF Graduate School.
- Must have 3.00 GLA last 60 hours of B.S. degree
- Must have 500V, 600Q, 4.5 AW on GRE
- All international students are required to submit the TOEFL test. Non-native English speaking graduate students must score at least 570 on the TOEFL and at least 50 on the TSE to be eligible for a teaching assistantship.
- It is expected that candidates for the M.S. degrees will have completed courses equivalent to those required for the B.S. in Biology at U.S.F.

Materials necessary for a complete application are listed below:

The following items should be submitted in the envelope provided to:

CMMB Graduate Office
Attention: CMMB Graduate Director
University of South Florida
4202 E. Fowler Ave – BSF 218
Tampa, FL 33620-5150

1) Two official transcripts in a sealed envelope from each post-secondary institution. Transcripts of work completed at USF will be secured by the Office of Admissions. Thus, applicants only need to secure transcripts from other institutions for the application packet.

2) Three letters of recommendation from faculty in sealed envelopes (on their university letterhead) with the envelope seal signed by the recommender. Students shall complete a Student Recommendation Form that can be found on the CMMB website and submit it to the recommenders.
3) A brief essay stating your intended field of research and professional goals. Please indicate your specific research interests, in order that we may refer your application to appropriate CMMB faculty members. In the essay please list 2-3 CMMB faculty members that you would like to have review your file.

4) Applicants must complete the Application for Teaching Assistantship (TA) Form that can be found on the CMMB or IB website if they wish to be considered for a TA position. Applicants who do not return this form will not be considered for a teaching position. Applicants should attach a resume to the Application for Teaching Assistantship (TA) Form that highlights any previous teaching experience.

5) OFFICIAL test scores must be sent to USF directly from the testing agency. The University of South Florida’s 4-Digit Institution Code is: 5828 Official GRE scores. This exam must have been taken within the last five years.

DEGREE PROGRAM REQUIREMENTS

The thesis based M.S. degree requires successful completion of the following:

1. structured coursework
2. an oral qualifying exam
3. research thesis
4. comprehensive final examination

The Master’s Degree Requirements should be completed in two to three years. The CMMB Department requires that all graduate work applied toward the completion of degree requirements be completed within a five year period after matriculation. Thesis research should be publishable and students are encouraged to publish their findings. Students must choose a specific concentration in the M.S. degree that will be completed within either the CMMB Department. The specific requirements for the Master of Science (M.S.) in Microbiology are provided below

1. Credit hour requirement: 30 semester hour credits beyond the Baccalaureate Degree is required. (including: BSC6910, BSC 6971, BSC 6935 and other structured and unstructured courses approved by CMMB or IB)

2. Students admitted to the CMMB Department must complete three laboratory rotation during their first semester of residency.

3. Successful completion of the comprehensive qualifying examination. The exam should be taken at the end of the first year, or early in the second year of study. The examination is administered and evaluated by the student’s graduate committee.

4. Submission of a thesis proposal and approval by the major professor, graduate committee and graduate director.

5. A minimum of eight (8) thesis research credit hours (BSC 6971).

6. Seminar requirement: one presentation, excluding the thesis seminar and defense. Students should present posters or oral presentations based on their thesis research at national/regional professional meetings. The student’s graduate committee must approve the presentation.

7. Submission of an acceptable thesis.

8. Presentation of the thesis seminar (BSC 6935) and successful defense of the thesis.

MS in Microbiology Course Requirements

Required coursework (9 credit hrs)

BSC 6930 Lectures in Contemporary Biology (1) Enrollment in this course is required during each semester of residency
BSC 6932 Advances in Scientific Review (2)
BSC 6932 Advances in Scientific Writing (2)
PCB 6930 Advances in Cell and Molecular Biology (1)

Microbiology Electives* (minimum of 6 hrs)
- MCB 5206 Public Health and Pathogenic Microbiology (3)
- MCB 5655 Applied and Environmental Microbiology (3)
- PCB 5335 Principles of Immunology (3)
- PCB 6236 Advanced Immunology (3)
- MCB 5815 Medical Mycology (3)
- BSC 5931 Molecular Microbial Ecology (3)
- BSC 5931 Prokaryotic Molecular Genetics (3)
- MCB 5410 Cellular Microbiology (3)
- PCB 5616 Molecular Phylogenetics (3)
- PCB 5525 Molecular Genetics (3)
- BSC 5425 Genetic Engineering and Recombinant DNA Technology (3)

*The supervisory committee may approve additional courses not listed here

MS in Microbiology Non-Thesis Option
Non-Thesis - For students enrolled in the non-thesis program, a 30-hour minimum is required at the 5000-6000 level; 26 hours must be in formally structured courses; 16 hours must be at the 6000 level; 15 structured hours must be offered by CMAM. A review paper of a topic approved by the supervisory committee is required as well as successful completion of the comprehensive qualifying exam after all course work has been completed. For non-thesis masters students, this exam will occur at the end of the program of study.

Comprehensive Oral Qualifying Examination.
A final comprehensive oral examination is required for all master’s students. This examination is open to all departmental faculty. Students must take their comprehensive exam within two years of matriculation and the exam is normally taken after the completion of all formal course work. Thesis students must take the examination at least one semester before the thesis is presented. Any graduate work counted toward the requirement for the M.S. degree must be completed within five (5) years after matriculation.

All thesis-based Master’s Degree students must present a seminar to the Department of Biology and must be enrolled in BSC 6935, during the final semester. The seminar should be a concise summary of the research completed to satisfy the requirements for the M.S. Degree. The seminar is open to the general public and must be announced two weeks prior to the presentation. Upon completion of the seminar, the general public will be invited to ask questions. At the discretion of the student’s graduate committee, members of the committee may continue to question the graduate student after the general public has departed the seminar room. Each student is expected to defend his/her research to the unanimous satisfaction of the graduate committee.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm

http://www.cas.usf.edu/
PHILOSOPHY PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
U.S. Students
   Fall: February 15
   Spring: October 15
   Financial Assistance: January 2

International Students
   Fall: February 15
   Spring: August 1
   Financial Assistance: January 2

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 38.0101
Dept Code: PHI
Program (Major/College): PHI AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Philosophy

Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Contact program for information or visit http://philosophy.usf.edu/

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
Aesthetics
Analytic Philosophy
Ancient Greek Philosophy
Continental Philosophy
Epistemology
Ethics & Contemporary Moral Philosophy
Feminist Philosophy
Medieval Philosophy
Modern Philosophy
Philosophy of Mind
Philosophy and Religion
Philosophy of Science
Social & Political Philosophy
19th and 20th Century Philosophy
ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university plus the following documents must be submitted:

- statement of purpose
- three (3) letters of recommendation
- A ten (10) page philosophy writing sample
- In order to be competitive, applicants should submit GRE generalist test scores of 600V, 600Q, and an analytic score of 5.0

DEGREE PROGRAM REQUIREMENTS

Once admitted, students must successfully complete at least 30 credit hours in accordance with the following requirements:

1. Proseminar I (6 credit hours) and Proseminar II (6 credit hours)
2. Course in Symbolic Logic or Modal Logic (3 credit hours)
3. Coursework in the History of Philosophy from the list appearing in “Areas of Study and Coursework” (6 credit hours)
4. Coursework in Metaphysics, Epistemology, and Logic from the list appearing in “Areas of Study and Coursework” (3 credit hours)
5. Course in Value Theory from the list appearing in “Areas of Study and Coursework” (3 credit hours)
6. Coursework or an examination demonstrating reading proficiency in one of the following languages: ancient Greek, Latin, French, German, or a substitute approved by the Director of Graduate Studies and the Department Chair
7. Thesis (3 credit hours) OR A comprehensive examination on a required list of readings constructed by the candidate and a committee of examiners

Areas of Study and Coursework
Students will be required to meet the distribution of credit hours described below. While many of the courses could fall into two or more categories, the categories as stated should provide a comprehensive training in philosophy. When there is good reason to approve substitutions for the courses listed, the Director of Graduate Studies has the discretion to approve substitutions on a case-by-case basis. The Department Chair must also approve any substitutions.

History of Philosophy
(A minimum of six credit hours required for the M.A., courses must come from two different categories; a minimum of 12 credit hours required for the Ph.D. with at least one from each of the four categories)

I. Ancient and Medieval
   a. Plato
   b. Aristotle
   c. Topics in Ancient/Medieval Philosophy
II. Early Modern Philosophy
   a. Rationalists
   b. Empiricists
   c. Topics in Early Modern Philosophy

III. Kant

IV. 19th and 20th Century Philosophy
   a. Continental I: Phenomenology to Hermeneutics
   b. Continental II: Political Theory and Continental Social Theory
   c. Continental III: From Structuralism to Deconstruction
   d. Marxism
   e. Analytic Philosophy
   f. Topics in Twentieth Century Philosophy

Metaphysics, Epistemology, and Logic
(A minimum of three credit hours required for the M.A.; a minimum of nine credit hours required for the Ph.D.)

1. Seminar in Metaphysics
2. Seminar in Epistemology
3. Seminar in the Philosophy of Natural Science (including Math)
4. Seminar in the Philosophy of Social Science
5. Seminar in Logic
6. Modal Logic
7. Philosophy of Language
8. Philosophy of Mind
9. Topics in Contemporary Philosophy (if topic is in the area of metaphysics, epistemology, and logic)

Value Theory
A minimum of three (3) credit hours required for the M.A.; a minimum of nine (9) credit hours required for the Ph.D.
Only one required value theory class may come from category II)

I. General Topics
   a. Seminar in Ethics
   b. Seminar in Social Philosophy
   c. Seminar in Political Philosophy
   d. Seminar in Aesthetics
   e. Topics in Feminist Philosophy

II. Specific Topics
   a. Seminar in the Philosophy of Religion
   b. Seminar in the Philosophy of Law
   c. Seminar in the Philosophy of History

Concentration in Philosophy and Religion

Once admitted, students must successfully complete at least 30 credit hours including the following requirements:

I. Nine (9) hours of core courses as follows:
   PHI xxxx Historically Oriented Pro-seminar
   PHI/REL 6706 Seminar in the Philosophy of Religion
   REL 6035 Theory and Methods in Religious Studies
II. One (1) course (3 hours) from each of the following five areas:

1. Philosophy and Religion in Antiquity
   - PHP 6005 Plato
   - PHP 6015 Aristotle
   - REL 6327 Seminar in Ancient Literature
   - REL xxxx Formative Christianity
   - REL xxxx Early Jewish Literature
   - REL 6285 Studies in Biblical Archaeology

2. Philosophy and Religion in the Medieval and Modern Periods
   - REL xxxx Augustine’s Confessions
   - REL xxxx Medieval Christian Natural Theology
   - PHH 6938 Seminar in Medieval Philosophy
   - PHP xxxx Descartes
   - PHH xxxx Seminar in Rationalism
   - PHH xxxx Seminar in Empiricism
   - PHP 6415 Kant
   - REL xxxx Modern Jewish Thought
   - REL xxxx Hermeneutics and Epistemology in Modern Religious Thought

3. Ethics, Philosophy, and Religion
   - PHI 6605 Seminar in Ethics
   - PHI 6634 Seminar in Biomedical Ethics
   - PHI 6665 Metaethics
   - PHI xxxx Environmental Ethics
   - REL 6175 Religion, Ethics, and Public Policy
   - REL 6178 Comparative Religious Ethics
   - REL xxxx Buddhist Ethics
   - REL 6182 Faith and Reason in Western Religious Ethics
   - REL xxxx Comparative Philosophy of Religion

4. Philosophy and Religion: Politics, Culture
   - PHH 6265 Continental Phil I: Phenomenology to Hermeneutics
   - PHH 6266 Continental Phil II: Political Theory and Continental Social Theory
   - PHH 6267 Continental Phil III: From Structuralism to Postmodernism
   - PHI 6425 Seminar in the Philosophy of Social Science
   - PHI 6808 Seminar in Aesthetics
   - PHM 5125 Topics in Feminist Philosophy
   - PHM 6105 Seminar in Social Philosophy
   - PHM 6305 Seminar in Political Philosophy
   - REL 6126 Religion in America
   - REL 6143 Religion, Culture, and Society
   - REL 6175 Religion, Ethics, and Public Policy
   - REL 6195 Religion and Modernization
   - REL 6447 Liberation Theology
   - REL xxxx Buddhism and Postmodernism
   - REL xxxx Religious Issues in the Caribbean World

5. World Religions and Non-Western Philosophy
   - PHI xxxx African Philosophy
   - REL xxxx Buddhism
   - REL xxxx Comparative Philosophy of Religion
   - REL xxxx Buddhism and Postmodernism
   - REL xxxx Seminar in Confucianism
   - REL xxxx Medical Philosophy: Chinese, Greek, Indian
   - REL xxxx Comparative Mysticism
• PHM 5125  Topics in Feminist Philosophy
• PHI xxxx  Latin American Thought
• REL 6178  Comparative Religious Ethics
• REL xxxx  Buddhist Ethics
• REL xxxx  Religious Issues in the Caribbean World

NOTE: At least two of these five courses must be taken in the Philosophy Department, and at least two must be taken in the Religious Studies Department.

III. Coursework or an examination demonstrating reading proficiency in one foreign language appropriate to the student’s research, with the approval of the Director of Graduate Studies.

IV. Successful completion of a thesis (including 3 credit hours) OR a comprehensive examination on a required list of readings necessary constructed by the candidate and a committee of examiners.

COURSES
See http://www.ups.usf.edu/sab/sabs.cfm
PHILOSOPHY PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
U.S. Students
Fall: February 15
Spring: October 15
Financial Assistance: January 2

International Students
Fall: February 15
Spring: August 1
Financial Assistance: January 2

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 38.0101
Dept Code: PHI
Program (Major/College): PHI AS

Concentration: Philosophy and Religion

CONTACT INFORMATION

College: Arts and Sciences
Department: Philosophy
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Contact program for information or visit http://www.cas.usf.edu/philosophy/index.html

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
Aesthetics
Analytic Philosophy
Ancient Greek Philosophy
Continental Philosophy
Epistemology
Ethics and Contemporary Moral Philosophy
Feminist Philosophy
Medieval Philosophy
Modern Philosophy
Philosophy of Mind
Philosophy and Religion
Philosophy of Science
Social & Political Philosophy
19th and 20th Century Philosophy
ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university plus the following documents must be submitted:

- statement of purpose
- three (3) letters of recommendation
- A ten (10) page philosophy writing sample
- In order to be competitive, applicants should submit GRE general test scores of 600V, 600Q, and an analytic score of 5.0.

DEGREE PROGRAM REQUIREMENTS

Once admitted, students must successfully complete at least 90 credit hours in accordance with the following requirements:

1. Proseminar I (6 credit hours) and Proseminar II (6 credit hours)
2. Course in Symbolic Logic or Modal Logic (3 credit hours)
3. Coursework in the History of Philosophy from the list appearing in “Areas of Study and Coursework” (12 credit hours)
4. Coursework in Metaphysics, Epistemology, and Logic from the list appearing in “Areas of Study and Coursework” (9 credit hours)
5. Coursework in Value Theory from the list appearing in “Areas of Study and Coursework” (9 credit hours)
6. Coursework or an examination demonstrating reading proficiency in two of the following languages: ancient Greek, Latin, French, German. A substitution for one of these languages may be approved by the Director of Graduate Studies and the Department Chair
7. 12 credit hours in area(s) of doctoral research
8. A comprehensive examination on a required list of readings constructed by the candidate and a committee of examiners
9. A written prospectus for the dissertation and an oral defense of this prospectus
10. A written dissertation and an oral defense of this dissertation

Areas of Study and Coursework
Students will be required to meet the distribution of credit hours described below. While many of the courses could fall into two or more categories, the categories as stated should provide a comprehensive training in philosophy. When there is good reason to approve substitutions for the courses listed, the Director of Graduate Studies has the discretion to approve substitutions on a case-by-case basis. The Department Chair must also approve any substitutions.

History of Philosophy
(A minimum of 6 credit hours required for the M.A., courses must come from two different categories; a minimum of 12 credit hours required for the Ph.D. with at least one from each of the four categories)
I. Ancient and Medieval
   a. Plato
   b. Aristotle
   c. Topics in Ancient/Medieval Philosophy

II. Early Modern Philosophy
   a. Rationalists
   b. Empiricists
   c. Topics in Early Modern Philosophy

III. Kant

IV. 19th and 20th Century Philosophy
   a. Continental I: Phenomenology to Hermeneutics
   b. Continental II: Political Theory and Continental Social Theory
   c. Continental III: From Structuralism to Deconstruction
   d. Marxism
   e. Analytic Philosophy
   f. Topics in Twentieth Century Philosophy

Metaphysics, Epistemology, and Logic
(A minimum of three credit hours required for the M.A.; a minimum of nine credit hours required for the Ph.D.)

I. Seminar in Metaphysics
II. Seminar in Epistemology
III. Seminar in the Philosophy of Natural Science (including Math)
IV. Seminar in the Philosophy of Social Science
V. Seminar in Logic
VI. Modal Logic
VII. Philosophy of Language
VIII. Philosophy of Mind
IX. Topics in Contemporary Philosophy (if topic is in the area of metaphysics, epistemology, and logic)

Value Theory
A minimum of three credit hours required for the M.A.; a minimum of nine credit hours required for the Ph.D. Only one required value theory class may come from category II)

I. General Topics
   a. Seminar in Ethics
   b. Seminar in Social Philosophy
   c. Seminar in Political Philosophy
   d. Seminar in Aesthetics
   e. Topics in Feminist Philosophy

II. Specific Topics
   a. Seminar in the Philosophy of Religion
   b. Seminar in the Philosophy of Law
   c. Seminar in the Philosophy of History
Concentration in Philosophy and Religion

Once admitted, students must successfully complete at least 90 credit hours including the following requirements:

I. Nine (9) hours of core courses as follows:
   - PHI xxxx  Historically Oriented Pro-seminar
   - PHI/REL 6706  Seminar in the Philosophy of Religion
   - REL 6035  Theory and Methods in Religious Studies

II. Two (2) course (6 hours) – one in Philosophy and one in Religious Studies - from each of the following five areas

A. Philosophy and Religion in Antiquity
   - PHP 6005  Plato
   - PHP 6015  Aristotle
   - REL 6327  Seminar in Ancient Literature
   - REL xxxx  Formative Christianity
   - REL xxxx  Early Jewish Literature
   - REL 6285  Studies in Biblical Archaeology

B. Philosophy and Religion in the Medieval and Modern Periods
   - REL xxxx  Augustine’s Confessions
   - REL xxxx  Medieval Christian Natural Theology
   - PHP 6938  Seminar in Medieval Philosophy
   - PHP xxxx  Descartes
   - PHP xxxx  Seminar in Rationalism
   - PHP xxxx  Seminar in Empiricism
   - PHP 6415  Kant
   - REL xxxx  Modern Jewish Thought
   - REL xxxx  Hermeneutics and Epistemology in Modern Religious Thought

C. Ethics, Philosophy, and Religion
   - PHI 6605  Seminar in Ethics
   - PHI 6634  Seminar in Biomedical Ethics
   - PHI 6665  Metaethics
   - PHI xxxx  Environmental Ethics
   - REL 6175  Religion, Ethics, and Public Policy
   - REL 6178  Comparative Religious Ethics
   - REL xxxx  Buddhist Ethics
   - REL 6182  Faith and Reason in Western Religious Ethics
   - REL xxxx  Comparative Philosophy of Religion

D. Philosophy and Religion: Politics, Culture
   - PHH 6265  Continental Phil I: Phenomenology to Hermeneutics
   - PHH 6266  Continental Phil II: Political Theory and Continental Social Theory
   - PHH 6267  Continental Phil III: From Structuralism to Postmodernism
   - PHI 6425  Seminar in the Philosophy of Social Science
   - PHI 6808  Seminar in Aesthetics
   - PHM 5125  Topics in Feminist Philosophy
   - PHM 6105  Seminar in Social Philosophy
   - PHM 6305  Seminar in Political Philosophy
   - REL 6126  Religion in America
   - REL 6143  Religion, Culture, and Society
   - REL 6175  Religion, Ethics, and Public Policy
   - REL 6195  Religion and Modernization
   - REL 6447  Liberation Theology
   - REL xxxx  Buddhism and Postmodernism
   - REL xxxx  Religious Issues in the Caribbean World
E. World Religions and Non-Western Philosophy
   • PHI xxxx African Philosophy
   • REL xxxx Buddhism
   • REL xxxx Comparative Philosophy of Religion
   • REL xxxx Buddhism and Postmodernism
   • REL xxxx Seminar in Confucianism
   • REL xxxx Medical Philosophy: Chinese, Greek, Indian
   • REL xxxx Comparative Mysticism
   • PHM 5125 Topics in Feminist Philosophy
   • PHI xxxx Latin American Thought
   • REL 6178 Comparative Religious Ethics
   • REL xxxx Buddhist Ethics
   • REL xxxx Religious Issues in the Caribbean World

III. Coursework or an examination demonstrating reading proficiency in two foreign languages appropriate to the student’s research, with the approval of the Director of Graduate Studies or the Chair of the student’s Dissertation Committee.

IV. 12 credit hours in area(s) of doctoral research.

V. A comprehensive examination on a required list of readings constructed by the candidate and a committee of examiners.

VI. A written prospectus for the dissertation and an oral defense of the prospectus.

VII. A written dissertation and an oral defense of this dissertation. The dissertation committee will be composed of

   a. Either a Major Professor appointed in both Philosophy and Religious Studies, or co-Major Professors, one of whom is appointed in Philosophy and the other of whom is appointed in Religious Studies; and

   b. At least one other member from Philosophy and one from Religious Studies.

COURSES
   See http://www.ugs.usf.edu/sab/sabs.cfm
PHYSICS PROGRAM

Master of Science (M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 1
- Spring: September 1
- Summer: February 1

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 40.0801
Dept Code: PHY
Program (Major/College): PHY AS

Concentrations:
- Applied Physics (APM)
- Atmospheric Physics (APZ)
- Atomic and Molecular Physics (AMZ)
- Laser Physics (LPZ)
- Materials Physics (MPZ)
- Medical Physics (MEZ)
- Optical Physics (OPZ)
- Semiconductor Physics (SCZ)
- Solid State Physics (SSZ)

CONTACT INFORMATION

College: Arts and Sciences
Department: Physics
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Contact program for information.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university plus

- three letters of recommendation
- a statement of purpose
- GRE General Test scores required, GRE Physics Subject Test scores recommended.
DEGREE PROGRAM REQUIREMENTS

Students admitted to the graduate program in Physics, will consult with the Physics Director of Graduate Studies, who will be the student’s course advisor and monitor the student’s progress. After a decision has been made concerning the student’s academic goals, the duties of graduate advising will be assumed by the major professor and the supervisory committee appointed by the department chairperson. In keeping with the student’s academic goals, the supervisory committee will determine the appropriate course of study and examinations required for graduation for both the thesis and non-thesis options.

Total Minimum Hours: 30

Core Requirements 15 credit hours
Core courses: (all five are required)

a) PHZ 5115 Mathematical Methods I 3
b) PHY 6346 Electricity and Magnetism I 3
c) PHY 6645 Quantum Mechanics I 3
d) PHY 6646 Quantum Mechanics II 3
e) PHY 6536 Statistical Mechanics 3

Thesis option 15 credit hours
Three graduate-level elective classes (nine credit hours), at least two of which must be within physics, plus six credit hours of master’s-thesis or directed research. PHY 6911, and PHY 6971 will not count toward the electives. In addition, the candidate must present and successfully defend a written thesis.

Non-thesis option 15 credit hours
Five graduate-level elective classes (fifteen credit hours), at least two of which must be in physics. PHY 6911, and PHY 6971 will not count toward the electives.

Laboratory or Computing Experience
The student, as part of their elective work or thesis, or through previous course work, should demonstrate either laboratory or computational experience.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
PHYSICS (APPLIED PHYSICS) PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 1
- Spring: September 1
- Summer: February 1

Minimum Total Hours: 57
Program Level: Doctoral
CIP Code: 40.0801
Dept Code: PHY
Program (Major/College): APD AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Physics
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

This program emphasizes the practical, engineering applications of theoretical and fundamental physical concepts. The program encompasses the areas of laser physics, materials physics, computational physics, environmental physics and sensors, biomedical physics and imaging science.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as University plus

- three letters of recommendation
- a statement of purpose
- GRE General Test scores required, GRE Physics Subject Test scores recommended.

DEGREE PROGRAM REQUIREMENTS

The program requires a total of 57 credit hours distributed as follows:

1. Core courses: (all 6 required)

   a) PHZ 5115  Mathematical Methods I  3
   b) PHY 6346  Electricity and Magnetism I  3
   c) PHY 6645  Quantum Mechanics I  3
   d) PHY 6646  Quantum Mechanics II  3
   d) PHY 6536  Statistical Mechanics  3
   f) Industrial Practicum (contact department for details)
2. **Laboratory experience: 0–1 classes:**
   This may be met, for example, by submitting an experimental thesis or dissertation, by taking Modern Laboratory Techniques (PHY 6846L) or Electronics for Research (PHY 5720C), or through sufficiently rigorous relevant experience (e.g., prior courses, industrial employment, etc.).

3. **Computational experience: 0–1 classes**
   This may be met, for example, by submitting a computational thesis or dissertation or by completing Computational Physics I (PHZ 5156C), cross-listed undergraduate Computational Physics (PHZ 5151C), or Measurement and Instrumentation (PHY 6753), or through sufficiently rigorous relevant experience (e.g., prior graduate or undergraduate courses, industrial employment, etc.).

4. **Electives:** at least an additional 4 graduate-level classes, of which at least 2 are in Physics
   Any graduate-level classes (excluding research and seminars), including any of the courses mentioned above, if they are not used to fulfill other requirements. Among the possible elective courses are Biophysics I and II, Materials I and II, Solid-State Physics I and II, Lasers and Applications, Electricity and Magnetism II, Classical Mechanics, Atomic and Molecular Spectra I and II, Physical Applications of Group Theory, Light-wave Devices, and special-topics courses.

5. **Qualifying Process:**
   The student, in consultation with his or her research advisor, will assemble a supervisory committee that consists of the advisor and at least three other faculty members, at least two of whom are in the Physics Department. The Qualifying Process (contact department for details) is based on the student’s GRE Physics Test score, graduate GPA at USF, and research accomplishments and potential. If the supervisory committee judges the qualifying process to be successfully completed, the student may proceed to the candidacy stage.

6. **Admission to candidacy:**
   To become a Ph.D. Candidate, the student must present a dissertation proposal and successfully defend that proposal to the supervisory committee.

7. **Dissertation:**
   The candidate will conduct original and significant research, describe that research and the results in a doctoral dissertation and defend that dissertation in an oral presentation to the supervisory committee. The defense is open to the public and must be scheduled according to the regulations of the Graduate School.

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses in theoretical and applied areas</td>
<td>18</td>
</tr>
<tr>
<td>Lab training</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>12</td>
</tr>
<tr>
<td>Dissertation Research (PHY 7980)</td>
<td>24</td>
</tr>
</tbody>
</table>

An important feature of this program is a course in laboratory measurement and instrumentation and a field-site industrial practicum, which comprise the six hours of lab training.

**COURSES**
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
PHYSICS / ENGINEERING SCIENCE JOINT PROGRAM

Master of Science (M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
See listings for Physics and Engineering Science
Minimum Total Hours: 51
Program Level: Masters
CIP Codes: 40.0801 and 14.0101
Dept Codes: PHY and ESB
Program (Major/College): PHY AS and EGC EN

CONTACT INFORMATION

Colleges: College of Arts and Sciences
College of Engineering
Departments: Physics, Engineering Science
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Contact the program for information.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
See listings for Physics and Engineering Science.

Program Admission Deadlines
See deadlines for Physics and for Engineering Science.

DEGREE PROGRAM REQUIREMENTS

Contact the program for information.

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
PHYSICS / ENGINEERING SCIENCE JOINT PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:  See listings for Physics and Engineering Science
Program Level:  Doctoral
CIP Codes:  40.0801 and 14.0101
Dept Codes:  PHY and ESB
Program (Major/College):  PHY AS and EGC EN

Minimum Total Hours:  90

CONTACT INFORMATION

Colleges:  Arts and Sciences, Engineering
Departments:  Physics, Engineering Science
Contact Information:  www.grad.usf.edu

PROGRAM INFORMATION

Contact program for information

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
See listings for Physics and Engineering Science.

Program Admission Deadlines
See deadlines for Physics and for Engineering Science

DEGREE PROGRAM REQUIREMENTS

Contact the program for information.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
PHYSIOLOGY AND MORPHOLOGY CONCENTRATION

Master of Science (M.S.) Degree in the Biology Program with a Concentration in Physiology and Morphology

DEGREE INFORMATION

<table>
<thead>
<tr>
<th>Program Admission Deadlines:</th>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall:</td>
<td>College: Arts and Sciences</td>
</tr>
<tr>
<td>January 1 for full consideration; however applications are accepted to February 15 (U.S. Applicants) January 1 (International)</td>
<td>Department: Integrated Biology (IB)</td>
</tr>
<tr>
<td>Spring:</td>
<td>Contact Information: <a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
</tr>
<tr>
<td>August 1 (U.S. Applicants) July 1 (International)</td>
<td>Other Resources: <a href="http://www.usf4you.usf.edu">www.usf4you.usf.edu</a></td>
</tr>
</tbody>
</table>

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 26.0101
Dept Code: BIO
Program (Major/College): BIO AS

PROGRAM INFORMATION

For program information refer to the Biology Program (M.S.) listing.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: Physiology and Morphology

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Applying to the Department of Integrative Biology
Students interested in attending graduate school within the IB Department should contact potential major professors to communicate their research ideas and establish that the professor will consider the student’s application. The IB Department requires that all students admitted into the MS program have the approval of a major professor. Applicants should contact faculty conducting research in the student’s area of interest well in advance of the application deadline. For all master’s students, the major professor and at least two additional faculty constitute the student’s supervisory committee, the major professor and at least one of the committee members must be from the Integrative Biology Department. Supervisory committees must be established within two semesters after matriculation. Failure to do so will be cause for dismissal.

The IB Graduate Director, IB Chair, and the College Associate Dean (or designee) must approve the Supervisory Committee. Once a major professor has been assigned and/or a student occupies or utilizes significant space or facilities for research or analogous scholarly activity directly pertinent to the generation of a thesis, the student shall enroll for a minimum of two (2) hours of research credit each semester (other than summer semester), until eligible to enroll in thesis credits.
Program Admission Requirements

- Prospective students must apply to a specific Integrative Biology MS program concentration via the online application process through the USF Graduate School.
- Must have 3.00 GPA last 60 hours of B.S. degree
- Must have 500V, 600Q, 4.5AW on GRE
- All international students are required to submit the TOEFL test. Non-native English speaking graduate students must score a minimum of at least 570 on the paper based test or a minimum total score of 79 on the internet test on the TOEFL and at least 50 on the TSE to be eligible for a teaching assistantship.
- For acceptance into the IB Department, acceptance by a faculty member in IB is MANDATORY. IB encourages applicants to contact faculty via email to indicate an interest in the research being conducted in their laboratory. IB will make every effort to pair potential graduate students with appropriate faculty, however, it is recommended that applicants make direct contact with individual faculty. The Graduate Director can assist the student in selecting a potential Major Professor.
- It is expected that candidates for the M.S. degrees will have completed courses equivalent to those required for the B.S. in Biology at U.S.F.

Materials necessary for a complete application are listed below:

The following items should be submitted in the envelope provided to:

Biology Graduate Office
Attention: (Integrative Biology)
University of South Florida
4202 E. Fowler Ave – SCA110
Tampa, FL 33620-5150

1) **Transcripts.** Two official transcripts in a sealed envelope from each post-secondary institution. Transcripts of work completed at USF will be secured by the Office of Admissions. Thus, applicants only to secure transcripts from other institutions for your application packet.

2) **Letters of Recommendation.** Three letters of recommendation from faculty in sealed envelopes (on their university letterhead) with the envelope seal signed by the recommender. Students shall complete a Student Recommendation Form that can be found on the IB website and submit it to the recommenders.

3) **Essay.** A 1-2 page essay stating your intended field of research and professional goals. Please indicate your specific research interests, in order that we may refer your application to appropriate IB faculty members. In the essay please list 2-3 IB faculty members that you would like to have review your file. Acceptance into the IB graduate program requires the identification of specific faculty who are willing to direct your research.

4) **TA Application.** Applicant must complete the Application for Teaching Assistantship (TA) Form that can be found on the IB website if they wish to be considered for a TA position. Applicants who do not return this form will not be considered for a teaching position. Applicants should attach a resume to the Application for Teaching Assistantship (TA) Form that highlights any previous teaching experience.

5) **Official GRE scores.** This exam must have been taken within the last five years. OFFICIAL test scores must be sent to USF directly from the testing agency. The University of South Florida’s 4-Digit Institution Code is: 5828
DEGREE PROGRAM REQUIREMENTS

The thesis based M.S. degree requires successful completion of the following:

1. structured coursework
2. an oral qualifying exam
3. research thesis
4. defense of thesis examination

The Master’s Degree Requirements should be completed in two to three years. The IB Department requires all graduate work applied toward the completion of degree requirements be completed within a five year period after matriculation. Thesis research should be publishable and students are encouraged to publish their findings. Students must choose a specific concentration in the MS degree that will be completed within either the IB Department. The specific requirements for the Master of Science (M.S.) and the specific concentrations are provided below.

1) Credit hour requirement: a total of 30 semester hour credits beyond the Baccalaureate Degree is required. (including BSC 6910, BSC 6971, BSC 6935, and other structured and unstructured courses)

2) Successful completion of the oral comprehensive qualifying examination. The exam should be taken at the end of the first year, or early in the second year of study. The examination is administered and evaluated by the student’s graduate committee.

3) Submission of a thesis proposal and approval by the major professor, graduate committee and graduate director.

4) A minimum of eight (8) thesis research credit hours (BSC 6971).

5) Seminar requirement: one presentation, excluding the thesis seminar and defense. Students should present posters or oral presentations based on their thesis research at national/regional professional meetings. The student’s graduate committee must approve the presentation.

6) Submission of an acceptable thesis.

7) Presentation of the thesis seminar (BSC 6935) and successful defense of the thesis.

Degree Progress
A student must be registered for an appropriate load (in no case fewer than two [2] graduate hours) in the college for the semester in which all degree requirements are satisfactorily completed. A student who receives grades below “B” in structured courses required by the advisory committee will be dropped from the program. Registration in courses entitled Directed Research, Thesis must be with the approval of the major professor and must be commensurate with each student’s research plan. Students may not register in Thesis: Master’s until a Supervisory Committee has been formed and completed the oral qualifying examination. A student who enrolls in courses entitled Thesis: Master’s but does not submit a thesis will not be certified for graduation.

Core Requirements
MS in Biology Core (20 credit hrs)
BSC 6930 Lectures in Contemporary Biology (1) Repeated three times for 3 credits

Concentration Requirements (17 hrs)
A minimum 17 credit hours of course work selected from the list below for a minimum of 20 credit hours. The graduate student, major professor and graduate committee will establish the specific courses for each graduate student. Other courses, not listed below, can be substituted if approved by the Graduate Committee. Specific course training beyond this point will be determined in each individual case by the special needs of the student as decided by the student’s Graduate Committee. Graduate students concentrating in the area of Physiology and Morphology will select from the following list of courses:
PCB 6456 – Biometry I (4)
PCB 6458 – Biometry II (3)
BSC 6932 – Advances in Ichthyology (1)
ZOO 5463 – Herpetology (4)
ZOO 5456 – Ichthyology (4)
ZOO 54xx – Ornithology (3)
BSC 6932 – Scientific Writing (2)
PCB 5256 – Developmental Mechanisms (3)
BSC 6932 – Physiological Ecology (3)
BSC 6932 – Advances in Physiology (1)
BSC 6932 – Ecoimmunology (3)
BSC 5931 – Comparative Approaches in Evolution (3)
BSC 5931 – Ecological and Functional Morphology (3)
BSC 6932 – Physiology of Movement (3)

Thesis (6971) 8 hours
A minimum of eight thesis research credit hours is required.

Non-Thesis - For students enrolled in the non-thesis program, a 30-hour minimum is required at the 5000-6000 level; 26 hours must be in formally structured courses, 16 hours must be at the 6000 level; 15 structured hours must be offered by IB. A review paper of a topic approved by the supervisory committee is required as well as successful completion of the comprehensive oral qualifying exam after all course work has been completed. For non-thesis masters students, this exam will occur at the end of the program of study.

Comprehensive Oral Qualifying Examination. A comprehensive examination is required for all master’s students. This examination is open to all departmental faculty. Students must take their comprehensive exam within two years of matriculation and the exam is normally taken after the completion of all formal course work. Thesis students must take the examination at least one semester before the thesis is presented. Any graduate work counted toward the requirement for the M.S. degree must be completed within five (5) years after matriculation.

All thesis-based Master’s Degree students must present a seminar to the Department of Biology and must be enrolled in BSC 6935, during the final semester. The seminar should be a concise summary of the research completed to satisfy the requirements for the M.S. Degree. The seminar is open to the general public and must be announced two weeks prior to the presentation. Upon completion of the seminar, the general public will be invited to ask questions. At the discretion of the student’s graduate committee, members of the committee may continue to question the graduate student after the general public has departed the seminar room. Each student is expected to defend his/her research to the unanimous satisfaction of the graduate committee.

COURSES
See: http://www.ugs.usf.edu/sab/sabs.cfm
PHYSIOLOGY AND MORPHOLOGY CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Biology Program with a Concentration in Physiology and Morphology

DEGREE INFORMATION

Program Admission Deadlines:
  Fall: January 1 for full consideration; however applications are accepted to February 15 (U.S. Applicants) January 1 (International)
  Spring: August 1 (U.S. Applicants) July 1 (International)

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 26.0101
Dept Code: BIO
Program (Major/College): BIO AS

CONTACT INFORMATION

College: Arts and Sciences
Departments: Integrated Biology (IB)
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

For program information refer to the Biology Program (Ph.D.) listing.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: Physiology and Morphology

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Applying to the Department of Integrative Biology
Students interested in attending graduate school within the IB Department should contact potential major professors to communicate their research ideas and establish that the professor will consider the student's application. The IB Department requires that all students admitted into the PhD program have the approval of a major professor. Applicants should contact faculty conducting research in the student's area of interest well in advance of the application deadline. All doctoral degree seeking students must form a supervisory committee. The major professor and at least three committee members must be from the IB Department and the committee must be established within two semesters after matriculation. Failure to do so will be cause for dismissal. The IB Graduate Director, IB Chair, and the College Associate Dean (or designee) must approve the Supervisory Committee. Once a major professor has been assigned and/or a student occupies or utilizes significant space or facilities for research or analogous scholarly activity directly pertinent to the generation of a dissertation, the student shall enroll for a minimum of two (2) hours of research credit each semester (other than summer), until eligible to enroll in dissertation credits.
Program Admission Requirements

- Prospective students must apply to a specific Biology PhD program concentration via the online application process through the USF Graduate School.
- Must have 3.00 GPA last 60 hours of B.S. degree.
- Must have 500V, 600Q, 4.5 AW on GRE.
- All international students are required to submit the TOEFL test. Non-native English speaking graduate students must score a minimum of at least 570 on the paper based test or a minimum total score of 79 on the internet based test on the TOEFL and at least 50 on the TSE to be eligible for a teaching assistantship.
- For acceptance into the IB Department, acceptance by a faculty member in IB is MANDATORY. IB encourages applicants to contact faculty via email to indicate an interest in the research being conducted in their laboratory. IB will make every effort to pair potential graduate students with appropriate faculty, however it is recommended that applicants make direct contact with individual faculty. The Graduate Director is available to assist students in identifying a potential Major Professor.
- It is expected that candidates for the PhD degree will have completed courses equivalent to those required for the B.S. in Biology at U.S.F.

DEGREE PROGRAM REQUIREMENTS

The Ph.D. degree requires successful completion of:

1. structured coursework
2. written qualifying exam (dissertation proposal, presentation/seminar, and defense of dissertation/proposal)
3. oral qualifying exam and Admission to Candidacy
4. oral Defense and submission of approved Dissertation

Coursework

A total of 90 credits beyond the baccalaureate must be earned: this includes any graduate credit earned prior to admission to the doctoral program. A minimum of three years of graduate work beyond the Baccalaureate Degree is required. Twelve (12) hours of graduate work completed while a non-degree seeking student at this institution may be transferred to the doctoral program, with approval of the supervisory committee. At least one academic year of residence must be on the campus. A year of residence is enrollment in a minimum of nine (9) semester credits for two consecutive semesters. The direction and immediate supervision of graduate work for doctoral students resides with the major professor and student’s graduate committee. Graduate students are not admitted unless a major professor has agreed to serve as the student’s supervisor. The University imposes limitations on the time period between admission to candidacy and successful completion of degree requirements. University policy for time limits may be viewed in the Degree Requirements Section of this catalog.

The IB Department requires that all graduate work applied toward the completion of degree requirements be completed within a seven year period after matriculation. Doctoral students are encouraged to gain teaching experience in at least two undergraduate courses in the department. Overall degree requirements for the Doctor of Philosophy are as follows:

1. Credit hour requirement: A total of 90 semester hour credits beyond the Baccalaureate degree is required. (including BSC 7910, BSC 7971, BSC 7980 and other structured and unstructured courses)
2. A minimum of twenty-four (24) dissertation research credit hours (BSC 7980) is required.
3. Submission of a doctoral proposal and approval by major professor, graduate committee, and graduate director

4. Successful completion of the dissertation proposal, presentation/seminar and preliminary doctoral examination. There is an oral exam.

5. Presentation requirement: two presentations, excluding the doctoral seminar and defense. Students are expected to present posters or oral presentations based on their dissertation research at national/regional professional meetings. The graduate committee must approve the presentation.

6. Publication requirement: one research paper must be submitted for publication to a refereed scientific journal by the date of the Doctoral Seminar and Defense. The paper may be sole or coauthored, but it must be based on the dissertation research. The student’s supervisory committee must approve the paper prior to submission.

7. Submission of an acceptable dissertation

8. Presentation of the doctoral seminar (BSC 7936) and successful defense of the dissertation.

Degree Progress
A student must be registered for an appropriate load (in no case fewer than two [2] graduate hours) in the college for the semester in which all degree requirements are satisfactorily completed. A student who receives three grades below “B” in structured courses required by the advisory committee will be dropped from the program. Registration in courses entitled Directed Research, or Dissertation must be with the approval of the major professor and must be commensurate with each student’s research plan. Students may not register in Dissertation: Doctoral (BSC 7980) until a Supervisory Committee has been formed and a approved Admission to Candidacy on file with the Graduate School. A student who enrolls in courses entitled Dissertation: Doctoral but does not submit a dissertation will not be certified for graduation.

Core Requirements
PhD in Biology Core (10 credit hrs.)
BSC 6930 Lectures in Contemporary Biology (1) Repeated four times for 4 credits plus 6 additional hours of coursework.

Concentration Requirements
A minimum of two courses selected from the list below for a minimum of 6 credit hours. The graduate student, major professor and graduate committee will establish the specific courses for each graduate student. Other courses, not listed below, can be substituted if approved by the Graduate Committee. Specific course training beyond this point will be determined in each individual case by the special needs of the student as decided by the student’s Graduate Committee.

Graduate students concentrating in the area of Physiology and Morphology will select from the following list of courses:

PCB 6456 – Biometry I (4)
PCB 6458 – Biometry II (3)
BSC 6932 – Advances in Ichthyology (1)
ZOO 5463 – Herpetology (4)
ZOO 5456 – Ichthyology (4)
ZOO 54xx – Ornithology (3)
BSC 6932 – Scientific Writing (2)
PCB 5256 – Developmental Mechanisms (3)
BSC 6932 – Physiological Ecology (3)
BSC 6932 – Advances in Physiology (1)
BSC 6932 – Ecommunology (3)
BSC 5931 – Comparative Approaches in Evolution (3)
BSC 5931 – Ecological and Functional Morphology (3)
BSC 6932 – Physiology of Movement (3)
Qualifying Examination
All students in the IB PhD degree concentration must complete a qualifying examination.

The exam consists of 3 parts:

1. Dissertation proposal
2. Seminar/presentation of proposal
3. Defense of dissertation proposal

Admission to Candidacy
The doctoral student is eligible for admission to candidacy after completing structured course requirements, passing an oral qualifying examination and approval by the supervisory committee. Appropriate forms to document promotion to candidacy must be completed and approved by the graduate school. Following admission to candidacy, a student must enroll in BSC 7980 when engaged in research, data collection, or writing activities relevant to the doctoral dissertation. Advisors should assign the number of credits in this course in accordance with policy and appropriate to the demands made on faculty, staff, and University facilities, but in no event will the total number of earned dissertation credits be fewer than 16. Students not admitted to candidacy are not eligible to enroll in BSC 7980.

Additional Requirements
Any graduate work counted toward fulfilling the requirements for the Ph.D. degree must be completed within seven (7) years after matriculation.

Doctoral Seminar and Defense.
All doctoral students must present a public seminar to the IB Department and must be enrolled in BSC 7980, during the semester in which the seminar is given. The seminar should be a concise summary of the research completed to satisfy the requirements for the Ph.D. The seminar is open to the general public and must be announced two weeks prior to the presentation. Upon completion of the seminar, the general public will be invited to ask questions. At the discretion of the student’s graduate committee, members of the committee may continue to question the graduate student after the general public has departed the seminar room. Each student is expected to defend his/her research to the unanimous satisfaction of the graduate committee. Following the defense, students will make any editorial modifications to the dissertation as recommended by the supervisory committee and submit the dissertation to the Graduate School.

COURSES
See: http://www.ugs.usf.edu/sab/sabs.cfm
POLITICAL SCIENCE PROGRAM

Master of Arts (M.A.) Degree

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DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 45.1001
Dept Code: GIA
Program (Major/College): POL AS

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PROGRAM INFORMATION

The graduate program leading to the M.A. in Political Science is designed to offer advanced general instruction in Political Science. It prepares its graduates for positions of responsibility in the public and private sectors, as well as in research, teaching, and study at the doctoral level. For instructional purposes, the graduate curriculum in Political Science has been divided into three fields:

- Field 1: Comparative Government and Politics (courses with a CPO prefix)
- Field 2: International Relations (courses with an INR prefix)
- Field 3: Public Policy (courses with a PUP, POS, POT, URP, or PAD prefix)

Students select one field as a major area and another field as a minor area. They must consult with the graduate coordinator to map out a course plan.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

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ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university plus:

- three (3) letters of recommendation
- and a 500 word statement of purpose
- must have an undergraduate background in political science.
DEGREE PROGRAM REQUIREMENTS

A minimum of 36 hours of graduate level course work distributed according to the following five categories:

1. **Required Research Methods Sequence** (6 hours):
   - POS 6735 (3)
   - POS 6736 (3)

2. **Major field** (15 hours):
   - Core course in major area
   - Either
     - CPO 6091, INR 6007, or PUP 6007
     - And 4 additional courses.

3. **Minor field** (9 hours):
   - Core course in major area
   - Either
     - CPO 6091, INR 6007, or PUP 6007
     - And 2 additional courses.

4. **Thesis** (Minimum of 6 hours):
   - POS 6971

To earn an MA in Political Science students are required to complete a thesis that provides new insight into a relevant topic in political science or international studies. As students approach the thesis stage, they need to compose a thesis committee consisting of a major professor, who must be a member of the Department of Government and International Affairs, and two readers. One of the two readers can be from another department, but that person must first be approved by the program director. The thesis committee must approve proposals before students embark on their projects. Students must prepare a written thesis and defend their work in a formal oral presentation before their committee.

**Comprehensive Examination**

After finishing course work each student must pass a written comprehensive examination covering his or her major and minor fields. These examinations must be taken before completion of the thesis and thesis defense. Students cannot enroll in thesis hours before the semester they have signed up to take their exams.

**Course Listings**

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Students may take a maximum of 3 hours of Independent Study (POS 6909) and 3 hours maximum of Directed Research (POS 6919)

**COURSES**

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
PSYCHOLOGY PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Students are not admitted to a terminal M.A. degree in Psychology. See deadlines for Ph.D. in Psychology

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 42.0101
Dept Code: PSY
Program (Major/College): PSY AS

Concentrations:
Clinical Psychology (PSC)
Cognition, Neuroscience, and Social Psychology (PCN)
Industrial-Organizational Psychology (PSI)

CONTACT INFORMATION

College: Arts and Sciences
Department: Psychology
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The graduate faculty of the Psychology Department is divided into three broad concentrations: Clinical, Cognition, Neuroscience, & Social Psychology, and Industrial-Organizational. Each of these areas offer Ph.D. level training in the following areas of special expertise.


Cognition, Neuroscience, & Social Psychology – Behavioral Neuroscience, Cognition, Judgment and Decision Making, Development, Memory, Perception, Social. In addition, with faculty in Communication Sciences and Disorders, the Cognitive and Neural Sciences faculty offer a specialization in Speech/Language/Hearing Sciences.


Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools; Clinical Program: American Psychological Association, and member of the Academy of Psychological Clinical Science.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Not a terminal MA. See Ph.D. Requirements.
DEGREE PROGRAM REQUIREMENTS

The Department of Psychology does not admit students seeking a terminal M.A. degree in Psychology. Additional information is available in the Graduate Student Handbook: http://psychology.usf.edu/policies/students.aspx

Total Minimum Hours: 30 (B- or better for each required course)

Core requirements:
PSY 6971 Master’s Thesis (6)
PSY 6217 Regression and Analysis of Variance (4)
Two of the following:
   EXP 6608 Cognitive Psychology (3)
   SOP 6266 Social Psychology (3)
   PSB 6056 Physiological Psychology (3)

The remainder of the required hours are fulfilled by satisfying concentration requirements described below.

Concentration Requirements:

Clinical Psychology

Graduate Breadth Requirements: Students must take one course in each of the three Breadth areas: Biological Aspects of Behavior, Social Aspects of Behavior, and Cognitive/Affective Aspects of Behavior.

Biological aspects of behavior
   PSB 6056—Physiological Psychology (3)
   CLP 6937—Human Neuropsychology (3)
   CLP 7379—Health Psychology (3)
   EXP 7099—Psychopharmacology (3)
   EDF 6938—Pediatric Psychopharmacology (3)
   EXP 7099—Psychophysiology (3)
   EXP 7099—Survey of Neuroscience (3)

Social aspects of behavior
   SOP 6266—Social (3)
   PSY 6266—Psychology of Gender (3)
   EXP 7099—Stress and Coping (3)
   INP 6935—Organizational Psychology (3)
   EXP 7099—Social and Personality Development (3)
   EXP 7099—Social Psychology of Interpersonal Relationships (3)

Cognitive and affective aspects of behavior
   EXP 6608—Cognitive (3)
   EXP 7099—Memory (3)
   EXP 7099—Forgetting (3)
   CLP 7379—Emotion and its Disorders (3)
   CLP 7379—Mood Disorders (3)
   EXP 7099—Image and Mind (3)
   EXP 7099—Cognitive Neuroscience of Perception (3)

Graduate Research Methods Requirements: All clinical students are required to take a total of four graduate research methods courses.

   PSY 6217 ANOVA/Regression plus lab (4 credits)
   SOP 7265 Multivariate Statistics or equivalent outside of department
   PSY 6217/SOP 6266 Clinical Psychometrics or equivalent outside of department
Plus ONE additional research methods course (3 credits). Students may choose from the list of approved courses below. Students wishing to fulfill this methods requirement with any course not listed below must submit a request to the clinical faculty.

- SOP 6266--Factor Analysis (3)
- SOP 6266--Structural Equation Modeling (3)
- SOP 6266--Meta-Analysis (3)
- EXP 7099--Developmental Research Methods (3)
- CLP 6937--Grant Writing (3)
- SOP 6266--Item Response Theory (3)
- SOP 6266--Hierarchical Linear Modeling (3)

### Clinical Core Requirements

Clinical Didactic Courses: Students need to take at least one “fundamental” course in each of the three areas (assessment, interventions, and psychopathology).
- CLP 6438 Clinical Assessment
- CLP 7188 Clinical Interventions
- CLP 6166 Psychopathology and its Development

### Specialized Topic Course Requirements:

Students must also complete four courses in specialization topics related to psychological assessment, intervention, and psychopathology/dysfunction. The following courses would fulfill this requirement:

- CLP 6937--Neuropsychological Assessment (3)
- CLP 6937--Prevention science (3)
- CLP 7379--Emotion and its disorders (3)
- CLP 7379--Mood disorders (3)
- CLP 7379--Eating disorders (3)
- CLP 7379—Addictions (3)
- CLP 7379--Health Psychology (3)
- CLP 7379--New Paradigms in Psychology (3)
- CLP 7379--Cultural Diversity (3)
- CLP 7379--Advanced Psychological Intervention Seminar/Specialized Treatments (3)
- PSY 6946--Advanced Psychological Assessment Seminar (3)
- CLP 7379--Clinical Science Seminar (3)

### Clinical Practicum

- PSY 6946 (1 hour per semester beginning the second year of graduate training)

### Other course requirements:

- Skills for Psychological Intervention (PSY 6946--2 credits)
- Introduction to Clinical Psychology/Cultural Diversity Pro-Seminar (CLP 6937): 3 credits
- Ethics and Professional Problems (PSY 7931--2 credits)

### Research Requirements:

- PSY 6971 Thesis (6)
Concentration Requirements:

Cognition, Neurosciences, & Social Psychology:

Prior to the Comprehensive Exam
Total Minimum Hours: 30

Core Requirements (16 hours)
At least a B- in a minimum of two of the following:
Cognitive Psychology (3), Physiological Psychology (3), or Social Psychology (3). Students may be allowed to substitute an advanced three-hour course for one or both of these courses with the written permission of the CNS Area Director. (6 total hours)
Two basic methods courses with grades of at least B-: Analysis of Variance (3) and Regression (4) and ANOVA (4)/Research Design and Analysis (3). (8 total hours)
Introduction to CNS (2 semesters, 1 hour each)

Concentration Requirements (6 hours)
* A minimum of two seminars or advanced courses in cognition, neuroscience, or social psychology from CNS faculty or, with written permission of the Area Director, related disciplines with grades of at least B-.

Total Thesis Hours Required (6 hours)
Master’s thesis research (minimum 6 PSY6971 Thesis: Master’s or PSY6917 Directed Research credits—it is recommended that students take thesis credits in order to retain the option of applying for a master’s degree).

Concentration Requirements:

Industrial-Organizational Psychology

I/O Concentration Requirements (30 hours)

EXP 6608 Cognitive Psychology (3)
SOP 6669 Personality (3)
SOP 6058 Social Psychology (3)
INP 6935 Personnel Psychology (3)
INP 6935 Organizational Psychology (3)
PSY 7931 Ethics and Professional Problems (3)
INP 7097 Research in I/O Psychology (2 semesters, 1 hour each)
SOP 6669 Psychometrics (3)
PSY 6217 ANOVA - Multiple Regression (4)
SOP 6669 Organizational Research Methods (3)
PSY6971 Thesis: Master’s (6)

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
PSYCHOLOGY PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall:
Clinical: December 1
Cognition, Neuroscience & Social Psychology: January 2
Industrial-Organizational: January 2

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 42.0101
Dept Code: PSY
Program (Major/College): PSY AS

Concentrations:
Clinical Psychology (PSC)
Cognition, Neuroscience, & Social Psychology (PCN)
Industrial-Organizational Psychology (PSI)

CONTACT INFORMATION

College: Arts and Sciences
Department: Psychology
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The Psychology Department graduate program is divided into three broad concentrations: Clinical, Cognition, Neuroscience, & Social Psychology, and Industrial-Organizational. Each of these areas offer Ph.D. level training in the following areas of special expertise:

Clinical –

Cognition, Neuroscience, & Social Psychology
Behavioral Neuroscience, Cognition, Judgment and Decision Making, Development, Memory, Perception, Social. In addition, with faculty in Communication Sciences and Disorders, the CNS faculty offer a specialization in Speech/Language/Hearing Sciences.

Industrial-Organizational

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools; Clinical Program: American Psychological Association, and member of the Academy of Psychological Clinical Science.
ADMISSION INFORMATION

Must meet University requirements (application, fee, transcripts, GRE/TOEFL scores, see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
University requirements plus

- a personal goals statement
- three letters of recommendation
- strong preference for GRE V and Q scores each at the 50th percentile or better
- upper division undergraduate GPA 3.4 or better.

DEGREE PROGRAM REQUIREMENTS

After completion of all M.A. requirements in Psychology or its equivalent with a minimum GPA of 3.0, the following requirements must be met:

Total Minimum Hours: 12

- Successful completion of the Ph.D. Comprehensive Qualifying Exam (CL, CNS, IO) or major area paper (CL, CNS).
- PSY 7980 Doctoral Dissertation (12)
- Successful Defense of the Doctoral Dissertation

Additional information is available in the Graduate Student Handbook: [http://psychology.usf.edu/policies/students.aspx](http://psychology.usf.edu/policies/students.aspx)

Concentration Requirements:

Clinical Psychology

Graduate Breadth Requirements: Students must take one course in each of the three Breadth areas: Biological Aspects of Behavior, Social Aspects of Behavior, and Cognitive/Affective Aspects of Behavior.

**Biological aspects of behavior**

- PSB 6056—Physiological Psychology (3)
- CLP 6937—Human Neuropsychology (3)
- CLP 7379—Health Psychology (3)
- EXP 7099—Psychopharmacology (3)
- EDF 6938—Pediatric Psychopharmacology (3)
- EXP 7099—Psychophysiology (3)
- EXP 7099—Survey of Neuroscience (3)

**Social aspects of behavior**

- SOP 6266—Social (3)
- PSY 6266—Psychology of Gender (3)
- EXP 7099—Stress and Coping (3)
- INP 6935—Organizational Psychology (3)
- EXP 7099—Social and Personality Development (3)
- EXP 7099—Social Psychology of Interpersonal Relationships (3)

**Cognitive and affective aspects of behavior**

- EXP 6608—Cognitive (3)
- EXP 7099—Memory (3)
EXP 7099—Forgetting (3)
CLP 7379—Emotion and its Disorders (3)
CLP 7379—Mood Disorders (3)
EXP 7099—Image and Mind (3)
EXP 7099—Cognitive Neuroscience of Perception (3)

Graduate Research Methods Requirements: All clinical students are required to take a total of four graduate research methods courses.

PSY 6217 ANOVA/Regression plus lab (4 credits)
SOP 7265 Multivariate Statistics or equivalent outside of department
PSY 6217/SOP 6266 Clinical Psychometrics or equivalent outside of department

Plus ONE additional research methods course (3 credits). Students may choose from the list of approved courses below. Students wishing to fulfill this methods requirement with any course not listed below must submit a request to the clinical faculty:

SOP 6266—Factor Analysis (3)
SOP 6266—Structural Equation Modeling (3)
SOP 6266—Meta-Analysis (3)
EXP 7099—Developmental Research Methods (3)
CLP 6937—Grant Writing (3)
SOP 6266—Item Response Theory (3)
SOP 6266—Hierarchical Linear Modeling (3)

Clinical Core Requirements

Clinical Didactic Courses: Students need to take at least one “fundamental” course in each of the three areas (assessment, interventions, and psychopathology).

CLP 6438 Clinical Assessment
CLP 7188 Clinical Interventions 4
CLP 6166 Psychopathology and its Development 3

Specialized Topic Course Requirements:
Students must also complete four courses in specialization topics related to psychological assessment, intervention, and psychopathology/dysfunction. The following courses would fulfill this requirement:

CLP 6937—Neuropsychological Assessment (3)
CLP 6937—Prevention science (3)
CLP 7379—Emotion and its disorders (3)
CLP 7379—Mood disorders (3)
CLP 7379—Eating disorders (3)
CLP 7379—Addictions (3)
CLP 7379—Health Psychology (3)
CLP 7379—New Paradigms in Psychology (3)
CLP 7379—Cultural Diversity (3)
CLP 7379—Advanced Psychological Intervention Seminar/Specialized Treatments (3)
PSY 6946—Advanced Psychological Assessment Seminar (3)
CLP 7379—Clinical Science Seminar (3)

Clinical Practicum

PSY 6946 (1 hour per semester beginning the second year of graduate training)

Other course requirements:
Skills for Psychological Intervention (PSY 6946—2 credits)
Introduction to Clinical Psychology/Cultural Diversity Pro-Seminar (CLP 6937): 3 credits
Ethics and Professional Problems (PSY 7931–2 credits)

Research Requirements:
PSY 6971 Thesis (6)
PSY 7980 Dissertation (12)

Internship Requirements:
Each student in the Clinical Program is required to complete a one-year, full-time, APA-approved (or CPA approved) internship in a training facility approved by the Program.

Comps/Major area paper

Concentration Requirements:

Cognition, Neurosciences, & Social Psychology:
Prior to the Comprehensive Exam
Total Minimum Hours: 30

Core Requirements (16 hours)
At least a B- in a minimum of two of the following:
Cognitive Psychology (3), Physiological Psychology (3), or Social Psychology (3). Students may be allowed to substitute an advanced three-hour course for one or both of these courses with the written permission of the CNS Area Director. (6 total hours)
Two basic methods courses with grades of at least B-: Analysis of Variance (3) and Regression (4) and ANOVA (4)/Research Design and Analysis (3). (8 total hours)
Introduction to CNS (2 semesters, 1 hour each)

Concentration Requirements (6 hours)
A minimum of two seminars or advanced courses in cognition, neuroscience, or social psychology from CNS faculty or, with written permission of the Area Director, related disciplines with grades of at least B-.

Total Thesis Hours Required (6 hours)
Master’s thesis research (minimum 6 PSY6971 Thesis: Master’s or PSY6917 Directed Research credits –it is recommended that students take thesis credits in order to retain the option of applying for a master’s degree).

Doctoral Requirements (in addition to the requirements for the M.A. degree) (33 more hours)

Elective requirements (21 hours)
Completion of at least four additional seminars or advanced courses that are relevant to the student’s area of research specialization. Of the six courses that are the required minimum for the doctorate (2 before admission to doctoral candidacy), at least three must be offered in the Psychology Department. Students may substitute the third core course (Cognitive, Physiological, or Social) for one of the six with the written permission of the Area Director. At least two of the courses must be outside the student’s concentration and will serve as the minor. These fulfill the minor requirement.

* Completion of at least three additional advanced methods courses. These fulfill the tools of research requirement, which must be approved by the Graduate Program Committee. Methods courses are those that deal primarily with research design, data collection techniques, quantitative or qualitative analytic methods, or instrumentation.

Comprehensive/Qualifying Exam Requirements
Students must pass a comprehensive examination or major area paper.

* Admission to doctoral candidacy.
* PSY 7980 Dissertation (minimum of 12 dissertation credits).
Concentration Requirements:

**Industrial-Organizational Psychology**
- EXP 6608 Cognitive Psychology (3)
- SOP 6669 Personality (3)
- SOP 6058 Social Psychology (3)
- INP 6935 Personnel Psychology (3)
- INP 6935 Organizational Psychology (3)
- PSY 7931 Ethics and Professional Problems (3)
- INP 7097 Research in I/O Psychology (2 semesters, 1 hour each)
- SOP 6669 Psychometrics (3)
- PSY 6217 ANOVA - Multiple Regression (4)
- SOP 6669 Organizational Research Methods (3)

PSY 6971 Thesis: Master’s (6)

(In addition to the requirements for the M.A. degree)
- 2 additional elective graduate methods courses (3 hours each)
- 7 additional elective graduate courses (3 hours each)
- 2 graduate course minor (3 hours each) – work done outside of students concentration
- 6 month part-time, 3 month full-time internship

PSY 7980 Dissertation: Doctoral (12)

**COURSES**
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
PUBLIC ADMINISTRATION PROGRAM

Master of Public Administration (M.P.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 42
Program Level: Masters
CIP Code: 44.0401
Dept Code: GIA
Program (Major/College): PAD AS

Also offered as:
A Doctoral Minor in Public Administration

CONTACT INFORMATION

College: Arts and Sciences
Department: Government and International Affairs
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The Public Administration Program offers a multi-disciplinary course of study leading to the Master of Public Administration (M.P.A.). The M.P.A. degree is designed primarily to prepare students for successful leadership roles and management careers in the public (i.e., governmental and quasi-governmental organizations) and non-profit sectors. Students enrolled in the M.P.A. Program pursue careers in local, state, or federal agencies of government, non-profit organizations, and special service districts. Additionally the M.P.A. degree prepares individuals for further academic study leading to a doctorate in Public Administration, a Ph.D. in Public Policy and Administration, as well as a variety of other disciplines. Those employed in public management positions may wish to pursue the M.P.A. in order to broaden educational backgrounds to prepare for increased job responsibilities, or to change career paths. Such in-service students currently make up the majority of the M.P.A. student body.

The Public Administration Program also offers courses of study leading to a Graduate Certificate in Public Management (G.C.P.M.) and Graduate Certificate in Nonprofit Management (G.C.N.M.). These programs are designed for individuals who wish to acquire knowledge of public and nonprofit management theory and practices, but who do not find it necessary or feasible to pursue the M.P.A. degree. The M.P.A. Program also serves pre-service students who have recently completed a bachelor’s degree, who wish to gain entry to a professional career track. Students admitted to the M.P.A. are not eligible for the Graduate Certificate in Public Management.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools; the National Association of Schools of Public Affairs and Administration (NASPAA).

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Admission decisions to the M.P.A. Program are based on an overall assessment of the applicant’s potential for successfully completing the M.P.A. degree. General admission criteria include scores obtained on the Graduate Record Examination (GRE), performance as an undergraduate.
Specific criteria are:

- Completion of a Bachelor's degree from a regionally accredited university.

- The University of South Florida requires a 3.00 (B) grade point average (calculated using grades earned for all coursework completed during junior and senior years of undergraduate study), and GRE scores of 500V, 500Q, 4.0AW or better preferred. This provision applies to all applicants, including those who have already completed courses in the MPA curriculum. Regardless of GPA, those who score 850 or below on the GRE, are required to retake the exam.

- Two letters of recommendation, one from a faculty member familiar with the applicant's academic performance and potential. Should the applicant be unable to provide the letter from a former professor, with the director's approval, letters from other sources will be accepted.

- The submission of a one-page career statement detailing the applicant's career goals and aspirations, including ways in which the applicant believes the M.P.A. degree can help to facilitate the stated goals.

- Approval by the M.P.A. Admissions Committee and, if deemed necessary, an admissions interview. Applicants lacking the background necessary for graduate study in the M.P.A. Program may be asked to take additional undergraduate courses prior to admission.

- The GRE is a required element for MPA admission. However, at the discretion of the MPA program, it may be waived under certain conditions. Examples where GRE waivers may be waived include:
  
  - Applicant already possesses a graduate degree from a regionally accredited university
  - A written application by the student and a current resume indicating senior level experience
  - Five years or more of practical, professional experience at a senior level (to be determined upon review of documentation by the admissions committee)
  - Documentation of past experience through letters of recommendation from senior management, and
  - Completion of the GCPM or GCNM certificates with a grade point average of 3.5/4.0 or better and no certificate course grade less than a B-.
  - Approval of the Public Administration Admission Committee; decision to be made on a case by case basis. (Additional documentation and a personal interview may be required)

**DEGREE PROGRAM REQUIREMENTS**

The M.P.A. required curriculum is a minimum of 42 hours. All students must complete a core of nine courses (27 hours) and either four or six courses (15 hours) in elective coursework selected in consultation with an advisor. Students with appropriately documented administrative work experience commensurate with their career goals may not be required to complete an internship in a public or nonprofit agency. However, students without practical administrative experience in a public or nonprofit sector must complete an internship (6 hours).

The number of elective courses required depends upon the exit option selected by the student. The Problem Report exit option requires four (4) elective courses, as well as registration for PAD 6909, Problem Report for three (3) hours. The Capstone course exit option requires students take 6 elective courses, one of which will be PAD 6056, The Practice of Public Management. At least 24 credit hours must be taken at the 6000 level. A minimum of 27 credit hours must be taken in formal, regularly scheduled classes. Courses at the 5000 level are accepted for credit toward the M.P.A. degree.
Core Requirements (27 hrs)
PAD 5700 Research Methods in Public Administration
PAD 6060 Public Administration Theory and Practice
PAD 6041 Ethics and Public Service
PAD 6227 Public Budgeting
PAD 6307 Policy Analysis, Implementation, and Program Evaluation
PAD 6417 Human Resources Management
PAD 6703 Quantitative Aids for Public Managers
PAD 6710 Public Information Management
PAD 6275 Political Economy for Public Managers

Electives (12-15 credit hours)
Each student must take 12-15 elective credit hours depending on the exit option chosen. Students should refer to the MPA website http://www.cas.usf.edu/pad/index.html http://gia.usf.edu/pad for courses approved by the Program. Students must maintain an overall GPA of 3.00 or better in all of their coursework during the program.

Internship (6 credit hours)
Pre-service students are required to complete a supervised internship (PAD 6946. Internship in Public Administration) in a governmental or non-profit organization. Internships provide students the opportunity to gain valuable experience in the public sector, thereby enhancing the academic course of study. Internship credits must be earned while the student is in residence and before the student has completed regular course work requirements. Exceptions to this rule can only be made by the M.P.A. Director and must be made in advance. In-service students who have appropriate managerial/work experience commensurate with their career goals, may not be required to complete an internship. After consultation with the student, the M.P.A. Director may choose to waive the internship requirement.

Exit Requirements
Capstone Course (3 credit hours)
PAD 6056, The Practice of Public Management, is a final step before graduation. To be eligible to enroll in the capstone course, students must have completed a minimum of 39 credit hours (13 courses). This course is designed to provide the student with an opportunity to apply the knowledge and skills acquired during studies in the Public Administration Program. This course is designed to challenge students to test managerial proficiency, develop capabilities in synthesizing and integrating conceptual frameworks, and to relate these skills to real managerial situations. A minimum grade of “B-” must be earned in the Capstone Course.

-OR-

PAD 6909 Problem Report (3 credit hours)
The Problem Report focuses on a significant administrative/policy problem confronting a public or nonprofit manager or agency. Upon completion, the student should have demonstrated the ability to identify a problem and a set of solutions, collect and analyze relevant data, and present and defend a recommended course of action intended to solve the problem. The student is expected to present and be prepared to defend these findings (both verbally and in writing) to a committee. This option is available only after the student has obtained faculty advisors and submitted a written proposal that complies with Problem Report requirements. Copies of Problem Report, the proposal guidelines, and expectations can be obtained from the M.P.A. Program or M.P.A. website. Students selecting this exit option must complete four elective courses. This requirement is to be completed near the end of the student’s course of study. In-service students must select a problem for study that lies outside their immediate work-related responsibilities. The Problem Report Committee shall consist of at least two M.P.A. faculty and, where appropriate, and with permission of the examination committee, a qualified person outside the M.P.A. Program. A minimum grade of “B” must be achieved on the Problem Report. Students must register for PAD 6909 Problem Report, (3 credit hours).

Doctoral Minor in Public Administration
Students enrolled in doctoral level courses of study in other programs (e.g., Anthropology, Psychology, Education) can, with their program’s approval, complete a doctoral minor in Public Administration. Students should complete a minimum of four graduate public administration courses to be determined with the advice and consent of an M.P.A. faculty member or M.P.A. Director.

COURSES
See http://www.ups.usf.edu/sab/sabs.cfm
RELIGIOUS STUDIES PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
Minimum Total Hours: 36
Program Level: Masters
CIP Code: 38.0201
Dept Code: REL
Program (Major/College): REL AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Religious Studies
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The M.A. degree in Religious Studies provides opportunities for students with backgrounds in the scholarly study of religion to expand their knowledge of the social, cultural, and historical contexts of religion, to develop a greater in-depth knowledge of particular religious traditions, and to acquire proficiency with a wide variety of pertinent methodologies and theoretical perspectives. This degree serves the needs of students interested in teaching or counseling. It will be of special value to those interested in pursuing a doctorate in religious studies.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university plus:

- Three (3) letters of recommendation, and
- A writing sample
- A personal statement (1-3 pages, double-space)
- GRE required, but no minimum specified
DEGREE PROGRAM REQUIREMENTS

Students select a major professor and develop a plan for completing a minimum of 36 credit hours. The thesis track requires six (6) of these credits be devoted to a thesis project. The non-thesis track requires that all 36 credits come from graduate seminars. The plan of study is subject to approval of the Graduate Committee. A majority of these courses will be in religious studies, although the plan may include approved courses in other departments. No more than 6 credit hours of 4000-level courses may be counted for graduate credit. There is no uniform language requirement; however, language skills may be required for particular areas of study. All students are required to demonstrate expertise in at least two religious traditions, as well as satisfactorily complete a written, comprehensive examination wherein they demonstrate competence in:

1) pertinent theoretical issues and research methodologies;
2) the analysis and interpretation of related texts, artifacts, and activities; and
3) social and historical contexts of the religions studied.

The Department of Religious Studies “Graduate Student Handbook” should be consulted for additional information about basic requirements and specific procedures.

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<th>Total Minimum hours</th>
<th>36 hours</th>
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<td>Core Requirements (15 hrs)</td>
<td></td>
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<tr>
<td>REL 6035 Theory and Methods in Religious Studies</td>
<td>3</td>
</tr>
<tr>
<td>Six (6) hours of courses in Western Religions (Christianity, Judaism, or Islam)</td>
<td>6</td>
</tr>
<tr>
<td>Six (6) hours of courses in Eastern Religions (Hinduism, Buddhism, Daoism, or Confucianism)</td>
<td>6</td>
</tr>
</tbody>
</table>

Electives (15-21 hrs)
No more than six (6) hours may come from independent study/directed reading.
No more than six (6) hours may come from classes below 6000-level.
No more than six (6) hours may come from departments other than Religious Studies.

Thesis/Non-Thesis

Thesis
The student wishing to receive an M.A. degree with a thesis is required to take a minimum of 36 credits. They will complete the core requirements and fifteen (15) hours of elective credits. They will also complete a minimum of six (6) credits of REL 6971. The student will pass a comprehensive exam prior to defending the master’s thesis. They will research, write, and successfully defend the master’s thesis before a committee of three professors.

Non-Thesis
The student wishing to receive an M.A. degree without a thesis is required to take a minimum of 36 credits. The will complete the core requirements and twenty-one (21) hours of elective credits. The student will also pass a comprehensive exam.

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
## RELIGIOUS STUDIES / EDUCATION PROGRAM

**Dual Degree Program**  
Master of Arts (M.A.) Degree

### DEGREE INFORMATION

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<th>Program Admission Deadlines:</th>
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<td>Closed for new admissions</td>
<td>Colleges:</td>
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<td></td>
<td>Arts and Sciences and Education</td>
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<tr>
<td>Minimum Total Hours:</td>
<td>Departments:</td>
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<tr>
<td>n/a</td>
<td>Religious Studies</td>
</tr>
<tr>
<td>Program Level:</td>
<td>Contact Information:</td>
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<tr>
<td>Masters</td>
<td><a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
</tr>
<tr>
<td>CIP Codes:</td>
<td>Other Resources:</td>
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<tr>
<td>38.0201</td>
<td><a href="http://www.usf4you.usf.edu">www.usf4you.usf.edu</a></td>
</tr>
<tr>
<td>Dept Code:</td>
<td></td>
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<tr>
<td>REL</td>
<td></td>
</tr>
<tr>
<td>Program (Major/College):</td>
<td></td>
</tr>
<tr>
<td>REL AS</td>
<td></td>
</tr>
</tbody>
</table>

Currently, no students are being admitted to this program
SECOND LANGUAGE ACQUISITION AND INSTRUCTIONAL TECHNOLOGY (SLAIT) PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:

Fall: February 15
Fall admission only

International applicants not in the U.S.:
Fall: February 1
Fall admission only

International applicants currently in the U.S.:
Fall: February 15
Fall Admission Only

Minimum Total Hours: 74
Program Level: Doctoral
CIP Code: 13.401
Dept Code: EDI
Program (Major/College): DLT EJ

Cross-listed under the College of Arts and Sciences, the College of Education, and the Interdisciplinary Programs Sections.

CONTACT INFORMATION

Colleges: Education and Arts and Sciences
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

This is an interdisciplinary program between the College of Education and the College of Arts and Sciences and combines the expertise of both faculties to provide a curriculum in pedagogy, world language education, second language acquisition, sociolinguistics, socio-cultural theory, instructional technology, statistics, and research design. The goal of the program is to prepare students for careers in academia.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
Second Language Acquisition, Instructional Technology, Foreign Language Education, ESOL, Distance Learning.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Admission Requirements
In addition to the general admission requirements under the advanced graduate education programs, applicants must:

• Submit a “Statement of Purpose” relating their career goals specifically to this doctoral program and describing their experience with instructional technology and language teaching;
• Supply a current curriculum vitae;
• Provide 3 letters of recommendation from professors or other individuals who can attest to the applicant’s experience and background;
• Offer evidence of research experience or scholarly promise;

http://www.cas.usf.edu/
Second Language Acquisition and Instructional Technology  
(SLAIT) (Ph.D.)

- Meet with the graduate faculty for a personal interview;
- Take a two-hour background assessment to assist faculty in planning the prospective student’s program of studies.

**Most students** admitted to this program will:

- Possess a Master’s degree (or equivalent academic level) from a regionally accredited institution or its international equivalent;
- present a minimum GPA of 3.50 (or international equivalent);
- score at or above 500 on the GRE verbal reasoning and 4 on the GRE analytical writing section;

Submit a TOEFL score of minimum 550 (paper-based), 213 (computer-based), or 80 (internet-based), if applicable.

Program evaluates each applicant’s dossier based on a composite of variables and appropriateness of fit with the program

**For international applicants:** Applicants whose native language is not English or who have not earned a degree in the United States must also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 550 on the paper-based test, are required. Applications submitted with TOEFL scores that do not meet the minimum requirements will be denied. The TOEFL requirement may be waived if the applicant meets one of the following conditions:

- The applicant’s native language is English, or
- Has scored 500 or higher on the GRE Verbal Test, or
- Has earned a college degree at a U.S. institution of higher learning, or
- Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or

In addition to these university requirements, applicants to the College of Education must provide the following:
- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest (e.g. Graduate Record Exam scores, etc.).

**DEGREE PROGRAM REQUIREMENTS**

**Prerequisites:**
(The prerequisite courses are based on the needs of the individual student; they are not counted towards the 44 hours of required core course work. No minimum or maximum number of prerequisites must be taken. Their selection quantity is reviewed by the student in consultation with his/her SLA/IT supervisory committee chair prior to the student’s first semester of study, and is begun during the first year. Please refer to the Program of Study at [http://www.coedu.usf.edu/slait/programStudy.htm](http://www.coedu.usf.edu/slait/programStudy.htm)

**Prerequisite Coursework**
- LIN 5700 Applied Linguistics (3)
- FLE 6665 Current Trends in Foreign Language Education (3)
- LIN 6720 Second Language Acquisition (3)
- LIN 6081 Introduction to Graduate Studies (3)
- TSL 5371 Methods of TESOL (3)
- TSL 5372 ESOL Curriculum and Instruction (3)
- EME 5403 Computers in Education (3)
- TSL 5471 Language Testing (3)
- FLE 4314/5313 or FLE 4333/5331 Methods of Teaching Foreign Languages (3)
Program of Study: 74 hours minimum
44 hours of core requirements (with suggested credit hours for different sub-categories);
12 credit hours of electives;
18 hours of dissertation work.
See each section (immediately below) for specific information and course suggestions.

Core Requirements: 44 hours

Statistics/Measurement/Research Design: 14 hours minimum
EDF 6407 Statistical Analysis of Education I (4)
EDF 7408 Statistical Analysis of Education II (4)
and either
EDF 7477 Qualitative Research I (4) and
EDF 7478 Qualitative Research II (4)
or
EDF 7410 Design for Systematic Studies in Education (4) and
EEX 7743 Philosophies of Inquiry (3) or
EDG 7931 Introduction to Qualitative Research (3)

Second Language Acquisition: 18 hours
SLA 7776 Research Lab 1 (2)
SLA 7776 Research Lab 2 (2)
SLA 7776 Research Lab 3 (1-4)
SLA 7776 Research Lab 4 (1-4)
SLA 7776 Research Lab 5 (1-2)
SLA 7776 Research Lab 6 (1-2)
SLA 7938 Advanced Seminar in SLA (3)
SLA 7939 Advanced Seminar in FLE (3)
EDG 7931 Sociocultural Theory in SLA (3)

Instructional Technology: 12 hours
EME 6936 ACET Interactive Media (3)
FLE 6932 Applications of Technology to SLA/FLE (3)
EDF 6284 Problems in Instructional Design (3) (prerequisite for EME 6613)
EME 7938 Computer-Augmented Instructional Paradigms (3) (Survey of research in instructional technology)

Electives: 12 hours
Courses (not inclusive of these) are selected with the approval of the student’s program advisor or committee. Elective coursework must be taken at the graduate and/or advanced graduate level. Select a total of 12 hours of electives from the following three groups (A, B, and C).

Group A: Second Language Acquisition (6-9 hours are required from Group A)
LIN 6018 Topics in Theoretical Linguistics (3)
LIN 6117 History of Linguistic Thought (3)
LIN 6601 Sociolinguistics (3)
LIN 6748 Contrastive Analysis (3)
LIN 6931 Writing Processes in SLA (3)
EDG 6931 Heritage Language Teaching & Learning (3)
LIN 6932 Discourse Analysis (3)
FLE 6932 Dual Language in Education (3)
EDG 7931 Advanced Seminar in Heritage Language Teaching & Learning (3)

Group B: Technology
EME 6613 Development of Technology-Based Instruction (3)
EME 6930 PLE: FLASH (3)
EME 6930 PLE: Web Programming I (3)
EME 6936 ACET: Digital Video (3)
EME 6936 ACET: Instructional Graphics (3)
EME 6936 ACET: Current Trends in Ed Technology (3)
EME 6936 ACET: Web Design (3)
EME 7939 Research Methods in Technology-Based Education (3) (EDF 7410 as prerequisite)
EME 7458 Research in Distance Learning (3)
EME 7631 Research in Technology Project Management (3)
EME 6936 Internet in Education (3)

Group C: Education, Anthropology, Psychology
EXP 6643 Psychology of Language (3)
EDF 7145 Educational Psychology (3)
EDF 6883 Issues in Multicultural Education (4)
EDF 7586 Classics in Educational Research (4)
EDF 7934 Seminar in Social Foundations of Education (4)
EDF 7692 Issues in Curriculum and Instruction (3)
EDG 7931 Practicum in Teacher Education (3)
EDG 7931 Curriculum Frameworks in Teacher Education (3)
ANG 6766 Seminar in Anthropological Linguistics (3)

Dissertation: 18 hours
SLA 7980 – SLAIT Dissertation (18)

Qualifying Examination:
All students will be required to pass a written qualifying examination (QE). The QE integrates work in the specialization, cognate, and foundations areas, in this case, in Second Language Acquisition, Instructional Technology, and Teacher Education.

Residency requirements:
Students must enroll in a minimum of 9 hours for each of two semesters in a 12 month period to fulfill the residency requirements. Students in the Ph.D. program should be engaged in no more than half-time employment during the residency period.

Please be advised that program and/or course requirements are subject to change, per state legislative mandates of the Florida Department of Education program approval standards and accreditation criteria.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
SOCIOMETRY PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 45.1101
Dept Code: SOC
Program (Major/College): SOC AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Sociology
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The Sociology M.A. program provides a foundation in a broad range of sociological theories and research methods and an opportunity for pursuing specialized interests in elective Sociology courses, courses in other departments, and thesis research. Many of our M.A. recipients continue in sociology Ph.D. programs. Others teach in secondary schools and junior colleges, are employed in mental health services and research, in human resources management, and government organizations, or work as research consultants and market analysts.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
Community and Identity Studies, Cultural Sociology, Social Psychology, Emotions, Family, Sex and Gender, Race/Ethnic/Minority Relations, Religion, Deviant Behavior/Social Disorganization, Science and Technology, Qualitative Methodology

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university plus:

- three letters of recommendation
- personal statement
- a writing sample that demonstrates strong scholarly research
- GRE required 500v, 500q
- Official Transcripts
- TOEFL. Applicants whose first language is not English must also submit a score of at least 600 on the Tests of English as a Foreign Language (TOEFL).
DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours: 36

The Sociology Department requires a thesis for the capstone course. Six of the required 36 hours are taken as thesis hours.

Core Requirements (9 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYA 6126</td>
<td>Contemporary Sociological Theory</td>
<td>(3)</td>
</tr>
<tr>
<td>SYA 6305</td>
<td>Methods of Research</td>
<td>(3)</td>
</tr>
<tr>
<td>SYA 6405</td>
<td>Sociological Statistics</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Electives (21 hours)

The 21 hours of electives must include at least 12 hours scheduled graduate courses in Sociology, no more than six (6) hours of SYA 6971 (Thesis). With approval of the Graduate Director, a student may transfer up to six (6) hours of credit from another university or up to 12 hours of credit taken as a non-degree seeking student at USF. With Graduate Director’s approval, up to nine (9) hours of elective credit may be taken in a department other than Sociology.

Thesis (SYA 6971) 6 credit hours

COURSES

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
SOCIOLGY PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: January 15

Minimum Total Hours: 60 (post masters)
Program Level: Doctoral
CIP Code: 45.1101
Dept Code: SOC
Program (Major/College): SOC AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Sociology
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Note: meeting these minimum requirements does not guarantee admission into the program.
Applicants must have:

- **GRE.** A minimum score of 600 verbal and 500 quantitative
- **GPA.** A cumulative GPA of 3.25 at the undergraduate level and 3.50 at the Master’s level from an accredited institution of higher learning.
- **TOEFL.** Applicants whose first language is not English must also submit a score of at least 600 on the Tests of English as a Foreign Language (TOEFL).
- **Letters of Recommendation.** At least three (3) letters of recommendation from academic faculty with Ph.D.s in the field speaking to the applicant’s academic and research capabilities and potential.
- **Statement.** A statement detailing the reasons for seeking a Ph.D. in Sociology at USF; future career goals, summary of scholarly and extra-curricular activities; research efforts; and past preparation for upper-level graduate work.
- **Writing Sample.** A demonstration of evidence of scholarly/research preparation via a sample of written research to date.

DEGREE PROGRAM REQUIREMENTS

The **60 credit hour minimum** post-M.A. program is as follows:

Pre-Requisites/M.A. Requirement
Research Methods
Statistics
Sociological Theory
Elective Courses (21 hours)
Thesis (6 hours)

36 hours
Interdisciplinary Core
Interdisciplinary Professional Seminar (required as a first course for all students)
Capstone Interdisciplinary Seminar (Required as a final course for all students)

Disciplinary Requirements
SYA 7515 Advanced Research Methods and Study Design (3)
SYA 7019 Advanced Sociological Theory
Specialty Research Methods course (3) – A research methods course in any discipline chosen in consultation with advisor

Electives within Sociology
Sociology graduate courses chosen in consultation with advisor

Note: Students entering the Ph.D. program who have not completed Teaching Sociology (SYG 6936) will also be required to complete that course prior to full-charge classroom teaching (this is not a condition of employment, but will be a factor in TA duty assignment)

Interdisciplinary Electives
Chosen in consultation with faculty advisor

Dissertation Proposal Preparation

Dissertation

Total Credit Hours (beyond the M.A.)

Other Requirements

Comprehensive Exam
*Note: Students also are required to complete a comprehensive exam upon completion of the 9-credit core requirements. The exam will measure theoretical and methodological knowledge, preparation for further coursework, and ability to successfully defend a dissertation proposal. Dissertation proposal defense will occur after the remaining elective requirements and dissertation proposal preparation requirements have been completed.

Graduate Requirements
A minimum cumulative graduate GPA at USF of 3.00 and successful completion and defense of a Ph.D. comprehensive exam, dissertation proposal, and dissertation.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
SPANISH PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 16.0905
Dept Code: WLE
Program (Major/College): SPA AS

CONTACT INFORMATION

College: Arts and Sciences
Department: World Languages
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu
www.cas.usf.edu/languages/

PROGRAM INFORMATION

The Hispanic/Latino area of the Department of World Languages supports a broad, intellectually driven approach to teaching language, culture and literature in higher education. Languages and cultures are complex, multifunctional phenomena that link an individual to other individuals, to communities and to national cultures. The graduate program in Spanish offers students academic and practical training in the languages, literatures and cultures of the Spanish-speaking communities of Spain, Latin America, and the United States. Students who receive a Masters of Arts in Spanish from the Department of World Language Education at USF become well-educated communicators with deep translingual and transcultural competence. Thus, they are exceptionally prepared to either continue studies leading to the Ph.D., or find careers in related fields such as the teaching profession, translation, government and civil service and agencies, legal and paralegal services, or foreign and domestic business enterprises.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Must have:

- undergraduate 3.0 GPA
- 2-3 letters of recommendation,
- A two-page statement of purposes in Spanish.
- an oral interview in Spanish (can be done by phone)
- If degree is from abroad student must pass TOFEL. A score of 213 for computer based test, or 79 for internet based test, or 550 for paper based test.
- Approval from the program director in case of degree from another discipline
DEGREE PROGRAM REQUIREMENTS
Total Minimum Hours 36

Core Requirements

FOW 6085, Bibliography (1 credit)

Students must have taken, or plan to take, an Introduction to Hispanic Linguistics course, or equivalent, prior to or during their MA studies in Spanish. This requirement must be fulfilled before taking the MA comprehensive exam.

Courses - 35 hours
Select courses from
- SPW 5135 Colonial Spanish American Literature 3
- SPW 5355 Spanish American Drama and Poetry 3
- SPW 5387 Spanish American Prose 3
- SPW 5388 Golden Age Poetry and Drama 3
- SPW 5405 Medieval Literature 3
- SPW 5465 19th Century Literature 3
- SPW 5605 Cervantes 3
- SPW 5725 Generation of 1898 3
- SPW 5726 Vanguard Literature 1918 1936 3
- SPW 5934 Selected Topics 3
- SPW 6427 Golden Age Novel 3
- SPW 6485 Post Civil War Literature 3
- SPW 6775 Caribbean Literature 3
- SPW 6910 Directed Research 1-19

Or - Students may also take 27-30 semester hours in Spanish and 6-9 semester hours in another related area, as approved by Graduate Director. Two 4000 level courses (BA) can count towards the degree provided the student is enrolled in the MA program or had a prior arrangement with the Graduate Director.

Areas of Emphasis
Select one of the areas of emphasis below:

**Emphasis Option A: Languages and Cultures**
Refer to core requirements above.
Non-thesis option.

**Emphasis Option B: Literatures and Cultures**
In addition to core requirements above:

Proficiency in a second foreign language. The second foreign language requirement can be satisfied by having completed the second semester of a language other than Spanish within the last two years, or by taking a placement test and placing into level III of that language, or by taking the second semester of another language other than Spanish while pursuing the Spanish Masters. In special cases, a translation and brief oral interview can be arranged in place of these requirements.

**Thesis. (6 hours)**
SPW 6971
Students are strongly encouraged to undertake MA thesis work. If a student selects this option, he/she must complete 27 semester hours of SPN/SPW 5000-6000 level courses (or 21-24 semesters hours in Spanish and 6-9 semester hours in another related area, as approved by the Graduate Director.) Two 4000 level courses (BA) can count towards the degree, provided the student is enrolled in the MA program, or had a prior arrangement with the Graduate Director. In addition, 6 semester hours (SPW 6971), towards completion of MA thesis, must be completed.
Comprehensive Exam
Successful completion of a Comprehensive Exam at the end of coursework (typically in the second semester of the second year). This exam is based on the MA reading list.

OTHER INFORMATION

Three Summer M.A. program: Students may also receive the M.A. in Spanish by enrolling in courses at the Tampa campus during the summer, whenever courses are available. Generally the degree is received after three summers of study. Contact the Graduate Program Director for details.

Special Summer Programs Overseas
The Division of Languages and Linguistics, in cooperation with the International Affairs Center, offers several summer study programs overseas. These include study in Argentina, Spain, and Costa Rica. For complete details, contact the program advisors or the International Affairs Center.

To obtain a copy of the Masters of Arts in Spanish handbook, please visit the World Language Department in CPR 419.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
STATISTICS PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
For Teaching Assistants, International and Financial Aid Applicants:

  Fall: February 1
  Spring: August 1

For Domestic applicants (US citizens or permanent residents) without financial aid or Teaching Assistant applicants:

  Fall: February 15
  Spring: October 1

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 27.0501
Dept Code: MTH
Program (Major/College): STC AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Mathematics and Statistics
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: n/a

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
To be admitted for graduate study in the Statistics program, students

- Should have at least 3.50 GPA average in courses taken during the last two years of their undergraduate or graduate studies.
- Must have a BA or BS in one of the following areas: Statistics, Mathematics, Physical Sciences, Engineering, or Business.
- Students who expect to specialize in graduate work in statistics are advised to study as much mathematics as possible during their undergraduate years. Some interdisciplinary experience in natural sciences, engineering, economics, or psychology is also highly desirable. Students who do not have at least three semesters of successful course work in calculus will be required to complete additional courses in mathematics before being admitted. Prior course work in advanced calculus and in statistics is preferable, but not mandatory.
- GRE is required with a quantitative score of at least 650 required for admission. Students whose native language is not English must score at least 550 (paper based) or at least 79 (internet based) on the Test of English as a Foreign Language (TOEFL) exam. However, for students who have a BA or higher degree from an accredited U.S. institution that requirement is waived.
International students whose native language is not English must submit satisfactory scores on the Test of Spoken English (TSE) or the SPEAK test to be eligible for teaching assignments. Students who score 50 or above on the Speak Test are allowed to teach in the classroom. Those who score 45 to 50 are allowed to teach on the condition that they enroll concurrently in ENS 4502. (See the Graduate Catalog for more details.)

The University of South Florida and the Department of Mathematics and Statistics encourage applications from qualified individuals from all cultural, racial, religious, ethnic groups, gender, sex orientation, disabilities in accordance with all university regulations.

OTHER INFORMATION

The most recent supplementary document for the Statistics graduate students. “THE HANDBOOKS FOR BOTH M.A. AND Ph.D. GRADUATE STUDENTS IN STATISTICS/PROBABILITY PROGRAMS” at the Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA, dated October 2007 (revised October 2009) are available at the following websites:

http://math.usf.edu/grad/stats/ma/
http://math.usf.edu/grad.stats.phd/

Prospective graduate students in Statistics are welcome to read the information on the Handbooks. In addition, a HARD COPY OF THESE HANDBOOKS will be provided to graduate students at the time of their FIRST time academic advisement process.

DEGREE PROGRAM REQUIREMENTS

Total Minimum Program Hours: 30 hours

Core Requirements

Sequences:

STa 5166 – Statistical Methods I - (3 credits)
STa 6167 – Statistical Methods II – (3 credits)
STa 5326 – Mathematical Statistics I – (3 credits)
Mat 6932 – Mathematical Statistics II – (3 credits)
STa 6208 – Linear Statistical Models – (3 credits)

Electives:

STa 5446 – Probability Theory I – (3 credits)
STa 6447 – Probability Theory II – (3 credits)
STa 5526 – Nonparametric Statistics – (3 credits)
STa 6746 – Multivariate Analysis – (3 credits)
STa 6876 – Time Series Analysis – (3 credits)
Mat 6932 – Survival Analysis – (3 credits)
Mat 6932 – Stochastic Processes – (3 credits)
Mat 6932 – Stochastic Dynamic Modeling – (3 credits)
STa 6877 – Time Series Analysis II – (3 credits)
Mat 6932 – Nonlinear Time Series Analysis – (3 credits)
Mat 6908 – Independent Study – (as indicated by professor)
Mat 6932 – Special Topics Courses - (3 credits)

A candidate must complete at least 30 credit hours for a MA. At least twenty hours must be in formal regularly scheduled course work, ten of which must be at the 6000 level. Up to 6 credit hours at the 4000 level or graduate
courses from other departments at USF can be counted upon approval. A student who elects the thesis option must register for a minimum of 6 credit hours in MAT 6971, only 6 hours of which may be applied toward the 30-hour degree requirement. The student must maintain a 3.00 average to remain a candidate for a degree. Failure to do this will result in being placed on probation. A letter from the major professor is required to remove a student from probation after he/she regains a 3.00 average.

Department may waive some of the course requirements for those students who have taken equivalent course work at another institution.

**Comprehensive Examination**

Graduation from the masters program also requires the completion of both written and oral examinations. For the non-thesis option, there is no language or thesis requirement for the M.A. degree.

**Written Comprehensive Examination** The written exam is designed to cover material presented during the first year of graduate work. The purpose of the exam is to make sure the students have reviewed their first year's work before starting the second year and to point out weaknesses which should be overcome during their second year in order to graduate. Students are expected to pass this exam in at most two attempts. More specifically, the material for the above examination will be taken primarily from the following sequences of courses Semester 1: STA 5166 Statistical Methods I and STA 5326 Mathematical Statistics I; Semester 2: STA 6167 Statistical Methods II and MAT 6326 Mathematical Statistics II, and STA 6208 Linear Statistical Models.

**A. Non-thesis Option**

At least 30 hours of Statistics and Mathematics graduate courses. Specifically:

(A) The Statistics and Mathematics graduate courses of 5000 level or higher, offered regularly for statistics and mathematics majors from our department are counted towards the 30 hours requirement.

(B) Up to 6 hours of 4000 level or higher courses, taken from our department or other departments at USF, may be counted towards the 30 hours requirement with approval by the Statistics Faculty.

(C) Completing at least 3 hours of Research Project work which is counted towards the 30 credit hours requirement

- Taking the course MAT 5912 – Research Project (Non-Thesis Option) and presenting a paper exemplifying the creative component of the degree program. This may be, but is not restricted to, a literature review, a report of independent research, design and (or) analysis of a sample survey or experiment, a report on consulting with research workers outside the department, or a report on the construction of a computer program requiring statistical numerical analysis.
- Taking the sequences Statistical Methods and Mathematical Statistics with at least a “B” average for each sequence.
- Passing one Qualifying Exam on Statistical Methods or Math Statistics at master's level.

Under this degree option, the student is required to present a paper representing the creative component of the degree program. This may be, but is not restricted to, a literature review, a report of independent research, the design and (or) analysis of a sample survey or experiment, a report on consulting with research workers outside the department, or a report on the construction of a computer program requiring statistical numerical analysis.

**B. Thesis Option**

**Student’s Graduate Committee**

Students working toward a thesis degree will have the benefit of a committee of members of the graduate faculty, appointed by the program director/departmental chairperson and approved by the Dean of Graduate Studies. The
committee will approve the course of study for the student and plan for research, supervise the research and any comprehensive qualifying exams, and read and approve the thesis for content and format.

- At least 30 hours of stat and math graduate courses (see above for details).
- Taking the sequences Statistics Methods and Mathematical Statistics with at least a “B” average for each sequence.
- At least 6 hours in MAT 6971, Master’s Thesis, only 6 hours of which are counted in the 30 hours requirement.
- Oral Defense of the Thesis
- Final Submission of Approved Thesis.

Under this degree option 6 research credits may be applied to the total of 30 required on the student’s program of study. These reductions are made to allow the student sufficient time to complete a formal master’s thesis. A master’s thesis is a scholarly composition that demonstrates the ability of the author to do independent and creative work. It explores in some depth a problem or issue related to the major field of study. Although considerable variations in format and style are acceptable, precise expression, logical construction, and meticulous attention to detail are essential. A thesis in statistics should deal with some aspect of statistical methodology or theory, or the development of statistical models for a class of problems related to a scientific question. While most theses will include a case study or example that involves scientific data, the analysis of a particular data set does not, alone, constitute the level of scholarly accomplishment required for a thesis.

**COURSES**
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
URBAN AND REGIONAL PLANNING PROGRAM

Master of Urban and Regional Planning (M.U.R.P.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 48
Program Level: Masters
CIP Code: 04.0301
Dept Code: GPY
Program (Major/College): URP A5

CONTACT INFORMATION

College: Arts and Sciences
Department: Geography
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The goal of the program is to train students to become planning practitioners able to work in a variety of public and private sector environments in a number of different fields. Graduates of this program will go on to play a vital role addressing the planning and public policy challenges in our region and beyond.

Effective planners must possess a wide range of cross-cutting skills; our program is therefore designed to foster strong analytical abilities; technological facility; effective communication skills; and deep knowledge in specialization areas. Our specialization areas build on the existing strengths of faculty across campus, and allow us to offer a program that will be distinctive within the state and around the country. Emphasis on environmental planning, building on faculty expertise in Geography, Geology and Environmental Sciences and Policy, gives our program a unique edge. Similarly, our courses in applied quantitative and geospatial analysis draw on the technological skills and high-quality facilities of the Geography Department; we will also have a strong program in Growth Management and Transportation Planning based on our links to the Center for Urban Transportation Research and the Florida Center for Community Design and Research. Graduates of the Masters program in Urban and Regional Planning will be able to:

1. Engage in policy-related research relevant to urban and regional issues
2. Assume positions of leadership public, private and nonprofit organizations engaged in planning, land use, and public policy
3. Further public discourse on the problems confronting cities and regions
4. Utilize communications and technical skills to become successful at all levels of the planning profession.

The program offers an MA with both a thesis and a non-thesis option. The Thesis Option Requires 42 credit hours of graduate level coursework with a six credit hour thesis. The Non-thesis option requires 48 credit hours of coursework followed by a Comprehensive Examination. Coursework includes a six course (18 credit) core; completion of a 3-6 internship credits (with students already working the field exempt upon approval). Students must maintain a 3.0 average.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.
Program Admission Requirements
Students must

- have taken the GRE exam with a minimum score of at least 500 V and 500 Q, taken within the last five years preceding the application and the score submitted regardless of the GPA.
- have a bachelor’s degree with a 3.00 undergraduate GPA
- two letters of recommendation (one from a faculty member)
- a “letter of intent” explaining your background and interest in Urban and Regional Planning sent directly to the Geography Department; all other admissions material is submitted to the Graduate School.

DEGREE PROGRAM REQUIREMENTS

The program required 48 hours and will be based on satisfactory (3.0) completion of the following:

Core Requirement (18) hours:
- URP 6100 Planning, Theory, and History
- URP 6xxx Politics and Policymaking for Planning
- URP 6xxx Political Economy and the Urban and Regional Environment
- URP 6766 Research Methods for Urban and Regional Planning
- URP 6xxx Statistical Methods for Planners
- URP 6xxx Spatial Methods for Planners
- URP 6115 Planning, Policy, and Politics

Electives: (18 hours)
Eighteen (18) hours of credit approved by the major adviser

Anthropology
- ANG 5488 Quantitative Methods in Applied Anthropology (space permitting with Dept. permission)
- ANG 6447 Selected Topics in urban Anthropology (as appropriate, depending on topic)
- ANG 6448 Regional Problems in Urban Anthropology
- ANG 6465 regional Problems in Medical Anthropology
- ANG 6766 Research Methods in Applied Anthropology (space permitting, with Dept permission)

Architecture and Community Design
- ARC 6397 Introduction to Urban Design
- ARC 5931 The City

Economics
- ECO 6505 Public Finance
- ECO 6525 Public Sector Economics
- ECP 6614 Urban Economics
- ECP 6624 Regional Economics

Geography
- GEO 5177 GIS for non-majors
- GEO 6166 Perspectives on Environmental Thought
- GEO 6159 GIS Seminar
- GEO 6178 Environmental Applications of GIS
- GEO 6345 Technological Hazards and Environmental Justice
- GEO 6605 Contemporary Urban Issues
- GEO 6704 Adv transportation Geography

Public Administration/Political Science
- POS 5159 Urban Policy Analysis
- PAD 5333 Concepts and Issues in Public Planning
- PAD 5807 Urban and Local Government Administration
- PAD 6336 Community Development Programs and Strategies
PAD 6338 Urban Land Use and Policy Administration
PAD 6339 Housing and Public Policy
PAD 6355 Urban Growth Management

Public Health
PHC 6120 Community Partnership Advocacy

Sociology
SYA 6475 Community Analysis
SYA 6440 SPSS and Social Research
SYA 6315 Qualitative Research
SYA 6655 Evaluation Research

Transportation Engineering
TTE 5501 Transportation Planning and Economics
TTE 6651 Public Transportation
TTE 665 Transportation and Land Use
CGN 6933 Land Use and Transportation

Comps
Students in the thesis option complete the thesis in lieu of a comprehensive exam. Students in the non-thesis option complete a comprehensive exam.

Non-thesis
Non-thesis students will complete an additional 24-30 credits, drawn from the electives listed above.

Thesis (3 to 6 hours)
Thesis students will complete an additional 18-24 credits, drawn from the electives listed above.

Internship (3-6 hours)
In addition to the required courses listed above, all students will complete between 3-6 credits of internship (Students currently working in the field of planning can be exempt from this requirement with approval of the Program Director)

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
WOMEN’S STUDIES PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
  Fall: February 15 (February 15 for assistantship applications)
  Spring: October 15
  Summer: February 15

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 05.0207
Dept Code: WST
Program (Major/College): WST AS

CONTACT INFORMATION

College: Arts and Sciences
Department: Women’s and Gender Studies
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The M.A. in Women’s Studies requires the completion of 36 credit hours. The program has two tracks: a research option that requires a thesis and an applied option that requires an internship and subsequent analytic report on the internship experience. This format was designed to serve the needs of a variety of different categories of students desiring a graduate degree in Women’s Studies. The thesis option is recommended for students who intend eventually to pursue a doctoral degree. Either the thesis or the internship option is recommended for students who seek the M.A. as a terminal degree.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: n/a

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as general university requirements with the exception those applicants without training in Women’s Studies are admitted on a conditional basis. In addition,

- GRE scores are required
- applicants must submit a personal narrative statement of purpose
- a writing sample (appropriate examples include a term paper or research paper)
- three letters of recommendation.
DEGREE PROGRAM REQUIREMENTS

The M.A. in Women’s Studies requires the completion of thirty-six credit hours. These hours are divided as follows:

Core Requirements (12 credit hours)

- WST 6001 Feminist Research and Methodology
- WST 6560 Advanced Feminist Theory
- WST 6003 Feminist Scholarship and Pedagogy
- WST 6936 Selected Topics in Women’s Studies

Electives (18 credit hrs) to be selected from

- Courses offered by the Department of Women’s and Gender Studies, up to six cr. hrs. of which may be 4000-level courses;
- Graduate courses on women and issues surrounding the intersection of gender/class/race/sexuality offered by other departments;

No more than one other graduate-level course approved by the graduate director.

Comprehensive Examinations
Each student must pass a written comprehensive examination. It is expected that a student will successfully complete the comprehensive examination prior to beginning thesis or internship work.

Thesis
Six credit hours of thesis research, typically over two semesters, during which the student will develop a thesis proposal approved by the student’s thesis committee and complete a Master’s thesis on the approved topic. The completed Thesis must be defended at an oral defense.

Non-thesis
Six credit hours of internship experience, typically over two semesters, in a human service agency or other organization which focuses on women. The internship will be approved by the student’s internship committee. The student will be required to write a narrative report describing the internship in detail and analyzing the experience in terms of appropriate theoretical frameworks. The completed narrative and experience must be defended as an oral defense.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
Section 13

College of Behavioral and Community Sciences

http://www.bcs.usf.edu/
Changes to Note

The follow curricular changes for the College of Behavioral and Community Sciences were approved by the USF-Tampa Graduate Council on the date noted.

Graduate Certificate Changes
Positive Behavior Support Remove pre-req; add elective option 4/19/10

New Courses
RCS 6456 Counseling Approaches for Substance Abusers 2/1/10

Course Changes
GEY 6402 Statistical & Qualitative Methods in Aging Research Change title to Statistical Methods in Aging Research 5/3/10
RCS 5450 Substance Abuse I Change title to Fundamentals of Substance Abuse Counseling 2/1/10
RCS 6459 Substance Abuse 2 Change title to Professional Skills for Addictions Counselors 2/1/10

Other Revisions (GC approval not needed)
Aging Studies (Ph.D.) – minor edits to copy
Audiology (Post-Bacc) (M.S.) and (Ph.D.) – minor edits to course titles, numbers
Criminal Justice Administration (M.A.) – change admission deadline
Gerontology (M.A.) – correct course title
Rehab and Mental Health Counseling (MA) – minor edits to courses and copy format
Social Work (Ph.D.) – minor edits to course numbers
University of South Florida
College of Behavioral and Community Sciences
4202 E Fowler Ave MHC 1110
Tampa, FL 33620

Web address:  http://www.bcs.usf.edu
Email:  See departmental listings
Phone:  813-974-2365
Fax:  813-974-4699

College Dean:  Junius Gonzales
Associate Dean:  Catherine Batsche
Assistant Dean:  Cynthia Stark
Graduate Coordinator:  Catherine Batsche

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools (SACS). Contact the College for other accreditation information.

Mission Statement:
The College of Behavioral and Community Sciences prepares students, scholars, human service providers, policy makers, and other professionals to improve the quality of life, health, and safety of diverse populations and to promote positive change in individuals, groups, communities, organizations and systems. Through multidisciplinary teaching and research, service, and engagement with community partners, the College focuses on the rigorous development, dissemination/implementation, and analysis of innovative solutions to the complex challenges that affect the behavior and well-being of individuals, families, populations, and the communities in which we live.

The College offers eight programs at the master’s level and seven programs at the doctoral level. Master’s programs are available in Applied Behavior Analysis, Audiology (Post-Baccalaureate), Aural Rehabilitation, Criminal Justice Administration, Criminology, Gerontology, Rehabilitation & Mental Health Counseling, Social Work, and Speech-Language Pathology. Doctoral programs are offered in Aging Studies, Audiology, Communication Sciences & Disorders, Criminology, and Social Work. Dual degrees are offered in Social Work/Public Health at the master’s level and Audiology/Communication Sciences and Disorders at the doctoral level.

The College is also home to the Louis de la Parte Florida Mental Health Institute whose mission is to improve the lives of individuals with mental, addictive, and developmental disorders. Graduate studies in Behavioral Health are offered in collaboration with the College of Public Health at both the master’s and doctoral levels and in collaboration with the College of Education at the doctoral level. The Institute houses a Research Library, a Behavioral Health Research Data Center, and a Survey Research Unit that can support the research theses and dissertations of graduate students.

The following are degree programs offered across programs and/or colleges.

Degrees Offered:
   Master of Arts (M.A.)
   Master of Science (M.S.)
   Master of Social Work (M.S.W.)
   Doctor of Audiology (Au.D.)
   Doctor of Philosophy (Ph.D.)
Degree Programs:

Master of Arts (M.A.)
Applied Behavior Analysis (ABY)
Criminal Justice Administration (CJA)
Criminology (CCJ)
Gerontology (GEY)
Rehabilitation and Mental Health Counseling (REH)

Master of Science - M.S.
Audiology (AUD)
Aural (Re) Habilitation (Post Bac) (ARH)
Speech-Language Pathology (SPP)

Master of Social Work - M.S.W.
Social Work – (SOK)

Doctor of Audiology -Au.D.
Audiology (AYD)

Doctor of Philosophy -Ph.D.
Aging Studies (AGE)
Communication Sciences and Disorders (CSD)
Criminology (CCJ)
Social Work (SOK)

Dual Degree Programs:

Master of Social Work - M.S.W.
Social Work/Public Health Dual Degree MSW/MPH (Maternal and Child Health)(Behavioral Health)

Doctor of Audiology -Au.D.
Audiology/Communication Sciences and Disorders – (AUD/CSD) Dual Program

Doctor of Philosophy -Ph.D.
Audiology/Communication Sciences and Disorders (AUD/CSD) – Dual Program

Concentrations:
Addictions & Substance Abuse Counseling (ASA) (MA)
Hearing Sciences and Audiology (HAS) (Ph.D.)
Marriage and Family Therapy (MFL) (MA)
Neurocommunicative Sciences (NCS) (Ph.D.)
Speech-Language Sciences (SLS) (Ph.D.)

Graduate Certificates Offered:
See Graduate Certificates Section

Interdisciplinary Opportunities
The College of Behavioral and Community Sciences (BCS) works with other colleges in interdisciplinary efforts, such as the jointly offered specialty concentration in Behavioral Health as part of the master’s and doctoral programs in the Department of Community and Family Health (DCFH) in the College of Public Health (COPH). For information about this, and other opportunities, contact either BCS or COPH for information.

http://www.bcs.usf.edu/
COLLEGE REQUIREMENTS

Thesis Enrollment
Upon successful completion of all M.A./M.S. degree requirements except for thesis, Behavioral & Community Sciences graduate students must enroll in a minimum of two (2) credit hours of Thesis each semester (except Summers) until the completion of the master’s degree.

Dissertation Enrollment
Doctoral students who have been admitted to candidacy, are required to accumulate a minimum of six (6) credit hours of Dissertation during each previous 12-month period (previous three (3) terms, e.g., Fall, Spring, Summer) until the degree is granted.
About the Catalog

The University of South Florida Graduate Catalog is organized with the degree programs offered listed in the section of the college that offers them. For example, the Master of Science degree with a “program” (also known as major) in Biology is listed in the College of Arts and Sciences section. Some colleges offer areas of specialization, or “concentrations” within a degree program.

EXAMPLE OF PROGRAM PAGE

**Green denotes Program (or Major)**

**Black denotes degree**

**APPLIED BEHAVIOR ANALYSIS PROGRAM**

**Master of Arts (M.A.) Degree**

DEGREE INFORMATION

EXAMPLE OF CONCENTRATION PAGE

**Green denotes Program (or Major)**

**Black denotes degree**

**ADULT EDUCATION CONCENTRATION**

**Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program**

**Blue denotes Concentration (or area of specialization)**

With a concentration in Adult Education

DEGREE INFORMATION

The name of the program and/or concentration does not appear on the diploma – only the name of the degree (i.e., Master of Arts) is listed. The program and concentration information is listed on the official transcript. Other areas, such as application track, are not listed on the transcript.
AGING STUDIES PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
   Fall: January 15
   Fall admissions only

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 30.1101
Dept Code: GEY
Program (Major/College): AGE BC

CONTACT INFORMATION

College: Behavioral & Community Sciences
Department: School of Aging Studies
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

The Interdisciplinary Ph.D. in Aging Studies is the first of its kind in the United States, and to the best of our knowledge, the world. What makes this program unique is the combined emphasis on providing a broad based foundation in the interdisciplinary aspects of aging with a focus on developing in-depth expertise in a research area. The program draws on the expertise of faculty from multiple colleges, departments, and centers at the University of South Florida to provide students with exposure to other disciplines and their different approaches to scientific and scholarly inquiry.

The Ph.D. in Aging Studies is hosted by the School of Aging Studies, which is the organizational focal point for interdisciplinary research, educational, clinical and community service activities in aging for faculty and students. An interdisciplinary committee of faculty governs the program, allowing students to develop research programs that focus on their particular interests and capitalize on the breadth of opportunities throughout the university.

The Ph.D. in Aging Studies is a research-oriented program designed to train future leaders in the field of aging. The program admits students who show exceptional promise to become strong academic, public sector, and corporate researchers. Students should expect to enroll in the program full time (9 credits in fall, 9 credits in spring, and 6 credits in summer). First year students are generally supported with an $18,000 fellowship, tuition waiver, and health insurance. Fellowship or assistantship support and tuition waivers are generally available during subsequent years of doctoral training. Students who wish to apply as part-time students must contact Dr. McEvoy before applying.

Faculty Organization
The interdisciplinary nature of the program is exemplified by the number of core faculty who teach and serve on dissertation committees in the program and the range of academic departments they represent. Over forty faculty from multiple colleges and research centers have been identified as the core faculty in the program.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.
ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- A Bachelor’s Degree
- GPA of 3.25 and
- a current GRE; to be competitive, 580V, 620Q, 5.0 A.W.
- Applicants where English is not the language of instruction must also submit a TOEFL score of at least 600.
- In addition, students must submit their best example of a single authored writing sample
- and a summary of their career goals and past preparation for a research career plus
- three letters of recommendation from individuals familiar with the student’s work and/or research.

DEGREE PROGRAM REQUIREMENTS

Minimum Hours: 90 credit hours beyond the baccalaureate
Dir. Research/Dissertation: 56 credits*

*At least 2 credits of Dissertation every semester after admission to candidacy; if more than minimum of required course credit is taken, then fewer credits of Directed Research are required.

CORE REQUIREMENTS

Courses (12 hours)
GEY 7610 Psychological Aging: Interdisciplinary Perspectives (3.0)
GEY 7604 Biomedical Aging (3.0)
GEY 7649 Population Aging (3.0)
GET 7623 Social and Health Aspects of Aging (3.0)

Each core course is taught from an interdisciplinary perspective with faculty from different fields addressing issues from their disciplinary perspectives.

Methods Courses (6 hours minimum)
GEY6402 Statistical & Qualitative Methods in Aging Research (3.0)
GEY6403 Multivariate Statistical Analysis for Aging Research (3.0)

Students must also enroll in a sequence of at least two methods/statistics courses and are encouraged to obtain additional training in methods relevant to their dissertation.

Proseminar and Content Seminar (16 credits minimum)
GEY 7936 Aging Studies Pro-seminar (4.0)
GEY 7602 Ph.D. Seminar in Health and Aging (3.0)
GEY 7611 Ph.D. Seminar in Mental Health (3.0)
GEY 7622 Ph.D. Seminar in Policy and Elderly (3.0)
GEY 7651 Ph.D. Seminar in Cognition (3.0)

Students are required to enroll in the GEY 7936 Aging Studies Pro-seminar (2 credits) each fall of their first 2 years in the program. They must also enroll for at least four Content Seminars (GEY 7602, GEY 7611, GEY 7622, Gey7651) (3 credits). The Pro-seminars investigate different research topics, allow students to practice presenting their research, and provide students with exposure to distinguished lecturers from throughout the U.S. The content seminars cover different topics relevant to aging each spring semester.
**Elective Requirement**
There are no requirements, other than the total minimum credit hours mentioned above. Each Ph.D. student, in consultation with his/her major advisor, designs an appropriate curriculum to obtain content and skills that match their research interests.

**Project**
All students complete a First Year Research Project, designed to be presented at a national conference in the fall of their second year. Students develop individualized courses of study, allowing specialization in a wide variety of content areas and research methods. Supervised research experience is available from a number of faculty with diverse research expertise. Students enroll for GEY 7911 (Directed Research in Aging Studies) for 1 credit hour for a grade of S/U.

**Comprehensive/Qualifying exam**
The qualifying examination is usually taken during the end of the second year of course work, or the following Fall semester.

**Dissertation (56 hours minimum – see section Minimum Hours)**

GEY 7911 Directed Research  
GEY 7980 Dissertation

**COURSES**
See [http://www.ups.usf.edu/sab/sabs.cfm](http://www.ups.usf.edu/sab/sabs.cfm)
APPLIED BEHAVIOR ANALYSIS PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15
Minimum Total Hours: 44
Program Level: Masters
CIP Code: 42.9999
Dept Code: CFS
Program (Major/College): ABY BC

CONTACT INFORMATION

College: Behavioral & Community Sciences
Department: Child and Family Studies
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

The master’s degree program in applied behavior analysis (ABA) is designed to meet growing needs in Florida and nationally for practitioners who can work effectively in the fields of developmental disabilities, autism, education, child protective services, child behavior disorders, rehabilitation, mental health, and business and technology. ABA provides an approach for developing, implementing, and evaluating practical strategies to produce changes in socially significant behaviors of individuals in the context of community settings. Three important features characterize the scientific basis upon which ABA is built: a) it focuses upon objectively measurable behavior of individuals; b) it studies environmental influences upon the targeted behaviors; and c) it places a premium upon single-subject research designs to analyze the effects of different environmental variables.

The 44-credit-hour master’s degree in ABA is in the department of Child and Family Studies in the College of Behavioral and Community Sciences. It provides coursework and practical supervision across three colleges (College of Behavioral and Community Sciences, College of Arts and Sciences, and College of Education). This interdisciplinary program links courses from a number of university departments to create a comprehensive, cohesive degree program. Students demonstrate knowledge of behavioral principles and procedures in courses that constitute a core curriculum, demonstrate applied behavior analysis skills through supervised practicum experiences, and complete a data based thesis. The master’s degree program is designed to prepare students to meet the standards to be Board Certified Behavior Analysts (BCBAS). It will assist in their preparation for employment in a variety of fields where there are growing demands for competent professionals with expertise in applied behavior analysis.

Philosophy

The systematic analysis and application of behavioral principles is an extensive repertoire of professional behaviors. In the USF ABA program, these skills are acquired as students move through the sequenced curriculum of coursework and practicum experiences. The curriculum requires application of behavioral analytic principles, with direct supervision by faculty and BCBA supervisors. Students participate in practicum training in community agencies under the supervision of BCBA. In addition to the 10-25 hours of behavior analysis practice they complete in their practicum sites each week, students also participate in practicum seminars each semester. In these seminars, the Practicum Coordinator discusses important practice issues and facilitates student discussion of their applied work. The supervision of the students’ research theses rests in the hands of designated core faculty members (i.e., “major professors”). Major professors serve as mentors for the students by closely supervising their research and their progress through the program. Therefore, as students are mentored by their major professors during the program, a meaningful major professor-student relationship is essential.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.
ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Three letters of reference from professors and/or employers who know the applicant well
- Current resume or curriculum vitae
- One-page narrative describing the applicant’s experiences, training, and interest in Applied Behavior Analysis and in the Master’s Program in Applied Behavior Analysis at USF.
- GRE Scores on the general subtests

Specific Procedures

The primary assumption underlying admission to the M.A. program is that every student accepted is capable (a) of successfully completing his or her respective program and (b) of performing competently in the field as an Applied Behavior Analyst. Applicants are selected based on their potential to benefit from the program and their potential to contribute both to the Program and the field of Applied Behavior Analysis.

Within the admissions process, a culturally diverse student body is actively recruited, and applicants of academic and professional promise are not systematically excluded on the basis of race, ethnic origin, gender, age, religion, lifestyle, sexual orientation, or physical handicap. The admissions process is selective, but flexible—all pertinent data submitted for consideration will be evaluated as an entire package. The evaluation process, however, does involve both academic and interpersonal considerations. The profession of Applied Behavior Analysis requires that the practitioner possess personal characteristics as well as academic and technical competencies, and the admissions process attempts to evaluate both these areas.

Admission to the program is based on past academic work; a resume outlining relevant work, volunteer, and extracurricular experience in applied behavior analysis; letters of recommendation; and a statement of professional goals. Students may apply, after conferral or anticipated conferral of their Bachelor’s degree. Applications should be submitted by February 15 to be considered for application in the following fall term. Late applications will be considered if space in the program is available.

For further Admissions Information, please visit Graduate Admissions.

A decision about each applicant’s candidacy is made by the Program Director based on the strength of the applicant’s record and his/her:

- Academic record and experiences as an undergraduate
- Career goals and their compatibility with those of the program
- Potential for successful completion of the program
- Sensitivity to the needs of potential client populations
- Interpersonal skills
- Communication skills, both oral and written

NOTE: The Program Director reserves the right to contact all references identified by the candidate.
DEGREE PROGRAM REQUIREMENTS

Core requirement
EDF 6215 ABA Basic Principles (4)
EDF 6217 Behavior Theory (4)
EDG 6931 Observational Methods and Functional Assessment (3)
EDG 6931 Ethics in ABA (1)
MHS 6100 ABA in Complex Community Environments (3)
PSY 6217 Single-Subject Design (3)

Electives
MHS 6900 (ABA Applications) (3)
MHS 6900 (Behavior Analysis and Developmental Disabilities) (3)

Comprehensive Exam
Practicum Seminar MHS 6940 (10)

Thesis
MHS 6971 (10)

Total minimum hours: (44)

Below is the program of study for the Applied Behavior Analysis program. For more information on program requirements, contact the program.

Fall semester—year 1
EDF 6215 ABA Basic Principles (4)
EDG 6931 Observational Methods and Functional Assessment (3)
PSY 6217 Single-Subject Design (3)
MHS 6940 ABA Practicum (2)

Spring semester—year 1
EDF 6217 Behavior Theory (4)
EDG 6931 Ethics in ABA (1)
MHS 6100 ABA in Complex Community Environments (3)
MHS 6940 ABA Practicum (2)

Summer—year 1
MHS 6940 ABA Practicum (2)
MHS 6971 Thesis (2)

Fall semester—year 2
MHS 6900 Elective (ABA Applications) (3)
MHS 6940 ABA Practicum (2)
MHS 6971 Thesis (4)

Spring semester—year 2
MHS6900 Elective (Behavior Analysis and Developmental Disabilities) (3)
MHS 6940 ABA Practicum (2)
MHS 6971 Thesis (4)

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
Audiology (Post-Bacc) (M.S.)

AUDIOLOGY PROGRAM (POST-BACC)

Master of Science (M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Closed for new admissions

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 51.0204
Dept Code: CSD
Program (Major/College): AUD BC

CONTACT INFORMATION

College: Behavioral & Community Sciences
Department: Communication Science and Disorders
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, students are not being admitted to this program

PROGRAM INFORMATION

The Masters of Science Degree in Audiology is designed to provide students with basic academic knowledge related to hearing and Audiology.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Three (3) letters of recommendation
- A 1-2 page letter of intent
- GRE scores at or above the 33rd percentile on both Verbal and Quantitative sections.
- GRE writing score of 4.0 or better
- GPA greater than or equal to 3.0 for last 60 credit hours of baccalaureate degree
- Demonstration of competency in communication skills as determined by the chairperson or delegate.

DEGREE PROGRAM REQUIREMENTS

A minimum of 36-credits must be completed from the following:

<table>
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<tr>
<td>SPA 5120</td>
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<td>SPA 5303</td>
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<td>SPA 5506</td>
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http://www.bcs.usf.edu/
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<td>SPA 6340</td>
<td>Principles of Amplification I</td>
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<td>SPA 6341</td>
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<td>SPA 6571</td>
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<td>SPA 6676</td>
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<td>SPA 6805</td>
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<td>SPA 6910</td>
<td>Directed Research</td>
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See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
AUDIOLOGY PROGRAM

Doctor of Audiology (Au.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 1
Fall Admission Only

Minimum Total Hours: 120
Program Level: Doctoral/Professional
CIP Code: 51.0202
Dept Code: CSD
Program (Major/College): AYD BC

CONTACT INFORMATION

College: Behavioral & Community Sciences
Department: Communication Science and Disorders
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The Au.D. is a four-year post-baccalaureate professional degree. The primary objective is to produce audiologists who are competent to perform the wide array of diagnostic, remedial, and other services associated with the practice of Audiology and who meet the standards mandated by the Council on Academic Accreditation of the American Speech-Language-Hearing Association.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools; the Council on Academic Accreditation of the American Speech-Language-Hearing Association.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Three (3) letters of recommendation
- A 1-2 page letter of intent
- GRE scores at or above the 33rd percentile on both Verbal and Quantitative sections.
- GRE writing score of 4.0 or better
- GPA greater than or equal to 3.0 for last 60 credit hours of baccalaureate degree
- Demonstration of competency in communication skills as determined by the chairperson or delegate.

DEGREE PROGRAM REQUIREMENTS

General University requirements for graduate work must be fulfilled and a minimum of 120 hours of regularly scheduled academic course work and clinical practica at the graduate level designed to meet competencies set by the American Speech-Language-Hearing Association. Also required for graduation are the attainment of a “B-” or better in each graduate Audiology course, the attainment of clinical competence determined by a GPA of 3.0 in all clinical practica and academic coursework, satisfactory passage of annual comprehensive didactic and clinical oral examinations and a national examination in the specialty of Audiology, and successful completion of an audiology
doctoral project. A student with a bachelor’s degree in any field may enter the four-year post-baccalaureate program. However, students who lack undergraduate coursework in Communication Sciences and Disorders may be required to add several courses to their graduate program. A student with a master’s degree and State License in Audiology or the Certificate of Clinical Competence in Audiology (CCC-A) may be admitted into an individualized program of study.

### CORE REQUIREMENTS

**Total Minimum Hours:** 120

**Audiology Science Core (17)**
- SPA 6571 Profession of Audiology (2)
- SPA 5303 Auditory Anatomy & Physiology (3)
- SPA 5120 Psychoacoustics (3)
- SPA 5132 Audiology Instrumentation (3)
- SPA 5153C Quantitative Problem Solving (3)
- SPA 6805 Research Procedures (3)

**Audiology Practice Core (48)**
- SPA 5328 Rehabilitative Audiology for Adults (3)
- SPA 6311 Medical Audiology (3)
- SPA 6340 Principles of Amplification I (3)
- SPA 6341 Principles of Amplification II (3)
- SPA 6676 Speech Perception & Hearing Loss (3)
- SPA 6305 Pediatric Audiology (3)
- SPA 6314 Electrophysiology (3)
- SPA 6316 Vestibular Eval & Treatment (3)
- SPA 6930 Audiology Bus & Practice Mgmnt (3)
- SPA 6354 Hearing Conservation (3)
- SPA 7346 Cochlear Implants (3)
- SPA 7931 Advanced Sensory Aids (3)
- SPA 7931 Advanced Electrophysiology (3)
- SPA 6324: Aural Rehabilitation: Children (3)
- SPA 7931 Advanced Vestibular Seminar (3)
- SPA 7931 Seminar: Adv. Medical Audiology (3)

**Practical Experience (49)**
- SPA 5506 Clinical Lab I (3)
- SPA 5506 Clinical Lab II (3)
- SPA 6505 Clinic I (4)
- SPA 6505 Clinic II (6)
- SPA 6505 Clinic III (6)
- SPA 6505 Clerkship I (3)
- SPA 6505 Clerkship II (3)
- SPA 6505 Clerkship III (3)
- SPA 6505 Externship I (6)
- SPA 6505 Externship II (6)
- SPA 6505 Externship III (6)

**Doctoral Project (6 minimum)**
- SPA 6910 Directed Research (3 minimum)
- SPA 7734 Audiology Doctoral Project Seminar (3 minimum)
Annual Examination
Students in Audiology will be evaluated at the end of each year of coursework. The purpose of these examinations is twofold: 1) Determine eligibility for continuation in academic coursework and practical experiences; and 2) Determine areas of weakness that will require remediation. Individualized remediation programs will be designed, if needed, by the student under the supervision of the Audiology faculty and may include the completion of additional written papers, projects, and/or additional course work.

Audiology Doctoral Project
The goal of the Audiology Doctoral Project (ADP) is to provide an experience in basic or applied research or evidence-based practice. Upon completion of the ADP, students are expected to continue to be critical consumers of research and be able to apply current research findings to their practice of audiology. It is expected that all students will complete the ADP experience before the end of the third year of study. The ADP must be completed and defended prior to graduation.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
AUDIOLOGY / COMMUNICATION SCIENCES AND DISORDERS
DUAL DEGREE PROGRAM

Doctor of Audiology (Au.D.) Degree
Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 1
Fall Admission Only

Minimum Total Hours: 120+
Program Level: Doctoral
CIP Code: 51.0202
Dept Code: CSD
Program (Major/College): AYD BC / CSD BC

PROGRAM INFORMATION

The Au.D./Ph.D. Program is designed to offer a path for those interested in Clinical Research to earn both doctoral degrees within approximately six years. The primary objective is to produce research audiologists competent to perform the wide array of diagnostic, remedial and other services associated with the practice of audiology as well as conduct independent research in the area of hearing and balance disorders.

Accreditation:
The Au.D./Ph.D. programs are accredited by the Commission on Colleges of the Southern Association of College and Schools. The Au.D. program is also accredited by the Council on Academic Accreditation of the American Speech-language-Hearing Association.

Major Research areas:
Audiology, Hearing and Vestibular Science, Audiological Rehabilitation, Cochlear Implants, Auditory Processing, Speech Perception

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Admission to the Au.D. program.
- Demonstration of success in the Au.D. program for a minimum of three consecutive, full-time semesters.
- One (1) letter of recommendation from a member of the USF Audiology research faculty.
- Demonstration of competency in communication skills as determined by the chairperson or delegate.

http://www.bcs.usf.edu/
DEGREE PROGRAM REQUIREMENTS

Requirements for the Au.D./Ph.D. program are the same as the requirements for the individual degree programs (Au.D. and Ph.D.) with the following exceptions:

1. The Audiology Doctoral Project (ADP) and Associated coursework (SPA 6930 Directed Research, SPA 7931 Audiology Doctoral Project Seminar) that are required for the Au.D. Program are waived. This requirement will be met by one of the two Research Rotations required of Ph.D. students. The first research rotation must be successfully completed prior to enrolling in the final semester of Externship (SPA 6505 Externship III).

2. The Au.D. Course focused on aspects of business related to managing a private practice (SPA 6360 Audiology Business and Practice Management) is not required of the Au.D./Ph.D. students.

3. Three courses are shared by the two programs: SPA 6930 Psychoacoustics, SPA 5303 Auditory Anatomy and Physiology, and SPA 6128 Speech Perception and Hearing Loss (Replaces SPA 7150 Advanced Speech Science)

4. The Concentration/Specialized Study Area (12 credits) and Core Content (12 credits) requirements of the Ph.D. program are met by the shared courses and coursework already required for the Au.D. program: SPA 5132 Audiology Instrumentation, SPA 5506 Math and Physics for Speech and Hearing, SPA 5328 Audiological Rehabilitation, SPA 6345 Principles of Amplification I, SPA 6314 Electrophysiology, SPA 6354 Hearing Conservation

Course Requirements: See course listings for the Doctor of Audiology (Au.D.) and Doctor of Philosophy (Ph.D.) programs offered by the Department of Communication Sciences and Disorders. The credits required for the Au.D./Ph.D. program will constitute no less than 120 hours beyond the Bachelor’s Degree irrespective of waived courses or course substitutions.

Courses
See http://www.ugs.usf.edu/sab/sabs.cfm
AURAL (RE)HABILITATION PROGRAM

Master of Science (M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 1

Minimum Total Hours: 44
Program Level: Masters
CIP Code: 51.0204
Dept Code: CSD
Program (Major/College): ARH BC

CONTACT INFORMATION

College: Behavioral & Community Sciences
Department: Communication Sciences and Disorders
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, students are not being admitted to this program.

PROGRAM INFORMATION

The Masters of Science Degree in Aural Rehabilitation is designed to enable students to meet minimal requirements for certification as a Teacher of the Hearing Impaired (K-12) in the State of Florida.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Three letters of recommendation
- GRE scores of 52nd percentile in Verbal or a 52nd percentile on Writing and a 32nd percentile on quantitative.
- GPA of 3.20 or higher in the last 60 hours of undergraduate coursework
- A letter of intent, and
- Applicant must also demonstrate competency in communication skills as determined by the chairperson or delegate.

DEGREE PROGRAM REQUIREMENTS

All ARH majors must complete the following:

Course Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>SPA 5204</td>
<td>Phonological Development &amp; Disorders</td>
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<tr>
<td>SPA 5403</td>
<td>Language Learning in the School Age Child</td>
<td>(3)</td>
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<td>SPA 6324</td>
<td>Aural Rehabilitation: Children</td>
<td>(3)</td>
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<tr>
<td>SPA 6645</td>
<td>Language for Hearing Impaired</td>
<td>(3)</td>
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<tr>
<td>SPA 6674</td>
<td>Curriculum Procedures &amp; Materials for Hearing Impaired</td>
<td>(3)</td>
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<tr>
<td>SPA 6675</td>
<td>Reading for the Hearing Impaired</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6930</td>
<td>ST: Speech Perception &amp; Production in the HI</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6930</td>
<td>ST: Family Centered Deaf Education</td>
<td>(3)</td>
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<tr>
<td>SPA 6930</td>
<td>ST: Foundations of Deaf Education</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6930</td>
<td>ST: Introduction to Cued Speech</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6930</td>
<td>ST: Classroom Applications of Sign Language</td>
<td>(3)</td>
</tr>
<tr>
<td>EEX 6025</td>
<td>Trends &amp; Issues in Special Education</td>
<td>(3)</td>
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</table>
Practicum Requirements

SPA 6505  Practicum: Intro to Clinical AR  (1)
SPA 6505  Practicum: ARH  (2)
SPA 6505  Practicum: Classroom  (2)

Electives (one 3 credit course in Special Education)

Examples:
EEC 6269  EC: Play & Learning  (3)
MAE 6117  Teaching Elementary Math  (3)

Courses
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
COMMUNICATION SCIENCES AND DISORDERS PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: December 1 for full consideration; however applications are accepted until February 15
Spring: October 15

Minimum Total Hours: 53
Program Level: Doctoral
CIP Code: 51.0204
Dept Code: CSD
Program (Major/College): CSD BC

Concentrations:
Hearing Sciences and Audiology (HAS)
Neurocommunicative Sciences (NCS)
Speech-Language Sciences (SLS)

PROGRAM INFORMATION

The Department of Communication Sciences and Disorders provides disciplinary and interdisciplinary education to prepare research scientists capable of addressing both theoretical and applied issues in laboratory, clinical, and classroom settings. Academic preparation emphasizes basic and advanced study in the communicative sciences, interdisciplinary study, and extensive research preparation. The program of study is tailored to meet individual interest areas. The overall aim of the doctoral program is to produce graduates who excel in meeting the rigorous demands of an academic/research career.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:

Speech-Language Sciences:
Speech perception and production processes, speech perception by normal hearing listeners and listeners with hearing loss, non-native speech, language development in at-risk populations, linguistic and discourse correlates for reading, writing, and spelling, second language learning and literacy learning, and language variation and multiculturalism;

Hearing Sciences and Audiology:
Aural rehabilitation, psychoacoustics, aging, temporal processing, speech perception by impaired listeners, auditory evoked potentials, and otoacoustic emissions;

Neurocommunicative Sciences:
aphasia, cognitive/linguistic processing in normal aging and adults with neurological disorders, cognitive neuroscience.

ADMISSION INFORMATION

http://www.bcs.usf.edu/
Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- three letters of recommendation
- a letter of intent
- Master's degree in Communication Sciences and Disorders, Speech and Hearing Sciences or a related field (e.g. Linguistics, Psychology, Education). Students with a non-CSD background may be required to take prerequisite coursework in the basic speech, language, and hearing sciences depending on career plans and desired area of focus.
- GPA of 3.0 or above from previous graduate study.
- GRE scores at the 33rd percentile for Verbal, Quantitative and Writing subtests, taken within 5 years preceding the application. Students with lower scores may be offered admission on a conditional basis if the letter of intent and letters of recommendation are particularly strong. The GRE requirement may be waived for students with demonstrated research experience (e.g. previous publications).

DEGREE PROGRAM REQUIREMENTS

The specific coursework to be completed for research and tools of research, core content, and concentration/specialized study are determined individually to create a course of study appropriate to the student's desired specialization. The core content normally consists of four advanced seminars (SPA 7931) covering the four major content areas of the field (speech, language, hearing, and neurocommunicative science). In certain cases, with approval of the Major Advisor and Program Director, previously completed graduate level coursework may be applied towards requirements in the Core content or Specialized Study areas. Completion of the Ph.D. in Communication Sciences and Disorders normally requires a minimum of four years of study.

Students must complete the following requirements

CORE REQUIREMENTS

Research and tools of research  minimum of 13 credit hours

Two course sequence in statistical analysis (6 credits min)
- EDF 6407 Statistical Analysis for Ed. Research I  (4)
- EDF 7408 Statistical Analysis for Ed. Research II  (4)

OR
- GEY 6934 Research Methods I  (3)
- GEY 6934 Research Methods II  (3)

Tools of research (3 credits min)
In consultation with an academic advisor, the student selects a course that facilitates development of a research tool or methodology, either within the department or in related departments.

Research rotation (4 credits min)
Two one-semester research rotations, as described below.

Core Content  minimum of 12 credit hours
SPA 7931  (3)

CONCENTRATION REQUIREMENTS  minimum of 12 credit hours
In consultation with an academic advisor, the student selects coursework in support of the specialization, either within the department or in related departments.

Seminar
SPA 5506 Doctoral seminar  minimum of 4 credit hours

Dissertation  minimum of 12 credits min
Other

In addition to specific degree requirements, a student must complete the following to qualify for graduation:

1. Satisfactory completion of two one-semester research rotations with one rotation in the student’s primary area of interest and a second rotation in a different research area.

2. With the supervision of a qualifying committee, pass a written qualifying examination that evaluates the student’s speciality knowledge and methodological competence. At the discretion of the qualifying committee an oral examination may follow the written examination.

3. Establish a doctoral committee prior to admission into doctoral candidacy.

4. Prepare and defend a dissertation proposal.

5. Following completion of the dissertation research, successfully defend the work before the dissertation committee.

6. Departmental policy specifies that any student earning a C+ or below in two courses will be recommended for dismissal from the Ph.D. program.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
CRIMINAL JUSTICE ADMINISTRATION PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines: open
Fall: Rolling Admissions

*rolling admissions; applications continually accepted for Fall cohort program

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 43.0103
Dept Code: CJP
Program (Major/College): CJA BC

CONTACT INFORMATION

College: Behavioral & Community Sciences
Department: Criminology
Contact Information: [www.grad.usf.edu](http://www.grad.usf.edu)
Other Resources: [www.usf4you](http://www.usf4you)

PROGRAM INFORMATION

The M.A. in Criminal Justice Administration is a specialized and concentrated program of study designed specifically for practitioners and those whose desire is to complete an M.A. with a special emphasis on administration and management within the criminal justice system. Generally it targets individuals who do not anticipate continuing on to the doctoral studies. It is a concentrated weekend, cohort-based program leading to the M.A. in five consecutive semesters. Up to two classes may be offered via the internet. Classes are held on weekends, meet for one day, and run seven weeks back-to-back. The program is modeled after a typical executive MBA program for working professionals.

This is a cohort based model. This degree concentrates on issues related to the organization and operation of criminal justice agencies and related organizations.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: n/a

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Students are required to have:

- A bachelor’s degree from a regionally accredited university or college
- A minimum undergraduate GPA of 3.00
- Two letters of recommendation attesting to the applicant’s abilities to succeed at the graduate level
- A statement of purpose addressing the motivations to attain a graduate diploma and the intention to apply the diploma to a specific set of purposes
DEGREE PROGRAM REQUIREMENTS

CORE REQUIREMENTS
Coursework Requirements (33 hrs. total)

- CCJ 6936 Current Issues in Law Enforcement (3)
- CCJ 6605 Theoretical Approaches to Criminal Behavior (4)
- CCJ 6705 Research Methods in Criminology (4)
- CCJ 6935 Topics in Criminology and Criminal Justice (9)
- CCJ 6706 Quantitative Analysis I (4)
- CCJ 6406 Theory, Practice, and Research in Law Enforcement (3)

Additionally two courses in public administration at the 6000 level are required. (6)
The department recommends PAD 6041 (3) PAD 6934 (3) or similar courses in PAD approved by the CJA Program Director in coordination with the Public Administration Program.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
CRIMINOLOGY PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:

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CONTACT INFORMATION

College: Behavioral & Community Sciences
Department: Criminology
Contact Information: [www.grad.usf.edu](http://www.grad.usf.edu)

PROGRAM INFORMATION

The M.A. in Criminology is a two-year program designed to provide the student with an in depth understanding of the major ideas, issues, theories, and research comprising the field of Criminology and Criminal Justice.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: n/a

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- A bachelor’s degree from a regionally accredited university or college
- An upper division GPA of 3.00 or scores of 500V, 500Q, 4.0 A.W. or higher on the Graduate Record Exam (GRE). All applicants must submit GRE scores.
- Statement of purpose detailing reasons for seeking a graduate degree in Criminology, future career plans, and research interests
- A writing sample providing evidence of candidate’s scholarly abilities
- Three letters of reference speaking to the applicant’s academic capabilities
DEGREE PROGRAM REQUIREMENTS

All course work counted toward the degree must have the prior approval of the Graduate Program Director of the Department of Criminology. Such work may include up to six (6) hours outside the department.

CORE REQUIREMENTS
Thesis Option
33 hours of CCJ course work, which must include:

- CCJ 6605 Theoretical Approaches to Criminal Behavior (4)
- CCJ 6705 Research Methods in Criminology (4)
- CCJ 6706 Quantitative Analysis I (4)
- CCJ 6707 Quantitative Analysis II (4)
- CCJ 6050 ProSeminar in Criminology (taken twice for 1 hour each during the first two semesters) (2)

Electives (9)

Thesis (6)
- CCJ 6971 Thesis Hours (6)

The thesis will consist of research that makes an original contribution to the scholarly literature and may be of either a quantitative or qualitative nature. An oral defense of the thesis is required after the final draft of the thesis has been accepted by the candidate’s supervisory committee.

Non-Thesis Option
33 hours of course work, which must include:

- CCJ 6605 Theoretical Approaches to Criminal Behavior (4)
- CCJ 6705 Research Methods in Criminology (4)
- CCJ 6706 Quantitative Analysis I (4)
- CCJ 6707 Quantitative Analysis II (4)
- CCJ 6050 ProSeminar in Criminology (taken twice for 1 hour each during the first two semesters) (2)
- CCJ 6905 Directed Independent Study (3)

Electives (12)

A non-thesis comprehensive examination option is available and intended primarily for students who do not intend to continue their graduate education beyond the M.A. degree.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
See http://www.criminology.usf.edu/grad/courses
CRIMINOLOGY PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:

Fall: January 15

Minimum Total Hours: 90

Program Level: Doctoral

CIP Code: 45.0401

Dept Code: CJP

Program (Major/College): CCJ BC

CONTACT INFORMATION

College: Behavioral & Community Sciences

Department: Criminology

Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The Ph.D. is a research degree granted in recognition of high achievement in criminology. This achievement requires accomplishments beyond the completion of coursework that demonstrate the ability to work independently and contribute to criminological knowledge.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- A bachelor’s degree from a regionally accredited institution and a GPA of at least 3.00; or a master’s degree from a regionally accredited institution and a GPA of at least 3.40 or better (on a 4.00 scale) during graduate study.
- A score of 500V, 500Q, 4.0 A.W. or higher on the Graduate Record Exam (GRE) within the preceding five (5) years
- Three (3) letters of recommendation speaking to the applicants academic capabilities
- A candidate’s statement detailing
  - reasons for seeking a Ph.D. degree in criminology
  - future career plans and
  - research interests
- A writing sample providing evidence of the candidate’s scholarly abilities.
- Students are admitted to the Ph.D. program once each year and begin their course of study with the start of the regular academic year each August (fall semester).
DEGREE PROGRAM REQUIREMENTS

A total of 90 hours beyond the B.A./B.S., of which a minimum of 57* hours must be completed at USF. The 90 hours required for the Ph.D. are as follows:

Core Requirements (18 Hours)

- CCJ 6050 Pro Seminar in Criminology (2)
- CCJ 6605 Theoretical Approaches to Criminal Behavior (4)
- CCJ 6705 Research Methods in Criminology (4)
- CCJ 6706 Quantitative Analysis in Criminology I (4)
- CCJ 6707 Quantitative Analysis in Criminology II (4)

Electives (9-12 hours)

- 9 to 12 elective hours, 9 of which may be in an area outside the department;

Tools of Research (6 hours)

- CCJ 6708 Quantitative Analysis in Criminology III (3)
- CCJ 6709 Qualitative Research Methods in Criminology, or (3)
- CCJ 6716 Evaluation Methods in Criminology (3)

Dissertation (24 hours)

- CCJ 7980 (24)

Master’s Degree (30 or 33 hours are transferred from M.A./M.S.)

*The Graduate Program Director can determine the minimum number of hours needed by each student.

In addition to successfully completing these requirements, students are required to pass a doctoral comprehensive examination, complete residency requirements (nine [9] hours each in the fall and spring), and write and defend a dissertation prospectus and dissertation.

Comprehensive Examinations

The take-home comprehensive examination assesses the student’s ability to employ theory, research methods, and statistical analysis.

COURSES

See [http://www.ups.usf.edu/sab/sabs.cfm](http://www.ups.usf.edu/sab/sabs.cfm)
GERONTOLOGY PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 30.1101
Dept Code: GEY
Program (Major/College): GEY BC

CONTACT INFORMATION

College: Behavioral & Community Sciences
Department: School of Aging Studies
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Gerontology is the study of the process of human aging in all its aspects: physical, psychological, and social. In the School of Aging Studies, particular emphasis is placed on educating Gerontology students who, in their professional careers, will work to sustain or improve the quality of life of older people. Many of our program graduates are employed in agencies providing services for older adults. For information about the interdisciplinary Ph.D., see the separate listing for Aging Studies Ph.D.

The School offers the M.A. in Gerontology, with either a thesis or non-thesis option. In addition to completing a required core curriculum, students may select gerontology courses suited to their particular career goals. These include courses focused on such diverse concentrations as research, program administration, direct service, and case management. While the M.A. program does not have separate tracks, students are advised to select courses in the concentration(s) that match their intended career. Students should meet with their advisors to select concentrations appropriate to their professional goals.

Internships are recommended and available for students who need practical experience in the field of aging. Students interested in internships should see the school’s internship director. Following completion of the necessary coursework there is a comprehensive examination designed to test the student’s knowledge of, and ability to integrate, key concepts and information in the field of gerontology. This examination must be taken and passed by all students in the M.A. program. Students electing the thesis option must successfully pass an oral examination on the thesis. There are no language requirements.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
University requirements with the exception of
- a GPA of 3.00 or greater and
- a GRE score of at least 430V, 470Q, 4.0A.W.

DEGREE PROGRAM REQUIREMENTS
The M.A. degree requires 36 credits of graduate study.

**CORE REQUIREMENTS**

**Required courses (15 credits) include:**

- GEY 5620 Sociological Aspects of Aging (3)
- GEY 5630 Economics and Aging (3)
- GEY 6600 Human Development (3)
- GEY 6613 Physical Change and Aging (3)
- GEY 6450 Gerontological Research and Planning (3)

**Comprehensive exam**

Following completion of the required 15-credit coursework, there is a comprehensive examination designed to test the student’s knowledge of, and ability to integrate, key concepts and information in the field of gerontology. This examination must be taken and passed by all students in the M.A. program requirements.

**Internship**

Internships are available for students who need practical experience in the field of aging.

**Thesis**

Students electing the thesis option must successfully pass an oral examination on the thesis. There are no language requirements.

**Electives (21 credits)**

The remaining 21 hours of coursework must be selected from other graduate courses in gerontology. The following courses are suggested for four areas of study:

**Further Educational/Research Goals**

- GEY 6402 Statistical Methods in Aging Research (3)
- GEY 6403 Multivariate Statistical Analysis for Aging Research (3)
- GEY 6901 Directed Reading in Gerontology (3)
- GEY 6910 Directed Research in Gerontology (3)
- GEY 6971 Thesis: Master’s (2-19)

**Administrative Goals**

- GEY 4327 Understanding Principles and Practices in Long Term Care (3)
- GEY 4328 Health Care Operations (3)
- GEY 6325 Social Policy and Planning for Gerontologists (3)
- GEY 6500 Seminar in Principles of Administration (3)
- GEY 6626 Health, Ethnicity, and Aging (3)
- GEY 6647 Ethical and Legal Issues in Aging (3)

**Clinical Services Goals**

- GEY 6607 Alzheimer’s Disease Management (3)
- GEY 6614 Aging and Mental Disorders (3)
- GEY 6615 Topics in Psychopathology and Aging (3)
- GEY 6616 Mental Health Assessment of Older Adults (3)
- GEY 6617 Gerontological Counseling Theory and Practice (3)
- GEY 6618 Gerontological Group & Family Counseling (3)
Case Management Goals
GEY 6206 Family Cargiving in Aging and Chronic Illness (3)
GEY 6321 Gerontological Case management (3)
GEY 6326 Geriatric Interdisciplinary Team Training (3)
GEY 6614 Aging and Mental Disorders (3)
GEY 6616 Mental Health Assessment of Older Adults (3)
GEY 6617 Gerontological Counseling Theory and Practice (3)

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
REHABILITATION AND MENTAL HEALTH COUNSELING (POST-BACC) PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15
Spring: October 15

Minimum Total Hours: 60
Program Level: Masters
CIP Code: 51.2310
Dept Code: REH
Program (Major/College): REH BC

CONCENTRATIONS:
Addictions and Substance Abuse Counseling (ASA)
Marriage and Family Therapy (MFL)

Also offered as a 5-year program:
is currently under administrative review; no new applications are being accepted at this time.

PROGRAM INFORMATION

The Department of Rehabilitation and Mental Health Counseling trains counselors to work with physically, mentally, emotionally, and chemically disabled individuals. Training emphasizes psychological, social, medical, and vocational aspects of disability, and also the development and refinement of personal adjustment counseling skills. Graduates with this M.A. are prepared for careers as both rehabilitation specialists and mental health counselors.

The Department offers only the M.A. degree. Most students are admitted after earning a baccalaureate degree in one of the behavioral, social, health-related, or educational disciplines (REH). A Five-Year Program (REF)Five-Year Program (REF) is available to undergraduates with strong academic credentials, and undergraduates interested in this program should contact the department during their sophomore year. The Department offers two areas of concentration that may also lead to a certificate: (1) Addictions and Substance Abuse Counseling; (2) Marriage and Family Therapy. Each student may elect to pursue a program of specialization in any of these areas. The Addictions and Substance Abuse counseling program is approved by the Certification Board for Addictions Professionals of Florida (CBAPF Approved Provider #179A).

Upon completion of at least 75% of the program, students are eligible to sit for the national examination to become a Certified Rehabilitation Counselor (CRC). Upon graduation, individuals are also eligible to take the examination for the state licensure as a Mental Health Counselor. Upon completion of 1500 hours of post-graduate clinical supervision graduates receive their state license as a Mental Health Counselor. For a complete description of the department and its program, visit the department’s Web page at:

http://rmhc.bcs.usf.edu

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools, and the Commission on Rehabilitation Education (CORE).

ADMISSION INFORMATION

http://www.bcs.usf.edu/
Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

**Program Admission Requirements**
Same as university requirements plus:

- Three letters of recommendation
- Online department application (which includes a personal statement of intent)
- GRE
- Interview (on campus)
- Undergraduate statistics or research methods course

**DEGREE PROGRAM REQUIREMENTS**

The department offers both a thesis and a non-thesis program. There is no language requirement; however, a comprehensive examination is required of all students. The following 54-hour core curriculum is consistent with national certification standards for rehabilitation counselors and must be taken by all students (post-baccalaureate, thesis, and non-thesis).

**Core Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>MHS 5020</td>
<td>Foundations of Mental Health Counseling</td>
<td>(3)</td>
</tr>
<tr>
<td>MHS 5480</td>
<td>Human Growth &amp; Development</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 5780</td>
<td>Legal &amp; Ethical Issues &amp; Professional Standards</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 5035</td>
<td>Rehabilitation Counseling: Concepts &amp; Applications</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 5080</td>
<td>Medical Aspects of Disability</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 5450</td>
<td>Fundamentals of Substance Abuse Counseling</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6220</td>
<td>Individual Evaluation &amp; Assessment</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6476</td>
<td>Human Sexuality</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6301</td>
<td>Career &amp; Lifestyle Assessment</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6408</td>
<td>Diagnosis &amp; Treatment Psychopathology</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6409</td>
<td>Counseling &amp; Community Settings</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6440</td>
<td>Social &amp; Cultural Foundations</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6510</td>
<td>Group Theories and Practice</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6407</td>
<td>Counseling Theories and Practice</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6740</td>
<td>Research &amp; Program Evaluation</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6803</td>
<td>Practicum in Counseling</td>
<td>(6)</td>
</tr>
<tr>
<td>RCS 6825</td>
<td>Internship</td>
<td>(3)</td>
</tr>
</tbody>
</table>

**Concentration Requirements:**

**Addictions and Substance Abuse Counseling (15 credit hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCS 5450</td>
<td>Fundamentals of Substance Abuse Counseling</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6459</td>
<td>Professional Skills for Addictions Counselors</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6930</td>
<td>ST: Employee Assistance Programs (3) or approved elective</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6803</td>
<td>Practicum (Substance Abuse)</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6456</td>
<td>Counseling Approaches for Substance Abusers</td>
<td>(3)</td>
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</tbody>
</table>

**Marriage and Family Therapy (15 credit hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCS 6476</td>
<td>Foundations of Mental Health Counseling</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6930</td>
<td>Seminar: Dynamics of Marriage and Family Therapy</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6930</td>
<td>Seminar: Marital Therapy, Theory, and Techniques</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6930</td>
<td>Seminar: Family Therapy, Theory, and Techniques</td>
<td>(3)</td>
</tr>
<tr>
<td>RCS 6803</td>
<td>Practicum in Marriage and Family Therapy</td>
<td>(3)</td>
</tr>
</tbody>
</table>
Non-Thesis
Students in the non-thesis program must complete a minimum of 60 hours in the Post-Baccalaureate Program (REH). Two electives (6 credits) may be taken from Rehabilitation and Mental Health Counseling offerings or from offerings outside the department with the consent of an advisor.

Thesis
All students are initially admitted to the non-thesis program. Admitted students may subsequently apply to the faculty for a thesis program. Students in a thesis program must complete a minimum of 60 hours in the Post-Baccalaureate Program (54-hr.) core curriculum plus a minimum of three (3) hours of RCS 6970. An oral defense of the thesis is required.

Five-Year Program (including 54-hour core curriculum).
Additional hours to complete the minimum of 150 hours for students in the Five-Year Program may be elected from other Rehabilitation and Mental Health Counseling offerings or from related programs with the consent of the advisor.

Comprehensive Examination
The written comprehensive examination assesses the student’s understanding of the significant content and process areas of the program curriculum.

COURSES
See http://www.ups.usf.edu/sab/sabs.cfm
SOCIAL WORK PROGRAM

Master of Social Work (M.S.W.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Full-time two-year program: February 15

Full-time Adv Standing Program Deadlines:
*Summer: February 15
*Spring: October 15

Part-time program: Contact School for further information. Please call 813-974-2063 regarding deadlines

Minimum Total Hours: 48 (with B.S.W.)
60 (without B.S.W.)

Program Level: Masters
CIP Code: 44.0701
Dept Code: SOK
Program (Major/College): SOK BC

Also offered as: Dual Degree – M.S.W./M.P.H.

CONTACT INFORMATION

College: Behavioral & Community Sciences
Department: School of Social Work

Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

The School of Social Work offers a program leading to a Master of Social Work (M.S.W.) degree. The program is fully accredited by the Council on Social Work Education. A dual-degree program is available with Public Health/Maternal and Child Health or Behavioral Health. The primary objective of the program is preparation of the graduate for professional social work practice through acquisition of specialized knowledge and skills necessary for clinical practice with individuals, families, and groups. The secondary objectives of the M.S.W. program are:

1. to prepare students academically for pursuit of doctoral education in social work or related human service disciplines or professions;

2. to contribute to the needed supply of professionally educated clinical social workers in the Tampa Bay area, the state, the region, and the nation.

The M.S.W. program offers a specialized course of study in direct clinical practice. The program offers students a core curriculum, plus electives, and a supervised field experience designed to produce professionals with individual, family, and group practice skills. The M.S.W. program is designed to produce specific competencies for clinical practice. Graduates of the M.S.W. program should demonstrate:

1. practice competency in relationship skills;

2. knowledge of the interrelationships in the biological, psychological, and sociocultural factors in human life, including the impact of disease, injury, and emotional distress and their implications for social work practice;

3. skill in methods of scientific inquiry for the purpose of advancing professional knowledge and practice;

4. basic skill in the application of a range of social work treatment methodologies for the purpose of differential diagnosis and intervention;
5. practice competency in applying a biopsychosocial approach to the assessment of human problems;

6. practice competency in applying a biopsychosocial approach to treatment of human problems through individual, family, and group modalities;

7. a basic knowledge of managerial processes in social services, including program planning, personnel management, finance, and evaluation.

The M.S.W. program places great emphasis on standards of professional behavior and ethics in the practice of social work. Entrance into the M.S.W. program does not guarantee graduation from the program. Students admitted to the M.S.W. program must maintain a minimum GPA of 3.0, in all social work courses, with no grade below “C” counting toward graduation. Failure to maintain the specified GPA or to exhibit responsible professional behavior determined by the School may result in suspension or dismissal from the program. Courses with grades below “C” must be repeated before progressing to the next sequence. Students must pass the comprehensive paper during the last semester in order to graduate from the program.

Students may pursue the M.S.W. program on either a full- or part-time basis. Both programs consist of 60 semester hours of study. Students should check directly with the School of Social Work for applications and timelines. The full-time program takes four semesters to complete; the part-time program lasts for 7 consecutive semesters. Students with recently earned B.S.W. degrees from programs accredited by the Council on Social Work Education may apply for advanced standing and be exempt from up to 12 hours of foundation coursework, thus enabling them to graduate with 48 credit hours. Both the full- and part-time programs are heavily sequenced and students must stay in sequence. All students must obtain professional liability insurance prior to enrollment in field

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools and Council of Social Work Education.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- School of Social Work Application
- Three letters of recommendation
- 750 word biographical sketch
- Liberal arts pre-requisites
- Interview may be required; experience in the field preferred.
- GRE required

DEGREE PROGRAM REQUIREMENTS

Program Requirements (non-B.S.W. students) 60 hours minimum

Summary
- Foundations Courses 12 hours
  (ex: SOW 6105, SOW 6305, SOW 6235, SOW 6405)
- Advanced Courses 30 hours
- Field Courses 12 hours
- Electives 6 hours
- Total 60 hours

Core Requirements
A. Human Behavior and Social Environment Courses – (11 hours)
- SOW 6105 Foundations of Human Behavior (3)
- SOW 6114 Individual Growth and Development Theory (3)
- SOW 6124 Theoretical Perspectives on Mental Dysfunctioning (3)
- SOW 6126 Theoretical Perspectives on Physical Dysfunctioning (2)

B. Social Work Practice Courses – (19 hours)
- SOW 6342 Individual, Family and Group Treatment I (3)
- SOW 6305 Fundamentals of Social Work Practice (3)
- SOW 6348 Clinical Practice Perspectives on Race and Culture (3)
- SOW 6362 Individual, Family and Group Treatment II (4)
- SOW 6368 Individual, Family and Group Treatment III (3)
- SOW 6375 Macro Practice Seminar (3)

C. Policy and Services Courses – (6 Hours)
- SOW 6235 Foundations of Social Welfare Policy (3)
- SOW 6236 Social Welfare Policy Analysis and Design (3)

D. Social Work Research Courses – (6 hours)
- SOW 6405 Foundations of Social Work Research and Statistics (3)
- SOW 6438 Evaluation of Clinical Practice in Diverse Setting (3)

E. Supervised Field Experience (12 hours)
   For full-time students:
   - SOW 6534 Field Instruction I (4)
   - SOW 6535 Field Instruction II (4)
   - SOW 6536 Field Instruction III (4)
   For part-time students:
   - SOW 6553 Field Instruction Sequence IA:Part-Time (1)
   - SOW 6555 Field Instruction Sequence IIA:Part-time (2)
   - SOW 6557 Field Instruction Sequence IIC:Part-Time (2)
   - SOW 6559 Field Instruction Sequence IIIB:Part-Time (2)
   - SOW 6554 Field Instruction Sequence IIB:Part-Time (1)
   - SOW 6556 Field Instruction Sequence IIIB:Part-Time (2)
   - SOW 6558 Field Instruction Sequence IIIA:Part-Time (2)

F. Additional Requirements: Social Work Elective hours (6)
   All electives outside of program must be approved.

G. Comprehensive Exam
A comprehensive examination involving the content from across the curriculum is administered in the SOW 6126 Theoretical Perspectives of Physical Dysfunctioning course during the final semester. It is called the Capstone Paper.

Program Requirements (B.S.W. students eligible for Advanced Standing) 48 hours minimum
As space is available, students qualifying for admission with advanced standing can elect to begin coursework in either spring or summer semester.

Summary
- Advanced Courses: 30 hours (from sections A, B, C, and D above)
- Field Courses: 12 hours
- Electives: 6 hours
- Total: 48 hours

Core requirements
A. Human Behavior and Social Environment Courses – (8 hours)
   SOW 6114 Individual Growth and Development Theory (3)
   SOW 6124 Theoretical Perspectives on Mental Dysfunctioning (3)
   SOW 6126 Theoretical Perspectives on Physical Dysfunctioning (2)

B. Social Work Practice Courses – (16 hours)
   SOW 6342 Individual, Family and Group Treatment I (3)
   SOW 6348 Clinical Practice Perspectives on Race and Culture (3)
   SOW 6362 Individual, Family and Group Treatment II (4)
   SOW 6368 Individual, Family and Group Treatment III (3)
   SOW 6375 Macro Practice Seminar (3)

C. Policy and Service Courses – (3 hours)
   SOW 6236 Social Welfare Policy Analysis and Design (3)

D. Social Work Research Courses – (3 hours)
   SOW 6438 Evaluation of Clinical Practice in Diverse Setting (3)

E. Supervised Field Experience
   For full-time students (12 hours):
   SOW 6534 Field Instruction I (4)
   SOW 6535 Field Instruction II (4)
   SOW 6536 Field Instruction III (4)

   For part-time students (12 hours)
   SOW 6553 Field Instruction Sequence IA:Part-Time (1)
   SOW 6555 Field Instruction Sequence IIA:Part-Time (2)
   SOW 6557 Field Instruction Sequence IIC:Part-Time (2)
   SOW 6559 Field Instruction Sequence IIIA:Part-Time (2)
   SOW 6554 Field Instruction Sequence IIB:Part-Time (1)
   SOW 6556 Field Instruction Sequence IIB:Part-Time (2)
   SOW 6558 Field Instruction Sequence IIIA:Part-Time (2)

F. Additional Requirements: Social Work Elective hours (6)
   All electives outside of program must be approved.

G. Comprehensive Exam
   A comprehensive examination involving the content from across the curriculum is administered in the SOW 6126 Theoretical Perspectives of Physical Dysfunctioning course during the final semester. It is called the Capstone Paper.

COURSES
   - See http://www.ugs.usf.edu/sab/sabs.cfm
SOCIAL WORK AND PUBLIC HEALTH DUAL DEGREE PROGRAMS

Dual Degree Program
Master of Social Work (M.S.W.) /Master of Public Health (M.P.H.) Degrees

DEGREE INFORMATION
Program Admission Deadlines: Refer to individual program listings
Minimum Total Hours: Social Work 48 (for advanced standing)
Public Health 42
Program Level: Masters
CIP Code: Social Work: 44.0701
Public Health: 51.2201
Dept Codes: SOK, DEA
Program (Major/College): SOK BC / MPH PH
Concentrations: Maternal and Child Health
Behavioral Health

CONTACT INFORMATION
Colleges: Behavioral and Community Sciences
Public Health
Contact: www.grad.usf.edu

PROGRAM INFORMATION
School of Social Work and the College of Public Health offer a dual-degree program with MPH concentrations in either Maternal and Child Health or Behavioral Health.

For social work students seeking the dual-degree, expanded study in public health encourages a well-balanced macro-micro orientation to clinical practice. Such expansion can provide the social work student with specific skills that result in comprehensive and effective client interventions in health care settings. The fundamental methodological tools of public health, such as biostatistics, epidemiology, and health management and evaluation, further assist the social worker in targeting the needs of individuals and communities. The MSW/MPH dual-degree program is a two to three year full-time course of study.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of Colleges and Schools

ADMISSION INFORMATION
Students may apply either simultaneously for the Dual Master’s Degree Students (indicating this intention on their application forms) or may add Social Work after admission to the Public Health Program, or add Public Health after admission to the Social Work Program. Applications for the Dual Master’s Degree may be obtained from the Admissions Office at the School of Social Work or at the College of Public Health. The application should be signed by the Chair of the Social Work Graduate School and then returned the College of Public Health. Admissions are conducted independently and admission to one program in no way guarantees admission to a different program.

DEGREE PROGRAM REQUIREMENTS
Refer to the requirements for each degree.

http://www.bcs.usf.edu/
SOCIAL WORK PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Cyclical admissions. Contact School of Social Work for further information.

Minimum Total Hours: 60
Program Level: Doctoral
CIP Code: 44.0701
Dept Code: SOK
Program (Major/College): SOK BC

CONTACT INFORMATION

College: Behavioral & Community Sciences
Department: School of Social Work
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The School of Social Work offers a program leading to a Ph.D. in Social Work. The Ph.D. program provides a course of study to prepare graduates for academic and research careers, to provide leadership in research and education committed to excellence in social work clinical practice and to provide leadership in the development of clinical services for diverse, vulnerable and underserved populations.

The Ph.D. program, requiring 60 hours of study, is offered via a nontraditional model of delivery. During the first three years, students complete thirty-six hours of course work in nine semesters. These courses are offered in intensive weekend sessions during the fall and spring semesters and in concentrated three-week summer sessions. Dissertation work (24 hours) is taken during the course of years four and five.

This doctoral program allows students to attend course work while maintaining full-time employment commitments.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Same as university plus:

- Bachelor’s degree from an accredited university or college; undergraduate G.P.A. of 3.0 in last two (2) years of undergraduate work;
- Master’s degree from CSWE accredited social work program; G.P.A. of at least 3.5 (on a 4.0 scale);
- GRE required, 500V, 500Q.
- School of Social Work Application
- Three recommendations addressing applicant’s academic and professional capabilities;

http://www.bcs.usf.edu/
Candidate’s statement that describes reasons for seeking admission to the Ph.D. in Social Work program, career goals, and research interests;

Professional or academic writing sample providing evidence of scholarly abilities such as single-authored journal article, book chapter, technical report, thesis, grant application, or other comparable work.

Interview

DEGREE PROGRAM REQUIREMENTS

Thirty-six hours (36) of course work

Core Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SOW 7491</td>
<td>Theoretical Perspectives in Social Work Research</td>
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</tr>
<tr>
<td>SOW 7490</td>
<td>Foundations of Social Work Research Methods</td>
<td>(3)</td>
</tr>
<tr>
<td>SOW 7496</td>
<td>Qualitative Methods in Social Work Research</td>
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<td>SOW 7497</td>
<td>Quantitative Methods in Social Work Research</td>
<td>(3)</td>
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<tr>
<td>SOW 7417</td>
<td>Advanced Statistics in Social Work Research</td>
<td>(3)</td>
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<tr>
<td>SOW 7616</td>
<td>Advanced Clinical Practice With Complex Problems</td>
<td>(3)</td>
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<tr>
<td>SOW 7446</td>
<td>Evaluation of Social Work Practice/Program Evaluation</td>
<td>(3)</td>
</tr>
<tr>
<td>SOW 7776</td>
<td>The Social Work Educator in the University</td>
<td>(3)</td>
</tr>
<tr>
<td>SOW</td>
<td>Critical Issues in Social work</td>
<td>(3)</td>
</tr>
<tr>
<td>SOW 7919</td>
<td>Directed Studies in Social work Research</td>
<td>(3)</td>
</tr>
<tr>
<td>SOW 7981</td>
<td>Proposal Writing I</td>
<td>(3)</td>
</tr>
<tr>
<td>SOW 7982</td>
<td>Proposal Writing II</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Qualifying Exam

Successful completion of qualifying examinations at the end of Semester seven prepares the student for Candidacy.

Other Requirements

Completion of remaining course work in semesters eight and nine, and successful defense of a dissertation proposal admits the student for Candidacy.

Dissertation

Successful defense of a dissertation consisting of original Social Work research

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOW 7980</td>
<td>Dissertation Hours</td>
<td>(24)</td>
</tr>
</tbody>
</table>

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
SPEECH-LANGUAGE PATHOLOGY (POST-BACC) PROGRAM

Master of Science (M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 1

Minimum Total Hours: 61
Program Level: Masters
CIP Code: 51.0204
Dept Code: CSD
Program (Major/College): SPP BC

CONTACT INFORMATION

College: Behavioral & Community Sciences
Department: Communication Sciences and Disorders
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

The Department of Communication Sciences and Disorders is devoted to the study of normal and disordered human communication. Courses and clinical practice provide the student with principles, research methods and application of knowledge about the spectrum of verbal and non-verbal communication skills. Diagnosis and remediation of communicative problems dominate the clinical component of this course of study.

The Master of Science in Speech Language Pathology is structured to meet the preparation requirements of the American Speech-Language-Hearing Association for the Certificate of Clinical Competence.

Accreditation:

Major Research Areas: n/a

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

• completion of a set of pre-requisite courses, also required for state licensure and national certification in speech-language pathology,
• at least a 3.20 average on a 4.00 scale in all work attempted while registered as a upper division student working for a baccalaureate degree,
• minimum GRE scores: 52nd percentile (approx. 460) on the verbal portion OR the 52nd percentile (approx. 4) on the writing section AND the 32nd percentile (approx. 470) on the quantitative section, taken within five years preceding application
• three letters of recommendation
• a letter of intent and resume, and
• applicant must also demonstrate competency in communication skills as determined by the chairperson or delegate.

http://www.bcs.usf.edu/
DEGREE PROGRAM REQUIREMENTS

All speech-language pathology majors must complete the following:

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>29 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA 5204 Advanced Clinical Phonology</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 5403 Lang. Lrng in School-Age Year</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 5552 Diagnostic Principles and Practices</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6211 Advanced Vocal Disorders</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6225 Advanced Fluency Disorders</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6410 Aphasia</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6559 Augmentative and Alternative Communication</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6571 Ethical Practice Issues in Comm. Dis.</td>
<td>(2)</td>
</tr>
<tr>
<td>SPA 6805 Research Procedures in Comm. Sci. &amp; Dis.</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6565 Dysphagia</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Practicum

Also, students will enroll in sufficient graduate clinical practicum (23 credits) to meet a minimum of 400 clock hours to fulfill the requirements of the American Speech-Language-Hearing Association. Of these hours, 25 hours must be in observation and at least 250 clock hours must be in speech-language pathology.

Electives (Non-thesis Option) 9 hours

Students who chose to do a thesis will not complete any elective coursework. For students who chose not to do a thesis, they will select 9 hours from among the following courses:

<table>
<thead>
<tr>
<th>Electives</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA 5133C Speech Science Instrumentation</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6232 Neuromotor Disorders of Speech</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6245 Craniofacial Communication Disorders</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6324 Aural Rehabilitation: Children*</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6401 Pediatric Language Disorders</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6404 Language Learning Disabilities</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6417 Communication &amp; Cognition in Traumatic Brain Injury</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6473 Multicultural Differences in Language Use</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6564 Seminar in Aging, Cognition, and Communication</td>
<td>(3)</td>
</tr>
<tr>
<td>SPA 6910 Directed Research</td>
<td>(var)</td>
</tr>
<tr>
<td>SPA 6971 Thesis</td>
<td>(var)</td>
</tr>
</tbody>
</table>

*required for students who have not had a course in aural rehabilitation at the undergraduate level

Thesis option

Each student must complete at least 1 hour of SPA 6910 (Directed Research) and a minimum of 8 hours of SPA 6971 (Thesis) and submit an approved thesis.

Non-thesis option

Each student must complete an additional nine (9) hours of coursework. The specialized coursework for the non-thesis option will be selected with the assistance of an advisor.

GPA and Comprehensive Exam Requirements

Also required for graduation are the attainment of a ‘B’ or better in each graduate Speech-Language Pathology course, the attainment of clinical competence and a GPA of 3.0 in all coursework and clinical practica, and satisfactory passage of a comprehensive examination

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
COLLEGE OF BUSINESS
Changes to Note

The follow curricular changes for the College of Business were approved by the USF-Tampa Graduate Council on the date noted.

Changes to Programs
Management Information Systems (MS) Change CIP Code from 52.1201 to 11.0501 3/1/10

Program Terminations
Executive MBA for Physicians Program (MDX) (MBA) 11/2/09

New Courses
GEB 6457 Ethics, Law and Sustainable Business Practices 4/19/10
MAN 6147 Leadership Concepts 4/19/10
MAN 6456 Improvisation in Business Organizations 2/1/10
MAN 6518 Sustainable Production Systems 4/19/10
MAN 6746 Designing Sustainable Enterprise 4/19/10
MAN 6748 Assessing Performance in Sustainable Organizations 4/19/10
MAN 6950 Capstone Experience in Leading Sustainable Enterprise 4/19/10

Course Changes
ENT 6016 New Venture Formation change prefix from GEB to ENT 5/3/10
GEB 6116 Business Plan Development change prefix from GEB to ENT 5/3/10
ENT 6126 Strategic Entrepreneurship previously GEB 6930 5/3/10
ENT 6186 Strategic Market Assessment previously GEB 6930 5/3/10
ENT 6415 Venture Capital & Private Equity previously GEB 6930 5/3/10
ENT 6606 Product Development previously GEB 6930 5/3/10
ENT 6946 Advanced Topics in Entrepreneurship previously GEB 6930 5/3/10
GEB 6930 Selected Topics change from 3 hours to 1-3 hrs variable 7/2/10
MAN 6107 Leadership Perspective Change to variable credit hours and title to Leading Sustainable Enterp: Goals & Proc 4/19/10
MAN 6116 Managing Diversity Change title to Diversity and Organizational Justice 4/19/10

Other Revisions (GC approval not needed)
Accountancy (M.Acc.)– change Admission deadline
Business Admin (MBA) – course number edits
Business Economics (MA) – moved to CAS section
Entrepreneurship in Applied Technologies (M.S.) – minor course edits
Executive MBA – minor edits
Management (MS) – minor course edits and correction to total hours
Real Estate (MS) – minor course edits
University of South Florida  
College of Business  
4202 E. Fowler Ave., BSN 3403 (loc BSN 103)  
Tampa, FL 33620  

Web address: [http://www.coba.usf.edu/](http://www.coba.usf.edu/)  
Email: mba@coba.usf.edu  
Phone: 813-974-3335  
Fax: 813-974-4518  

**College Dean:** Robert Forsythe  
**Associate Dean:** Charles Kroncke  
**Graduate Coordinator:** Wendy Sage Baker  

**Accreditation:**  
The Ph.D., M.B.A., M.S. in Management Information Systems, M.S. in Management: Leading Sustainable Enterprises, M.S. in Finance, Master of Accountancy, M.S. in Marketing, M.S. in Entrepreneurship, M.S. in Real Estate, and M.A. in Economics programs in the College of Business are accredited by the AACSB International – The Association to Advance Collegiate Schools of Business. The College also is a member of the Graduate Management Admission Council (GMAC).  

**Mission Statement:**  
The USF College of Business will provide a high-quality, diverse learning environment preparing students to contribute to and take leading positions in business and society. Our teaching, scholarship, and service will link theory and practice to benefit the University and the communities it serves.  

**Major Research Areas:** Contact College for information.  

**Types of Degrees Offered:**  
Master of Accountancy (M.Acc.)  
Master of Arts (M.A.)  
Master of Business Administration (M.B.A.)  
Master of Science (M.S.)  
Master of Science in Marketing (M.S.M.)  
Master of Science in Real Estate (MSRE)  
Doctor of Philosophy (Ph.D.)
Name of Programs Offered:

Master of Accountancy - M.Acc.
Accountancy

Master of Arts - M.A.
Business Economics

Master of Business Administration - M.B.A.
Business Administration (full-time or part-time) (BUS)
Executive M.B.A. (MBA)

Master of Science - M.S.
Entrepreneurship in Applied Technologies (EAT)
Biomedical Engineering (MSBE) / Entrepreneurship in Applied Technologies (M.S.) (Dual Degree Program)
Finance (FIN)
Management (MAN)
Management Information Systems (ISM)

Master of Science in Marketing – M.S.M.
Marketing (MKT)

Master of Science in Real Estate – M.S.R.E.
Real Estate (RST)

Doctor of Philosophy - Ph.D.
Business Administration (BUD)

Concentrations:

Leading Sustainable Enterprises (LSE) (M.S. in Management)
Accounting (Ph.D. in Business Administration)
Economics (Ph.D. in Business Administration)
Finance (Ph.D. in Business Administration)
Information Systems (Ph.D. in Business Administration)
Marketing (Ph.D. in Business Administration)

Also see application areas in program descriptions.

Graduate Certificates Offered:
see Graduate Certificate website http://www.outreach.usf.edu/gradcerts/

COLLEGE REQUIREMENTS

Non-Degree Seeking Students
The College of Business will approve, on a space available basis, non-degree seeking student status for transient students (degree-seeking students at another AACSB accredited institution) or for students with valid reasons to register in this status and who meet all admission requirements. Contact the college for additional requirements.
About the Catalog

The University of South Florida Graduate Catalog is organized with the degree programs offered listed in the section of the college that offers them. For example, the Master of Science degree with a “program” (also known as major) in Biology is listed in the College of Arts and Sciences section. Some colleges offer areas of specialization, or “concentrations” within a degree program.

**EXAMPLE OF PROGRAM PAGE**

Business Administration Program

Master of Business Administration (M.B.A.) Degree

**DEGREE INFORMATION**

**EXAMPLE OF CONCENTRATION PAGE**

Adult Education Concentration

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program

With a concentration in Adult Education

**DEGREE INFORMATION**

Blue denotes Concentration (or area of specialization)

The name of the program and/or concentration does not appear on the diploma – only the name of the degree (i.e., Master of Arts) is listed. The program and concentration information is listed on the official transcript. Other areas, such as application track, are not listed on the transcript.
# ACCOUNTANCY PROGRAM

## Master of Accountancy (M.Acc.) Degree

### DEGREE INFORMATION

<table>
<thead>
<tr>
<th>Program Admission Deadlines:</th>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall: March 1</td>
<td>College: Business</td>
</tr>
<tr>
<td>Spring: October 1</td>
<td>Department: School of Accountancy</td>
</tr>
<tr>
<td>Summer: March 1</td>
<td>Contact Information: <a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
</tr>
</tbody>
</table>

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 52.0301
Dept Code: ACC
Program (Major/College): MAC BA

Also offered as:
Track under Business Administration (Ph.D.)

### PROGRAM INFORMATION

The objective of the Master of Accountancy (M.Acc.) Program is to provide candidates with greater breadth and depth of knowledge in accountancy than is possible in the baccalaureate program. The program is designed to meet the increasing needs of business, government, and public accounting. Students entering the M.Acc. Program must already have the equivalent of an undergraduate degree in accounting from an AACSB accredited school. The program may also be structured to satisfy the requirements to sit for the CPA Examination in Florida.

**Accreditation:**
Accredited by both the Commission on Colleges of the Southern Association of College and Schools (SACS) and AACSB International (The Association to Advance Collegiate Schools of Business).

**Major Research Areas:**
Contact department.

### ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

**Program Admission Requirements**

- At least a 3.0 upper-level accounting GPA (minimum of 21 hours at a U.S. AACSB-accredited program within the past 5 years)
- a 3.00 overall upper-level GPA
- a 500 or higher GMAT score

International applicants from non English-speaking countries must also have a TOEFL score of 550 or higher on the written version, a minimum score of 213 on the computer-based test or a 79 on the internet-based test.

Admission to the M.Acc. program is competitive. For full consideration, please submit your application by the deadlines shown above.

http://www.coba.usf.edu/
DEGREE PROGRAM REQUIREMENTS

For the student who has the equivalent of an undergraduate major in accounting at USF (including 21-24 hours of upper-level accounting coursework taken within the last 5 years), the program consists of 30 hours. Most (21 hours) of the program is devoted to the study of accounting. The remaining nine (9) hours consist of study in other business areas including economics, entrepreneurship, finance, and information systems/decision sciences. These nine (9) hours are elected by the student in consultation with the M.Acc. Advisor. At least 70% of the coursework must be at the 6000 level.

The M.Acc. curriculum has a set of three required common core accounting courses. The student may emphasize a particular specialty through a choice of accounting electives. The sequencing of courses will be determined in consultation with the M.Acc. Advisor.

**Required Accounting Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 6875</td>
<td>Financial Reporting and Professional Issues</td>
<td>3</td>
</tr>
<tr>
<td>ACG 6405</td>
<td>Advanced Accounting Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ACG 6932</td>
<td>Integrative Accounting Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

**Accounting Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 6476</td>
<td>Contemporary Issues in Accounting Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ACG 6636</td>
<td>Contemporary Issues in Auditing</td>
<td>3</td>
</tr>
<tr>
<td>TAX 6065</td>
<td>Contemporary Issues in Taxation</td>
<td>3</td>
</tr>
<tr>
<td>ACG 6346</td>
<td>Contemporary Issues in Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACG 6936</td>
<td>Selected Topics in Accounting</td>
<td>3</td>
</tr>
<tr>
<td>TAX 6445</td>
<td>Estate Planning</td>
<td>3</td>
</tr>
<tr>
<td>ACG 5205</td>
<td>Advanced Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACG 5675</td>
<td>Internal and Operational Auditing</td>
<td>3</td>
</tr>
<tr>
<td>ACG 5501</td>
<td>Governmental / Not-for-Profit Accounting</td>
<td>3</td>
</tr>
<tr>
<td>TAX 5015</td>
<td>Federal Taxation for Business Entities</td>
<td>3</td>
</tr>
</tbody>
</table>

**Non-accounting Electives**

Electives must be approved in advance by M.Acc. Advisor

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
</tr>
</tbody>
</table>

Open Elective

One 6000 level accounting or non-accounting elective

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

**Total Semester Hours:**

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
</tr>
</tbody>
</table>

COURSES

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
BUSINESS ADMINISTRATION PROGRAM

Master of Business Administration (M.B.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: June 1
- Spring: October 15
- Summer: No Admit

Minimum Total Hours: 37
Program Level: Masters
CIP Code: 52.0101
Dept Code: DEA
Program (Major/College): BUS BA

Application Tracks/Areas of Study:
- Building Sustainable Enterprise
- Entrepreneurship
- Finance
- Advanced Financial Management
- Advanced International Business
- International Business Management
- Advanced Management
- Management Information Systems
- Advanced Management Information Systems
- Marketing Strategy
- Advanced Marketing

Also offered as:
- Executive M.B.A.

CONTACT INFORMATION

College: Business
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

The Master of Business Administration (M.B.A.) is a professional degree designed to prepare graduates for managerial roles in business and not-for-profit organizations. Graduates will develop the necessary skills and problem-solving techniques that will permit them to make an early contribution to management and eventually to move into broad, general management responsibilities at the executive level. The program is designed to meet the needs of qualified men and women with undergraduate degrees from accredited universities. The work experience requirement provides meaningful background that will enhance the student’s understanding and learning experience.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools (SACS); AACSB International – The Association to Advance Collegiate Schools of Business

Major Research Areas:
Contact Coordinator for department

http://www.coba.usf.edu/
ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Upper-level GPA 3.0 or higher
- minimum of 500 on GMAT
- International applicants from non English-speaking countries must also have a TOEFL score of 550 or higher on the written version, a minimum score of 213 on the computer-based test or a 79 on the internet-based test.
- Two years of significant, professional work experience prior to enrollment.
- Resume, statement of purpose, and recommendations.

The admissions committee carefully considers each completed application, with particular attention to work history, undergraduate performance, recommendations and test scores. Personal characteristics that add to the diversity of the class may also be considered.

DEGREE PROGRAM REQUIREMENTS

The M.B.A. degree is a 37-48 hour program. All M.B.A. candidates must complete all degree requirements within five years of beginning the program. The full-time student without course waivers generally will need 6 semesters to complete the program. Part-time students can complete all work within a reasonable time—approximately three years without course waivers. Part-time students are encouraged to take two courses per semester and must complete 12 hours per calendar year to remain on active status as a degree-seeking student. Students who have completed undergraduate or graduate courses in business and economics from an AACSB accredited school may receive course waivers and reduce their course loads from the maximum requirement. Courses are scheduled to accommodate both full-time and part-time students. All courses are at the graduate level. Students entering the program are expected to have sufficient competency in mathematics (College Algebra), communication skills (written and verbal), basic computer skills, high-speed internet access, and two years of relevant work experience. The curriculum consists of:

The Common Body of Knowledge
Common Body of Knowledge: (CBK) courses, also known as the "TOOL" Area courses, are designed to provide basic background in the several functional areas in order to prepare for more advanced studies. The courses assume little or no prior knowledge in the field. Students having undergraduate degrees in Business Administration may be eligible for waivers, subject to standards set by the faculty. The conditions for waivers are explained more fully below. Students who waive the tool courses are required to take a Business Skills Review course (non-credit) in the first semester of enrollment.

Application Areas (tracks):
The application areas encourage the development of market driven competencies and provide students with distinctive sets of knowledge and skills. Each grouping of courses allows students to position themselves in the marketplace by choosing applications that match their career goals. Students will select 2-3 areas of competency, each with 9 credit hours (advanced tracks are 6 credit hours). Students who do not waive the tool courses are required to take only two specialization tracks (18 hours). Students who waive the tool courses are required to take 3 specialization tracks (27 credit hours).

Certificate of Achievement:
Students will receive a certificate of achievement for the successful completion of each application sequence. Application area courses also include the opportunity to sharpen skills in writing, presentation, teamwork, technology applications, global applications, and communication.

Integrated Business Applications:
Integrated Business Applications is a six credit, two consecutive semester course sequence which emphasizes the integration and utilization of techniques and methods taught in the Tool and Application areas. The sequence involves working in both group and individual projects, with "live" as well as published cases. It utilizes a variety of computer applications, and includes the development of detailed business plans
### M.B.A. Course Structure

#### Core Requirements

**Common Body of Knowledge, "Tool" courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 6025</td>
<td>Financial Accounting for Managers</td>
<td>2</td>
</tr>
<tr>
<td>ACG 6075</td>
<td>Management Accounting &amp; Control</td>
<td>2</td>
</tr>
<tr>
<td>MAN 6055</td>
<td>Human Behavior and Organization</td>
<td>2</td>
</tr>
<tr>
<td>ECP 6702</td>
<td>Managerial Economics</td>
<td>2</td>
</tr>
<tr>
<td>QMB 6305</td>
<td>Managerial Decision Analysis</td>
<td>2</td>
</tr>
<tr>
<td>ECO 6708</td>
<td>Global Econ. Environment of Bus.</td>
<td>2</td>
</tr>
<tr>
<td>MAR 6815</td>
<td>Marketing Management</td>
<td>2</td>
</tr>
<tr>
<td>FIN 6934</td>
<td>Financial Management</td>
<td>2</td>
</tr>
<tr>
<td>ISM 6021</td>
<td>Management Information Systems</td>
<td>2</td>
</tr>
<tr>
<td>QMB 6603</td>
<td>Operations Management &amp; Quality Enhancement</td>
<td>2</td>
</tr>
</tbody>
</table>

**Application Areas (Required Electives)**

<table>
<thead>
<tr>
<th>Track #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Track #1</td>
<td>9</td>
</tr>
<tr>
<td>Application Track #2</td>
<td>9</td>
</tr>
<tr>
<td>Application Track #3</td>
<td>9</td>
</tr>
</tbody>
</table>

*Note: Some Application Tracks may not be offered each year. Additional applications tracks may be developed based on students interests and needs.*

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEB 6445</td>
<td>Social, Ethical, Legal Systems</td>
<td>2</td>
</tr>
<tr>
<td>MAN 6147</td>
<td>Leadership Concepts</td>
<td>2</td>
</tr>
<tr>
<td>GEB 6895</td>
<td>Integrated Business Applications I</td>
<td>3</td>
</tr>
<tr>
<td>GEB 6896</td>
<td>Integrated Business Applications II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Semester Credits Required**

37-48

### Constraints

1. The maximum credits required is forty-eight (48).
2. Students with an undergraduate degree in Business who are eligible to waive the tool area courses must complete an advanced course in four of the seven areas waived. Students do not need an advanced course in their area of undergraduate major. Students who waive the tool courses are required to take Business Skills Review exams (non-credit) in the first semester of enrollment.
3. Students who are required to take the tool courses are required to take only two specialization tracks (18 hours). Students who waive the tool courses are required to take 3 specialization tracks (27 credit hours).

*Note: Tool/core courses may not be counted as electives.*

### Thesis

Students may elect a 6 hour thesis in any of the areas of concentration of the college, subject to departmental approval.

### Non-Tampa Campus Offerings

The full-time and part-time MBA programs are offered on the Tampa campus and the USF Downtown Center (part-time only).

### COURSES

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
BUSINESS ADMINISTRATION PROGRAM

Doctor of Philosophy (Ph.D.) Degree

<table>
<thead>
<tr>
<th>DEGREE INFORMATION</th>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Admission Deadlines:</td>
<td>College: Business</td>
</tr>
<tr>
<td>Fall:</td>
<td>Contact Information: <a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
</tr>
<tr>
<td>January 2</td>
<td></td>
</tr>
<tr>
<td>Fall admission only</td>
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<td>Minimum Total Hours: 90</td>
<td></td>
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<td>Program Level: Doctoral</td>
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<td>CIP Code: 52.0201</td>
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<td>Dept Code: DEA</td>
<td></td>
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<tr>
<td>Program (Major/College): BUD BA</td>
<td></td>
</tr>
</tbody>
</table>

Concentrations:
- Accounting
- Economics
- Finance
- Information Systems
- Marketing

PROGRAM INFORMATION

The Ph.D. program offered by the College of Business provides its graduates with preparation for careers as college and university professors and as research and staff personnel in industry and government. The doctoral program provides for intellectual growth as students work closely with faculty in seminars, research projects, and other assignments which develop their teaching and research skills. The curriculum offers breadth of understanding of the integral components of business administration as well as depth of field specialization sufficient to permit the student to make a meaningful contribution to their discipline. The program is sufficiently flexible to allow each student to build upon his or her strengths and to accommodate students with various levels of preparation in a wide variety of fields, and in areas outside the college. However, the degree conferred is PhD in Business with a concentration in one of the departmental areas.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools; AACSBI – The Association to Advance Collegiate Schools of Business.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Competitive based on GPA, GMAT or GRE
- personal statement
- recommendations
- interview
- International applicants from non English-speaking countries must also have a TOEFL score of 550 or higher on the written version, a minimum score of 213 on the computer-based test or a 79 on the internet-based test.

http://www.coba.usf.edu/
DEGREE PROGRAM REQUIREMENTS

A minimum of 90 semester hours beyond the bachelor's degree is required. This includes 21 hours of dissertation. A minimum of 45 hours of coursework must be completed at the University of South Florida.

Foundation Courses
These courses are designed to develop an appreciation of the institution of business and to help students see how their areas of specialization fit into this general picture. With the approval of the student's program committee, a student may satisfy these requirements in any of the following ways:

A. By completing an undergraduate degree in business at an AACSB accredited institution, with an average of "B" or better in the last 60 hours, no more than 5 years prior to admission to the Ph.D. program.

B. By completing an M.B.A. degree at an AACSB accredited institution, no more than 5 years prior to admission to the Ph.D. program

C. By completing one approved course with a grade of "B" or better in each of the functional areas: Accounting, Finance, Information Systems, Management, and Marketing. (Economics requirements are described under core requirements.) All graduate-level courses at the 6000 level or above, with the exception of specific "tool" courses (e.g. statistics), will count toward this requirement.

D. By successfully petitioning the doctoral Program Committee to accept previous academic work (e.g., specialized Masters programs in business, degrees granted more than 5 years ago, etc.) in fulfillment of all or part of this requirement. Such a petition must be initiated during the first semester of the program.

CORE REQUIREMENTS
The core courses are designed to provide a strong background in Economics and to develop the student’s quantitative and statistical research skills. These courses are required of all students in the program. The College will waive a course only if the student has passed the same or equivalent course with a grade of "B" or better within the preceding five years.

The Economics requirement can be met by completing two graduate level courses, one in microeconomics and one in macroeconomics, with a grade of "B" or better. The courses which satisfy this requirement are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECP 6702</td>
<td>Managerial Economics</td>
<td>2</td>
</tr>
<tr>
<td>ECO 6708</td>
<td>Global Economic Env. of Business</td>
<td>2</td>
</tr>
<tr>
<td>ECO 6115</td>
<td>Microeconomics I*</td>
<td>3</td>
</tr>
<tr>
<td>ECO 6206</td>
<td>Aggregate Economics*</td>
<td>3</td>
</tr>
<tr>
<td>ECP 6408</td>
<td>Economics of Organization*</td>
<td>3</td>
</tr>
</tbody>
</table>

*At least one course must be taken from among those listed above with an asterisk (*).

The quantitative and statistical coursework is to be determined by the student’s program committee in consultation with the student. A three course series is required. An appropriate sequence should be chosen from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 6424</td>
<td>Econometrics I</td>
<td>3</td>
</tr>
<tr>
<td>ECO 6425</td>
<td>Econometrics II</td>
<td>3</td>
</tr>
<tr>
<td>ECO 7426</td>
<td>Econometrics III</td>
<td>3</td>
</tr>
<tr>
<td>ECO 7427</td>
<td>Econometrics IV</td>
<td>3</td>
</tr>
<tr>
<td>QMB 6375</td>
<td>Applied Linear Statistical Models</td>
<td>3</td>
</tr>
<tr>
<td>QMB 7565</td>
<td>Introduction to Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>QMB 7566</td>
<td>Applied Multivariate Statistical Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

Any substitution of appropriate mathematics, statistical and quantitative coursework must be approved by the Doctoral Program Committee, preferably at the time of acceptance, or definitely before the student takes a substitute course. In addition, students are required to take an additional research elective approved by their advisory committee. Should a student earn a grade of "C" or lower in the core courses, the case will be brought before the Doctoral Program Committee for review. After reviewing the case, the Committee will take one of the following steps:
a. Require the student to pass an examination that covers the material relevant to the subject. A student who fails the exam on the first attempt may retake it within one year. A student who fails the exam on the second attempt will be subject to dismissal.

b. Require the student to retake the course. If the student retakes the course and fails to receive a grade of “B” or better, the student is subject to dismissal.

Concentration Field
All students will take at least five (5) courses at the 6000 or 7000 level in an area designated as the student’s Concentration. Students are encouraged to identify courses in the concentration field that will provide experience in applying current research techniques to problems in that field. To accomplish this, the student may propose a combination of formal classroom courses and independent directed-research courses. This combination may include a year-long research seminar in which the groundwork is laid for the student’s dissertation. The specific agenda of courses will be determined by the student’s program committee. The following fields are offered: Accounting, Economics, Finance, Information Systems, Management (inactive) and Marketing. Courses taken as part of the Foundation or Core sections may not be counted as part of the hours required for a concentration field.

Support Field (9 hours)
The support area will consist of a minimum of three courses (9 hours) from one or more of the fields listed under the concentration field, or elsewhere in the university. The support field and the concentration field cannot be taken in the same department. Courses within the support field can be selected to complement the concentration field and in special cases may include courses outside the College of Business. The nature and number of the support area courses will be determined by the Student’s Program Committee in consultation with the Ph.D. coordinator of the support field department. Courses taken as part of the Foundation or Core courses may not be counted as part of the 9 hours required for support fields.

CONCENTRATIONS
Students select one of the following concentrations:

Accounting Concentration Requirements
The Accounting concentration emphasizes:
- The mastery of one or more specialized areas of accounting, such as accounting information systems, auditing, or financial accounting
- The development of requisite skills to engage in respected applied, practical and scholarly research
- The development of effective teaching skills

The concentration requires meeting the College of Business foundation course requirements and completing 41 hours of coursework. The 41 hours of coursework include:
- 17 credit hours of core requirements related to economics and research methods
- 15 credit hours of accounting courses
- 9 credit hours in a support field

Economics Concentration Requirements
Concentration Admission Requirements
In addition to the general program admission requirements listed above, the Economics Concentration also requires that applicants have:
- A GRE score of at least 500 (V) and 660 (Q) or a GMAT score of at least 575
- A strong background in mathematics, statistics, and economic theory

Required Coursework (27 hours)
In addition to any Foundation Courses that may be required and the Support Field, the Economics Concentration consists of:

ECO 6115 Microeconomics I (3)
ECO 6206 Aggregate Economics (3)
ECO 6305 History of Economic Thought (3)
ECO 6405 Mathematical Economics I (3)
ECO 6424 Econometrics I (3)
ECO 6425 Econometrics II 3)

http://www.coba.usf.edu/
ECO 7116 Microeconomics II (3)
ECO 7406 Mathematical Economics II (3)
ECO 7426 Econometrics III (3)

Fields (12 hours)
Select two of the groupings below:
ECP 6536 Economics of Health Care I (3)
ECP 7537 Economics of Health Care II (3)
ECS 6015 Economic Development (3)
ECO 6706 International Trade: Theory and Policy (3)
ECP 6405 Industrial Organization I (3)
ECP 7406 Industrial Organization II (3)
ECO 6505 Public Finance (3)
ECO 6525 Public Sector Economics (3)
ECP 6614 Urban Economics (3)
ECP 6624 Regional Economics (3)
ECP 6205 Labor Economics I (3)
ECP 7207 Labor Economics II (3)

Comprehensive Qualifying Examination for the Economics Concentration
The Comprehensive Qualifying Examination for the Economics Concentration is given in two parts. The first examination covers mathematical economics and microeconomics and the second examination covers econometrics. Students are permitted two attempts to pass each examination. A second failure on either examination disqualifies the student from continuing in the Ph.D. program.

Finance Concentration Requirements
In addition to the required core and foundation courses, the curriculum will normally include the following courses:

FIN 6804 Theory of Finance 3
FIN 7808 Advanced Micro Finance 3
FIN 7817 Financial Markets 3
FIN 7930 Selected Topics in Finance (3, 3) (Two Semesters)
FIN 7935 Finance Research Seminar 3

Courses taken as part of the Foundation or Core sections may not be counted as part of the hours required for the concentration.

Support Field (9 hours)
Those who elect Finance as a support field will establish their support field curriculum in consultation with their major advisors and a representative from the Finance department. Normally, a support field in Finance would require the following three courses:
FIN 6804 Theory of Finance 3
FIN 7817 Financial Markets 3
FIN 7808 Advanced Micro Finance 3

Comprehensive Qualifying Exam:
Upon completion of all coursework, students must pass a comprehensive written examination. The student’s performance on this exam should reflect familiarity with the literature, current issues and problems related to these fields. A student who fails the field exam may retake it within one year. A second failure disqualifies the student from continuing in the Ph.D. program. If the degree is not conferred within 5 calendar years of the comprehensive qualifying examination, a second and different examination must be taken. Students passing the comprehensive qualifying examination are eligible for admission to candidacy for the Ph.D. program.
Dissertation:
21 credit hours of dissertation are required for the degree.

Residency Requirements:
Ph.D. students in the College are required to complete a minimum of 15 credit hours per calendar year. Failure to meet this requirement will result in the student being placed on conditional status.

Information Systems Concentration Requirements

ISM 6124 Advanced Systems Analysis and Design*
ISM 6218 Advanced Databases Management*
ISM 6225 Distributed Information Systems*
ISM 6930 Computational Methods in Business
ISM 7910 MIS Research Seminar I
ISM 7911 Seminar in Technical IS Research
ISM 7912 Seminar in MIS Organizational Research
One additional ISM course at the 6000 level or higher.**

*Note: This requirement can be waived if a student has taken these or equivalent graduate courses in a prior program and earned a B or higher. Waiver requests for any of the courses listed above should include a copy of the course syllabus and should be submitted to the department’s Ph.D. Coordinator.

**Note that any of the three courses taken to satisfy the foundational course requirement in Information Systems can also satisfy this requirement.

Support Field (9 hours):
Students take 3 graduate courses outside of the concentration area. Courses may be taken outside of the College of Business, but should complement the concentration subject area.

Comprehensive Qualifying Exam:
Upon completion of all coursework, students must pass a comprehensive examination in the concentration area. The student’s performance on this exam should reflect familiarity with the literature, current issues, and problems related to these fields.

There are two parts to the comprehensive examinations following the completion of coursework:
(i) A written examination and
(ii) An oral presentation and successful defense of the student’s “second year research paper.”
Students will be considered to have passed the comprehensive exam if they pass the written exam and successfully present and defend the “second year research paper.”

Marketing Concentration Requirements
Students will be required to successfully complete a minimum of 6 doctoral-level Marketing seminars. Typically, one doctoral seminar will be offered in the Fall semester and two seminars will be offered in the Spring semester. The six required courses may be selected from the following list:

MAR 7555 Consumer Behavior Theory
MAR 7635 Advanced Marketing Research: Design and Technique
MAR 7667 Marketing Models and Strategy Applications
MAR 7787 Marketing Theory and History
MAR 7910 Independent Study in Marketing (S/U only)
MAR 7930 Advanced Seminar in Marketing
MAR 7931 Seminar in Selected Marketing Topics including:
- Buyer-Seller Interaction
- Marketing Channels, Logistics and Supply Chain Management
- Marketing Management
- Marketing Strategy
- Readings in Marketing
- Sales Management

MAR 7980 Dissertation Research (S/U only)

In addition, students will complete a “Pro-Seminar” every Fall semester for the first two years of study.
Note: The Professional Seminars do not count as one of the six required Ph.D. seminars.

Comprehensive Qualifying Examinations
Upon completion of all coursework, students must pass the equivalent of a comprehensive examination in the concentration area. The student’s performance on these “exams” should reflect familiarity with the literature, as well as with current issues and problems related to these fields. A student who fails either of the exams may retake it within one year. A second failure disqualifies the student from continuing the Ph.D. program. If the degree is not conferred within 5 calendar years of the comprehensive qualifying examination, a second and different examination must be taken. Students passing the qualifying examination are eligible for admission to candidacy for the Ph.D. program.

The decision to administer a separate comprehensive exam for a support area will be made by the department in which the support area is taken. In the event that an interdisciplinary support area is selected, any department represented by six (6) or more semester hours may require a qualifying examination. In the event that no single department represents six semester hours or more, the student’s program committee will solicit input from the faculty teaching the courses in the support area. If a majority of those polled take the position that a separate comprehensive examination in the support area is not appropriate, the exam will not be administered. If a separate comprehensive examination is not administered in a support area, material from the support area will be integrated into the comprehensive exam in the concentration area.

Dissertation- 21 hours of dissertation are required for the degree.

Residency Requirement - Ph.D. students in the College are required to complete a minimum of 15 hours per calendar year. Failure to meet this requirement will result in the student being placed on conditional status.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
BUSINESS ADMINISTRATION (SATURDAY MBA) PROGRAM

Master of Business Administration (M.B.A.) Degree

<table>
<thead>
<tr>
<th>DEGREE INFORMATION</th>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Admission Deadlines:</td>
<td>College: Business</td>
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<tr>
<td></td>
<td>Contact Information: <a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
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<tr>
<td>Minimum Total Hours: 48</td>
<td>Other Resources: <a href="http://www.usf4you">www.usf4you</a></td>
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<td>Program Level: Masters</td>
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<td>CIP Code: 52.0201</td>
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<tr>
<td>Dept Code: DEA</td>
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<tr>
<td>Program (Major/College): MBS BA</td>
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</table>

Also offered as: See listing under MBA Program

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THIS PROGRAM IS BEING DISCONTINUED
ENTREPRENEURSHIP IN APPLIED TECHNOLOGIES PROGRAM

Master of Science (M.S.) Degree

<table>
<thead>
<tr>
<th>DEGREE INFORMATION</th>
<th>CONTACT INFORMATION</th>
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</thead>
<tbody>
<tr>
<td>Program Admission Deadlines:</td>
<td>College: Business</td>
</tr>
<tr>
<td>Fall: June 1</td>
<td>Department: Center for Entrepreneurship</td>
</tr>
<tr>
<td>Spring: October 15</td>
<td></td>
</tr>
<tr>
<td>Minimum Total Hours: 30</td>
<td>Contact Information: <a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
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<tr>
<td>Program Level: Masters</td>
<td>Other Resources: <a href="http://www.usf4you">www.usf4you</a></td>
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<td>CIP Code: 51.0701</td>
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<td>Dept Code: DEA</td>
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<tr>
<td>Program (Major/College): EAT BA</td>
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PROGRAM INFORMATION

The Center for Entrepreneurship at the University of South Florida, in conjunction with the Colleges of Business Administration, Engineering, and Medicine and the Graduate School, has established a novel, innovative, and unique program in interdisciplinary Entrepreneurship in Applied Technologies. The Master’s of Science Degree Program in Entrepreneurship in Applied Technologies is a 30 credit-hour program and consists of eleven (11) courses which will consolidate the Entrepreneurship education and training for successful opportunity recognition and development, technology and market assessment, technology commercialization, new venture formation, and new venture financing into a single inter-disciplinary program curriculum utilizing faculty and courses in the Colleges of Business Administration, Engineering, and Medicine under the auspices of the Graduate School. The program is designed such that a student may complete it in a concentrated 12-month period of study or in an 18-month period. In addition, the Masters of Science Degree in Entrepreneurship is designed so that it can be completed as part of a dual-degree program in conjunction with a traditional M.A., M.S., M.B.A., M.D., or Ph.D. program. Dual degrees include: Biotechnology (M.S.), Information Systems (M.S.), Public Health (MPH), Environmental Science (M.S.), Civil Engineering (M.S.and Ph.D.) and Biomedical Engineering (Ph.D). The program must be completed by the student within a 5-year period following initiation.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Bachelor’s degree or equivalent from a regionally accredited university
- “B” (3.0 on a 4.0 scale) average in all upper division work
- Two (2) letters of recommendation
- Letter of interest
- Statement of purpose
- Personal interview
- GRE, GMAT may be required on individual basis; MCAT or LSAT may be substituted
- Competence in Statistics, Accounting, and Finance must be demonstrated
# DEGREE PROGRAM REQUIREMENTS

## Program of Study

Course Requirements – Graduation will require successful completion of the 30 hour curriculum, with a minimum GPA of 3.00 (no grades below “C”), within a five (5) year period.

**Stipends** – N/A

## Required Entrepreneurship Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Department Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>ENT 6016</td>
<td>New Venture Formation</td>
<td>3</td>
<td></td>
<td>EIN 6935 Technology Venture Strategies</td>
<td>3</td>
</tr>
<tr>
<td>ENT 6116</td>
<td>Business Plan Development</td>
<td>3</td>
<td></td>
<td>EIN 6324 Technical Entrepreneurship</td>
<td>3</td>
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<tr>
<td>ENT 6126</td>
<td>Strategic Entrepreneurship</td>
<td>3</td>
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<td>EIN 6936 Strategies in Entrepreneurship Tech</td>
<td>3</td>
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<tr>
<td>GMS 6095</td>
<td>Principles of Intellectual Property</td>
<td>1-3</td>
<td></td>
<td></td>
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<tr>
<td>GMS 6094</td>
<td>Bio-medical Ethics in Tech. Entrepreneurship</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>EIN 6430</td>
<td>Overview of Regulated Industries</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>ENT 6186</td>
<td>Strategic Market Assessment</td>
<td>3</td>
<td></td>
<td>EIN 6935 Strategic Market Assessments</td>
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<tr>
<td>GMS 7930</td>
<td>Medical Ethics &amp; Humanities</td>
<td>1-3</td>
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<td></td>
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<tr>
<td>ENT 6947</td>
<td>Advanced Topics in Entrepreneurship</td>
<td>3</td>
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<td>ENT 6606</td>
<td>Product Development</td>
<td>3</td>
<td></td>
<td>EIN 6934 New Product Development</td>
<td>3</td>
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<tr>
<td>ENT 6415</td>
<td>Venture Capital &amp; Private Equity</td>
<td>3</td>
<td></td>
<td>EIN 6934 Venture Capital &amp; Private Equity</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 30

*numbers updated to reflect SCNS assignment

## COURSES

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm) or [http://ce.usf.edu](http://ce.usf.edu) or [http://www.entrepreneurship.usf.edu](http://www.entrepreneurship.usf.edu)
ENTREPRENEURSHIP IN APPLIED TECHNOLOGIES AND BIOMEDICAL ENGINEERING DUAL DEGREE PROGRAM

Master of Science (M.S.) and Master of Science in Biomedical Engineering (M.S.B.E.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: October 15
- Spring: June 1
- Summer: February 15

Minimum Total Hours: 30/33
Program Level: Masters
CIP Code: 14.0501 / 52.0701
Dept Codes: ECH / DEA
Program (Major/College): EBI EN / EAT BA

CONTACT INFORMATION

Colleges: Engineering and Business
Departments: Chemical Engineering Center for Entrepreneurship
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

The M.S. Biomedical Engineering (Bme) And M.S. Entrepreneurship In Applied Technologies (Eat) Dual Degree Program is designed to prepare students who can effectively function in the complex world of Biotechnology companies (“Biotechs”). The program’s objectives are to provide a strong Bme foundation for technical product development and research and development along with the skill set to effectively participate in the entrepreneurship, venture capital, business and financial aspects of Biotechs. Students would pursue appropriate coursework within both The College of Engineering and The Center For Entrepreneurship, double counting a total of nine credit hours.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements for each program.
Students must satisfy the requirements for the two degrees separately. No Letters Of Recommendation are required.
Refer to the individual program listings for the specific requirements for each degree.

DEGREE PROGRAM REQUIREMENTS

Course requirements:

<table>
<thead>
<tr>
<th>Common Courses</th>
<th>(counted towards both the BME and EAT degrees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME 6000</td>
<td>Biomedical Engineering                        (3)</td>
</tr>
<tr>
<td>GMS 7930</td>
<td>Principles of Intellectual Property           (3)</td>
</tr>
<tr>
<td>EIN 6934</td>
<td>New Product Development                       (3)</td>
</tr>
</tbody>
</table>

9 hrs total
Biomedical Engineering (30 hrs required)
GMS 7930 Anatomy & Physiology for Bioengineers (3)
PHC 6051 Biostatistics II (3)
ECH 6971 Master’s Thesis (6)
Approved BME electives (9)
Common BME/EAT courses (9)

Entrepreneurship in Applied Technologies (30 hrs required)
EIN 6154 Technical Entrepreneurship (3)
EIN 6934 Technology Venture Strategies (3)
EIN 6935 Strategic Marketing Assessments (3)
EIN 6936 Venture Capital & Private Equity (3)
GMS 7930 Bio Medical Ethics (3)
EIN 6430 Overview of Regulated Industries (3)
EIN 6936 Strategies in Entrepreneurship (3)
Common BME/EAT courses (9)

30 hours total

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ENTREPRENEURSHIP IN APPLIED TECHNOLOGIES AND BIOTECHNOLOGY DUAL DEGREE PROGRAM

Master of Science (M.S.) Degree and Master of Science in Biotechnology (M.S.)

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30/33
Program Level: Masters
CIP Code: 14.0501 / 52.0701
Dept Codes: ECH / DEA
Program (Major/College): EBI EN / EAT BA

CONTACT INFORMATION

Colleges: Engineering and Business
Department: Biotechnology Center for Entrepreneurship
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Contact Program for information

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements for each program. Students must satisfy the requirements for the two degrees separately. Refer to the individual program listings for the specific requirements for each degree.

DEGREE PROGRAM REQUIREMENTS

Refer to the individual program listings for the specific requirements for each degree.

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
EXECUTIVE M.B.A. PROGRAM

Master of Business Administration (M.B.A.) Degree

DEGREE INFORMATION

<table>
<thead>
<tr>
<th>Program Admission Deadlines:</th>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall:</td>
<td>College: Business</td>
</tr>
<tr>
<td></td>
<td>Contact Information: <a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
</tr>
<tr>
<td>Minimum Total Hours: 48</td>
<td>Other Resources: <a href="http://www.usf4you">www.usf4you</a></td>
</tr>
<tr>
<td>Program Level: Masters</td>
<td></td>
</tr>
<tr>
<td>CIP Code: 52.0201</td>
<td></td>
</tr>
<tr>
<td>Dept Code: DEA</td>
<td></td>
</tr>
<tr>
<td>Program (Major/College): MBA BA</td>
<td></td>
</tr>
<tr>
<td>Application tracks:</td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td></td>
</tr>
<tr>
<td>Also offered as:</td>
<td></td>
</tr>
<tr>
<td>Business Administration (M.B.A.)</td>
<td></td>
</tr>
</tbody>
</table>

PROGRAM INFORMATION

The weekend Executive M.B.A. is a lock-step, 20-month, AACSB accredited program designed to meet the unique needs of both mid-career managers who have demonstrated the potential to reach senior management positions, and senior managers who desire to significantly increase their personal and organizational effectiveness. The program provides an opportunity to broaden and enrich management skills, to extend knowledge of modern business techniques, and to further develop understanding of the social, political, and economic forces that shape the business environment and influence decision making. Classes are scheduled all day on two Saturdays and one Friday a month for four semesters. The weekend format allows participants to continue carrying their careers while they master a range of managerial skills.

Accreditation:
The Commission on Colleges of the Southern Association of College and Schools (SACS), AACSB International –The Association to Advance Collegiate Schools of Business.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below. The weekend Executive MBA Program requires the submission of a preliminary application and personal interview prior to official graduate school application. Please see the program website for application forms or contact the program office.

Program Admission Requirements

- Must have a 3.0 upper-level GPA
- GMAT (may be waived)
- 5 years of management/professional experience
- Interview
- Statement of corporate approval
- International applicants from non English-speaking countries must also have a TOEFL score of 550 or higher on the written version, a minimum score of 213 on the computer-based test or a 79 on the internet-based test.

http://www.coba.usf.edu/
# Executive MBA Program Requirements

**Executive MBA Program Curriculum**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 6025</td>
<td>Financial Accounting for Managers</td>
<td>2</td>
</tr>
<tr>
<td>MAN 6055</td>
<td>Human Behavior and Organization</td>
<td>2</td>
</tr>
<tr>
<td>GEB 6445</td>
<td>Social, Ethical, Legal Systems</td>
<td>2</td>
</tr>
<tr>
<td>QMB 6305</td>
<td>Managerial Decision Analysis</td>
<td>2</td>
</tr>
<tr>
<td>ECP 6702</td>
<td>Managerial Economics</td>
<td>2</td>
</tr>
<tr>
<td>ACG 6075</td>
<td>Managerial Accounting &amp; Control</td>
<td>2</td>
</tr>
<tr>
<td>ECO 6708</td>
<td>Global Economic Environment of Business</td>
<td>2</td>
</tr>
<tr>
<td>FIN 6934</td>
<td>Financial Management</td>
<td>2</td>
</tr>
<tr>
<td>MAR 6158</td>
<td>International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MAR 6815</td>
<td>Marketing Management</td>
<td>2</td>
</tr>
<tr>
<td>MAN 6911</td>
<td>Direct Research</td>
<td>2</td>
</tr>
<tr>
<td>FIN 6605</td>
<td>International Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>GEB 6930</td>
<td>Elective (chosen by program)</td>
<td>1-3 varies</td>
</tr>
<tr>
<td>MAN 6448</td>
<td>Negotiating Agreement and Resolving Conflict</td>
<td>3</td>
</tr>
<tr>
<td>QMB 6603</td>
<td>Operations Management</td>
<td>2</td>
</tr>
<tr>
<td>ISM 6021</td>
<td>Management Information Systems</td>
<td>2</td>
</tr>
<tr>
<td>FIN 6515</td>
<td>Investments</td>
<td>3</td>
</tr>
<tr>
<td>MAN 6930</td>
<td>Business Problems Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MAN 6305</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MAN 6930</td>
<td>Executive Leadership</td>
<td>3</td>
</tr>
</tbody>
</table>

*Specific courses subject to change*

Total hours: 48

During the interim summer session, each student participates in the annual ten-day Overseas Study Module, which involves on-site study of international business practices. A different country/region is selected each year. Past modules have included visits to such cities as Moscow, London, Zurich, Geneva, Brussels, Tokyo, Beijing, Shanghai, Mexico City, Buenos Aires, Rio de Janeiro, Hong Kong, Milan, and Paris.

### Courses

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
FINANCE PROGRAM

Master of Science (M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall Deadline: June 1
- Spring Deadline: October 15
- Summer Deadline: n/a

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 52.0801
Dept Code: FIN
Program (Major/College): FIN BA

CONTACT INFORMATION

College: Business
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

M.S. in Finance
The M.S. in Finance offers a curriculum that concentrates on both finance and economics concepts. Students who complete the M.S. in Finance will be better prepared to succeed in careers in the financial world, especially in positions that require specialized knowledge about various finance topics.

Accreditation
Accredited by the Commission on Colleges of the Southern Association of College and Schools (SACS). AACSB International -The Association to Advance Collegiate Schools of Business.

Major Research Areas
Finance

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- GMAT score of 550 or higher
- Undergraduate upper-level GPA of 3.00 or higher
- International applicants from non English-speaking countries must also have a TOEFL score of 550 or higher on the written version, a minimum score of 213 on the computer-based test or a 79 on the internet-based test.
DEGREE PROGRAM REQUIREMENTS

Course Requirements:
Prerequisites – a student who does not have an undergraduate degree in business will have to complete the following courses before taking courses in the MSF program (Semester hours are in parentheses):

- Principles of Finance (3)
- Microeconomics (3)
- Macroeconomics (3)
- Financial Accounting (3)
- Managerial Accounting (3)
- Statistics I (3)
- Statistics II (3)

Students must successfully (a grade of A or B) complete equivalent courses in each of these areas prior to taking MSF courses. These courses should have been completed in an AACSB accredited program within five years of entering the MSF program.

Core Economics (6 hours)
- ECO 6115 Microeconomics (3)
- ECO 6205 Macroeconomics (3) or ECO 6206 Aggregate Economics (3)

Core Statistics (6 hours)
- ECO 6936 Mathematical Economics (3)
- ECO 6424 Econometrics I (3)

Core Finance (12 hours)
- FIN 6416 Advanced Financial Management (3)
- FIN 6515 Investments (3)
- FIN 6804 Theory of Finance (3)
- FIN 6445 Financial Policy (3)*

*must be taken at the end of the program after the other core courses are completed.

Core finance courses may be waived for students who graduated with finance majors from AACSB accredited programs within five years of entering the MSF program. Only courses with the same content as the core finance courses can be used to satisfy the MSF course requirements, and students must have earned grades of A or B to have such courses waived. Advanced finance courses must be substituted for waived courses.

Finance Electives (6 hours)
Students can select any two of the following courses:
- FIN 6246 Advanced Money and Capital Markets (3)
- FIN 6326 Bank Management (3)
- FIN 6418 Working Capital Management (3)
- FIN 6605 International Finance (3)
- FIN 6934 Financial Statement Analysis (3)
- FIN 6934 Financial Options and Futures (3)
- FIN 6934 Selected Topics in Finance (3)

Additional Information Regarding Curriculum
Leadership, teamwork, communication skills and organizational change are emphasized. Much of the curriculum is delivered through case studies, class discussion, exercises, group projects, video taped role-playing, simulations, and prominent guest speakers from the local business and non-profit community. Emphasis is placed on student participation and teamwork. All courses include writing, presentation, and critical thinking skills.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
MANAGEMENT PROGRAM

Master of Science (M.S.) Degree in the Management Program
With a concentration in Leading Sustainable Enterprises

DEGREE INFORMATION

Program Admission Deadlines:
Fall Deadline: June 1
Fall admission only

Minimum Total Hours: 32
Program Level: Masters
CIP Code: 52.0101
Dept Code: MAN
Program (Major/College): MAN BA
Concentration Code: LOE

Concentrations:
Leading Sustainable Enterprises

Also offered as:
under Master of Business Administration – as an application area (Management and Advanced Management)

CONTACT INFORMATION

College: Business
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

M.S. in Management: Leading Sustainable Enterprises
For updated details, please consult our website at www.coba.usf.edu. This program develops the skill to lead 21st century organizations. It is targeted for experienced, successful working managers - people who are already good at their jobs and who can be promoted to higher leadership and executive positions within or outside their present organizations. It is not intended for recent graduates seeking entry-level managerial positions. The future requires a very different type of leader than the past. The hierarchical model of scientific management is no longer widely accepted. The leaders of the future must be able to empower others and to facilitate teamwork in diverse groups, to recognize and adapt to the constraints and opportunities of a global economy, and to accommodate the ethical and societal needs of the environment within which the organization functions. The program focuses on the triple bottom line of sustainable economic performance, corporate social responsibility, and concern for the natural environment.

Both the profit and not-for-profit communities have recognized these changes and have demanded that business schools provide a modified and improved manager for the future - a manager who succeeds by facilitating the performance of others. This manager must be successful in leadership and organizational effectiveness. Ethical and virtuous behavior as well as technical skills are promoted. These values lead to organizational behavior that is both effective and ethical. Intrapersonal, interpersonal, and organizational competencies are enhanced. The M.S.M. faculty members blend scholarly activity and applied skills. It is the goal of the faculty to prepare graduates for successful careers as leaders in the real world.

This is an extremely progressive, dynamic, well-focused program. It is designed to help you reach career goals. The M.S.M. is a 32 credit hour program offered in cohort format. The program is designed around the needs of working managers. Classes meet Monday and Tuesday evenings for twenty-one months. All students begin in the fall semester. The curriculum proceeds from encompassing perspective to skills development through understanding of interpersonal and organizational dynamics, to planned change and implementation. Sections are limited to thirty
students. Course offerings and section availability are guaranteed to cohort members. All majors are eligible and welcome.

**Accreditation:**
Accredited by the Commission on Colleges of the Southern Association of College and Schools (SACS). AACSB International -The Association to Advance Collegiate Schools of Business.

**Major Research Areas:**
Leadership, Organizational Effectiveness, Strategic Management

**ADMISSION INFORMATION**

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

**Program Admission Requirements**

- Must have a 3.00 or higher upper-level GPA and a GMAT score of 500 or higher GMAT; lower totals may be offset by score of 28 or higher on V and 4.0 on analytical writing on the GMAT;
- Leadership ability, five years of managerial experience, and personal statement.
- International applicants from non English-speaking countries must also have a TOEFL score of 550 or higher on the written version, a minimum score of 213 on the computer-based test or a 79 on the internet-based test.
- Competitive based on GMAT and personal statement.

**DEGREE PROGRAM REQUIREMENTS**

Students take the same twelve required courses. The cohort format is structured as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEB 6445</td>
<td>Social, Ethical, Legal Systems</td>
<td>2</td>
</tr>
<tr>
<td>MAN 6147</td>
<td>Leadership Concepts</td>
<td>2</td>
</tr>
<tr>
<td>MAN 6107</td>
<td>Leading Sustainable Enterprises: Goals and Processes</td>
<td>2</td>
</tr>
<tr>
<td>MAN 6748</td>
<td>Assessing Performance in Sustainable Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MAN 6055</td>
<td>Human Behavior and Organizations</td>
<td>2</td>
</tr>
<tr>
<td>MAN 6448</td>
<td>Negotiating Agreement and Resolving Conflict</td>
<td>3</td>
</tr>
<tr>
<td>MAN 6746</td>
<td>Designing Sustainable Enterprise</td>
<td>3</td>
</tr>
<tr>
<td>MAN 6116</td>
<td>Diversity and Organizational Justice</td>
<td>3</td>
</tr>
<tr>
<td>MAN 6256</td>
<td>Politics and Control in Organization</td>
<td>3</td>
</tr>
<tr>
<td>MAN 6950</td>
<td>Capstone Experience in Leading Sustainable Enterprises</td>
<td>3</td>
</tr>
<tr>
<td>MAN 6518</td>
<td>Sustainable Production Systems</td>
<td>3</td>
</tr>
<tr>
<td>GEB 6457</td>
<td>Ethics, Law, and Sustainable Business Practices</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 32 credits minimum

**Additional Information Regarding Curriculum**
Leadership, teamwork, communication skills and organizational change are emphasized. Much of the curriculum is delivered through case studies, class discussion, exercises, group projects, video taped role-playing, simulations, and prominent guest speakers from the local business and non-profit community. Emphasis is placed on student participation and teamwork. All courses include writing, presentation, and critical thinking skills. Leadership, teamwork, communication skills, and organizational change to promote sustainable organizational performance are emphasized.

**COURSES**
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
MANAGEMENT INFORMATION SYSTEMS PROGRAM

Master of Science (M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: June 1
Spring: October 30
Minimum Total Hours: 33
Program Level: Masters
CIP Code: 11.0501
Dept Code: QMB
Program (Major/College): ISM BA

Also offered as:
Track under Business Administration (Ph.D.) and application area in Business Administration (M.B.A.)

CONTACT INFORMATION

College: Business
Department: Information Systems/Decision Sciences
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Management Information Systems (M.S./M.I.S.)
The Master of Science in Management Information Systems (M.S./M.I.S.) meets the needs of the marketplace for expertise in both information technology and management. Highly qualified individuals with motivation for leadership in information technology fields are encouraged to apply for admission to this program. Graduates of the program are in great demand by firms in the information services sector of the economy, software development organizations, management consultants, and M.I.S. departments in industry. An Advisory Board consisting of senior information systems executives and consultants works closely with the department to ensure that the program maintains high standards.

The MS/M.I.S. program is designed for individuals who are challenged by applications of Information Systems and Information technology and who are willing to undertake a career that demands a broad rather than narrow range of skills. Students who already have considerable background either in information systems or in business coursework will make use of the built-in flexibility of the program, designing programs of study that will provide them with the best background for their careers. A faculty advisor will work closely with each student to design and monitor the most effective course sequence and optional thesis/practicum work.

Accreditation
Accredited by the Commission on Colleges of the Southern Association of College and Schools, and AACSBI International - The Association to Advance Collegiate Schools of Business.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- A 3.00 upper-level GPA
- A score of 500 or higher on the GMAT or a score of 25 percentile or higher in the verbal section of GRE or GMAT, and a 40 percentile or higher in the quantitative section of GRE or GMAT and
- Work experience preferred.
- In addition, a TOEFL score of 550 or higher (213 or higher on the computerized test) may be required for international students applying to the program.
DEGREE PROGRAM REQUIREMENTS

The program requires 33 hours of coursework and may be taken either full-time or part-time. Full-time students with appropriate prerequisites may be able to complete the program in one full year (3 semesters) of study. Part-time students and full-time students who need prerequisites will typically need from 1 1/2 to 3 years to complete the degree. Early in the first semester, a student and the program advisor will work together to complete a formal Program of Study that will define a coherent sequence of courses to satisfy the student’s objectives. A student may have the option to complete a master’s thesis or a Practicum project, depending upon the availability and approval of a faculty sponsor.

Prerequisites
Incoming students are expected to have the following as prerequisites:

1) One semester of a high-level, object oriented programming language (e.g., C#, C++, Java) or substantial programming experience;
2) One semester of Information Systems Analysis and Design;
3) One semester of Database Systems or equivalent;
4) A course in Statistics
5) A course in economics, and
6) A course in financial accounting.

These required prerequisite courses may be taken concurrently with courses in the M.S./M.I.S. program. Prerequisite courses do not count toward the 33 credit hours of course requirements in the M.S./M.I.S. program.

Technical Core (9 credits)
The following three courses provide a solid understanding of state-of-the-art research and practice in technical areas of Information Systems.

1. ISM 6124 (3 credits) - Advanced Systems Analysis and Design
   Students learn to manage and perform activities throughout an information systems development life cycle, from the analysis of system requirements through system design to system implementation and operation. Advanced system development processes, methods, and tools are presented. This course is continually revised to include the latest theories and tools. A group project using advanced CASE tools is an integral portion of the course.

2. ISM 6218 (3 credits) - Advanced Database Administration
   Advanced practice and research in database systems, to include entity-relationship modeling, relational databases, object-oriented databases, performance issues, and management of the database administration (DBA) function. State-of-the-art database systems will be used for individual and group projects.

3. ISM 6225 (3 credits) - Distributed Information Systems
   Students learn technological as well as managerial aspects of telecommunication systems and distributed systems. Important topics covered include telecommunications fundamentals, voice and data communications, local and wide area networks, Internet, wireless technologies, and distributed systems.

Capstone Course (3 credits)
ISM 6155 (3 credits) - Enterprise Information Systems Management
An advanced study of information system management to include system planning, project selection, project management, and organizational information management policies. This course is considered to be the capstone of the MS/MIS program and as such it must be taken during one of the last two semesters of the student’s program.

Electives (21 credits)
Seven elective courses may be selected from additional Information Systems courses or (with prior approval by the academic advisor) other areas of specialization such as areas of Management, Decision Sciences, Computer Science, Logistics
### Existing Course Offerings

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISM 6124</td>
<td>Adv Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>ISM 6125</td>
<td>Software Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ISM 6145</td>
<td>Seminar on Software Testing</td>
<td>3</td>
</tr>
<tr>
<td>ISM 6155</td>
<td>Capstone Course</td>
<td>3</td>
</tr>
<tr>
<td>ISM 6218</td>
<td>Adv Database Management</td>
<td>3</td>
</tr>
<tr>
<td>ISM 6225</td>
<td>Distributed Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ISM 6305</td>
<td>Managing the Info Sys Function</td>
<td>3</td>
</tr>
<tr>
<td>ISM 6382</td>
<td>International Aspects of Info Systems</td>
<td>3</td>
</tr>
<tr>
<td>ISM 6405</td>
<td>Decision Support Syst Applications</td>
<td>3</td>
</tr>
<tr>
<td>ISM 6480</td>
<td>Electronic Commerce</td>
<td>3</td>
</tr>
<tr>
<td>ISM 6905</td>
<td>Independent Study</td>
<td>1-6</td>
</tr>
<tr>
<td>ISM 6930</td>
<td>Selected Topics in MIS</td>
<td>1-6</td>
</tr>
<tr>
<td>ISM 6971</td>
<td>Thesis: Masters</td>
<td>2-6</td>
</tr>
</tbody>
</table>

In addition to the courses listed above the following courses have been offered and are in the process of being formalized as regular course offerings:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISM 6316</td>
<td>Project Management</td>
</tr>
<tr>
<td>ISM 6930</td>
<td>Web Based Applications</td>
</tr>
<tr>
<td>ISM 6136</td>
<td>Data Mining</td>
</tr>
<tr>
<td>ISM 6208</td>
<td>Data Warehousing</td>
</tr>
</tbody>
</table>

In addition, the following Special Topics are being offered:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISM 6930</td>
<td>Information Security and Risk Management</td>
</tr>
<tr>
<td>ISM 6930</td>
<td>Enterprise Resource Planning and Business Process Management</td>
</tr>
<tr>
<td>ISM 6930</td>
<td>Multimedia Applications</td>
</tr>
</tbody>
</table>

### Thesis Option

The master’s thesis option requires six credits of ISM 6971, which count as six of the 21 MIS elective credits. The thesis must make a well-defined contribution to the research and development in an area of Information Systems.

### Practicum Option

The practicum option requires an investigation of a new information technology artifact. The project typically occurs in the student’s place of employment and is jointly supervised by a faculty member and a manager in the company. Based upon the magnitude of the project, either three or six hours of credit in ISM 6905 would be taken. The practicum would count for three or six hours of the 21 hours of MIS electives.

### COURSES

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
MARKETING PROGRAM

Master of Science in Marketing (M.S.M.) Degree

DEGREE INFORMATION

Program Admission Deadlines:

<table>
<thead>
<tr>
<th>Fall</th>
<th>June 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>October 15</td>
</tr>
</tbody>
</table>

Minimum Total Hours: 33

Program Level: Masters

CIP Code: 51.1401

Dept Code: MKT

Program (Major/College): MKT BA

Also offered as:
Concentration under Business Administration (Ph.D.)

CONTACT INFORMATION

College: Business

Department: Marketing

Contact Information: www.grad.usf.edu

Other Resources: www.usf4you

PROGRAM INFORMATION

Contact program for information

Accreditation

Accredited by the Commission on Colleges of the Southern Association of College and Schools. AACSB International - The Association to Advance Collegiate Schools of Business.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

To be admitted to the MS in marketing program, an applicant must

- take the GMAT (Graduate Management Admission Test) and score a minimum of 500 (under special circumstances a GRE score may be considered in lieu of the GMAT) and
- have a 3.0 or higher upper level undergraduate GPA from an accredited university
- submit two letters of recommendation from either industry or academic sources
- Work experience is desirable.
- To be granted an MS in Marketing degree, a student must have completed all of the required and elective courses with a GPA of 3.0 or higher.

DEGREE PROGRAM REQUIREMENTS

Prerequisites

During the first year of the program, students who are unable to waive the prerequisites will be required to take:

- MAR 6815 Marketing Management (2)
- QMB 6305 Managerial Decision Analysis (2)

These courses may be waived if taken within the last five years from an AACSB accredited program (two undergraduate marketing courses are required to substitute for MAR 6815).

http://www.coba.usf.edu/
Core Marketing Classes (21 hours)

- MAR 6816 Marketing Strategy (3)
- MAR 6216 Logistics and Physical Distribution Management or MAR 6936 Supply Chain Management (3)
- MAR 6158 International Marketing Management (3)
- MAR 6936 Consumer Behavior (3)
- MAR 6336 Promotional Management or MAR 6936 Brand Management (3)
- MAR 6646 Research for Managers (3)
- MAR 6916 Directed Research or MAR 6907 Independent Study (3)

Electives (12 hours)

Electives will be a set of coordinated courses in areas such as supply chain management, marketing communications, social marketing, marketing research or others. The specific courses will be chosen based on mutual agreement by the Director and the student. These courses will form a unified set, and will be designed to maximize the student’s objectives. These courses may be a combination of COBA courses and courses outside the College.

Total Program (33 hours)

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
REAL ESTATE PROGRAM

Master of Science in Real Estate (M.S.R.E) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: June 1
- Spring: October 15

Minimum Total Hours: 34
Program Level: Masters
CIP Code: 51.1401
Dept Code: FIN
Program (Major/College): RST BA

CONTACT INFORMATION

College: Business
Department: Finance
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Contact program for information

Accreditation
Accredited by the Commission on Colleges of the Southern Association of College and Schools. AACSB International - The Association to Advance Collegiate Schools of Business.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as program’s requirements.

DEGREE PROGRAM REQUIREMENTS

Prerequisites/Tools Courses(12 hours)
A student who does not have an undergraduate degree in business will have to complete the following courses before taking courses in the MSRE program (semester credit hours are in parentheses):

- ACG 6025 Financial Accounting (2)
- ACG 6075 Managerial Accounting and Control (2)
- ECP 6702 Managerial Economics (2)
- ECO 6708 Global Economic Environment of Business (2)
- FIN 6934 Financial Management (2)
- QMB 6305 Managerial Decision Analysis (2)

Students must successfully (a grade of A or B) complete equivalent courses in each of these areas prior to taking MSRE courses. These courses should have been completed in an AACSB accredited program within five years of entering the MSRE program.
### Required Core/Courses (25 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 6416</td>
<td>Advanced Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>REE 6045</td>
<td>Real Estate Decisions</td>
<td>2</td>
</tr>
<tr>
<td>REE 6XXX*</td>
<td>Real Estate Financing and Investment</td>
<td>3</td>
</tr>
<tr>
<td>REE 6XXX*</td>
<td>Real Estate Development</td>
<td>2</td>
</tr>
<tr>
<td>ECP 6614</td>
<td>Urban Economics</td>
<td>3</td>
</tr>
<tr>
<td>GIS 5049</td>
<td>GIS for Non-Majors</td>
<td>3</td>
</tr>
<tr>
<td>CGN 6933</td>
<td>Green Infrastructure and Sustainable Community</td>
<td>3</td>
</tr>
<tr>
<td>URP 6XXX*</td>
<td>Research Methods for Urban &amp; Regional Planning</td>
<td>3</td>
</tr>
<tr>
<td>ARC 5931</td>
<td>The City</td>
<td>3</td>
</tr>
</tbody>
</table>

Core finance and real estate courses may be waived for students who graduated from AACSB accredited programs within five years of entering the MSRE program and took courses with substantively the same content. Only courses with the same content as the core finance courses can be used to satisfy the MSRE course requirements, and students must have earned a grade of A or B to have such courses waived. Advanced finance elective courses with the same total credit hours must be substituted for waived courses.

### Advance Elective Courses (9 hours)

Students can select any three (a minimum of nine hours) of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 6515</td>
<td>Investments</td>
<td>3</td>
</tr>
<tr>
<td>FIN 6246</td>
<td>Advanced Money and Capital Markets</td>
<td>3</td>
</tr>
<tr>
<td>FIN 6418</td>
<td>Working Capital Management</td>
<td>3</td>
</tr>
<tr>
<td>FIN 6605</td>
<td>International Finance</td>
<td>3</td>
</tr>
<tr>
<td>REE 6934</td>
<td>Selected Topics in Real Estate</td>
<td>2-3</td>
</tr>
<tr>
<td>ECP 6456</td>
<td>Law and Economics</td>
<td></td>
</tr>
<tr>
<td>CGN 6933</td>
<td>Global Warming</td>
<td></td>
</tr>
<tr>
<td>TTE 5501</td>
<td>Transportation Planning and Economics</td>
<td></td>
</tr>
<tr>
<td>PAD 6336</td>
<td>Community Development Programs</td>
<td>3</td>
</tr>
<tr>
<td>GEO 6627</td>
<td>Site Feasibility Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GEO 6605</td>
<td>Contemporary Urban Issues</td>
<td>3</td>
</tr>
<tr>
<td>EVR 6934</td>
<td>Management of Florida Landforms</td>
<td></td>
</tr>
<tr>
<td>GEO 6116</td>
<td>Perspectives of Environmental Thought</td>
<td></td>
</tr>
<tr>
<td>GEO 6209C</td>
<td>Global Sustainability Development</td>
<td></td>
</tr>
<tr>
<td>ARC 6397</td>
<td>Introduction to Urban Design Theory, Methods</td>
<td></td>
</tr>
<tr>
<td>ARC 5931</td>
<td>Special Studies in Architecture</td>
<td></td>
</tr>
<tr>
<td>ARC 6397</td>
<td>Introduction to Urban Design Theory, Methods</td>
<td></td>
</tr>
<tr>
<td>ARC 5931</td>
<td>Special Studies in Architecture</td>
<td></td>
</tr>
</tbody>
</table>

### Total program (34 hours)

*Number may change

### COURSES

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
COLLEGE OF EDUCATION

http://www.coedu.usf.edu/
Changes to Note

The following curricular changes for the College of Education were approved by the USF-Tampa Graduate Council on the date noted.

Changes to Programs

Career & Technical Education (M.A.)  Change curriculum – ADE 6385  5/3/10
Exceptional Student Education (MAT)  Add 2 hrs practicum increase hrs to 50  5/3/10
School Psychology (M.A.)  Change curr, chg hours from 33 to 32  5/3/10
School Psychology (Ph.D.)  Change curr, chg hrs from 102 to 84  5/3/10

Concentration Changes

Curriculum and Instruction (M.Ed.): Soc Sci Ed  Change curr; add EDF 6432, EDF 6481  5/3/10
Curriculum and Instruction (Ed.S.): School Psych  Change curriculum hours from 92 to 82  5/3/10

New Graduate Certificates

Post Masters in Higher Education Leadership  4/5/10

New Courses

EDF 7359  Resilience in Human Development  2/1/10

Course Changes

EDF 7946 Supervised Exp in College Teach  chg hrs from 2 to 1  6/28/10
EEX 6234  ID. & Assess of Indiv. w/ Low Incid. Dis.  Change title to: Identification and Assessment of Individuals with Low Incidence Intellectual Disabilities and ASD; change description  2/1/10
EEX 6619  Positive Behavior Support  Change title to Positive Behavior Support for Students with Low Incidence Intellectual Disabilities and ASD; change description  2/1/10
SPS 6101  Child and Adolescent Behavior Disorders chg hrs from 4 to 3  5/3/10

Other Revisions (GC approval not needed)

Minor Course edits throughout section (e.g. course numbers, title updates, etc.)
University of South Florida  
College of Education  
4202 E. Fowler Ave, EDU162  
Tampa, FL  33620

Web address:  
http://www.coedu.usf.edu/college/  
Email:  
briscoe@coedu.usf.edu  
Phone:  
813-974-3406  
Fax:  
813-974-3391

College Dean:  
Colleen Kennedy  
Associate Dean:  
Harold Keller  
Graduate Coordinator:  
Diane Briscoe

Accreditation:  
In addition to the University’s regional accreditation by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS), the College is accredited by the National Council for the Accreditation of Teacher Education (NCATE) for the preparation of P-12 educators. Its initial certification programs are approved by the Florida Department of Education.

Vision/Mission Statement:  
The USF College of Education envisions itself as a leader in regional, national and international education. Leadership in Education encompasses:  
1) academic excellence,  
2) research, scholarship and inquiry that renews the educational process,  
3) collaboration that serves communities, institutions and individuals,  
4) educator preparation that builds on academic excellence, scholarship, and clinical practice, and  
5) collaboration that contributes to a just and productive society.

The College of Education fulfills this vision by: offering challenging learning opportunities in a supportive and diverse environment; creating and supporting research, scholarship, and inquiry in education; preparing the next generation of educators, scholars, and leaders for P-12 and the professoriate through exemplary undergraduate and graduate degree programs; serving the community through collaborative relationships; and, working with schools, agencies, and communities to offer educator preparation programs that prepare professionals who work competently, collaboratively, and ethically to improve educational outcomes for all.

Many concentrations are offered under the umbrella of “Curriculum and Instruction.” Graduate Certificates are also offered in a number of areas. For information about the different degree programs refer to program section of the Graduate Catalog. Students seeking initial certification must be admitted to one of the degree programs offered in the College. Individuals seeking additional information should contact the College of Education Graduate Studies Office at 813-974-3406, or http://www.coedu.usf.edu  
Students who have identified a degree program should contact directly the advisor for that program. Please be advised that program and/or course requirements are subject to change per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria. In instances where college or program requirements exceed university minimum requirements, students must meet the highest order of requirements presented. Always check with the advisor in your program of interest to determine whether or not there are programmatic variations. Please note also that COEDU college and program requirements are stated always as minimum requirements.

Major Research Areas:  
Contact Department or Program for information.
Types of Degrees Offered:
- Master of Arts (M.A.)
- Master of Arts in Teaching (M.A.T.)
- Master of Education (M.Ed.)
- Education Specialist (Ed.S.)
- Doctor of Education (Ed.D.)
- Doctor of Philosophy (Ph.D.)

Degree Programs and Concentrations:
- Career and Technical Education (M.A)
- Career and Workforce Education (Ph.D.)
- Career Counseling (Concentration in M.A., Counselor Education)
- Clinical Mental Health Counseling (Concentration in M.A., Counselor Education)
- College Student Affairs (M.Ed., Ph.D.)
- College Teaching (joint program with concentrations) (M.A.)
- Counselor Education (program with concentrations) (M.A., Ed.S., Ph.D.)
- Early Childhood Education (M.A., M.Ed., Ph.D.)
- Educational Leadership, College Leadership (Ed.D.)
- Elementary Education (M.A., Ed.S., Ed.D., Ph.D.)
- Elementary Education/ESOL (M.A.T.)
- English Education (M.A.,
- English Education/ESOL (M.A.T.)
- Exercise Science (M.A.)
- Foreign Language Education French, Spanish or German (M.A.)
- Foreign Language Education/ESOL (M.A.T.)
- Higher Education (Ed.S., Ph.D.)
- Human Resource Development (M.A.)
- Instructional Technology (Ed.S., Ph.D.)
- Interdisciplinary Education (Ed.S., Ph.D.)
- Mathematics Education (M.A., Ed.S.)
- Mathematics Education (M.A.T.: 5-9 or 6-12)
- Measurement and Evaluation (M.Ed., Ed.S., Ph.D.)
- Music Education (contact the College of The Arts)
- Physical Education (M.A.)
- Reading Education (M.A., Ed.S., Ph.D.)
- School Counseling (M.A. Concentration in Counselor Education)
- School Psychology (M.A. only available when combined with the Ed.S. or Ph.D. degree) (Ed.S., Ph.D.)
- Science Education (M.A.T.)
- Science Education (Biology, Chemistry, or Physics) (M.A., Ed.S.)
- Second Language Acquisition and Instructional Technology (SLAIT) joint program with the College of Arts & Sciences (Ph.D.)
- Secondary Education (M.Ed.)
- Secondary Education: Biology (M.Ed.)
- Secondary Education: Chemistry (M.Ed.)
- Secondary Education: English (M.Ed.)
- Secondary Education: Foreign Language (M.Ed.)
- Secondary Education: Instructional Technology (M.Ed.)
- Secondary Education: Mathematics (M.Ed.)
- Secondary Education: Physics (M.Ed.)
- Secondary Education: Social Science (M.Ed.)
Secondary Education: TESOL (M.Ed.)
Secondary Education (Ph.D.)
Secondary Education (Social Science Education) (Ph.D.)
Social Science Education (M.A., M.A.T.)
Special Education (Ed.S., Ph.D.)
Special Education, Behavior Disorders (M.A.)
Special Education, Exceptional Student Education/ESOL (M.A.T.)
Special Education, Gifted Education (M.A.)
Special Education, Intellectual Disabilities (M.A.)
Special Education, Motor Disabilities (currently unavailable)
Special Education, Specific Learning Disabilities (M.A.)
Teaching and Learning in English (Ph.D.)
Teaching and Learning in Mathematics (Ph.D.)
Teaching and Learning in Science (Ph.D.)
Teaching and Learning in Social Science (Ph.D.)
Teaching and Learning in the Content Area: General Education (Ph.D.)
Vocational Education (Ed.S.)

Accelerated Degree Programs
B.A./B.S. to M.A.T. Degree Program
Students may complete the B.A./B.S. to M.A.T. Program in the following areas:
- Foreign Languages – French, Spanish
- Interdisciplinary Natural Sciences
- Interdisciplinary Social Sciences – History/Geography, History/Politics, History/Psychology,
  Geography/Politics, Geography/Psychology

Graduate Certificates Offered:
- Autism Spectrum Disorder (XAU)
- Career Counseling* (XCC)
- College Teaching* (SCT)
- Disabilities Education: Severe and/or Profound (XDI)
- Diversity (XDV)
- English Education (XEE)
- ESOL** (XES)
- Foreign Language Education:Culture and Content (XFL)
- Foreign Language Education: Professional (XFP)
- Gifted Education** (XGF)
- Informal Science Institutions: Environmental Education (XEV)
- Instructional Technology: Distance Education** (XDD)
- Instructional Technology: Florida Digital Educator (XFD)
- Instructional Technology: Instructional Design* (XID)
- Instructional Technology: Multimedia Design (XMM)
- Instructional Technology: Web Design** (XWD)
- Leadership in Developing Human Resources* (XHR)
- Mathematics Education (XMC)
- Mental Health Counseling (XMH)
- Play Therapy (XPT)
- Post-Master’s Educational Leadership (K-12) (XEL)
- Post-Master’s in Higher Education Leadership
- Reading Certificate and Endorsement Program (XRC)
- Research Methods (XRM)
- School Counseling Post-Masters (XSO)
Science Education ((XSE))  
Social Science Education (XSS)  
Teacher Education (XTE)  

*Partially online curriculum  
**Fully online curriculum

For all certificates; access www.usf.edu; click on Academics; click on Graduate Certificates; click on Education.

**College of Education Minimum Requirements**

All degree requirements are stated below as college minimums. Please consult the program section of the catalog for variations.

**Master’s Degree Programs and Requirements**

The master’s programs offered in the College of Education lead to a Master of Arts degree (M.A.), a Master of Arts in Teaching degree (M.A.T.), or a Master of Education (M.Ed.) degree. Students pursuing a Master’s degree must have an earned baccalaureate degree from a regionally accredited institution, or an equivalent foreign degree as determined by an evaluation conducted by an agency approved for foreign credential evaluation. Most programs offer through their M.A.T. degrees, a plan of study that leads to initial teacher certification for holders of a non-education baccalaureate degree. The M.A. degree is primarily designed to increase competence in a teaching specialization or to provide professional preparation in one of the service areas of education. For most programs, two plans of study are available depending on the student’s background and professional goals.

**College of Education Requirements for the Master of Arts (M.A.) Degree**

A minimum of 30 semester hours is required for the master’s degree, at least 16 hours of which must be at the 6000 level. Courses at the 7000 level are advanced graduate level courses and thus are not approved to be part of the master’s degree program.

The M.A., **Plan I**

Program of graduate study is for those with a degree or appropriate initial teacher certification in the area of concentration who desire to increase their competence in a subject specialization or to receive additional professional preparation in an educational service area. The Plan I program is not available in all concentration areas. Contact the desired degree program for information.

**Plan I Degree Requirements**

Plan I students must take a minimum of one of the following Process Core (Foundation) courses. Additional requirements are described under the Program descriptions.

Process Core 3 hours minimum

- **EDF 6211**, Psychological Foundations of Ed. OR **EDF 6215**, Learning Principles Applied to Instruction  
- **EDF 6481**, Foundations of Educational Research  
- **EDF 6432**, Foundations of Measurement  

- **EDF 6517**, Historical Foundations of American Education, or  
- **EDF 6544**, Philosophical Foundations of American Education, or  
- **EDF 6606**, Socio-Economic Foundations of American Education

Current Trends in Teaching Specialization – 3 hours  
Concentration - 18 hours
Comprehensive Examination – Students must be registered for at least 2 graduate hours in the semester during which this exam is taken. 
Thesis (Some programs have a Thesis option available) 

Note: Check with the program of interest for programmatic variations. 

The M.A., Plan III (not available in all areas) 
This is a program of graduate study for the holder of a non-education baccalaureate degree who does not desire to meet initial certification requirements in the State of Florida. This plan is not available in all concentration areas. Please contact the program for information. 

Plan III Minimum Program Requirements: 
Undergraduate Pre-requisites as necessary 

Process Core 12 hours 
EDF 6432, Foundations of Measurement 
EDF 6481, Foundations of Educational Research 
EDF 6211, Psychological Foundations of Education or EDF 6215, Learning Principles Applied to Instruction 

EDF 6517, Historical Foundations of American Education or EDF 6544, Philosophical Foundations of American Education, or EDF 6606, Socio-Economic Foundations of American Education 

Current Trends Course in Teaching Specialization – 3 hrs. 
Concentration– 18 graduate hrs. Minimum 
Comprehensive Examination 

Note: Check with the program of interest for programmatic variations. 

M.A.T. Degree 
The M.A.T. degree is designed for holders of a non-education baccalaureate degree who desire to meet initial teacher certification requirements as part of a graduate program. The baccalaureate degree must be appropriate (as deemed by program faculty) for the teaching field in which certification is sought. Hours in the M.A.T. degree vary by discipline. Reference the program section of the Graduate Catalog for specific M.A.T. degree requirements. 

M.Ed. Degree 
The M.Ed. degree is designed for individuals who have a minimum of two years of relevant educational or professional experience in the concentration selected, as judged by the program faculty. This degree option is offered to students pursuing graduate study in educational leadership or curriculum and instruction with an associated specialization/concentration. 

College of Education Requirements for the Master of Education degree (M.Ed.) 
Two degree tracks are offered.
1. **Educational Leadership** The M.Ed. in Educational Leadership is designed to improve performance in K-12 school leadership. The degree provides coursework that meets Florida Educational Leadership Core Curriculum requirements in public school curriculum and instruction, organizational management and development, human resource management and development, leadership skills, communication skills, technology, educational law, and educational finance. Successful completion of the program fulfills degree and core curriculum requirements for Florida certification in Level I, K-12 Educational Leadership-Administrative Class. The M.Ed. degree in Educational Leadership requires a minimum of 36 semester hours with 60 percent or more of the courses at the 6000 level. Courses at the 7000 level are advanced graduate level courses and thus are not approved to be part of the master’s degree program.

2. **Curriculum and Instruction** The M.Ed. degree in Curriculum and Instruction, with a concentration (specialization) area – This degree is designed for the individual who has a minimum of two years of relevant educational or professional experience (as judged by program faculty) in a specialization area who wishes to pursue advanced study in that area. The primary objective is to prepare instructional leaders through courses in curriculum, methods, supervision, learning principles, human interaction, and areas of concentration/specialization. The foundation areas (professional studies) receive greater emphasis in the M.Ed. programs than the M.A. programs. Coursework in the concentration/specialization may include courses in colleges other than the College of Education.

The M.Ed. degree in Curriculum and Instruction requires a minimum of 33 semester hours with 60 percent or more of the courses at the 6000 level. Courses at the 7000 level are advanced graduate level courses and thus are not approved to be part of the master’s degree program.

**Master of Education (M.Ed.) Degree Requirements:**

**Program of Study**
Process Core 12 hours minimum
- **EDF 6432**, Foundations of Measurement
- **EDF 6481**, Foundations of Educational Research
- **EDF 6211**, Psychological Foundations of Ed., or **EDF 6215**, Learning Principles Applied to Instruction


Curriculum and Instruction 3 hours min.
- **EDG 6627** (a prerequisite course may be required at the undergraduate level)
Concentration - 18 graduate hours minimum
Comprehensive Examination

**Additional Listing of Pre-Approved Master’s level process core courses:**

**Psychological Foundations**
- EDF 6217 – Behavior Theory and Classroom Learning – 4 hrs.
- EDF 6354 – Human Development and Personality Theory – 4 hrs.
- EDF 6120 – Child Development – 4 hrs.

**Social Foundations**
- EDF 6520 – Education in Western Civilization – 4 hrs.
See individual program descriptions and contact the program of interest for programmatic variations.

Advanced Graduate Degree Programs
The advanced graduate degree programs lead to the Education Specialist (Ed.S.) degree, the Doctor of Education (Ed.D.) degree, and the Doctor of Philosophy (Ph.D.) degree. To be considered for admission to any advanced graduate degree program, students must have earned degrees from regionally accredited institutions, or hold equivalent foreign degrees as determined by an evaluation conducted by an agency approved for foreign credential evaluation, meet the program and/or college‐specified minimum GRE and/or GPA‐requirements and be favorably recommended also by program faculty or a program admissions committee. Additionally, students must comply with any other college or program requirements specified for the prospective degree program. Note: Please check with the program of interest for programmatic variations. The Ed.S. and Ph.D. degrees in Curriculum and Instruction with a concentration in Interdisciplinary Education are administered by the Interdisciplinary Education Program Coordinator, Dr. E.V. Johanningmeier, EDU 380‐S, (813) 974‐9495.

Education Specialist Degree Program (Ed.S.)
This degree is offered in the areas of Educational Leadership and in Curriculum and Instruction with a concentration area.

College of Education Requirements for the Education Specialist Degree (Ed. S.)
The Ed. S. degree consists of a minimum of 36 hours beyond the master’s degree and is flexible in its requirements. The degree is designed to provide professional educators with an opportunity to develop competencies in areas of special needs and interests. Consequently, the degree program has few required courses, and each student’s program is individually planned in consultation with a faculty program committee. Courses at the 5000 level are inappropriate; and a minimum of 15 hours should be taken at the 7000 level.

Program of Study
Concentration coursework - 27 hours minimum.
Thesis (Project) - 9 hours minimum
Comprehensive Examination (oral and/or written)
Oral defense of the project/thesis

Thesis/Project – Ed.S. Degree. The student is required to plan and successfully complete an individual thesis or project. The purpose is to provide an opportunity for the student to apply knowledge gained in the program to the resolution of significant needs arising from professional practice. A minimum of 9 semester hours of thesis enrollment is required in the Ed.S. degree program. Students are required to enroll for a minimum of 2 semester hours in the 6971 thesis course each semester while working on the Ed. S. project and for 2 graduate semester thesis hours in the semester during which the student plans to graduate. Students who have not completed the project after enrolling in the required 9 hours must continue to enroll in a minimum of 2 graduate credit hours each semester, including the semester in which the project is submitted to the College Associate Dean for Academic Affairs or the University Graduate Studies Office (School Psychology students). Students must have an oral defense of the project/thesis with their project/thesis supervisory committee.

Doctor of Education Degree Program (Ed. D.)
The Doctor of Education degree is available in Educational Leadership and in Educational Program Development with concentrations/ specializations in Adult Education, Educational Leadership (K‐12 and College Leadership), Elementary Education, and Special Education Administration and Supervision. The focus of this degree program is on the improvement of educational practice. Although research skills are recognized as being the basis of any doctoral program, the Ed.D. is considered more a practitioner’s than a research degree. Currently, the degree in Special Education with a concentration in Administration and Supervision is closed to new admissions.
College of Education Minimum Requirements for the Doctor of Education Degree (Ed. D.)

Program of Study
The Ed. D. requires a minimum of 76 hours beyond the master’s degree.
Concentration - 24 hours minimum
Curriculum and Instruction - 6 hours minimum
Statistics/Measurement/Research Design - 11 hours minimum
Psychological and Social Foundations - 11 hours minimum
Dissertation - 24 hours min.

Dissertation
Beginning with the semester immediately following admission to candidacy, students must be enrolled for a minimum of 50% of the required dissertation credit hours in each 12-month period for the first two years after being admitted to candidacy. Students may complete these hours in either two or three semesters but must be enrolled for dissertation hours in the Fall and Spring semesters of each year during the two year (24-month) period. Students may elect not to register for dissertation hours during the summer semester if in this two-year period they are not using university facilities or other USF resources, including faculty and staff time.

If such resources are being used, then enrollment in a minimum of two dissertation hours during the summer semester is required. If the dissertation is not completed by the time the required hours of dissertation credit have been accrued, students must enroll continuously thereafter, including summer semester, for a minimum of two dissertation hours per semester until graduation. (This includes the semester during which the dissertation is defended and the semester in which final submission of the dissertation is made to the Graduate School).

Exceptions to the continuous enrollment policy may be approved if the major professor writes a letter of petition to the Associate Dean for Academic Affairs, indicating specifically the nature and duration of the exception and the justification. Unless an exception has been approved, failure to enroll as specified may result in dismissal of the student from the program. To be readmitted, the student must secure permission from the major professor and write a letter of request, co-signed by the major professor, to the Associate Dean for Academic Affairs, outlining in detail a timeline for completing the dissertation. The Associate Dean for Academic Affairs will approve or deny the request. This process will be independent of, and will not replace, any procedures required for readmission by the University Office of Graduate Studies, or the department.

Residency
Ed.D. students must enroll for at least nine hours of graduate work in each of two semesters in a 12-month period. Individual programs may have additional residency requirements.

Doctoral Qualifying Examination
Students must demonstrate satisfactory performance on the Doctoral Qualifying Examination, and have completed all required coursework with satisfactory grades prior to admission to candidacy.
Doctor of Philosophy Degree Program (Ph.D.)

The Doctor of Philosophy degree is available in Curriculum and Instruction with concentrations in the following areas: Adult Education, College Student Affairs, Counselor Education, Early Childhood Education, Elementary Education, English Education, Higher Education, Instructional Technology, Interdisciplinary Education, Mathematics Education, Measurement and Evaluation, Reading/Language Arts Education, Science Education, Secondary Education (Social Science Concentration), Special Education, and Teaching and Learning in the Content Area: General Education. Contact the College of Visual and Performing Arts for information on the Ph.D. in Music Education.

The Ph.D. degree is also available in School Psychology, and Second Language Acquisition and Instructional Technology (a joint program with the College of Arts and Sciences).

College of Education Minimum Requirements for the Doctor of Philosophy Degree Program (Ph.D.) in Curriculum and Instruction.

Refer to the program sections for Ph.D. requirements for School Psychology and Second Language Acquisition/Instructional Technology (SLAIT).

Program of Study

The Ph.D. program in Curriculum and Instruction requires a minimum of 75 credit hours beyond the master’s degree.

- Concentration - 18 graduate hours minimum
- Curriculum & Instruction - 3 hours minimum
- Cognate Area - 12 hours minimum
- Statistics/Measurement/Research Design - 11 hours minimum
- Psychological and Social Foundations - 7 hours minimum
- Dissertation - 24 hours minimum

Residency

In addition to registering for nine graduate hours per semester, two semesters in a 12 month period, Ph.D. students should be engaged in no more than half time employment during the residency period.

Doctoral Qualifying Examination

Students must demonstrate satisfactory performance on the Doctoral Qualifying Examination, and have completed all required coursework with satisfactory grades prior to admission to candidacy.

International Students

All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

Listing of College Pre-Approved Courses that fulfill the Doctoral Level, Process Core Requirements:

Social Foundations –

3 hr courses
EDF 6531 History of Childhood: Disability and Deviance
EDF 6705 Gender and the Educational Process
EDF 6736 Education, Community and Change
EDF 7649 Analysis of Educational Issues

http://www.coedu.usf.edu/
4 hr courses
EDF 6883  Issues in Multicultural Education
EDF 7530  History of Higher Education
EDF 6765  Schools and the Future
EDF 7586  Classics in Educational Research
EDF 7682  Education in Metropolitan Areas
EDF 7934  Seminar in Social Foundations of Educational
EDF 6938  Special Topics may be taken with program, committee and college approval.

**Psychological Foundations –**
EDF 7359 Resilience in Human Development 4 hrs.
EDF 7145 Cognitive Issues in Instruction 4 hrs.
EDG 7931 Psychology of Language Development 4 hrs.
EDG 7931 Developmental Theory 4 hrs.
EDF 7133 Adolescent Development 4 hrs.
EDF 7265 Psychology of Oral and Written Language Development 4 hrs.

**Measurement/Statistics/Research Design**
EDF 6407 Statistical Analysis Education I 4 hrs.
EDF 7408 Statistical Analysis Education II 4 hrs.
EDF 7437 Adv Educational Measurement I 3 hrs.
EDF 7493 Systems Approaches for Progr Planning, Evaluation and Development 4 hrs.
EDF 7477 Qualitative Research in Education I 4 hrs.
EDF 7478 Qualitative Research in Education II 4 hrs.

**Curriculum**
EDG 7667 Analysis of Curriculum and Instruction 3 hrs.
EDG 7692 Issues in Curriculum and Instruction 3 hrs.
EDH 7225 Curriculum Development in Higher Education 3 hrs.
About the Catalog

The University of South Florida Graduate Catalog is organized with the degree programs offered listed in the section of the college that offers them. For example, the Master of Science degree with a “program” (also known as major) in Biology is listed in the College of Arts and Sciences section. Some colleges offer areas of specialization, or “concentrations” within a degree program.

EXAMPLE OF PROGRAM PAGE

Black denotes degree

ADULT EDUCATION PROGRAM

Green denotes Program (or Major)

Master of Arts (M.A.) Degree

EXAMPLE OF CONCENTRATION PAGE

Black denotes degree

ADULT EDUCATION CONCENTRATION

Green denotes Program (or Major)

Doctor of Philosophy (Ph.D.) Degree in Curriculum and Instruction

With a concentration in Adult Education

Blue denotes Concentration (or area of specialization)

The name of the program and/or concentration does not appear on the diploma – only the name of the degree (i.e., Master of Arts) is listed. The program and concentration information is listed on the official transcript. Other areas, such as application track, are not listed on the transcript.
ADULT EDUCATION PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 13.1201
Dept Code: LEA
Program (Major/College): AAE ED

Concentrations:
Human Resource Development (HRD)

CONTACT INFORMATION

College: Education
Department: Adult, Career & Higher Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The Adult Education program provides professional development opportunities to individuals concerned with the learning of adults. It includes courses and experiences for persons employed in or intending to enter the field of adult education. This degree is intended to help individuals work with adult learners in a wide variety of school and non-school settings. It is intended for holders of a non-education baccalaureate degree who do not wish to meet teacher certification requirements in the State of Florida. This Adult Education degree is a Plan III, non-certification option.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of Colleges and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Admission to the M.A. program in Adult Education is based on a holistic evaluation of the applicants’ demonstrated potential to complete successfully all of the course and research requirements specific to the degree. Applications are considered on a continuous basis throughout the year. Success in the program requires excellent presentation and high quality writing skills, scholarship, and a commitment to systematic inquiry. The admissions committee will consider each applicant in light of his or her qualifications and likelihood of success. The faculty takes into account all of the information, and balances previous grade point averages, test scores, previous success in graduate course work, recommendations, and professional goals.
Admission Process

For consideration for admission, students must submit:

- A clear and detailed statement of professional and personal goals describing the reasons that earning the degree is important to those goals;
- Two letters of recommendation, preferably at least one from a current or former professor who will attest to the applicant’s likelihood of success in a graduate program;
- A grade point average while classified as an upper division student in a baccalaureate degree at a regionally accredited university of 3.0 on a 4.0 scale; or a Master’s degree in a related field from a regionally accredited institution with an overall GPA of at least 3.5 on a 4.0 scale; or if the upper division undergraduate GPA is less than 3.0, the applicant must also have GRE Scores;
- have proof of educational or professional experience;
- obtain favorable recommendations for admission at the department and college levels and;
- satisfy any additional academic requirements or prerequisites identified by the program.

Coursework may be allowed in lieu of the GPA or GRE requirement. In exceptional cases, students not meeting the above criteria may be considered for admission by successfully completing at least 6 graduate semester hours of coursework taught by an adult education program faculty member. Students may additionally submit documentation of their potential for success with inclusion of the following:

- Successful professional experiences related to the academic program and professional goals of the applicant;
- Demonstrated commitment to personal and professional growth and development and to the completion of the coursework and project demands of the program;
- Excellent communication skills.

International Students:

All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. GRE scores, etc.)

DEGREE PROGRAM REQUIREMENTS

A minimum of 36 semester hours is required for the master’s degree, at least 16 hours of which must be at the 6000 level. Courses at the 7000 level are advanced graduate level courses and thus are inappropriate for the master’s degree program. This program is available as a Plan III non-certification option.

Total Minimum Hours (non-thesis option) 36 hours

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>6 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF6481 Foundations of Educational Research</td>
<td>(3)</td>
</tr>
<tr>
<td>or EDF6432 Foundations of Measurement</td>
<td>(3)</td>
</tr>
<tr>
<td>and one approved Psychological or Social Foundations course</td>
<td>(3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Concentration Requirements</th>
<th>18 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADE6385 The Adult Learner</td>
<td>(3)</td>
</tr>
<tr>
<td>ADE6966 Final Master’s Seminar (prior approval needed)</td>
<td>(4)</td>
</tr>
<tr>
<td>ADE6080 Foundations of Adult Education</td>
<td>(4)</td>
</tr>
</tbody>
</table>

Remaining hours to be selected from among:

| ADE6160 Program Management in Adult Education | (3) |
| ADE6197 Adult Basic Education | (4) |
ADE6280  Administration in Local Adult Education Programs (4)
ADE6287  Supervision of Local Adult Education Programs (4)
ADE6370  Human Resource Development (3)
ADE6946  Practicum in Adult Education (2-6)
ADE6161  Curriculum Construction in Adult Education (4)
ADE6360  Methods of Teaching Adult Education (3)
ADE6906  Independent Study (2-19)
ADE6198  Effective Continuing Education for Professional Groups (3)

Requirements Outside the Concentration  12 hours
At least one course (3 credits minimum) must be taken outside the adult, career and higher education department. Other courses may be selected as part of the remaining hours needed for degree completion based upon the student's selection and program advisor's approval, and may be selected from coursework throughout the university.

Comprehensive Examination
Written Exam Required

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards and accreditation criteria.

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
ADULT EDUCATION CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Adult Education

DEGREE INFORMATION

Program Admission Deadlines: Closed for admissions.
Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CAE

CONTACT INFORMATION

College: Education
Department: Adult, Career & Higher Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, students are not being admitted to this program.

PROGRAM INFORMATION

The Curriculum and Instruction degree is only offered in conjunction with a concentration area. Please see the area of concentration (listed alphabetically in the catalog) to determine whether or not the Curriculum and Instruction degree is available in your area of interest.

Program Description
This degree is designed for the professional educator who wishes to pursue advanced study. The primary objective is to prepare instructional leaders through courses in curriculum, methods, supervision, learning principles, human interaction, and areas of specialization. The foundation areas (professional studies) receive greater emphasis in the M.Ed. programs than the M.A. programs. Coursework in the concentration may include courses in colleges other than the College of Education. The Curriculum and Instruction program is offered with concentration areas. General program requirements are listed below. For specific specialization requirements, contact the appropriate department.

Accreditation: Programs in the College are accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below. Refer to each area of concentration for program admission requirements or contact the program for assistance.

For International applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See http://web.usf.edu/iac/admissions/language.html for further clarification and possible exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://admissions.grad.usf.edu/international.html
DEGREE PROGRAM REQUIREMENTS

College of Education Program Requirements for the Master of Education degree (M.Ed.)

The M.Ed. degree in Curriculum and Instruction normally requires a minimum of 33 semester hours with 60 percent or more of the courses at the 6000 level. Courses at the 7000 level are advanced graduate level courses and thus are not approved to be part of the master's degree program.

Program of Study Degree Requirements (usual minimums)

Core Requirements - 12 hours minimum
EDF 6432  EDF 6481  EDF 6211 or EDF 6215 or equivalent
EDF 6517 or EDF 6544 or EDF 6606 or equivalent
Curriculum and Instruction (EDG 6627) - 3 hours minimum; a prerequisite may be required at the undergraduate level

Concentration Requirements - 18 hours minimum

Comprehensive Examination
Individual areas of specialization may have variations in requirements. For information contact the department/program offering the concentration.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ADULT EDUCATION CONCENTRATION

Education Specialist (Ed.S.) degree in the Curriculum and Instruction Program
With a concentration in Adult Education

DEGREE INFORMATION

Program Admission Deadlines:
Domestic:
   Fall: February 15
   Spring: October 15
   Summer: February 15
International:
   Fall: January 2
   Spring: June 1
   Summer: January 2
Minimum Total Hours: 36
Program Level: Specialist
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: SAE

CONTACT INFORMATION

College: Education
Department: Adult, Career & Higher Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
This Ed.S. program prepares practitioners and teachers for the broad field of Adult Education. This includes public and proprietary schools, and non-school based settings such as business and industry, the professional associations, community agencies, and governmental units.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of Colleges and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below. For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

Program Admission Requirements
Admission to Ed. S. program in Adult Education is based on a holistic evaluation of the applicants’ demonstrated potential to successfully complete all of the course and research requirements of the specific degree programs. Success in the program requires excellent communication skills, scholarship in writing and research, and a commitment to high quality in systematic inquiry.

The program faculty will consider each applicant in light of his or her qualifications and likelihood of success. Applications are considered on a continuous basis throughout the year, although the offering of courses favors fall semester for initial registration. The faculty employ a broad approach to the admissions consideration, taking into account all of the information and test scores, previous grade point averages, recommendations, and professional experiences successes, and goals.
Admission Process
For consideration for admission, students must submit:

- A current professional vita or resume;
- A clear and detailed statement of professional and personal goals including reasons why this program is important.
- Three letters of recommendation from former professors or employers who will attest to the applicant’s likelihood of academic success in the doctoral program;
- A master’s degree from a regionally accredited institution with a 3.5 GPA on a 4.0 scale at the graduate level or a 3.0 GPA for work completed while classified as an upper division student in a baccalaureate degree program.
- GRE scores having no more than one sub-test score below the 33rd percentile. If a score in one area is low, the other should be considerably higher. In some instances, GMAT, LSAT or MCAT scores may be substituted for the GRE;
- Proof of educational or professional experience;
- Successful professional experiences related to the academic program and professionals goals of the applicant;
- Demonstrated commitment to personal growth and development and to the completion of the rigorous course and research demands of the program;
- Excellent academic, analytical, and communication skills.

In exceptional cases, students not meeting these criteria may submit additional or alternative documentation of their potential for success in doctoral level studies.

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. GRE scores, etc.)

DEGREE PROGRAM REQUIREMENTS

Program of Study: 36 hours minimum
Core Requirements
Concentration Requirements 18 hours
Students may select from the following concentration coursework

ADE7388 Adult Development and Learning (3)
ADE7947 Advanced Internship (2-4)
ADE7910 Directed Research (1-4)
ADE7076 Continuing Education in the Community College and Higher Education (3)
ADE7281 Organization and Management of Adult and Continuing Education and HRD (3)
ADE7169 Instructional Development using Adult Education Principles and Practices (4) (If not used for the Curriculum Course Requirement)
ADE7261 Leadership in Adult and Continuing Education and HRD (3)
ADE7676 HRD Policy Seminar (3)
ADE7931 Issues and Trends: Critical Race Theory (3)
ADE6931 Adult Learning and Cognitive Styles (3)
ADE6931 Learning and Change (3)
ADE6906 Independent Study (1-19 Var.)
ADE6931 Participatory Action Research for Educators (3)
ADE6931 International Adult Education (3)
ADE6198 Effective Continuing Education for Professional Groups (3)
Elective Courses (9 hours)
Elective courses (9) are chosen based upon the student's individual needs and are approved by the program advisor.

Thesis or Project Course (9 hours)
ADE6971 Thesis: Master’s/Education Specialist (9)

Comprehensive Examination

Oral defense of the project/thesis

OTHER INFORMATION
Please be advised that program of studies are designed by the program faculty working in concert with each individual student. Please check with program faculty before applying.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ADULT EDUCATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a concentration in Adult Education

PROGRAM INFORMATION

Program Description
Prepares leaders, researchers, university faculty, and related personnel to serve in the broad field of adult education.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of Colleges and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Admission to the Ph.D. program in Adult Education is based on a holistic evaluation of the applicants’ demonstrated potential to successfully complete all of the course and research requirements of the specific degree program. Success in the program requires excellent communication skills, scholarship in writing and research, and a commitment to high quality in systematic inquiry.

The program faculty will consider each applicant in light of his or her qualifications and likelihood of success. Applications are considered on a continuous basis throughout the year, although the offering of courses favors fall semester for initial registration. The faculty employ a broad approach to the admissions consideration, taking into account all of the information; test scores; previous grade point averages; recommendations; and professional experiences; successes; and goals.

Admission Process
For consideration for admission, students must submit:
• A current professional vita or resume;

• A clear and detailed statement of professional and personal goals:
• Three letters of recommendation from former professors or employers who will attest to the applicant’s likelihood of academic success in the doctoral program;

• A master’s degree from a regionally accredited institution or equivalent with a 3.50 GPA on a 4.00 scale at the graduate level or a 3.00 GPA for work completed while classified as an upper division student in a baccalaureate degree program;

• GRE scores having no more than one sub-test score below the 33rd percentile. If a score in one area is low, the other should be considerably higher. In some instances, GMAT, LSAT or MCAT scores may be substituted for the GRE;

• Proof of educational or professional experience;

• Successful professional experiences related to the academic program and professionals goals of the applicant;

• Demonstrated commitment to personal growth and development and to the completion of the rigorous course and research demands of the program;

• Excellent academic, analytical, and communication skills.

International Applicants:
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:
- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. GRE scores, etc.)

**DEGREE PROGRAM REQUIREMENTS**

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<th>Requirement</th>
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<tr>
<td>Total Minimum Hours</td>
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**Core Requirements**

<table>
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<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognate Requirement</td>
<td>12</td>
</tr>
</tbody>
</table>

Students should take twelve (12) credits in a cognate area outside of their major field of study. These courses must be taken at the graduate level, and should be selected in consultation with their major professor.

**Measurement/Statistics/Research Design Required Core**

- EDF6407 Statistical Analysis for Educational Research I (4)
- EDF7408 Statistical Analysis for Educational Research (4)
- EDF7410 Design of Systematic Studies in Education (4) or other approved course by major professor and/or program committee

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological and Social Foundations Required Core</td>
<td>7</td>
</tr>
</tbody>
</table>

Students must take one Psychological Foundations Course and one Social Foundations Course. Recommended courses are:

**Psychological Foundations Course**: EDF7145 Cognitive Issues in Instruction (4)

**Social Foundations Courses**: EDF6883 Issues in Multicultural Education (4); or EDF7682 Education in Metropolitan Areas (4); or EDF7934 Seminar in Social Foundations of Education (4).
Curriculum Course Requirement
Choose one course from the following:
ADE7169 Instructional Development using Adult Education Principles and Practices (3)
EDH7225 Curriculum Development in Higher Education (3)
EDG7667 Analysis of Curriculum and Instruction (3)
EDG7692 Issues in Curriculum and Instruction (3)

Concentration Requirements
Select from the following:

Required Concentration Courses:
ADE7388 Adult Development and Learning (3)
ADE7930 Beginning Doctoral Seminar (4)

Elective Concentration Courses
ADE7947 Advanced Internship (2-4)
ADE7910 Directed Research (1-4)
ADE7076 Continuing Education in the Community College and Higher Education (3)
ADE7269 Organization and Administration of Adult and Continuing Education and HRD (3)
ADE7169 Instructional Development using Adult Education Principles and Practices
(If not used for the Curriculum Course Requirement)
EVT7761 Research Seminar (3)
ADE7268 Leadership in Adult Continuing Education and HRD (3)
ADE7676 HRD Policy Seminar (3)
ADE7931 Issues and Trends: Critical Race Theory (3)
ADE6389 Adult Learning and Cognitive Styles (3)
ADE7931 Learning and Change (3)
ADE6906 Independent Study (1-19)
ADE6931 Participatory Action Research for Educators (3)
ADE6570 International Adult Education (3)
ADE6198 Effective Continuing Education for Professional Groups (3)

Dissertation Requirement
ADE7980 Dissertation (2-24)

Please be advised that programs of study are designed by the program faculty in concert with each individual student and the program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ADULT EDUCATION CONCENTRATION

Doctor of Education (Ed.D.) Degree in the Educational Program Development Program With a concentration in Adult Education

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 62
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): EPD ED
Concentration Code: EAE

CONTACT INFORMATION

College: Education
Department: Adult, Career & Higher Education
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Program Description
Prepares leaders for adult, continuing education, and human resource development positions in a variety of employment settings. The program is designed to develop the competencies of educational practitioners and to obtain and synthesize knowledge for the solution of educational problems and practices.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Admission to the Ed.D. program in Educational Program Development with an emphasis in Adult Education is based on a holistic evaluation of the applicant’s information and balancing test scores, previous grade point averages, recommendations, professional experiences and successes, etc. Success in the program requires excellent skills of scholarship in writing and research and a commitment to high quality and systematic inquiry. The program faculty will consider each applicant in light of his or her qualifications and likelihood of success. Applications are considered on a continuous basis throughout the year, although the offering of courses favors fall semester for initial registration.

Admission Process
For consideration for admission, students must submit:

- A current professional vita or resume;
- A clear and detailed statement of professional and personal goals describing the reasons that earning the doctorate is important to those goals;
- Have previous experience or a strong desire to work with adults in meeting their formal or informal education and/or training needs.
- Must provide proof of educational or professional experience.
- Submit a personal statement of the applicant’s vision/philosophy for Adult Education and its relationship to the future of Adult Education.

http://www.coedu.usf.edu/
 Submit three letters of recommendation from persons knowledgeable about the applicant’s academic and professional competence as it relates to the successful completion of doctoral studies.

 Obtain favorable recommendations from the program faculty;

 Satisfy any additional academic requirements or prerequisites identified by the program.

 A master’s degree from a regionally accredited institution or equivalent with 3.5 GPA on a 4.0 scale or a 3.0 for upper division level undergraduate coursework;

 Strong overall GRE scores having no more than one sub-test score below the 33rd percentile. If a score in one area is low, the other should be considerably higher; In some instances, GMAT, LSAT or MCAT scores may be substituted for the GRE.

 Significant successful professional experiences related to the academic program and professional goals of the applicant;

 Demonstrated commitment to personal and professional growth and development and to the completion of the rigorous course and research demands of the program

 Excellent academic, analytical and communication skills.

 In exceptional cases, students not meeting these criteria may submit additional or alternative documentation of their potential for success in doctoral level studies.

 For International applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based tests). See the Graduate Admissions website for further clarification and possible exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://www.grad.usf.edu/graduate-admissions-checklist.asp.

 DEGREE PROGRAM REQUIREMENTS

 For students who do not have a master’s degree in adult education, ADE 6080 Adult Education in the United States is a pre-requisite to doctoral study.

 Total Minimum Hours 62 hours

 Pre-Requisites:
 Students may be required to take any or all of the following pre-requisites:
 ADE6080 Foundations of Adult Learning (4)  
 ADE6385 The Adult Learner (3)  
 EVT6407 Statistical Analysis for Educational Research I (4)

 Core Requirements 13 hours
 ADE7930 Doctoral Seminar in Adult Education (4)  
 ADE7388 Adult Development and Learning (3)  
 EVT7761 Research Seminar in Vocational, Technical and Adult Education (3)  
 ADE7947 Advanced Internship: Adult Education (2-4)
Concentration Requirements
9 hours
Students must take the courses listed under the specialization of choice or receive approval from their program of study committee to take other courses. For those who have not earned a master’s degree in adult education, the continuing education and human resource development specialization is the only specialization choice available.

Continuing Education and Human Resource Development Specialization
ADE6198 Effective Continuing Education for Professional Groups (3)
ADE7076 Continuing Education in the Community College and Higher Education (3)
ADE7676 Human Resource Development Policy Seminar (3)
OR
Career and Workforce Development Specialization
ECT7066 Foundations and Philosophy of Vocational-Technical Education (3)
ECT7105 Vocational and Adult Education Program Planning and Implementation-(3)
ECT6661 Trends and Issues in Career and Technical Education (3)
OR
Community College and Higher Education Specialization
EDH6051 Higher Education in America (3) or
EDH6061 The Community College in America (3)
EDH7225 Curriculum Development in Higher Education (3)
EDH7636 Organizational Theory and Practice in Higher Education (3)
EDH6081 The Community College in Higher Education (3)

Curriculum and Instruction
3 hours
Select one of the following:
EDG7667 Analysis of Curriculum (3)
EDG7692 Issues in Curriculum and Instruction (3)
EDH7225 Curriculum Development in Higher Education (3)
EVT7169 Instructional Development for Vocational, Technical and Adult Education (3)

Research And Measurement Requirement
7 hours
EDF7408 Statistical Analysis for Educational Research II (4)
and
Select one of the following:
EDF7410 Design of Systematic Studies in Education (4)
EDF7438 Advanced Educational Measurement I (4)
EDF7484 Statistical Analysis for Educational Research III (4)
EDF7493 Systems Approaches for Program Planning, Evaluation and Development (4)
EDF7477 Qualitative Research in Education Part I (4) and EDF7478 Qualitative Research in Education Part II (4)

Psychological and Social Foundations Requirement
6 hours
Select one course from each Foundation area.

Psychological Foundations (Suggested Courses)
EDF7145 Cognitivie Issues in Instruction (4)
EDF7655 Organization Development in Educational Institutions (4)

Social Foundations (Suggested Courses)
EDF6883 Issues in Multicultural Education (4)
EDF7934 Seminar in Social Foundations of Education (4)
EDF6938 History of Higher Education in the United States (3)

Dissertation
24 hours

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.
CAREER AND TECHNICAL EDUCATION PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15
Fall admission only

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 13.1320
Dept Code: LEA
Program (Major/College): ACT ED

CONTACT INFORMATION

College: Education
Department: Adult, Career & Higher Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. Must meet University requirements (see Graduate Admissions), College of Education minimum requirements, as well as requirements listed below.

Faculty in the CTE program use a process for consideration of admission that encompasses the following items:

- B.A.
- Relevant experience in the field of Career & Technical Education (or closely related field):
- Certification in a CTE program area or closely related area (a statement of current certification status in letter of application is sufficient documentation). Certification is not required for admission to Plan III;
- A grade point average in upper division undergraduate coursework from a regionally accredited university (or international equivalent) of 3.0 on a 4.0 scale:
- In exceptional cases, a student with an upper-level undergraduate GPA of 2.50-2.99 may be considered for admission (based on age of the degree, discipline, institution and other considerations). In each of those cases, the student must earn a 3.5 GPA in the first two courses in the program to be permitted to continue:
- A letter of application containing a statement of professional goals
- A current resume or vita.

Special Instructions for International Students:
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).
DEGREE PROGRAM REQUIREMENTS
(Plan I, 30 hours minimum; Plan III, 30 hours minimum)

Core Requirements:

Plan I: Psychological or Social Foundations course – 3 hrs. min. from the college’s approved course listing or ADE 6385

Plan III: Psychological or Social Foundations courses – 6 hrs. min. from the college’s approved course listing or ADE 6385. (Selection may also include MHS 6340 Career Development)
Research – Improving CTE Programs, EDG 6931 or EDF 6481 Foundations of Educational Research – 3 hrs.

Concentration Requirements: 18 SH in Career & Technical Education (15 SH for those holding National Board Certification)
Proof of National Board Certification must be provided.

Students must select concentration coursework from the courses below.
ECT5386 Preparation & Development For Teaching
ECT6661 Trends and Issues in CTE, 3 SH Trends
EVT6665 School & Community Relations (formerly 6664)
ECT6197 Enhancing CTE Curriculum
ECW6264 Administration of Vocational Programs
ECW6696 Equity and Access in The New Economy
ECW6265 Supervision Of Vocational Programs
ECT6948 Practicum
ADE6360 Methods of Teaching Adult Education

Electives: Electives may be substituted for selected concentration courses with the advisor’s approval.

Field Experience: 3 hrs. minimum.
ECT6766 Emerging Workplace Competencies.
Another course may be considered for substitution if the student has recent experience in their occupational field.
The substitution requires approvals at the program and the college levels.

Comprehensive Examination: Students will maintain a comprehensive portfolio and submit it at the end their program.

Thesis: there is no thesis option in this program.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
CAREER AND WORKFORCE EDUCATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a concentration in Career and Workforce Education

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15
Fall admission only on a two-year cycle. Contact coordinator for next entry point.

Minimum Total Hours: 77 hours
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DVO

CONTACT INFORMATION

College: Education
Department: Adult, Career and Higher Education
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Program Description
Prepares leaders, researchers, university faculty and related personnel to serve in the broad field of Career and Workforce Education.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet university requirements (see Graduate Admissions) as well as program requirements listed below.

Program Admission Requirements
Admission to the Ph.D. program in Career and Workforce Education is based on an evaluation of the applicants’ demonstrated potential to complete successfully program coursework and research requirements. Success in the program requires a commitment to rigorous and systematic inquiry in the field along with excellent research skills and high quality scholarship.

Program faculty employ a holistic approach to admissions consideration, taking into account all of the information provided by applicants to balance test scores, previous grade point averages, recommendation forms, professional experiences and successes, and goals.

Admission Process
To be considered for admission, all applicants must submit the application materials listed below unless a particular requirement can be waived or additional/alternative documentation can be accepted. The following application materials should be sent directly to the Graduate Admissions Office:

- The University’s Graduate Admissions Application and related items (see Office of Graduate Admissions website at: http://admissions.grad.usf.edu/).
- Official Graduate Record Examination (GRE) scores with no more than one sub-score below the 33rd percentile. If a score in one area is very low, the other should be considerably higher.

http://www.coedu.usf.edu/
In exceptional cases, students not meeting this criterion may submit additional or alternative documentation of their potential for success in doctoral level studies.

- GRE scores may be waived in exceptional cases for applicants who have graduated from master’s degree programs in the Adult, Career, and Higher Education Department at USF with a GPA of 3.9 or higher (on a scale of 4.0) and received excellent ratings from program faculty (i.e., recommendation forms).
- Official transcripts from previous educational institutions. Applicants should have completed a master’s degree from a regionally accredited university with a 3.5 or higher graduate grade point average (GPA) on a 4.0 scale.

In addition, the following application materials must be submitted directly to the program coordinator:

- A current professional vita or resume.
- A cover letter including a statement of professional and personal goals, and reasons that earning the doctorate is important to those goals.
- Three Program Recommendation Forms (available for downloading at program website) completed by former professors or supervisors rating the applicant’s likelihood of success in the doctoral program.

The application materials should provide evidence of: (a) significant successful professional experiences supporting the fit between professional background, goals, and the applicant’s potential doctoral program of study; (b) commitment to personal and professional growth and development and to the completion of the rigorous course and research demands of the Ph.D. program; and (c) excellent academic, analytical and communication skills. To this end, an on campus or phone interview should be arranged with the program coordinator as an opportunity for both prospective students and faculty to gauge the fit with the program.

Applications are considered on a continuous basis throughout the year, although students are formally admitted into the program every two years beginning in the fall semester of even years. Applicants should be aware that meeting admissions requirements does not guarantee admission to the program. To ensure appropriate faculty support, the program will accept only a limited number of students every two years and in some cases applicants meeting or exceeding admission requirements may not be accepted for the requested starting date. To this end, applicants are strongly encouraged to apply early to the program.

DEGREE PROGRAM REQUIREMENTS

Total minimum hours: 77

Core requirements 21 hours

Specialization
ECT7066  Foundations of Career and Workforce Education (3)
EVT7761  Research Seminar (3)
EVT7168  Principles of Contextual Teaching and Learning (3)
ECW7105  Program Plan and Implementation (3)
EVTTBD  Comparative study of CWE systems (3)
ADE7169  Instructional Development (3)
EDG6931  Equity and Access in the New Economy (3)

Electives: Selected courses may be substituted with elective courses with the approval of the major professor.

Cognate (12 hours)
To be determined by students depending upon individual goals and with approval of their major professor.
Research Core (12 hours)
   EDF6407 Statistical analysis in Education I (4)
   EDF7408 Statistical analysis in Education II (4)
   EDF7410 Design of Systematic Studies in Education (4)

Foundations (7 hours)
   Courses to be determined with at least one course in Educational Psychology and one in Social Foundations of Education.

Doctoral Qualifying Exam
   Students must take and successfully complete a qualifying examination prior to becoming a candidate for a doctoral degree.

Doctoral Candidacy
   Students must be admitted to candidacy before they are permitted to enroll in dissertation hours.

Dissertation
   ECT7980

24 hours

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
COLLEGE STUDENT AFFAIRS CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in College Student Affairs

DEGREE INFORMATION

Program Admission Deadlines: [This program is currently not open for admission]

Minimum Total Hours: 42
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CSA

CONTACT INFORMATION

College: Education
Department: Psychological and Social Foundations
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The CSA Program at the University of South Florida emphasizes three major components: Foundational Studies, Professional Studies, and Supervised Practice, as recommended by the Council for the Advancement of Standards in Higher Education. The curriculum includes theories of human growth and development, environmental influences, and social science-based interventions as applied to student affairs practice. The instructional method of relating theory-to-practice is accomplished by involving students in rigorous classroom activity along with internships in specialized areas of student affairs work.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
The CSA Program admits 18-25 students each Fall semester. Applicants to the College Student Affairs (CSA) program must meet the admission requirements as established by the Graduate School and the College of Education and should have experience relevant to the program. For admission, all programs require earned degrees from regionally accredited institutions. Requirements for all applicants include:

- Official Graduate Record Examination (GRE) score of at least the 50th percentile Verbal and the 50th percentile Quantitative. Or a Miller’s Analogy Test (MAT) score of at least 50
- Undergraduate GPA of at least 3.0 on a four point scale for work done while an upper division student in the Baccalaureate degree.
- Proof of educational or professional experience
- Provide letters of recommendation
- Complete an interview with a program committee. Program interviews take place one day per week from January through May.
- Provide a personal statement of professional goals, resume, and assistantship application.
- Submission of a GRE score is required unless waived by the University
International Students
Applicants whose native language is other than English or who have earned a degree in the United States must also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 50 on the paper-based test, are required. Applications submitted with TOEFL scores that do not meet the minimum requirements will be denied. The TOEFL requirement may be waived if the applicant meets one of the following conditions:
- The applicant’s native language is English, or
- Has scored 500 or higher on the GRE Verbal Test, or
- Has earned a college degree at a U.S. institution of higher learning, or
- Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or
- Has scored 6.5 on International English Language Testing System (IELTS) http://www.ielts.org/

Students interested in applying to the program should visit the CSA website at http://csa.coedu.usf.edu/.

DEGREE PROGRAM REQUIREMENTS

The Department of Psychological and Social Foundations offers a Master of Education degree (M.Ed.) in College Student Affairs (CSA) upon the completion of required coursework and a comprehensive examination. Students must complete a minimum of 42 semester hours of graduate level course work to graduate.

All students must take the following courses:

Required Courses

Required Courses

Core Requirements:
- EDF6165 Group Processes
- EDF6481 Foundations of Educational Research

Concentration Requirements:
- SDS6042 Introduction to Student Affairs
- SDS6624 Ecology of Campus Life
- SDS6645 Student Development Theory
- SDS6701 Issues in Diversity
- SDS6703 The Law & Student Affairs
- EDF6935 Wellness Seminar
- EDF6281 Workshop & Conference Design
- EDF6944 Field Experience
- EDF6938 Special Topics

Internship:
- EDG6947 Internship

Assistantship
An assistantship is required for all admitted students. Applicants are required to interview with assistantship supervisors for the various available positions. This process varies from department to department. Applications from qualified candidates received by January 29 will have a better opportunity of securing their first choice of assistantship. Students will be interviewed as applications arrive, and assistantship placements will be determined as soon as a match is made. An Open House event is held every Spring to interview in person for assistantship placements. See http://www.coedu.usf.edu/main/departments/psf/sa/GraduateAssistantships.html

Comprehensive Examination
Students must pass a comprehensive written and oral examination that is administered during the semester in which they plan to graduate.

COURSES See http://www.ugs.usf.edu/sab/sabs.cfm or http://csa.coedu.usf.edu

http://www.coedu.usf.edu/
COLLEGE TEACHING PROGRAM

Master of Arts (M.A.) Degree in the College Teaching Program
With Concentrations in Biology, Business, Chemistry, Economics, Engineering, English, French, Geography, Geology, History, Mathematics, Physics, Political Science, Sociology, Spanish, and Speech Communication

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions*
Minimum Total Hours: 36
Program Level: Masters
CIP Code: 13.0406
Dept Code: LEA
Program (Major/College): JCT EJ
Concentration Code: JBI

CONTACT INFORMATION

College: Education
Department: Adult, Career & Higher Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

*Currently, students are not being admitted to this program.
COUNSELOR EDUCATION PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: January 7
Fall admission only

Minimum Total Hours: 63
Program Level: Masters
CIP Code: 13.1101
Dept Code: EDF
Program (Major/College): AGC ED

Concentrations:
Career Counseling (CRC)
Clinical Mental Health Counseling (CMH)
School Counseling (SCL)

CONTACT INFORMATION

College: Education
Department: Psychological and Social Foundations

Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRESS INFORMATION

Program Description
This is a limited access program with internal deadlines. Please check with he program prior to applying. The Counselor Education program provides students with the general counseling skills needed to become professional counselors. Graduates are trained to assess problems, counsel clients, select appropriate intervention strategies and consult with other professionals and administrators. All students complete a common core of courses plus additional courses appropriate to their chosen program. Included are courses in communication skills, counseling theory, research, practicum, and internship. In addition to the Master's degree, the Educational Specialist degree, and the Doctoral degree, the program offers Graduate Certificates in Career Counseling, Mental Health Counseling, Play Therapy, and School Counseling (post masters). The program offers three plans for a Master of Arts degree.

School Counseling (Plan II)
A concentration in School Counseling is available to currently enrolled students in the Master of Arts Counselor Education program. The School Counseling concentration is CACREP-accredited, and offers specialized coursework in school counseling. Graduate students pursuing a concentration in School Counseling must take the core course requirements of their graduate program

Plan III--Community Counseling
Plan III programs are for students who prefer to work in community based counseling positions rather than in elementary or secondary schools. There are two Plan III program options: (a) Mental Health Counseling and (b) Career Counseling.

Clinical Mental Health Counseling
A concentration in Clinical Mental Health Counseling is available to currently enrolled students in the Master of Arts Counselor Education program. The Clinical Mental Health Counseling concentration is CACREP-accredited, and offers specialized coursework in mental health counseling. Graduate students pursuing a concentration in Clinical Mental Health Counseling must take the core course requirements of their graduate program.

A concentration in Career Counseling is available to currently enrolled students in the Master of Arts Counselor Education program. The Career Counseling concentration is CACREP-accredited, and specializes in career counseling with a cognate

http://www.coedu.usf.edu/
in student affairs. Graduate students pursuing a concentration in Career Counseling must take the core course requirements of their graduate program.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools, and Council for the Accreditation of Counseling and Other Educational Related Programs (CACREP).

Major Research Areas:
Multicultural counseling and development, career development, play therapy, cognitive-behavioral interventions, community mental health, and counselor education and supervision

ADMISSIONS INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

Requirements also include:

- A Graduate Record Examination (GRE) Score of at least the 50th percentile Verbal and the 50th percentile Quantitative (writing not required) Or A Miller’s Analogy Test (MAT) score of at least 50
- GPA of at least 3.0 on a 4.0 scale for work done while an upper division student in a Baccalaureate degree. Students who have GRE subtest scores of less than the 50th percentile or MAT scores of less than 50 must have GPAs above 3.2 in order to be considered for admission.
- CLAST/GKT Required (School Track only)
- Proof of educational or professional experience
- Three Letters of recommendation
- Personal Statement
- Interview
- Resume

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:
- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. GRE scores, etc.)

DEGREE PROGRAM REQUIREMENTS

Contact the program assistant for detailed information prior to applying.

Total Minimum Program Hours:

Core Requirements – 36 hours minimum

Process Core – 7 hours
EDF6354 Human Development and Personality Theories 4
EDF6481 Foundations of Educational Research 3

Other Core Courses: 29 hours minimum
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MHS6006</td>
<td>Trends and Principles of the Counseling Profession</td>
<td>4</td>
</tr>
<tr>
<td>MHS6420</td>
<td>Multicultural Counseling with Diverse Populations</td>
<td>3</td>
</tr>
<tr>
<td>MHS6200</td>
<td>Assessment and Appraisal Procedures</td>
<td>4</td>
</tr>
<tr>
<td>MHS6340</td>
<td>Career Development</td>
<td>4</td>
</tr>
<tr>
<td>MHS6400</td>
<td>Counseling Theories and Practices</td>
<td>4</td>
</tr>
<tr>
<td>MHS6311</td>
<td>Online Services in Counseling and Helping Professions</td>
<td>3</td>
</tr>
<tr>
<td>MHS6509</td>
<td>Group Counseling Theories and Practices</td>
<td>4</td>
</tr>
<tr>
<td>MHS6700</td>
<td>Legal and Ethical Issues in the Counseling Profession</td>
<td>3</td>
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**CONCENTRATION REQUIREMENTS**

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<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>MHS6800</td>
<td>Practicum in Counseling Adolescents and Adults</td>
<td>4</td>
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<tr>
<td>MHS6601</td>
<td>Consultation for the Counseling Profession</td>
<td>3</td>
</tr>
<tr>
<td>MHS6341</td>
<td>Career Program Design and Evaluation</td>
<td>3</td>
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<tr>
<td>MHS6887</td>
<td>Internship in Career and College Counseling</td>
<td>6</td>
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<tr>
<td>SDS6645</td>
<td>Student Development Theory</td>
<td>3</td>
</tr>
<tr>
<td>SDS6042</td>
<td>Introduction of Student Affairs</td>
<td>3</td>
</tr>
<tr>
<td>SDS6624</td>
<td>Ecology of Campus Life</td>
<td>3</td>
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**Comprehensive Examination**

Students must successfully pass a comprehensive examination prior to graduation.

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>EDF6217</td>
<td>Behavior Theory and Classroom Learning</td>
<td>4</td>
</tr>
<tr>
<td>MHS6450</td>
<td>Counseling Substance Abuse in School and Community</td>
<td>4</td>
</tr>
<tr>
<td>MHC6470</td>
<td>Human Sexuality Issues for Counselors</td>
<td>4</td>
</tr>
<tr>
<td>MHS6800</td>
<td>Practicum in Counseling Adolescents and Adults</td>
<td>4</td>
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<tr>
<td>OR</td>
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<tr>
<td>SDS6801</td>
<td>Practicum in Counseling Children</td>
<td>4</td>
</tr>
<tr>
<td>MHS6413</td>
<td>School Counseling Accountability</td>
<td>3</td>
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<tr>
<td>MHS6601</td>
<td>Consultation for the Counseling Profession</td>
<td>3</td>
</tr>
<tr>
<td>MHS6417</td>
<td>Human Sexuality Issues</td>
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<tr>
<td>EDG6931</td>
<td>Reading and Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>EDF6217</td>
<td>Behavior Theory and Classroom Learning</td>
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<td>SDS6820</td>
<td>Internship in School Counseling</td>
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<tr>
<td>REDG786</td>
<td>Research &amp; Methods in Reading</td>
<td>3</td>
</tr>
<tr>
<td>TSL6700</td>
<td>ESOL for School Counselors and Psychologists</td>
<td>3</td>
</tr>
</tbody>
</table>

**Comprehensive Examination**

Students must successfully pass a comprehensive examination prior to graduation.

Students must also present official passing scores on the following examinations prior to graduation:

- Florida Professional Education Exam
- Florida Subject Area Examination in Guidance and Counseling

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<tr>
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<tr>
<td>MHS6800</td>
<td>Practicum in Counseling Adolescents and Adults</td>
<td>4</td>
</tr>
<tr>
<td>MHS6620</td>
<td>Counseling in Community Setting</td>
<td>3</td>
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</tbody>
</table>
MHS6070 Study of Mental Disorders for Counselors 3
MHS6450 Counseling Substance Abuse in School and Community 3
MHS6470 Human Sexuality Issues for Counselors 3
MHS6885 Internship in Community Agency Counseling 9

Comprehensive Examination
Students must successfully pass a comprehensive examination prior to graduation.

OTHER INFORMATION
Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida Department of Education program approval standards, and accreditation criteria. Graduate Certificates are also available in several areas.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
COUNSELOR EDUCATION CONCENTRATION

Education Specialist (Ed.S.) Degree in the Curriculum and Instruction Program
With a concentration in Counselor Education

DEGREE INFORMATION

Program Admission Deadlines:
Fall: January 15th
Fall admission only

Minimum Total Hours: 39
Program Level: Specialist
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: SGC

CONTACT INFORMATION

College: Education
Department: Psychological and Social Foundations
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The Ed.S. Degree in Curriculum and Instruction with concentration in Guidance and Counseling is designed to provide professional counselors with an opportunity to develop competencies in areas of special needs and interests. Consequently, each student’s program is individually planned in consultation with a faculty advisor.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. All candidates for admission must have a 48‐semester hour master’s degree in counseling or a closely related field from a regionally accredited institution or its international equivalent. The master’s degree must have included a 600 hour internship and coursework in theories of counseling, principles of counseling, group counseling, career development, multicultural counseling, and practicum in counseling.

Requirements for all applicants include:
• A Graduate Record Examination (GRE) score above the 65th percentile Verbal and above the 55th percentile Quantitative (writing not required). Official scores should be in a sealed envelope provided by Educational Testing Service or recorded on an official transcript. OR A Miller Analogy Test (MAT) score of at least 50. Students who have graduate GPAs of 3.80 or more may have the GRE/MAT requirement waived.
• A graduate GPA of at least 3.75 on a four‐point scale.
• Vita or resume
• Proof of educational or professional experience
• Letters of recommendation
• Interview
• Personal statement describing the applicant’s professional goals and reasons for applying to the program are required.

http://www.coedu.usf.edu/
For International applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See http://web.usf.edu/iac/admissions/language.html for further clarification and exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://web.usf.edu/iac/admissions

DEGREE PROGRAM REQUIREMENTS

Program of Study: 39 hrs. minimum

CORE REQUIREMENTS
MHS 7401 Adv. Counseling Theories 4
MHS 7610 Consultation and Supervision Theory 4
MHS 7930 Adv Seminar in Counseling 4
EDG 7931 Adv. Practicum in Counseling 4
SDS 7830 Adv. Internship in Counseling 3 minimum
EDG 7931 Cognitive Behavioral Res. Seminar 3
EDF 6407 Statistical Analysis I 4
EDF 7408 Statistical Analysis II 4

Thesis: MHS 6930 Directed Research/Thesis 9 minimum

Comprehensive Examination: Students must perform satisfactorily on a comprehensive examination prior to graduation.

OTHER INFORMATION
This is a limited access program with internal deadlines. Please check with program prior to applying. This degree is flexible in coursework and must be planned with a faculty advisor. Contact the Program for additional information.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
COUNSELOR EDUCATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a concentration in Counselor Education

DEGREE INFORMATION

Program Admission Deadlines:
Fall: January 15th
Fall admission only

Minimum Total Hours: 92
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DGC

CONTACT INFORMATION

College: Education
Department: Psychological and Social Foundations
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Program Description
The Ph.D. Degree in Curriculum and Instruction with Concentration in Guidance and Counseling is a research and theory intensive experience designed to provide a balance of intellectual and experiential learning resulting in professional educators who have multiple competencies as researchers, theorists, and problem-solvers in human growth and development. The doctoral program emphasizes research and theory as opposed to clinical skill development and is designed primarily for students who wish to pursue careers in academic institutions.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: Career development, clinical supervision, mental health counseling, multicultural counseling, and play therapy.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. All candidates for admission must have a 48-semester hour master’s degree in counseling or a closely related field from a regionally accredited institution or its international equivalent. The master’s degree must have included a 600 hour internship and coursework in theories of counseling, principles of counseling, group counseling, career development, multicultural counseling, and practicum in counseling.

Requirements for all applicants include:

- A Graduate Record Examination (GRE) score above the 65th percentile Verbal and above the 55th percentile Quantitative (writing not required). Official scores should be in a sealed envelope provided by Educational Testing Service or recorded on an official transcript. Or A Miller’s Analogy Test (MAT) score of at least 50.
- Students who have graduate GPAs of 3.80 or more may have the GRE/MAT requirement waived.

http://www.coedu.usf.edu/
- A graduate GPA of at least 3.75 on a four-point scale.
- Vita or resume
- Proof of educational or professional experience. A 48-semester hour Master’s degree in counseling or a closely related specialty and at least three (3) years of post-master’s professional work experience is required.
- Three (3) letters of recommendation
- Personal interviews for all candidates except in situations that would require extensive travel.
- Personal statement describing the applicant’s professional goals and reasons for applying to the program.

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:
- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.)

DEGREE PROGRAM REQUIREMENTS
88 hours minimum

CORE REQUIREMENTS

CONCENTRATION REQUIREMENTS: 38 HRS. MIN.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
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<tr>
<td>EDF 7946</td>
<td>Supervised Exp. in College Teaching</td>
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</tr>
<tr>
<td>MHS 6311</td>
<td>On-line Services in Counseling</td>
<td>2</td>
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<tr>
<td>MHS 7740</td>
<td>Planning, Eval., &amp; Accountability</td>
<td>3</td>
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<td>or</td>
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<tr>
<td>EDF 7493</td>
<td>Sys. Approaches for Prog. Plan &amp; Eval.</td>
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<tr>
<td>MHS 7401</td>
<td>Adv. Counseling Theories</td>
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<td>MHS 7610</td>
<td>Consultation and Supervision Theory</td>
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<td>MHS 7930</td>
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<td>SDS 7830</td>
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<td>EDG 7931</td>
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<td>EDG 7931</td>
<td>Proposal Preparation</td>
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<tr>
<td>EDG 7910</td>
<td>Directed Research</td>
<td>3</td>
</tr>
</tbody>
</table>

http://www.coedu.usf.edu/
Cognate: 12 hrs min
Courses in cognate are planned in consultation with the major professor and doctoral committee. Courses in the cognate must be taken at the graduate and/or advanced graduate level.

Measurement/Statistics/Research Design 11 hrs min
Required:
EDF 6407 Statistical Analysis I 4
EDF 7408 Statistical Analysis II 4

Plus (select one from the listing below)
EDF 7484 Statistical Analysis III 4
EDF 7437 Advanced Educ. Measurement 3
EDG 7931 Qualitative Res., Des., & Data Coll. 3

Foundations 7 hrs min
Philosophical/Social Foundations (select one)
EDF 6705 Gender and the Ed. Process 3
ESF 7586 Classics in Ed. Research 4
ESF 7682 Ed. In Metropolitan. Areas 4

Psychological Foundations (select one)
EDF 7145 Cognitive Issues in Instruction 4
or
EDG 7931 (Seminar of choice) 4
Requires the approval of the major professor and the college.

Dissertation
MHS 7980 24

OTHER INFORMATION
This is a limited access program that has internal deadlines. Please check with program prior to applying.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
CURRICULUM AND INSTRUCTION PROGRAM

Master of Education (M.Ed.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Refer to individual concentration areas for
information on deadlines that may be earlier than the
University deadlines of:
Fall          February 15
Spring        October 15
Summer        February 15

Minimum Total Hours: 33
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED

CONTACT INFORMATION

College: Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

The Curriculum and Instruction degree is only offered in conjunction with a concentration area. Please see the area of concentration (listed alphabetically in the catalog) to determine whether or not the Curriculum and Instruction degree is available in your area of interest.

Program Description
This degree is designed for the professional educator who wishes to pursue advanced study. The primary objective is to prepare instructional leaders through courses in curriculum, methods, supervision, learning principles, human interaction, and areas of specialization. The foundation areas (professional studies) receive greater emphasis in the M.Ed. programs than the M.A. programs. Coursework in the concentration may include courses in colleges other than the College of Education. The Curriculum and Instruction program is offered with concentration areas. General program requirements are listed below. For specific specialization requirements, contact the appropriate department.

Accreditation: Programs in the College are accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below. Refer to each area of concentration for program admission requirements or contact the program for assistance.

For International applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See http://web.usf.edu/ias/admissions/language.html for further clarification and possible exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://admissions.grad.usf.edu/international.html

http://www.coedu.usf.edu/
DEGREE PROGRAM REQUIREMENTS

College of Education Program Requirements for the Master of Education degree (M.Ed.)

The M.Ed. degree in Curriculum and Instruction normally requires a minimum of 33 semester hours with 60 percent or more of the courses at the 6000 level. Courses at the 7000 level are advanced graduate level courses and thus are not approved to be part of the master's degree program.

Program of Study Degree Requirements (usual minimums)

CORE REQUIREMENTS

Process Core 12 hours minimum
EDF 6432  EDF 6481  EDF 6211 or EDF 6215 or equivalent
EDF 6517 or EDF 6544 or EDF 6606 or equivalent

Curriculum and Instruction (EDG 6627) - 3 hours minimum; a prerequisite may be required at the undergraduate level

Concentration Requirements 18 hours minimum

Comprehensive Examination

Individual areas of specialization may have variations in requirements. For information contact the department/program offering the concentration.

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
Curriculum and Instruction (Ed.S.)

Curriculum and Instruction Program

Education Specialist (Ed.S.) Degree

Degree Information

Program Admission Deadlines:
Refer to individual concentration areas for information on deadlines that may be earlier than the University deadlines of:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Specialist
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED

Program Information

The Curriculum and Instruction degree is only offered in conjunction with a concentration area. Please see the area of concentration (listed alphabetically in the catalog) to determine whether or not the Curriculum and Instruction degree is available in your area of interest.

Program Description
The Ed.S. degree consists of a minimum of 36 hours beyond the master's degree and is flexible in its requirements. The degree is designed to provide professional educators with an opportunity to develop competencies in areas of special needs and interests. Consequently, the degree program has few required courses, and each student's program is individually planned in consultation with a faculty program committee. Courses at the 5000 level are inappropriate; and a minimum of 15 hours should be taken at the 7000 level.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Admission Information

Must meet University requirements (see Graduate Admissions) as well as requirements listed below. Refer to each area of concentration for program admission requirements or contact the program for assistance.

For International applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See http://web.usf.edu/iac/admissions/language.html for further clarification and possible exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://admissions.grad.usf.edu/international.html.
DEGREE PROGRAM REQUIREMENTS

Minimums

CORE REQUIREMENTS

CONCENTRATION REQUIREMENTS

Thesis/Project

27 hours minimum

9 hours minimum

Comprehensive Exam (Oral and/or written)

Oral defense of the thesis/project

Thesis/Project

The student is required to plan and successfully complete an individual thesis or project. The purpose is to provide an opportunity for the student to apply knowledge gained in the program to the resolution of significant needs arising from professional practice. A minimum of nine (9) semester hours of thesis enrollment is required in the Ed.S. degree program. Students are required to enroll for a minimum of 2 semester hours in the 6971 thesis course each semester while working on the Ed.S. project and for 2 semester hours in the semester in which the student plans to graduate. Students who have not completed the project after enrolling in the required 9 hours must continue to enroll in a minimum of two (2) credit hours of 6971 Thesis each semester, including the semester in which the project is submitted to the College Associate Dean for Academic Affairs or the Graduate School (School Psychology students). Students must have an oral defense of the project/thesis with their project/thesis supervisory committee. Individual areas of specialization may have additional requirements. For information contact the department/program offering the concentration.

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
CURRICULUM AND INSTRUCTION PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Refer to individual concentration areas for information on deadlines that may be earlier than the University deadlines of:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 75
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED

PROGRAM INFORMATION

The Curriculum and Instruction degree is only offered in conjunction with a concentration area. Please see the area of concentration (listed alphabetically in the catalog) to determine whether or not the Curriculum and Instruction degree is available in your area of interest.

Program Description
Refer to individual areas of concentration for information.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: Information available by accessing the concentration areas, listed alphabetically in the catalog.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below. Refer to each area of concentration for program admission requirements or contact the program for assistance.

PROGRAM DEGREE REQUIREMENTS

General Program Requirements for the C&I degree, (minimum requirements):
Program of Study – 75 hours minimum

Core requirements
Concentration Requirements 18 hours minimum
Curriculum and Instruction 3 hours
Cognate Area - 12 hours minimum
Statistics/Measurement/Research Design - 11 hours minimum
Psychological and Social Foundations -  
Dissertation  
7 hours minimum  
24 hours

**Dissertation**
Beginning with the semester immediately following admission to candidacy, the student must be enrolled for a minimum of 12 dissertation credit hours in each 12-month period for the first two years after being admitted to candidacy. Students may complete the 12 hours in either two or three semesters but must be enrolled for dissertation hours in the Fall and Spring semesters of each year during the two year (24-month) period. Students may elect not to register for dissertation hours during the summer semester if in this two-year period they are not using university facilities or other USF resources, including faculty and staff time. If such resources are being used, then enrollment in a minimum of two dissertation hours during the Summer semester is required. If the dissertation is not completed by the time the 24 hours of dissertation credit have been accrued, students must enroll continuously, including Summer semester, for a minimum of two dissertation hours per semester until graduation. (This includes the semester during which the dissertation is defended and the semester in which final submission of the dissertation is made to the Graduate School).

Exceptions to the continuous enrollment policy may be approved if the major professor writes a letter of petition to the Associate Dean for Academic Affairs, indicating specifically the nature and duration of the exception and the justification. Unless an exception has been approved, failure to enroll as specified may result in dismissal of the student from the program. To be readmitted, the student must secure permission from the major professor and write a letter of petition, co-signed by the major professor, to the Associate Dean for Academic Affairs, outlining in detail a timeline for completing the dissertation. The Associate Dean for Academic Affairs will approve or deny the petition. This process will be independent of, and will not replace, any procedures required by the University or the Graduate School.

**Residency**
Students must enroll for at least nine hours in each of two semesters in a 12-month period. The Ph.D. program requires that during the residency period, students may be employed no more than half-time. Individual programs may have additional residency requirements.

**Doctoral Qualifying Examination**
Students must demonstrate satisfactory performance on the Doctoral Qualifying Examination before admission to candidacy. (See current College of Education Graduate Handbook, www.coedu.usf.edu, click on information; also consult Faculty Program contact).

Individual areas of concentration may have variations in the requirements. For information contact the department/program offering the specialization of interest.

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

**COURSES**
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
EARLY CHILDHOOD EDUCATION PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
This degree program is open only to students who are part of the Jamaica program cohort.

Minimum Total Hours: 38 hours minimum
Program Level: Masters
CIP Code: 13.1210
Dept Code: EDR
Program (Major/College): ANK ED

CONTACT INFORMATION

College: Education
Department: Childhood Education and Literacy Studies
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The M.A. program is designed for students with a bachelor’s degree in Early Childhood Education with appropriate initial certification. It is for students who desire to expand expertise in the field and hold leadership positions.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

Requirements for applicants include:
- Minimum upper division GPA of 3.0 on a 4.0 scale in an upper division baccalaureate degree, or a first or second-class honors.
- GRE is required for applicants with an upper-division baccalaureate GPA below 3.0 on a 4.0 scale.

For International applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). In addition to these university requirements, applicants to the College of Education must provide an external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts.

DEGREE PROGRAM REQUIREMENTS

Program of Study: 38 hours minimum

Core Requirements
- EEC 6931 Ch Dev Issues of Teaching and Learning (3)
- EDG 6481 Fdns of Ed Research (3)
Program Core
- EDF 6938 Issues, Trends, and Dev in ECE in Jamaica (3)
- EDG 6931 Intro to Statistics (3)

Trends
- EEC 6672 Research Seminar: Issues, Trends and Advocacy in ECE (3)

Concentration Requirements
- EEC 6931 Special Topics/Intro to Technology (2)
- EEC 6265 EC Programs and Adv Curriculum (3)
- EEC 6626 EC Play and Learning (3)
- EEEC 6525 EC Program Dev and Admin (3)
- EDG 6935 Seminar in Curriculum Research (3)
- EDG 6931 Supervising Interns and Student Teachers (3)
- EEC 6205 Curriculum and Authentic Assessment (3)
- EEC 6055 Advocacy and Leadership in ECE (3)

Comprehensive Exam
Students need to be registered for at least two graduate credit hours during their final semester in order to take the exam.

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
EARLY CHILDHOOD EDUCATION CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Early Childhood Education

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33

Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CNK

CONTACT INFORMATION

College: Education
Department: Childhood Education and Literacy Studies
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The M.Ed. Degree in Curriculum and Instruction with a concentration in Early Childhood Education is designed for those students who hold a degree in early childhood education or a related field and wish to improve their skills in teaching young children, and prepare to take leadership roles in the field of early childhood education. When previous academic preparation is not in the field of early childhood education, prospective students will be expected to complete undergraduate courses as determined through conference with a faculty advisor upon admission to the program. This program is not a teacher certification preparation program.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned bachelor’s degrees from regionally accredited institutions or an international equivalent.

Requirements for all applicants include:
- Minimum GPA of 3.0 on a 4.0 scale in upper division baccalaureate degree.
- GRE required for applicants with an upper-division GPA below 3.0 on a 4.0 scale. Contact the department for details.

For International applicants: Applicants whose native language is not English or who have not earned a degree in the United States must also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 550 on the paper-based test, is required. Applications submitted with TOEFL scores that do not meet the minimum criteria will be denied. The TOEFL requirement may be waived if the applicant meets one of the following conditions:
- The applicant’s native language is English, or
- Has scored 500 or higher on the GRE Verbal Test, or
• Has earned a college degree at a U.S. institution of higher learning, or
• Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or
• Has scored 6.5 on International English Language Testing System (IELTS) http://www.ielts.org/

In addition to these university requirements, applicants to the College of Education must provide an external, course-by-course evaluation of the foreign degree by an approved external agency, and based on official transcripts.

DEGREE PROGRAM REQUIREMENTS

Program of Study: 33-34 hours minimum

CORE REQUIREMENTS 12 hours minimum
EDF 6481 Foundations of Educational Research (3)

EDF6120 Child Development (3-4) OR EDF 6211 Psychological Foundations of Education
EDF 6432 Foundations of Measurement (3)

EDF 6517 Historical Foundations of Education (3-4) Or
EDF 6544 Philosophical Foundations of Education (3-4) or
EDF 6606 Socio-Economic Foundations of Education (3-4) And

Trends: 3 hrs minimum

Concentration Requirements
(Content Specialization): 18 hours minimum
EEC 6415 EC: Diversity in Home and School (3)
EEC 6055 Advocacy and Leadership in ECE (3)
EEC 6205 EC: Curriculum and Authentic Assessment (3)
EEC 6626 EC Play and Learning (3)
EEC 6525 EC Program Development and Administration (3)
EEC6265 EC Programs and Adv Curriculum (3)
EEC6517 Social Justice in Early Childhood Ed (3)

Comprehensive exam
Students must apply to take their comprehensive exam. Students must be enrolled in at least two credit hours during the semester of their comprehensive exam.

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
EARLY CHILDHOOD EDUCATION CONCENTRATION

Education Specialist (Ed.S.) Degree in the Curriculum and Instruction Program
With a concentration in Early Childhood Education

DEGREE INFORMATION

Program Admission Deadlines: Closed to new admissions.
Minimum Total Hours: 36
Program Level: Specialist
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: SNK

CONTACT INFORMATION

College: Education
Department: Childhood Education and Literacy Studies
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

This program is currently closed to new admissions.
Please contact the program for additional information.
EARLY CHILDHOOD EDUCATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a concentration in Early Childhood Education

DEGREE INFORMATION

Program Admission Deadlines:
   Fall: February 15
   Fall admission only

Minimum Total Hours: 75
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DNK

CONTACT INFORMATION

College: Education
Department: Childhood Education and Literacy Studies
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Program Description
This program promotes scholarly and multidisciplinary inquiry that further empowers advanced graduate students through the development of knowledge, skills, and dispositions to assume roles as leaders, advocates, and scholars in the development and implementation of high quality and innovative early childhood practices.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

Requirements for all applicants include:
- 40th Percentile GRE scores on verbal, quantitative, and analytical sections
- Minimum GPA of 3.5 Masters
- Two years Educational or professional experience
- Three letters of recommendation
- Personal statement of academic history and goals
- Academic Writing Samples/Publications (two samples that demonstrate writing and research skills)
- Interview
- Employment Evaluations (2)

For International applicants: Applicants whose native language is not English or who have not earned a degree in the United States must also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 550 on the paper-based test, is required. Applications submitted with TOEFL scores that do not meet the minimum criteria will be denied. The TOEFL requirement may be waived if the applicant meets one of the following conditions:
• The applicant’s native language is English, or
• Has scored 500 or higher on the GRE Verbal Test, or
• Has earned a college degree at a U.S. institution of higher learning, or
• Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or
• Has scored 6.5 on International English Language Testing System (IELTS) http://www.ielts.org/

Applicants to the COEDU, for purposes of admission, must also present an external evaluation of foreign credentials by an approved external agency using official transcripts. See http://www.grad.usf.edu/newsite/admissions/checklist.asp for further clarification and exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://www.usf.edu/admission/

**DEGREE PROGRAM REQUIREMENTS**

The program requires a minimum of 75 hours beyond the Master’s degree. Each student’s program is individually planned in consultation with a faculty program committee. The requirements are as follows or as recommended by the doctoral coordinator, program faculty, or doctoral committee, and approved by the college and/or Graduate School.

**Program of Study**

**75 hours minimum**

**CORE REQUIREMENTS**

**Process Core**

**CURRICULUM**

EDG 7667 Anal of Curr & Instruction  
OR  
EDG 7692 Issues of Curr Instruction  
OR  
EDH 7225 Curr Dev in Higher Ed

**MEASUREMENT/STATISTICS/RESEARCH DESIGN**

EDF 6407 Stat Anal Educ I  
(4)  
EDF 7408 Stat Anal Educ II  
(4)

Select one from the following:  
EDF 7410 Des Sys Stud in Educ  
(4)  
EDF 7437 Adv Educ Meas I  
(3)  
EDF 7484 Stat Anal Educ Res III  
(4)  
EDF 7493 Sys Approaches for Prog Ping, Eval & Dev  
(4)  
EDF 7477 Qual Res in Educ. I  
(4)

**FOUNDATIONS**

At least one appropriate 7000-level course (or other doctoral level course) required in each of the following areas:  
Philosophical/Historical/Social Foundations  
Educational Psychology

**18 hours min**

**Concentration Requirements:**  
EEC 7056 Leadership and Advocacy Concerning Issues Affecting Young Children  
3 hours  
EEC 7057 Critical Perspectives in Early Childhood Education  
3 hours  
EEC 7615 Trends and Issues in Early Childhood Education  
3 hours  
EEC 7617 Assessment in Early Childhood Education  
3 hours  
EEC 7306 Teaching and Learning in Early Childhood  
3 hours  
EEC 7416 Ecological Approaches to Working with Children  
3 hours
Cognate: 12 hours min
The cognate can be described as a secondary concentration or sub-specialization area. Coursework must be taken at the graduate level, and is developed in consultation with the major professor and the doctoral committee. The coursework in the cognate is normally developed in support of the student’s research objectives.

Dissertation 24 hours minimum
Beginning with the semester immediately following admission to candidacy, the student must be enrolled for a minimum of 12 dissertation credit hours in each 12-month period for the first two years after being admitted to candidacy. Students may complete the 12 hours in either two or three semesters but must be enrolled for dissertation hours in the Fall and Spring semesters of each year during the two year (24-month) period. Students may elect not to register for dissertation hours during the summer semester if in this two-year period they are not using University facilities or other USF resources, including faculty and staff time. If such resources are being used, then enrollment in a minimum of two dissertation hours during the Summer semester is required. If the dissertation is not completed by the time the 24 hours of dissertation credit have been accrued, students must enroll continuously, including Summer semester, for a minimum of two dissertation hours per semester until graduation. (This includes the semester during which the dissertation is defended and the semester in which final submission of the dissertation is made to the Graduate School).

Exceptions to the continuous enrollment policy may be approved if the major professor writes a letter of petition to the Associate Dean for Academic Affairs, indicating specifically the nature and duration of the exception and the justification. Unless an exception has been approved, failure to enroll as specified may result in dismissal of the student from the program. To be readmitted, the student must secure permission from the major professor and write a letter of petition, co-signed by the major professor, to the Associate Dean for Academic Affairs, outlining in detail a timeline for completing the dissertation. The Associate Dean for Academic Affairs will approve or deny the petition. This process will be independent of, and will not replace, any procedures required by the University or the Graduate School.

Qualifying Examination

Residency requirements
Students must enroll for at least nine hours in each of two semesters in a 12-month period. The Ph.D. program requires that during the residency period, students may be employed no more than half-time.

For more information see the program’s website at http://www.coedu.usf.edu/main/departments/ce/graduate/DoctoralProgram.html

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
EDUCATIONAL LEADERSHIP PROGRAM

Master of Education (M.Ed.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15
Spring: October 15

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 13.0401
Dept Code: LEA
Program (Major/College): CAS ED

CONTACT INFORMATION

College: Education
Department: Educational Leadership and Policy Studies
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The M.Ed. educational leadership prepares school leaders to perform their designated task in an effective, ethical and efficient manner. The degree provides coursework that meets the Florida Principal Leadership Standards for K-12 schools in instructional leadership, operational leadership and school leadership. Successful completion of the program fulfills degree and core curriculum requirements for Florida certification in Level I K-12 Educational Leadership – Administrative Class. If you require further information, please contact the M.Ed. Program Coordinator.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS); The National Council for the Accreditation of Teacher Education (NCATE); and the Florida Department of Education.

ADMISSION INFORMATION

Applicants must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- A bachelor’s degree from a regionally accredited institution or an international equivalent.
- A minimum 3.0 GPA on a 4.0 scale in upper division undergraduate coursework.
- A valid Florida Professional Educator’s Certificate (please provide a clear copy showing border and State seal with your application).
- Three letters of professional recommendation.
- A letter of intent (brief statement outlining experience and goals for the degree).
- Teaching under a full-time contract for a minimum of two years. Confirmation may be required.
- Proof of English for Speakers of Other Languages (ESOL) training (3-hour course or 60 hours of district in-service education; applicants who do not possess this training will be required to complete TSL 5085).

Note: Contact the department if you do not meet the above criteria. Non-degree seeking coursework or the Graduate Record Examination may be required if an applicant’s GPA is below 3.00.

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

http://www.coedu.usf.edu/
• An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
• A social security number in degree programs requiring practica or internships;
• Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours 36 hours

Core Requirements
Process Core (9 hours)
- EDF 6492 Applied Educational Program Evaluation (3)
- EDG 6627 Foundations of Curriculum and Instruction (3)
- EME 6425 Technology for School Management (3)
- TSL 5085 ESOL 1 (3) [waived with documentation of 3-hour course or 60 hours of district in-service education]

Concentration Requirements (24 hours)
- EDA 6061 Principles of Educational Administration (3)
- EDA 6106 Administrative Analysis and Change (3)
- EDA 6192 Educational Leadership (3)
- EDA 6232 School Law (3)
- EDA 6242 School Finance (3)
- EDA 6503 The Principalship (3)
- EDG 6285 School Curriculum Improvement (3)
- EDA 6194 Educational Leadership II: Building Capacity (3)

Practicum (3 hours)
- EDA 6945 Administrative Practicum (last semester) (3)

Comprehensive Exam
- Portfolio (last semester with Practicum)

Graduation Requirement
- The Florida Educational Leadership Exam (FELE) must be passed prior to graduation.
- Official score report submission required.

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

Modified Educational Leadership Program

Program Description
The modified program in educational leadership is for those persons with an earned master’s degree in a field other than educational leadership and who wish to add educational leadership to their Florida Professional Educator’s Certificate. The modified program is a non-degree program consisting of approximately 24-30 hours of coursework that meets Florida Principal Leadership Standards for K-12 schools in instructional leadership, operational leadership and school leadership. Successful completion fulfills program and core curriculum requirements for Florida certification in Level I K-12 Educational Leadership–Administrative Class. The number of courses required will vary, depending upon the student’s master’s degree coursework.


Once certified in Educational Leadership by the Florida Department of Education, students who wish to pursue a higher degree may be able to have some eligible credits earned in the modified program considered for transfer to a Specialist (Ed. S) program.
Modified Educational Leadership Program continued

Admission Information:

Admission requirements:
- A Master’s degree from a regionally accredited institution with a minimum 3.0 GPA
- Official (original & sealed) Master’s and Bachelor’s transcripts. (Degrees earned from USF do not require transcripts.)
- A valid Florida Professional Educator’s Certificate (please provide a copy clearly showing border and seal).
- Proof of English for Speakers of Other Languages (ESOL) training (3 hour course or 60 hours of district in-service education)
- Three letters of professional recommendation
- A letter of intent (brief statement outlining experience and goals).
- Evidence of teaching under a full-time contract for a minimum of two years.

Minimum Total Hours: 30

Program requirements: Those completing the certification program are required to complete an ESOL training requirement. If you have not completed a 3-credit-hour course in ESOL or do not have documentation of the completion of sixty (60) hours of ESOL district in-service education, you will be required to complete TSL 5085. You should include documentation with your application if the requirement has already been met. In addition to coursework, successful completion of the Florida Educational Leadership Exam (FELE) is required for certification. Upon successful completion of the necessary courses, students will receive a stamp on their transcript indicating completion of a modified educational leadership program; however, the student must apply to the FLDOE for state certification.

Courses: Please see the Educational Leadership M.Ed. course listing. The number of courses required will vary depending upon the student’s master’s degree coursework. Applicants wanting consideration of previous Master’s coursework must supply a university catalog course description for each course they want reviewed and indicate which USF course may be comparable. The faculty program coordinator will evaluate coursework to determine acceptability and applicants will be provided with a list of recommended courses for completion of the Modified Program.

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
EDUCATIONAL LEADERSHIP PROGRAM

Education Specialist (Ed.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
  Fall: February 15

Minimum Total Hours: 36

Program Level: Specialist

CIP Code: 13.0401

Dept Code: LEA

Program (Major/College): SAS ED

CONTACT INFORMATION

College: Education
Department: Educational Leadership and Policy Studies

Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

The Ed.S. degree is an advanced graduate degree beyond the master’s degree but below the doctorate. The Ed.S. provides professional educators who already possess certification in educational leadership (K-12) with an opportunity to develop competencies in areas of special needs and interests. The degree is flexible, and each student’s program is individually planned in consultation with a 3-member faculty program committee. The Ed.S. program requires 15 semester hours of major coursework at the doctoral level, 9 semester hours at the master’s or advanced graduate level, and 3 semester hours in the area of research methods. A thesis/project is also required (9 semester hours) for a minimum total of 36 semester hours. There is also a comprehensive examination required. The student must have a supervisory committee consisting of three faculty members credentialed for advanced graduate committee work.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools (SACS); the National Council for the Accreditation of Teacher Education (NCATE).

ADMISSION INFORMATION

Applicants should contact the Program Advisor prior to applying to Graduate Admissions. Admissions for the Specialist program occur each fall. Applicants must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Admission Requirements

Applicants must:

- Submit an official Graduate Record Examination score taken within the last five years [verbal, quantitative, and analytical writing];
- Hold a Master’s degree from a regionally accredited institution with an earned GPA of at least 3.5 on a 4.0 scale;
- Hold a valid Florida Professional Educator’s Certificate in Educational Leadership (K-12); (please provide a clear copy showing border and State seal);
- Submit three letters of recommendation from persons knowledgeable about the applicant’s academic and professional competence;
- Complete writing sample on site;
International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours 36 hours

Concentration Requirements: 15 hours
EDA 7222 Administration Of School Personnel Policies and Practices (3)
EDA 7233 Legal Dimensions Of School Administration (3)
EDA 7247 Advanced School Finance (3)
EDS 7130 Teacher Evaluation: Process and Instruments (3)
EDG 7667 Analysis of Curriculum and Instruction (3) Or
EDG 7692 Issues in Curriculum and Instruction (3)

Concentration Electives 9 hours
May be taken at the Master’s and/or Advanced Graduate (6000 or 7000) levels from the areas of Educational Leadership, K-12; Higher Education-Community College, Adult or Vocational Education; or Instructional Technology

Core Elective 3 hours
Taken from the Department of Educational Measurement/Research at the graduate level.

Comprehensive Exam 9 hours
EDA 6971 Thesis/Project
Includes written comprehensive examination and oral defense of thesis/project.

Residency Requirement
There is no residency requirement for the Ed.S. program.

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
EDUCATIONAL LEADERSHIP PROGRAM

Doctor of Education (Ed.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15
Spring: October 15

Minimum Total Hours: 76
Program Level: Doctoral
CIP Code: 13.0401
Dept Code: LEA
Program (Major/College): EAS ED

CONTACT INFORMATION

College: Education
Department: Educational Leadership and Policy Studies
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The Ed.D. degree improves professional practice by enhancing the ability of professional educators to obtain, analyze, and synthesize information at an advanced level for effective education decision making. The doctorate program seeks to develop effective, ethical, and diverse leaders who maximize improvement and achievement in schools and other organizations. Skill application serve as the connection between knowledge and inquiry skills developed in the core curriculum, interdisciplinary electives, and research courses leading to restructured practice and school or organizational improvement.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools (SACS) and the National Council for the Accreditation of Teacher Education (NCATE).

ADMISSION INFORMATION

Contact the Program Advisor prior to applying to Graduate Admissions. Admission to the Ed.D. occur each fall and spring. Applicants must meet University requirements (see Graduate Admissions) as well as requirements listed below. Admission to the Ed. D. program is based on a holistic evaluation of the applicants’ demonstrated potential to successfully complete all of the course and research requirements of the program. Success in the program requires excellent skills of scholarship in writing and research and a commitment to high quality and systematic inquiry. The program faculty will consider each applicant in light of his or her qualifications and likelihood of success. Applicants meeting these criteria will be asked to complete an oral interview and onsite writing sample.

Program Admission Requirements

Applicants must:

- Submit an official Graduate Record Examination score taken within the last five years [verbal, quantitative, and analytical writing];
- Hold a Master’s degree from a regionally accredited institution
- Have an earned an undergraduate grade point average of 3.0 (B) in the last half of the baccalaureate or a grade point average of 3.5 in the master’s degree;
Hold a Florida Professional Educator’s Certificate in Educational Leadership (K-12); (please submit a clear copy showing border and State seal);
Submit three letters of recommendation from persons knowledgeable about the applicant’s academic and professional competence;
Complete writing sample on site;
Present self professionally in an oral interview with two or more faculty members;

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

### DEGREE PROGRAM REQUIREMENTS

<table>
<thead>
<tr>
<th>Total Minimum Hours:</th>
<th>76 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Requirements</strong></td>
<td>6 hours</td>
</tr>
<tr>
<td>EDG 7667 Analysis of Curriculum &amp; Instruction</td>
<td>(3)</td>
</tr>
<tr>
<td>EDG 7692 Issues in Curriculum &amp; Instruction</td>
<td>(3)</td>
</tr>
<tr>
<td><strong>Concentration Requirements</strong></td>
<td>24 hours</td>
</tr>
<tr>
<td>EDA 7222 Administration of School Personnel Policies</td>
<td>(3)</td>
</tr>
<tr>
<td>EDA 7233 Legal Dimensions of School Administration</td>
<td>(3)</td>
</tr>
<tr>
<td>EDA 7247 Advanced School Finance</td>
<td>(3)</td>
</tr>
<tr>
<td>EDS 7130 Teacher Evaluation</td>
<td>(3)</td>
</tr>
<tr>
<td>Specialization Electives</td>
<td>(9)</td>
</tr>
<tr>
<td>Computer course</td>
<td>(3)</td>
</tr>
</tbody>
</table>

*Note:* At least 16 hours must be at 7000-level, or 6000-level courses requiring advanced graduate standing. Must also include a 6000-level (or above) computer course (EMA prefix). This course may be waived and another concentration elective taken if the student shows proof of 600-level computer course.

<table>
<thead>
<tr>
<th>Required Measurement/Statistics/Research Design</th>
<th>11 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 6407 Statistical Analysis Education I</td>
<td>(4)</td>
</tr>
<tr>
<td>EDF 7408 Statistical Analysis Education II</td>
<td>(4)</td>
</tr>
<tr>
<td>Select one of the following courses:</td>
<td></td>
</tr>
<tr>
<td>EDF 7410 Design of System Study in Education</td>
<td>(4)</td>
</tr>
<tr>
<td>EDF 7437 Advanced Education Measurement I</td>
<td>(3)</td>
</tr>
<tr>
<td>EDF 7484 Statistical Analysis Education III</td>
<td>(4)</td>
</tr>
<tr>
<td>EDF 7493 System Approaches for Prog. Planning</td>
<td>(4)</td>
</tr>
<tr>
<td>EDF 7477 Qualitative Research in Education I</td>
<td>(4)</td>
</tr>
<tr>
<td>EDF 7478 Qualitative Research in Education II</td>
<td>(4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required Foundations Courses</th>
<th>11 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose three (3) 7000-level courses (or other doctoral level courses) from the areas below. All required hours may not be taken in one area; at least one 7000-level course (or other doctoral level course) is required in each area.</td>
<td></td>
</tr>
</tbody>
</table>

1. **Philosophical/Social/Historical**
   - EDF 6531 History of Childhood: Disability and Deviance (3)
   - EDF 6705 Gender and the Educational Process (3)
   - EDF 6736 Education, Community and Change (3)
   - EDF 6765 Schools and the Future (4)
EDF 6883  Issues in Multicultural Education  (4)
EDF 6938  Special Topics, with program, committee and college approval
EDF 7530  History of Higher Education  (3)
EDF 7586  Classics in Educational Research  (4)
EDF 7649  Analysis of Educational Issues  (4)
EDF 7682  Education in Metropolitan Areas  (4)
EDF 7934  Seminar in Social Foundations of Education  (4)

2. Educational Psychology
EDF 7145  Cognitive Issues in Instruction  (4)
EDF 7359  Resilience in Human Development  (4)
EDG 7931  Psychology of Language Development  (4)
EDG 7931  Adolescent Development  (4)
EDG 7931  Developmental Theory  (4)

Dissertation
EDG 7980 Dissertation: Doctoral

Required Examinations
Qualifying Examination is required prior to admission to candidacy and is taken after candidate has completed all required coursework.

Residency
There is no on-campus residency requirement for the Ed.D.

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

COURSES
See  http://www.ugs.usf.edu/sab/sabs.cfm
EDUCATIONAL LEADERSHIP –
COLLEGE LEADERSHIP CONCENTRATION

Doctor of Education, Ed.D. Degree in the Educational Leadership Program
With a concentration in College Leadership

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 76
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: LEA
Program (Major/College): EAS ED
Concentration Code: EHI

CONTACT INFORMATION

College: Education
Department: Adult, Career & Higher Education
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Program Description
Educational Leadership (College Leadership)
The College Leadership program develops the competencies of educational practitioners in two- and four-year-colleges and universities, and allows them to obtain and synthesize knowledge for the solution of educational problems and practices. The Ed.D. program is designed for individuals who are primarily interested in the application of theory to improve practice in higher education.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
The program faculty will consider each applicant in light of his or her qualifications and likelihood of success, first by reviewing the submitted materials and then through a personal interview for candidates who meet all other criteria. Applicants are encouraged to contact the program director prior to applying. Applications are considered on a continuous basis throughout the year, although the offering of courses favors fall semester for initial registration. The faculty employ a holistic approach to the admissions consideration, taking into account all of the information and balancing test scores, previous grade point averages, recommendations, professional experiences and successes, etc. However, the program faculty give preference to candidates presenting:

- A masters degree from a regionally accredited institution or an international equivalent with 3.5 GPA on a 4.0 scale and a 3.0 for upper division undergraduate coursework in the Baccalaureate degree;

- Strong overall GRE scores having no more than one sub-test score below the 33rd percentile. If a score in one area is low, the other should be considerably higher. In some instances, GMAT, LSAT, or MCAT scores may be substituted for the GRE;
• Demonstrated commitment to personal and professional growth and development and to the completion of the rigorous course and research demands of the program;

• Excellent academic, analytical and communication skills;

• A current professional vita or resume;

• A clear and detailed statement of professional and personal goals describing the reasons that earning the doctorate is important to those goals;

• Three letters of recommendation from former professors or supervisors who will attest to the applicant’s likelihood of success in the doctoral program;

• Present self professionally during an oral interview with program faculty;

In exceptional cases, students not meeting these criteria may submit additional or alternative documentation of their potential for success in doctoral level studies.

**For International applicants:**
Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See Graduate Admissions website for further clarification and exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit [http://www.grad.usf.edu/graduate-admissions-checklist.asp](http://www.grad.usf.edu/graduate-admissions-checklist.asp)

**DEGREE PROGRAM REQUIREMENTS**

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Requirements</strong></td>
<td>9 hours</td>
</tr>
<tr>
<td>EDH 6081 The Community College in America (3)</td>
<td></td>
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<tr>
<td>Or</td>
<td></td>
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<tr>
<td>EDH 6051 Higher Education in America (3)</td>
<td></td>
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<tr>
<td>EDH 7225 Curriculum Development in Higher Education (3)</td>
<td></td>
</tr>
<tr>
<td>EDH 7636 Organizational Theory in Higher Education (3)</td>
<td></td>
</tr>
<tr>
<td><strong>Concentration Requirements</strong></td>
<td>12-13 hours</td>
</tr>
<tr>
<td>Select a minimum of 4 courses from the following:</td>
<td></td>
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<tr>
<td>EDH 6938 Seminar in College Teaching (3)</td>
<td></td>
</tr>
<tr>
<td>EDH 6947 Internship (1-6)</td>
<td></td>
</tr>
<tr>
<td>EDH 7505 Higher Education Finance (3)</td>
<td></td>
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<tr>
<td>EDH 7632 Leadership in Higher Education (3)</td>
<td></td>
</tr>
<tr>
<td>EDH 7633 Governing Colleges &amp; Universities (3)</td>
<td></td>
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<tr>
<td>EDH 7635 Organization &amp; Administration of Higher Education (3)</td>
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<tr>
<td>EDH 7935 Higher Education Capstone Seminar (3)</td>
<td></td>
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<tr>
<td>EDH 7910 Directed Research (1-19)</td>
<td></td>
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<tr>
<td>ADE 6385 The Adult Learner (3) [committee approval required]</td>
<td></td>
</tr>
<tr>
<td>EDG 7931 Selected Topics (3) [committee approval required]</td>
<td></td>
</tr>
<tr>
<td><strong>Statistics/Measurement/Research Design:</strong></td>
<td>12 hours</td>
</tr>
<tr>
<td>Recommended courses but other courses possible with committee approval:</td>
<td></td>
</tr>
<tr>
<td>EDF 6407 Statistical Analysis for Educational Research I (4)</td>
<td></td>
</tr>
<tr>
<td>EDF 7408 Statistical Analysis for Educational Research II (4)</td>
<td></td>
</tr>
<tr>
<td>EDF 7410 Design of Systematic Studies (4)</td>
<td></td>
</tr>
</tbody>
</table>
Psychological and Social Foundations: 7-8 hours
Students must take one Psychological Foundations course and one Social Foundations course.

Dissertation 24 hours
EDH 7980: Dissertation (2-24)

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

COURSES
EDUCATIONAL PROGRAM DEVELOPMENT PROGRAM

Doctor of Education (Ed.D.) Degree

**DEGREE INFORMATION**

Program Admission Deadlines:
- **Fall:** February 15
- **Spring:** October 15
- **Summer:** February 15

Minimum Total Hours: 76

Program Level: Doctoral

CIP Code: 13.0301

Dept Code: CNI

Program (Major/College): EPD ED

**Concentrations:**
- Administration of Special Education (ESE)
- Adult Education (EAE)
- Elementary Education (EEE)
- Vocational Education (EVO)

**CONTACT INFORMATION**

College: Education

Contact Information: [www.grad.usf.edu](http://www.grad.usf.edu)

Refer to individual concentrations for Contact Information.

**PROGRAM INFORMATION**

Refer to individual areas of concentration for information.

**Accreditation:** Accredited by the Commission on Colleges of the Southern Association of College and Schools.

**ADMISSION INFORMATION**

Must meet University requirements (see Graduate Admissions) as well as requirements listed below. Refer to each area of concentration for program admission requirements or contact department.

**For international applicants**

Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See the Graduate School website for further clarification and possible exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit [http://www.grad.usf.edu/graduate-admissions-checklist.asp](http://www.grad.usf.edu/graduate-admissions-checklist.asp).

**DEGREE PROGRAM REQUIREMENTS**

Refer to areas of concentration for individual requirements.

**COURSES**

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
ELEMENTARY EDUCATION PROGRAM

Master of Arts (M.A.) Degree

<table>
<thead>
<tr>
<th>DEGREE INFORMATION</th>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Admission Deadlines:</td>
<td>College: Education</td>
</tr>
<tr>
<td>Fall: February 15</td>
<td>Department: Childhood Education</td>
</tr>
<tr>
<td>Spring: October 15</td>
<td>Contact Information: <a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
</tr>
<tr>
<td>Summer: February 15</td>
<td>Other Resources: <a href="http://www.usf4you">www.usf4you</a></td>
</tr>
</tbody>
</table>

Minimum Total Hours: 33

Program Level: Masters

CIP Code: 13.1202

Dept Code: EDR

Program (Major/College): AEE ED

Concentrations:
- Early Childhood
- Elementary Curriculum
- Language Arts

The M.A.T. degree in Elementary Education is available for students seeking initial teacher certification.

The Master of Arts (MA) degree in Elementary Education is only offered with a concentration in Elementary Curriculum. Please refer to the concentration in Elementary Curriculum for information.
ELEMENTARY EDUCATION
EARLY CHILDHOOD CONCENTRATION

Master of Arts (M.A.) Degree in the Elementary Education Program
With a concentration in Early Childhood

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions
Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.1202
Dept Code: EDR
Program (Major/College): AEE ED
Concentration Code: MEA

CONTACT INFORMATION

College: Education
Department: Childhood Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, no students are being admitted to this program.
ELEMENTARY EDUCATION – ELEMENTARY CURRICULUM CONCENTRATION

Master of Arts (M.A.) Degree in the Elementary Education Program
With a concentration in Elementary Curriculum

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.1202
Dept Code: EDR
Program (Major/College): AEE ED
Concentration Code: MEL

CONTACT INFORMATION

College: Education
Department: Childhood Education and Literacy Studies
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description (Plan I Option)
A program of study designed for those with a bachelor’s degree and certification in the discipline who desire to increase their competence in elementary education curriculum. This program is not designed for those seeking initial certification.

The Plan III non-certification option is not available in this degree program.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent

In order to be considered for admission, first-time or transferring graduate applicants must:
- Have an earned bachelor’s degree or equivalent from a regionally accredited university.
- Have earned a “B” (GPA of 3.0 on a 4.0 scale) average or higher in all work attempted while registered as an upper division student working in a baccalaureate degree in a regionally accredited institution, or GRE score of 540 for math and 460 for verbal if the GPA is between 2.5 and 2.999.
- Have an earned, valid, professional teaching certificate OR
- Be eligible for professional certification through the completion of a Bachelor’s Degree (state-approved program) in Elementary Education.

Exceptions to minimum requirements will be considered for applicants who have earned National Board Certification and who have maintained an outstanding professional record.
For international applicants: All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. GRE scores, etc.)

DEGREE PROGRAM REQUIREMENTS

A minimum of 33 hours including 6 hours of process core, 6 hours of program core, and 21 hours of emphasis area courses. National Board Certified Teachers will be permitted to substitute 3 hours from NBC studies for one elective course with receipt of transcript from National Board Program. Please contact program coordinator for more information.

Program of Study: 33 hours

Core Requirements:
- Process Core: 6 hours
  EDF 6215 Learning Principles Applied to Instruction or EDF 6120 Child Development
  EDF 6481 Foundations of Educational Research

Concentration Requirements
- Program Core: 6 hours
  RED 6748 Teacher Research or EDG 6935 Seminar in Curriculum Research
  LAE 6316 Trends in Literacy in a Diverse Society Or LAE 6415 Literature and the Learner

Electives
- Elective courses may be chosen from a variety of Departments. Possibilities are 6000 level courses in math, science, social studies, ESOL, and technology (all located in Secondary Education Department). Students may also choose from Early Childhood (EEC) courses located in the Childhood Education and Literacy Studies Department.

Comprehensive Examination: Transition Point Projects
- Students must successfully complete a Transition Point Project after each block of courses, culminating in an action research project.

Program and/or course requirements are subject to change, per state legislative mandates, and Florida State Department of Education program approval standards. Please contact Program for more information.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ELEMENTARY EDUCATION-
LANGUAGE ARTS CONCENTRATION

Master of Arts (M.A.) Degree in the Elementary Education Program
With a concentration in Language Arts

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions
Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.1202
Dept Code: EDR
Program (Major/College): AEE ED
Concentration Code: MLG

CONTACT INFORMATION

College: Education
Department: Childhood Education and Literacy Studies
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

The Master of Arts (MA) degree in Elementary Education with a concentration in Elementary Curriculum is replacing this degree. Please refer to the concentration in Elementary Curriculum for information.
ELEMENTARY EDUCATION PROGRAM

Master of Arts in Teaching (M.A.T.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 53
Program Level: Masters
CIP Code: 13.1202
Dept Code: EDR
Program (Major/College): TEE ED

CONTACT INFORMATION

College: Education
Department: Childhood Education and Literacy Studies
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
This program is designed for students who have a non-elementary bachelor's degree and who wish to become elementary teachers for grades K-6. Students earn an ESOL endorsement at the same time as a Master’s degree in Elementary Education.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. Requirements for applicants include:

- Have one of the following
  - bachelor’s degree or equivalent from a regionally accredited university, and have earned a “B” (3.0 on a 4.0 scale) average or higher in all work attempted cumulatively or as an upper division student.
  - A graduate degree from a regionally accredited institution with at least a 3.0 GPA for the preceding baccalaureate, or a 3.5 GPA for the graduate degree.
- Passing the General Knowledge Test of the Florida Teacher Certification Exam (preferred option), or Praxis I, or CLAST.
- A personal statement indicating reasons for applying to the program, pertinent personal and professional dispositions, and experiences and/or credentials relevant to teaching.

For international applicants:
Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test) with the admissions application. See the Graduate Admission website for further clarification and exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://www.grad.usf.edu/graduate-admissions-checklist.asp
International students entering this degree program must obtain a social security number for purposes of practicum, internship and certification testing. An external course by course evaluation of the foreign degree is required with the admissions application.

**DEGREE PROGRAM REQUIREMENTS**

A minimum of 53 hours of coursework (including internships). Students are expected to meet State of Florida testing requirements and Florida State Department of Education program approval standards, and accreditation criteria.

**Program of Study:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Requirements:</td>
<td>53 hours</td>
</tr>
<tr>
<td>LAE 6415</td>
<td>Literature and the Learner</td>
</tr>
<tr>
<td>RED 6514</td>
<td>Reading Process in Elementary Grades</td>
</tr>
<tr>
<td>EDE 6326</td>
<td>(or EDE 6804 or EDG 6931) Planning and Organizing: Instructional Strategies for Diverse Learners</td>
</tr>
<tr>
<td>Process Core:</td>
<td>6 hours</td>
</tr>
<tr>
<td>EDF 6211</td>
<td>Psychological Foundations or EDF 6120 Child Development</td>
</tr>
<tr>
<td>EDF 6432</td>
<td>Measurement for Teachers</td>
</tr>
<tr>
<td>Concentration Requirements:</td>
<td>11 hours</td>
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<tr>
<td>EDE 6946</td>
<td>Practicum in the Elementary School</td>
</tr>
<tr>
<td>EDG 6947</td>
<td>Internship</td>
</tr>
<tr>
<td>EDE 6458 I</td>
<td>and EDE 6458 II Selected Topics: Reflect. on Inst. Decision Making (I and II)</td>
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<tr>
<td>Content Specialization:</td>
<td>27 hours</td>
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<tr>
<td>TSL 5085</td>
<td>ESOL I: Theory and Practice for Teaching English Language Learners</td>
</tr>
<tr>
<td>TSL 5086</td>
<td>ESOL II: Second Language and Literacy Acquisition in Children and Adolescents.</td>
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<td>TSL 5240</td>
<td>ESOL III: Language Principles, Acquisition, and Assessment for Teaching English Language Learners</td>
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<tr>
<td>MAE 6117</td>
<td>Teaching Elementary Math</td>
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<tr>
<td>SCE 4310</td>
<td>Teaching Elementary School Science</td>
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<tr>
<td>SSE 6617</td>
<td>Trends in Elementary Social Studies*</td>
</tr>
<tr>
<td>RED 6540</td>
<td>Assessment in Literacy</td>
</tr>
<tr>
<td>LAE 6314</td>
<td>Writers and Writing</td>
</tr>
<tr>
<td>EDE 6506</td>
<td>Classroom Management, School Safety, Ethics, and Law</td>
</tr>
<tr>
<td>*students at USF-SM may substitute SSE 4313 Trends in Elementary Social Studies with Program Advisor Approval</td>
<td></td>
</tr>
</tbody>
</table>

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

**Practicum and Internship**

All students are required to complete a two-day a week practicum during their program and a final full-time internship in their last semester. Placements are made for students in local school districts.

**Comprehensive Examination**

Students are required to pass a comprehensive exam to be taken during their final internship semester or in the semester immediately prior to internship.

**Tests or Examinations**

Students must pass all sections of the Florida Teacher Certification Exam and have an original copy of the results sent to the department prior to internship.

**COURSES**

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
**ELEMENTARY EDUCATION CONCENTRATION**

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Elementary Education

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**DEGREE INFORMATION**

<table>
<thead>
<tr>
<th>Program Admission Deadlines:</th>
<th>Closed for Admission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not accepting applications.</td>
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<table>
<thead>
<tr>
<th>Minimum Total Hours:</th>
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</thead>
<tbody>
<tr>
<td>Program Level:</td>
<td>Masters</td>
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<td>CIP Code:</td>
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<tr>
<td>Dept Code:</td>
<td>CNI</td>
</tr>
<tr>
<td>Program (Major/College):</td>
<td>CUR ED</td>
</tr>
<tr>
<td>Concentration Code:</td>
<td>CEE</td>
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</table>

**CONTACT INFORMATION**

<table>
<thead>
<tr>
<th>College:</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department:</td>
<td>Childhood Education and Literacy Studies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact Information:</th>
<th><a href="http://www.grad.usf.edu">www.grad.usf.edu</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Resources:</td>
<td><a href="http://www.usf4you">www.usf4you</a></td>
</tr>
</tbody>
</table>

The Master of Arts (MA) degree in Elementary Education with a concentration in Elementary Curriculum is replacing this degree. Please refer to the concentration in Elementary Curriculum for information.

http://www.coedu.usf.edu/
ELEMENTARY EDUCATION CONCENTRATION

Education Specialist (Ed.S.) Degree in the Curriculum and Instruction Program
With a concentration in Elementary Education

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Specialist
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED

CONTACT INFORMATION

College: Education
Department: Childhood Education and Literacy Studies
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
Prepares in-school leaders with expertise in instruction and program development in a variety of educational settings.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. Requirements for applicants include:

- GRE Required
- Minimum GPA of 3.00 / 3.50 M
- Proof of educational or professional experience
- Proof of initial certification
- Letters of recommendation
- Interview
- Concept Paper or goal statement

For international applicants
Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See the Graduate Admissions website for further clarification and possible exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://web.usf.edu/iac/admissions.

http://www.coedu.usf.edu/
DEGREE PROGRAM REQUIREMENTS

The program requires a minimum of 36 hours beyond the Master’s degree, including coursework, written comprehensive examination, and a project. The Ed.S. program is individually planned with an advisor to include coursework in areas such as reading, elementary education, literacy and research.

Total Minimum Hours: 36 hours

Core Requirements

Concentration Requirements 27 hours

Thesis 9 hours

Comprehensive Exam Required

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
ELEMENTARY EDUCATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a concentration in Elementary Education

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 75
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DEE

CONTACT INFORMATION

College: Education
Department: Childhood Education and Literacy Studies
Contact Information: www.grad.usf.edu

Please refer to the Doctor of Philosophy (Ph.D.) Degree in Curriculum and Instruction or contact the program for information.

This Concentration is currently closed for admission.
ELEMENTARY EDUCATION CONCENTRATION

Doctor of Education (Ed.D.) in Educational Program Development
With a concentration in Elementary Education

DEGREE INFORMATION

Program Admission Deadlines:
Closed for Admission
Not accepting applications.

Minimum Total Hours: 72
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): EPD ED
Concentration Code: EEE

CONTACT INFORMATION

College: Education
Department: Childhood Education and Literacy Studies
Contact Information: www.grad.usf.edu

Please refer to the Doctor of Philosophy (Ph.D.) Degree in Curriculum and Instruction with a concentration in Reading and Language Arts Education, or contact the program for information.
ENGLISH EDUCATION PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines: 
Currently Closed for New Admissions
Fall: February 15
Spring: October 15
Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.1305
Dept Code: EDI
Program (Major/College): AEN EJ

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
A program of study designed for those with a bachelor’s degree in the field of English and/or a related appropriate initial certification who desire to increase their competence in this subject specialization or to receive additional professional preparation in an educational service area.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions), including an earned degree from regionally accredited institutions or an international equivalent as well as requirements listed below.

Program Admission Requirements
• Minimum GPA of 3.0 in upper division coursework in the baccalaureate degree
• Proof of educational or professional experience

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:
• An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
• A social security number in degree programs requiring practica or internships;
• Other information as required by the program of interest, (e.g. GRE scores, etc.)

DEGREE PROGRAM REQUIREMENTS

Plan I - Program of Study (min 16 hrs at 6000 level) 33 hours minimum

Core Requirements
Select one course from the following:
EDF 6211 Psychological Foundations of Education (3)
EDF 6215 Learning Principles Applied to Instruction (4)
EDF 6517 Historical Foundations of American Education (4)
EDF 6544 Philosophical Foundations of American Education (3)
EDF 6606 Socio-Economic Foundations of American Education (4)
EDF 6432 Foundations of Measurement (3)
EDF 6481 Foundations of Educational Research (3)
EDG 6627 Foundations of Curriculum and Instruction (3)

**Current Trends in Teaching Concentration**
LAE 6637 Current Trends in Sec English Educ (3)

**Concentration Requirements**
Courses selected with an academic advisor from among the following: English (LAE, ENC, LIT, AML), and English Education (LAE).

**Electives:**
Courses may be selected from either English or Education in consultation with the program advisor.

**Comprehensive Examination:**
Candidates must take and successfully pass two Master’s Comprehensive Examinations: one in English (content) and the other in English Education (methods). Students must be registered for at least two graduate hours during the semester in which the examinations are taken.

**Plan III** programs are also available for those who do not hold teaching certification but have a baccalaureate degree in English or a substantial number of hours in English content.

**Plan III - Program of Study** (min 16 hrs at 6000 level) 33 hours min

**Core Requirements:**
Select one course from the following:
EDF 6211 Psychological Foundations of Education (3)
EDF 6215 Learning Principles Applied to Instruction (4)
EDF 6517 Historical Foundations of American Education (4)
EDF 6544 Philosophical Foundations of American Education (3)
EDF 6606 Socio-Economic Foundations of American Education (4)
EDF 6432 Foundations of Measurement (3)
EDF 6481 Foundations of Educational Research (3)
EDG 6627 Foundations of Curriculum and Instruction (3)

**Current Trends in Teaching Concentration**
LAE 6637 Current Trends in Sec English Educ (3)

**Concentration Requirements**
Courses selected with an academic advisor from among the following: English (LAE, ENC, LIT, AML), and English Education (LAE).

**Electives**
Courses may be selected from either English or Education

**Comprehensive Examination:**
Candidates must take and successfully pass two Master’s Comprehensive Examinations: one in English (content) and the other in English Education (methods). Students must be registered in a course during the semester in which the examinations are taken.

**COURSES**
See [http://www.coedu.usf.edu/main/departments/seced/English/Engma_courswk.htm](http://www.coedu.usf.edu/main/departments/seced/English/Engma_courswk.htm)
ENGLISH EDUCATION PROGRAM

Master of Arts in Teaching (M.A.T.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 41
Program Level: Masters
CIP Code: 13.1305
Dept Code: EDI
Program (Major/College): TEN ED

PROGRAM INFORMATION

A program of study designed to prepare students for initial certification in English education.

Program Description
The M.A.T. in English Education is designed to include initial certification to teach English, grades 6-12 with ESOL endorsement while working towards a masters degree. It is planned for graduates of B.A. Liberal Arts English programs or for graduates of other programs who have completed the following within their programs of study: grammar/language development, adolescent literature, American literature, British literature, female/minority literature, expository writing, and creative writing. All students must make an appointment with an advisor to ensure that all certification requirements either within the degree itself or in addition to it have been met, and to develop a Graduate Planned Program.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools. Includes the state of Florida Accomplished Practices as well as NCATE/NCTE accreditation standards, and program approval by the Department of Education.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Requirements for all applicants include:

- Minimum GPA of 3.0 in upper division work completed while in the Baccalaureate degree. OR
- An earned graduate degree with a minimum GPA of 3.5 in coursework for that degree.
- General Knowledge Test (GKT) of the Florida Teacher Certification Exam

http://www.coedu.usf.edu/
International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

The courses required for the M.A.T. in English Education are listed below. Please check with the program for other program requirements.

**Core Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 6432</td>
<td>Measurement for Teachers</td>
<td>3</td>
</tr>
<tr>
<td>ESE 5342</td>
<td>Teaching the Adolescent Learner</td>
<td>3</td>
</tr>
<tr>
<td>ESE 5344</td>
<td>Classroom Management for a Diverse School and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

including ESOL Endorsement:

- TSL 5430 ESOL I – Theory and Practice of Teaching English Language Learners (3)
- TSL 5086 ESOL II Secondary Language and Literacy Acquisition (3)
- TSL 5241 ESOL III Language Principles, Acquisition & Assessment for English Language Learners (3)

**Current Trends in Teaching Concentration**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAE 6637</td>
<td>Current Trends in English Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Concentration Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAE 6738</td>
<td>Teaching Reading in English Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>LAE 5862</td>
<td>Classroom Communication</td>
<td>3</td>
</tr>
<tr>
<td>LAE 6325</td>
<td>Methods of Teaching Middle School Language Arts</td>
<td>4</td>
</tr>
<tr>
<td>LAE 6339</td>
<td>Methods of Teaching Secondary Language Arts</td>
<td>4</td>
</tr>
</tbody>
</table>

**Practicum, Internship, Field Work, etc.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAE 6947</td>
<td>Internship: English Education</td>
<td>6 (PR: CI and passing scores on FTCE)</td>
</tr>
</tbody>
</table>

**Comprehensive Examination:**

All candidates must take and successfully pass a Master’s Comprehensive Examination in English Education the last spring semester of their program.

**Completion of State of Florida Tests is also a requirement.**

Please be advised that program and/or course requirements are subject to change per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

**COURSES**

See [http://www.coedu.usf.edu/main/departments/seced/English/Engma_courswk.htm](http://www.coedu.usf.edu/main/departments/seced/English/Engma_courswk.htm)
FOREIGN LANGUAGE EDUCATION PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15*
- Spring: October 15*
- Summer: February 15*

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 13.1306
Dept Code: EDI
Program (Major/College): FLE EJ

Concentrations available in:
- Foreign Language Ed., French (AFF)
- Foreign Language Ed., German (AFG)
- Foreign Language Ed., Spanish (AFS)

*Currently no students are being admitted to Plan II of this program.

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
Prepares educators for teaching foreign language in a K-12 environment.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: German, Spanish, French, Latin, Foreign Language Education.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. The admissions committee will consider each applicant in light of his or her qualifications and likelihood of success. The faculty employs a holistic approach to the admissions consideration, taking into account all the information and balancing previous grade point averages, test scores, previous success in graduate coursework, recommendations, and professional experiences as well as fit of the program to the applicants’ personal and professional goals. In order to be admitted to the graduate program in Foreign Language Education, students must present the following:

Requirements for all applicants include:

- Minimum GPA of 3.00 in upper division coursework in the Baccalaureate degree
- Proof of relevant educational or professional experience

http://www.coedu.usf.edu/
Foreign Language Education (M.A.)

- Coursework is allowed in lieu of GPA or GRE requirement (Plan I)
- A current resume
- A clear and detailed statement of professional and personal goals describing the reasons that earning the degree is important to those goals.
- Two letters of recommendation, preferably at least one from a current or former professor (or school principal if working in a school environment) who will attest to the applicant’s likelihood of success in a graduate program.
- Strong GRE scores with no more than one sub-score below the 33rd percentile. If a score in one area is very low, the other should be considerably higher.
- Evidence of 30 credit hours in foreign language coursework or evidence of native language proficiency.
- An appropriate level of proficiency in foreign language demonstrated by an interview with the program faculty (in person or by telephone), by presenting an ACTFL OPI score of intermediate high or higher, or by any equivalent measure as approved by the program faculty.

For international applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See http://web.usf.edu/iac/admissions/language.html for further clarification and exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://web.usf.edu/iac/admissions

DEGREE PROGRAM REQUIREMENTS

For M.A. - Plan I
Program of Study

Core Requirements
Professional Education 12 hours

EDF 6211 or EDF 6215
EDF 6517 or EDF 6544 or EDF 6606
EDF 6481 Foundations of Educational Research
EDF 6432 Foundations of Measurement
FLE 6665 Current Trends
FLE 5291 Applications of Technology to FLE (except if taken as part of the B.A.)

Concentration Requirements 18 hours
(at the 5000 and 6000 level)

Comprehensive Examination: Required in both Foreign Language and Foreign Language Education.

Plan II – inactive.

Plan III - A Plan III, non-certification option is also available for those who do not desire teacher certification. For information on Plan III, contact the program coordinator.

COURSES
See http://www.coedu.usf.edu/main/departments/seced/ForLang/fle_ma.html
FOREIGN LANGUAGE EDUCATION PROGRAM
French Concentration

Master of Arts (M.A.) Degree in the Foreign Language Education Program
With a concentration in French

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15*
- Spring: October 15*
- Summer: February 15*

Minimum Total Hours: 30
Program Level: Masters

CIP Code: 13.1306
Dept Code: EDI
Program (Major/College): FLE EJ
Concentration Code: AFF

*Currently no students are being admitted to Plan II of this program.

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
Prepares educators for teaching French in a K-12 environment.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

The admissions committee will consider each applicant in light of his or her qualifications and likelihood of success. The faculty employs a holistic approach to the admissions consideration, taking into account all the information and balancing previous grade point averages, test scores, previous success in graduate coursework, recommendations, and professional experiences as well as fit of the program to the applicants’ personal and professional goals. In order to be admitted to the graduate program in Foreign Language Education, students must present the following:
Requirements for all applicants include:

- Minimum GPA of 3.0 in upper division coursework in the Baccalaureate degree
- Proof of relevant educational or professional experience
- Coursework is allowed in lieu of GPA or GRE requirement (Plan I)
- A current resume
• A clear and detailed statement of professional and personal goals describing the reasons that earning the degree is important to those goals.

• Two letters of recommendation, preferably at least one from a current or former professor (or school principal if working in a school environment) who will attest to the applicant’s likelihood of success in a graduate program.

• Strong GRE scores with no more than one sub-score below the 33rd percentile. If a score in one area is very low, the other should be considerably higher.

• Evidence of 30 credit hours in foreign language coursework or evidence of native language proficiency.

• An appropriate level of proficiency in foreign language demonstrated by an interview with the program faculty (in person or by telephone), by presenting an ACTFL OPI score of intermediate high or higher, or by any equivalent measure as approved by the program faculty.

For international applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See http://web.usf.edu/iac/admissions/language.html for further clarification and exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://web.usf.edu/iac/admissions.

DEGREE PROGRAM REQUIREMENTS

For M.A. - Plan I
Program of Study 36 hours

Core Requirements
Professional Education 12 hours

EDF 6211 or EDF 6215
EDF 6517 or EDF 6544 or EDF 6606
EDF 6481 Foundations of Educational Research
EDF 6432 Foundations of Measurement
FLE 6665 Current Trends 3 hours
FLE 5291 Applications of Technology to FLE (except if taken as part of the B.A.) 3 hours

Concentration Requirements 18 hours
(at the 5000 and 6000 level) Six (6) courses in the French language are taken at the 5000 and 6000 level in the World Language Education Department in the College of Arts & Sciences to provide students with further specialization in the foreign language. With their advisor, students are encouraged to select a mix of courses based on the areas (literature, civilization, linguistics) they wish to be examined on during their comprehensive examination. Please refer to the USF course catalogue as well as your advisor for course selection.

Comprehensive Examination: Required in both Foreign Language and Foreign Language Education.

Plan II – inactive.

Plan III - A Plan III, non-certification option is also available for those who do not desire teacher certification. For information on Plan III, contact the program coordinator.

COURSES
See www.coedu.usf.edu/main/departments/seced/ForLang/fle_ma.html
FOREIGN LANGUAGE EDUCATION PROGRAM  
GERMAN CONCENTRATION

Master of Arts (M.A.) Degree in the Foreign Language Education Program  
With a concentration in German

**DEGREE INFORMATION**

Program Admission Deadlines:
- Fall: February 15*
- Spring: October 15*
- Summer: February 15*

Minimum Total Hours: 30  
Program Level: Masters  
CIP Code: 13.1306  
Dept Code: EDI  
Program (Major/College): FLE EJ  
Concentration Code: AFG  
*Currently no students are being admitted to Plan II of this program.

**CONTACT INFORMATION**

College: Education  
Department: Secondary Education  
Contact Information: [www.grad.usf.edu](http://www.grad.usf.edu)  
Other Resources: [www.usf4you](http://www.usf4you)

**PROGRAM INFORMATION**

Program Description
Prepares educators for teaching German in a K-12 environment.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools and the National Association for the Accreditation of Teacher Education.

**ADMISSION INFORMATION**

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. The admissions committee will consider each applicant in light of his or her qualifications and likelihood of success. The faculty employs a holistic approach to the admissions consideration, taking into account all the information and balancing previous grade point averages, test scores, previous success in graduate coursework, recommendations, and professional experiences as well as fit of the program to the applicants' personal and professional goals. In order to be admitted to the graduate program in Foreign Language Education, students must present the following: Requirements for all applicants include:

- Minimum GPA of 3.0 in upper division coursework in the Baccalaureate degree
- Proof of relevant educational or professional experience
- Coursework is allowed in lieu of GPA or GRE requirement (Plan I)
• A current resume

• A clear and detailed statement of professional and personal goals describing the reasons that earning the degree is important to those goals.

• Two letters of recommendation, preferably at least one from a current or former professor (or school principal if working in a school environment) who will attest to the applicant’s likelihood of success in a graduate program.

• Strong GRE scores with no more than one sub-score below the 33rd percentile. If a score in one area is very low, the other should be considerably higher.

• Evidence of 30 credit hours in foreign language coursework or evidence of native language proficiency.

• An appropriate level of proficiency in foreign language demonstrated by an interview with the program faculty (in person or by telephone), by presenting an ACTFL OPI score of intermediate high or higher, or by any equivalent measure as approved by the program faculty.

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

For M.A. - Plan I

Program of Study (min 16 hrs at 6000 level) 36 hours

Core Requirements: 15 hours minimum

Select one from the following:
EDF 6211 Psychological Foundations of Education (3)
or
EDF 6215 Learning Principles Applied to Instruction (4)

Select one from the following:
EDF 6517 Historical Foundations of American Education (4)
or
EDF 6544 Philosophical Foundations of American Education (3)
or
EDF 6606 Socio-Economic Foundations of American Education (4)

EDF 6481 Foundations of Educational Research (3)
EDF 6432 Foundations of Measurement (3)
FLE 5291 Applications of Technology to Foreign Language Education (except if taken as part of the B.A.) (3)

Current Trends in teaching Specialization 3 hours
FLE 6665 Current Trends in Foreign Language Education (3)

Concentration Requirements 18 hours minimum
(at the 5000 and 6000 level) Six (6) courses in the German language are taken at the 5000 and 6000 level in the World Language Education Department in the College of Arts & Sciences to provide students with further specialization in the foreign language. With their advisor, students are encouraged to select a mix of courses based on the areas (literature,
civilization, linguistics) they wish to examined on during their comprehensive examination. Please refer to the USF course catalogue as well as your advisor for course selection.

**Comprehensive Examination:** A Comprehensive Examination must be taken in the final semester in the program. It is a 3-hour exam where the candidate will be expected to answer questions that display knowledge about the broad subjects that were covered in your program of studies.

**Plan III**
Plan III is a program for holders of a non-education baccalaureate degree who do not wish to meet teacher certification requirements in the State of Florida. (a 57-hour program) This program is closed for new applications.

**Core Requirements:**
EDF 6211 or EDF 6215 Educational Psychology (3)
EDF 6517 or EDF 6544 or EDF 6606 Social Foundations (3)
EDF 6481 Research Methods (3)
EDF 6432 Measurement (3)
EDG 4620 Curriculum & Instruction (3)

**Concentration Requirements: ESOL**
TSL 5085 ESOL 1 Theory and Practice of Teaching English Language Learners
TSL 5086 ESOL 2 Second Language and Literacy Acquisition in Children and Adolescents
TSL 5240 ESOL 3 Language Principles, Acquisition and Assessment for Teaching English Language Learners

**Foreign Language Education Core:**
FLE 5314 Methods of Teaching Foreign Languages in the Elementary School
FLE 5333 Methods of Teaching Foreign Languages in the Secondary School
FLE 5946 Practicum in the Foreign Language Classroom
FLE 5291 Applications of Technology to FLE
FLE 6665 Current Trends in the Foreign Language Classroom

**Concentration: German Language**
Six (6) courses in the German language are taken at the graduate level in the World Language Education department (College of Arts & Sciences) in literature, culture and civilization, and linguistics. Please refer to the USF course catalogue as well as our advisor for course selection. Students who do not hold a BA in the German language will also need to take 12 additional credit hours at the undergraduate level to complete the 30 credit hours required by the State of Florida.

**Comprehensive Examination:**
A Comprehensive Examination must be taken in the final semester in the program. It is a 3-hour exam where the candidate will be expected to answer questions that display knowledge about the broad subjects that were covered in your program of studies.

**COURSES**
FOREIGN LANGUAGE EDUCATION PROGRAM
SPANISH CONCENTRATION

Master of Arts (M.A.) Degree in the Foreign Language Education Program
With a concentration in Spanish

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15*
- Spring: October 15*
- Summer: February 15*

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 13.1306
Dept Code: EDI
Program (Major/College): FLE EJ
Concentration Code: AFS

*Currently no students are being admitted to Plan II in this program.

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
Prepares educators for teaching Spanish in a K-12 environment.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION
Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

The admissions committee will consider each applicant in light of his or her qualifications and likelihood of success. The faculty employs a holistic approach to the admissions consideration, taking into account all the information and balancing previous grade point averages, test scores, previous success in graduate coursework, recommendations, and professional experiences as well as fit of the program to the applicants’ personal and professional goals. In order to be admitted to the graduate program in Foreign Language Education, students must present the following:

Requirements for all applicants include:

- Minimum GPA of 3.0 in upper division coursework in the Baccalaureate degree
- Proof of relevant educational or professional experience
- Coursework is allowed in lieu of GPA or GRE requirement (Plan I)
- A current resume
- A clear and detailed statement of professional and personal goals describing the reasons that earning the degree is important to those goals.

http://www.coedu.usf.edu/
Two letters of recommendation, preferably at least one from a current or former professor (or school principal if working in a school environment) who will attest to the applicant’s likelihood of success in a graduate program.

Strong GRE scores with no more than one sub-score below the 33rd percentile. If a score in one area is very low, the other should be considerably higher.

Evidence of 30 credit hours in foreign language coursework or evidence of native language proficiency.

An appropriate level of proficiency in foreign language demonstrated by an interview with the program faculty (in person or by telephone), by presenting an ACTFL OPI score of intermediate high or higher, or by any equivalent measure as approved by the program faculty.

**For international applicants:** Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See the Graduation Admissions website for further clarification and exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit [http://www.grad.usf.edu/graduate-admissions-checklist.asp](http://www.grad.usf.edu/graduate-admissions-checklist.asp)

### DEGREE PROGRAM REQUIREMENTS

**For M.A. - Plan I**

**Program of Study**

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>36 hours</th>
</tr>
</thead>
</table>

**Professional Education**

<table>
<thead>
<tr>
<th>12 hours</th>
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<tbody>
<tr>
<td>EDF 6211 or EDF 6215</td>
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<tr>
<td>EDF 6517 or EDF 6544 or EDF 6606</td>
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<tr>
<td>EDF 6481 Foundations of Educational Research</td>
</tr>
<tr>
<td>EDF 6432 Foundations of Measurement</td>
</tr>
<tr>
<td>FLE 6665 Current Trends</td>
</tr>
<tr>
<td>FLE 5291 Applications of Technology to FLE (except if taken as part of the B.A.)</td>
</tr>
</tbody>
</table>

**Concentration Requirements**

<table>
<thead>
<tr>
<th>18 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>(at the 5000 and 6000 level) Six (6) courses in the Spanish language are taken at the 5000 and 6000 level in the World Language Education Department in the College of Arts &amp; Sciences to provide students with further specialization in the foreign language. With their advisor, students are encouraged to select a mix of courses based on the areas (literature, civilization, linguistics) they wish to be examined on during their comprehensive examination. Please refer to the USF course catalogue as well as your advisor for course selection.</td>
</tr>
</tbody>
</table>

**Comprehensive Examination:** Required in both Foreign Language and Foreign Language Education.

**Plan II** – inactive.

**Plan III** - A Plan III, non-certification option is also available for those who do not desire teacher certification. For information on Plan III, contact the program coordinator.

### COURSES

FOREIGN LANGUAGE EDUCATION PROGRAM

Master of Arts in Teaching (M.A.T.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 42
Program Level: Masters
CIP Code: 13.1306
Dept Code: EDI
Program (Major/College): TFL ED

Also offered as:
Accelerated Graduate Degree Program: BA/MAT -
BA (Foreign Language: French, Spanish, German) / MAT
(Foreign Language Education)

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The M.A.T. degree is designed for individuals with a Bachelor's degree in a field other than education who wish to become certified teachers in foreign language at the middle or high school level in the following Languages: Spanish, French, German, Latin, Italian, Chinese, Japanese, or Russian. Students can earn ESOL endorsement at the same time as the Master's degree. The M.A.T. is an accelerated degree.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools, the National Council for the Accreditation of Teacher Education, and the Department of Education.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions), including an earned degree from regionally accredited institutions or an international equivalent as well as requirements listed below.

Admission Program Requirements
Requirements for all applicants include:
- Minimum GPA of 3.0 in upper division coursework completed in the baccalaureate degree, OR
- An earned graduate degree with a minimum GPA of 3.5
- The General Knowledge Test (GKT) of the Florida Teacher Certification Exam.
- 2 Letters of recommendation (1 personal and 1 professional) stating the ability of the student to complete graduate studies.
- Concept Paper or goal statement
- Evidence of 30 credit hours in foreign language coursework or evidence of native language proficiency.
- An appropriate level of proficiency in the foreign language demonstrated by an interview with the program faculty (in person or by telephone, by presenting an ACTFL OPI score of intermediate high or higher, or by any equivalent measure as approved by the program faculty.)
International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS
A program of study designed for the holder of a non-education baccalaureate degree who is functionally competent and proficient in the target language. This program meets initial certification requirements (K-12) as well as full ESOL endorsement. The program requires 42 semester hours, minimum.

Core Requirements 18 hours minimum
EDF 6432, Foundations of Measurement or TSL 5440, Language Testing
ESE 5344, Classroom Management for a Diverse School & Society
ESE 5342, Teaching the Adolescent Learner
Including ESOL Endorsement
TSL 5085, ESOL I
TSL 5086, ESOL II
TSL 5240, ESOL III

Current Trends in Teaching Specialization 3 hours
FLE 6665, Current Trends in FLE

Concentration Requirement 15 hours minimum
FLE 5313 Methods of Teaching FL & ESOL in the Elementary School
FLE 5331 Methods of Teaching FL & ESOL in the Secondary School
FLE 5895 Dual Language Education
FLE 5946 Practicum in FL Teaching in the Secondary School
FLE 5291 Applications of Technology to FLE

Comprehensive Examination
A Comprehensive Examination must be taken in the final semester in the program. It is a 3-hour exam where the candidate will be expected to answer questions that display knowledge about the broad subjects that were covered in your program of studies.

Practicum, Internship, Field Work, etc. 6 hours
A 6-credit hour internship provides an essential practical and evaluative experience to the program. It is highly recommended to complement it with a 2-credit hour Senior Seminar to debrief and enhance the internship experience.

FLE 6947 Internship – 6 hours (PR: CI and passing scores of FTCE)
FLE 5936 Senior Seminar (optional)

Please be advised that program and/or course requirements are subject to change per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

COURSES
See http://www.coedu.usf.edu/main/departments/seced/ForLang/fle_ma.html
FOREIGN LANGUAGE EDUCATION ACCELERATED PROGRAM

Bachelor of Arts (B.A.) / Master of Arts in Teaching (M.A.T.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours:
- Program Level: Bachelors/Masters
- CIP Code: 13.1306
- Dept Code: EDI
- Program (Major/College): TFL ED

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The Accelerated B.A. or B.S. to M.A.T. Degree Program offers benefits for students who decide to pursue a career in the teaching profession. It provides the background within specific liberal arts disciplines and then allows students to take that knowledge into an accelerated master’s degree in teaching, designed around collaboration, academic excellence, progressive research, and ethical practices within diverse environments.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Admission Program Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. Requirements for all applicants include:

The BA/BS to MAT Program is designed for academically talented and educationally mature students who meet the following criteria:

- are admitted to one of the participating undergraduate majors in the College of Arts and Sciences (French, Spanish, or Latin programs)
- have completed at least 90 semester hours of coursework in one of the participating programs
- have an earned grade point average of at least 3.0 both overall and in the major coursework
- have no arrest record or have disclosed any record of previous arrests and/or convictions

Applying to the BA/BS to MAT Program
It is very important that students interested in the BA/BS to MAT Program work closely with their undergraduate academic advisor to ensure timely application to the program and a seamless transition from undergraduate to graduate status.

Please review and follow these steps carefully:

1. Contact your undergraduate academic advisor in the relevant subject area:
   - World Languages: Osiris Albrecht
2. File an Accelerated Degree Program Interest Form.
3. Submit the Interest form to your undergraduate advisor (instructions are on the form).

4. When the time comes to apply for the graduate program, submit the Accelerated Degree Program Application.

5. Provide an official copy of the General Knowledge Test (GKT) score report verifying passing scores on all four sections of the exam when submitting the Accelerated Degree Program Application. For more information about the GKT, please visit the following link: http://www.flnesinc.com/FL_testselection.asp. NOTE: The GKT information can be found under the “Florida Teacher Certification” of this webpage. The test code for the GKT is 082.

For international applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550paper-based, 213 computer-based, or 80 internet-based test). See http://web.usf.edu/iac/admissions/language.html for further clarification and exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://web.usf.edu/iac/admissions

DEGREE PROGRAM REQUIREMENTS

A program of study designed for a student currently in the World Language Education French, Spanish, or Latin BA program, who has already completed a minimum of 90 credits of course work in that program.

Core Requirements

EDF 6432, Foundations of Measurement or TSL 5440, Language Testing
ESE 5344, Classroom Management for a Diverse School & Society
ESE 5342, Teaching the Adolescent Learner
Including ESOL Endorsement
TSL 5085, ESOL I
TSL 5086, ESOL II
TSL 5240, ESOL III

18 hours minimum

Current Trends in Teaching Specialization

FLE 6665, Current Trends in FLE

3 hours

Concentration Requirements

FLE 5313, Methods of Teaching FL & ESOL in the Elementary School
FLE 5331, Methods of Teaching FL & ESOL in the Secondary School
FLE 5895, Dual Language Education
FLE 5946, Practicum in FL Teaching in the Secondary School
FLE 5291, Applications of Technology to FLE

15 hours minimum

Comprehensive Examination:

A Comprehensive Examination must be taken in the final semester in the program. It is a 3-hour exam where the candidate will be expected to answer questions that display knowledge about the broad subjects that were covered in your program of studies.

Practicum, Internship, Field Work, etc.

A 6-credit hour internship provides an essential practical and evaluative exit to the program.

FLE 6947 Internship – 6 hours (PR: CI and passing scores of FTCE)
(The internship is planned observation and teaching, supervised by a member of the University faculty and a school staff member.) Please refer to www.coedu.usf.edu/sas for specific internship entrance and State of Florida testing requirements.

COURSES

See http://www.coedu.usf.edu/main/departments/seced/ForLang/fle_ma.html
HIGHER EDUCATION, ADMINISTRATION CONCENTRATION

Education Specialist (Ed.S.) Degree in the Curriculum and Instruction Program
With a concentration in Higher Education, Administration

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions
Minimum Total Hours: 36
Program Level: Specialist
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: SHA

CONTACT INFORMATION

College: Education
Department: Adult, Career & Higher Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, students are not being admitted to this program.
HIGHER EDUCATION, COMMUNITY COLLEGE TEACHING CONCENTRATION

Education Specialist (Ed.S.) Degree in the Curriculum and Instruction Program
With a concentration in Higher Education, Community College Teaching

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions
Minimum Total Hours: 36
Program Level: Specialist
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: SCT

CONTACT INFORMATION

College: Education
Department: Adult, Career & Higher Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, students are not being admitted to this program.
HIGHER EDUCATION, ADMINISTRATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a concentration in Higher Education, Administration

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 81
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DHA

CONTACT INFORMATION

College: Education
Department: Adult, Career & Higher Education
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Program Description
The Higher Education Administration program is a research degree that prepares individuals interested in teaching, research, and policy positions in both community colleges and universities.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below. Admission to the Ph.D. program in Higher Education is based on a holistic evaluation of the applicant’s demonstrated potential to successfully complete all of the course and research requirements of the program.

The program faculty will consider each applicant in light of his or her qualifications and likelihood of success, first by reviewing the submitted materials and then through a personal interview for candidates who meet all other criteria. Applicants are encouraged to contact the program director before applying. Applications are considered on a continuous basis throughout the year, although the offering of courses favors fall semester for initial registration. The faculty employ a holistic approach to the admissions consideration, taking into account all of the information and balancing test scores, previous grade point averages, recommendations, professional experiences and successes, etc. However, the program faculty give preference to candidates presenting:

- A masters degree from a regionally accredited institution or international equivalent with 3.5 GPA on a 4.0 scale at the Master’s level and a 3.0 for upper division coursework completed in the Baccalaureate degree;

- Strong overall GRE scores having no more than one sub-test score below the 33rd percentile. If a score in one area is low the other should be considerably higher; In some instances, GMAT, LSAT or MCAT scores may be substituted for the GRE;
DEGREE PROGRAM REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Minimum Hours</strong></td>
<td>81</td>
</tr>
<tr>
<td><strong>Core Requirements</strong></td>
<td>9</td>
</tr>
<tr>
<td>EDH 6081 The Community College in America (3)</td>
<td></td>
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<tr>
<td>Or</td>
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<tr>
<td>EDH 6051 Higher Education in America (3)</td>
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<tr>
<td>EDH 7225 Curriculum Development in Higher Education (3)</td>
<td></td>
</tr>
<tr>
<td>EDH 7636 Organizational Theory in Higher Education (3)</td>
<td></td>
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<tr>
<td><strong>Concentration Requirements</strong></td>
<td>18</td>
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<tr>
<td>Specialization courses to be chosen and approved with the student’s program committee; recommended courses are:</td>
<td></td>
</tr>
<tr>
<td>EDH 7505 Higher Education Finance (3)</td>
<td></td>
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<tr>
<td>EDH 7632 Leadership in Higher Education (3)</td>
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<tr>
<td>EDH 7633 Governing Colleges and Universities (3)</td>
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<tr>
<td>EDH 7635 Organization and Administration in Higher Education (3)</td>
<td></td>
</tr>
<tr>
<td><strong>Cognate Requirements</strong></td>
<td>12</td>
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<tr>
<td>Depending on individual interests, each student selects 3-4 courses in an area that complements the concentration requirements and is relevant to his/her career goals.</td>
<td></td>
</tr>
<tr>
<td><strong>Statistics/Measurement/Research Design</strong></td>
<td>12</td>
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<tr>
<td>Recommended courses but other courses possible with committee approval:</td>
<td></td>
</tr>
<tr>
<td>EDF 6407 Statistical Analysis for Educational Research I (4)</td>
<td></td>
</tr>
<tr>
<td>EDF 7408 Statistical Analysis for Educational Research II (4)</td>
<td></td>
</tr>
<tr>
<td>EDF 7410 Design of Systematic Studies (4)</td>
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</tbody>
</table>
Psychological and Social Foundations  
7 hours  
Students must take one Psychological Foundations course and one Social Foundations course.

Dissertation  
24 hours  
EDH 7980 Dissertation  
Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

COURSES  
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)  
HIGHER EDUCATION, COMMUNITY COLLEGE TEACHING CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a concentration in Higher Education, Community College Teaching

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 75
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DCC

CONTACT INFORMATION

College: Education
Department: Adult, Career & Higher Education
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Program Description
The Higher Education Administration program is a research degree that prepares individuals interested in teaching, research, and policy positions in both community colleges and universities.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below. The program faculty will consider each applicant in light of his or her qualifications and likelihood of success, first by reviewing the submitted materials and then through a personal interview for candidates who meet all other criteria. Applications are considered on a rolling basis throughout the year, although the offering of courses favors fall semester for initial registration. The faculty employ a holistic approach to the admissions consideration, taking into account all of the information and balancing test scores, previous grade point averages, recommendations, professional experiences and successes, etc. However, the program faculty give preference to candidates presenting:

Program Admission Requirements

- A A masters degree from a regionally accredited institution or international equivalent with 3.5 GPA on a 4.0 scale at the Master’s level and a 3.0 upper division coursework completed in the Baccalaureate degree;
- Strong overall GRE scores having no more than one sub-test score below the 33rd percentile. If a score in one area is low the other should be considerably higher. In some instances, GMAT, LSAT or MCAT scores may be substituted for the GRE.
- Demonstrated commitment to personal and professional growth and development and to the completion of the rigorous course and research demands of the program;
• Excellent academic, analytical and communication skills;
• A current professional vita or resume;
• A clear and detailed statement of professional and personal goals describing the reasons that earning the doctorate is important to those goals;
• three letters of recommendation from former professors or supervisors who will attest to the applicant’s likelihood of success in the doctoral program:

In exceptional cases, students not meeting these criteria may submit additional or alternative documentation of their potential for success in doctoral level studies.

For International applicants: Applicants whose native language is not English or who have not earned a degree in the United States must also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 550 on the paper-based test, is required. Applications submitted with TOEFL scores that do not meet the minimum criteria will be denied. The TOEFL requirement may be waived if the applicant meets one of the following conditions:

• The applicant’s native language is English, or
• Has scored 500 or higher on the GRE Verbal Test, or
• Has earned a college degree at a U.S. institution of higher learning, or
• Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or
• Has scored 6.5 on International English Language Testing System (IELTS) [http://www.ielts.org/]

In addition to these university requirements, applicants to the College of Education must provide an external, course-by-course evaluation of the foreign degree by an approved external agency, and based on official transcripts.

**DEGREE PROGRAM REQUIREMENTS**

<table>
<thead>
<tr>
<th>Total Minimum Hour</th>
<th>81 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Requirements</td>
<td>9 hours</td>
</tr>
<tr>
<td>EDH 6081 The Community College in America (3) Or EDH 6051 Higher Education in America (3) EDH 7225 Curriculum Development in Higher Education (3) EDH 7636 Organizational Theory in Higher Education (3)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Concentration Requirements</th>
<th>18 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select from the following courses: ADE 6385 The Adult Learner (3) EDG 6938 Seminar in College Teaching (3) EDG 7931 Special Topics (3) EDH 6947 Internship (1-6) EDH 7505 Higher Education Finance (3) EDH 7632 Leadership in Higher Education (3) EDH 7633 Governing Colleges &amp; Universities (3) EDH 7635 Organization &amp; Administration of Higher Education (3) EDH 7935 Higher Education Capstone Course (3)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cognate Requirements</th>
<th>12 hours</th>
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</thead>
</table>
| Depending on individual interests, each student selects 3-4 courses in the student’s teaching area or another area approved by the program committee.
Statistics/Measurement/Research Design

Recommended courses but other courses possible with committee approval:
- EDF 6407 Statistical Analysis for Educational Research I (4)
- EDF 7408 Statistical Analysis for Educational Research II (4)
- EDF 7410 Design of Systematic Studies (4)

Psychological and Social Foundations

Students must take one Psychological Foundations course and one Social Foundations course.

Dissertation

EDH 7980 (2-24)

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

COURSES

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
HUMAN RESOURCE DEVELOPMENT CONCENTRATION

Master of Arts (M.A.) Degree in the Adult Education Program
With a concentration in Human Resource Development

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 13.1201
Dept Code: LEA
Program (Major/College): AAE ED
Concentration Code: HRD

CONTACT INFORMATION

College: Education
Department: Adult, Career & Higher Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The Adult Education program provides professional development opportunities to individuals concerned with the learning of adults. It includes courses and experiences for persons employed in or intending to enter adult education as a field of study. This degree is intended to help individuals work with adult learners in a wide variety of school and non-school settings. It is intended for holders of a non-education baccalaureate degree who do not wish to meet teacher certification requirements in the State of Florida. This Adult Education degree is a Plan III, non-certification option. A concentration in Human Resource Development (HRD) is available to currently enrolled students in the Master of Arts Adult Education degree. The HRD concentration specializes in Business and Industry learning and organizational development.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) and College requirements as well as those listed below.

Program Admission Requirements
Admission to the M.A. program in Adult Education is based on a holistic evaluation of the applicant’s demonstrated potential to complete successfully all of the course and research requirements specific to the degree. Success in the program requires excellent presentation and high quality writing skills, scholarship, and a commitment to systematic inquiry. The admissions committee will consider each applicant in light of his or her qualifications and likelihood of success. The faculty takes into account all of the information, and balances previous grade point averages, test scores, recommendations, and professional goals.

Admission Process

For consideration for admission, students must submit:
- A clear and detailed statement of professional and personal goals describing the reasons that earning the degree is important of those goals;
• Two letters of recommendation, preferably at least one from a current or former professor who will attest to the applicant’s likelihood of success in a graduate program;

• A grade point average while classified as an upper division student in a baccalaureate degree at a regionally accredited university of 3.0 on a 4.0 scale;

• If the upper division undergraduate GPA is less than 3.0, the applicant must also have GRE Scores. In the case of a GPA below 3.0, the faculty expects to see high GRE scores, usually exceeding 500 on both the verbal and quantitative subtests. In the event that an applicant does not meet the 3.0 GPA, or the GRE expectations, the applicant must complete at least 6 graduate semester hours as a non-degree seeking student in coursework taught by an adult education program faculty member before consideration for admission;

• have proof of educational or professional experience;

• obtain favorable recommendations for admission at the department and college levels and;

• satisfy any additional academic requirements or prerequisites identified by the program.

Students may additionally submit documentation of their potential for success with inclusion of the following:

1. Significant successful professional experiences related to the academic program and professional goals of the applicant;

2. Demonstrated commitment to personal and professional growth and development and to the completion of the coursework and project demands of the program;

3. Excellent communication skills.

For international applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See the Graduate Admissions website for further clarification and possible exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit [http://www.grad.usf.edu/graduate-admissions-checklist.asp](http://www.grad.usf.edu/graduate-admissions-checklist.asp)

**DEGREE PROGRAM REQUIREMENTS**

A minimum of 36 semester hours is required for the master’s degree, at least 16 hours of which must be at the 6000 level. Courses at the 7000 level are advanced graduate level courses and thus are inappropriate for the master’s degree program. This program is available as a Plan III non-certification option.

**Total Minimum Hours (non-thesis option) 36 hours**

**Core Requirements 6 hours**

EDF 6481  Foundations of Educational Research (3)
or EDF 6432 Foundations of Measurement (3)
and one approved Psychological or Social Foundations course (3)

**General Adult Education Requirements 11 hours**

ADE 6080: Foundations of Adult Education (4)
ADE 6385: The Adult Learner (3)
ADE 6966: Final Master’s Seminar (prior approval needed) (4)
Concentration Requirements
For a concentration in Human Resource Development, the following courses are required to be taken in the 36 hours of non-thesis option of the M.A. degree:

ADE 6370: Human Resource Development (3)
ADE 6360: Methods of Teaching in Adult Education (3)
ADE 6161: Curriculum Construction in Adult Education (4)
ADE 6160: Program Management in Adult Education (3)

Requirements Outside the Concentration
At least one course (3 credits minimum) must be taken outside the adult, career and higher education department. Other courses may be selected as part of the remaining hours needed for degree completion based upon the student's selection and program advisor's approval, and may be selected from coursework throughout the university.

Comprehensive Examination
Written Exam Required

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards and accreditation criteria.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
INSTRUCTIONAL TECHNOLOGY CONCENTRATION

Education Specialist (Ed.S.) Degree in the Curriculum and Instruction Program
With a concentration in Instructional Technology

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Specialist
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: SIT

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

This program is designed to prepare students for leadership in technology related positions. Courses include an array of topics including instructional design, distance learning, authoring, instructional graphics, and project management.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of Colleges and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

Applicants should:

- Meet all general requirements for the College of Education and the University Graduate Admissions Office.
- Hold a Master’s degree from a regionally accredited institution of higher education.
- Provide two favorable academic and professional recommendations (submitted to the program coordinator)

In addition the applicant must:

- Provide evidence (via transcript) of an undergraduate grade point average of 3.0 on a 4.0 scale in upper division level undergraduate coursework OR a GPA of 3.5 at the Master’s level.
- Submit strong, official (sealed in an envelope or recorded on transcript) Graduate Record Examination (GRE) Verbal, Quantitative, & Analytical Writing subscores. (Means of at least two out of three of the scores should be at or above the means for Education students—see http://www.ets.org/Media/Tests/GRE/pdf/gre_0809_interpretingscores.pdf.) The scores must be no less than five years old at time of application.
International Students:
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

**DEGREE PROGRAM REQUIREMENTS**

The Ed.S. in Curriculum and Instruction with a concentration in Instructional Technology is 36 semester hours in length. Entering students must hold a Master’s degree from a regionally accredited institution of higher education. See [http://www.coedu.usf.edu/IT](http://www.coedu.usf.edu/IT) for more details.

**Program Core Requirements**

36 hours

**Concentration requirements**

27 hours

- **Courses**
  - EDF 6284 - Problems in Instructional Design for Computers (3)
  - EME 7631 - Research in Technology Project Management (3)
  - EME 6613 - Development of Technology-Based Instruction (3)
  - EME 7938 - Computer-Augmented Instructional Paradigms in Education (3)
  - EME 7910 - Independent Study (3)
  - EME 7458 - Research in Distance Education (3)

- **Concentration Electives**
  from among:
  - CGS 6210 - Computer Hardware (3)
  - EME 6930 - PLE: Flash (3)
  - EME 6930 - PLE: Web Programming 1 (3)
  - EME 6930 - PLE: Web Programming 2 (3)
  - EME 6936 - ACET: Interactive Media (3)
  - EME 6936 - ACET: Web Design (3)
  - EME 6936 - ACET: Instructional Graphics (3)
  - EME 6936 - ACET: Digital Video (3)
  - EME 6936-ACET: Current Trends (3)

Other appropriate course(s) as approved by the student’s program committee

**Thesis/Project**

9 hours

- EME 6971 - Thesis

**Examinations that will be required, (e.g. Comprehensive Examination)**

Ed.S. students will be required to produce an online portfolio of their products and write a reflective summary of their competencies.

**COURSES**

See [http://www.coedu.usf.edu/IT/curriculum/eds/](http://www.coedu.usf.edu/IT/curriculum/eds/)
INSTRUCTIONAL TECHNOLOGY CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a concentration in Instructional Technology

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15
Spring: October 15

Minimum Total Hours: 78
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DIT

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Program Description
Instructional Technology is the theory and practice of design, development, utilization, management and evaluation processes and resources for learning.” (Seels&Richey, 1994, p.9). The USF Ph.D. in Instructional Technology is designed to prepare scholars for leadership roles in colleges, universities, corporations, the military, and other venues where research, development, and implementation of technology-based instructional methods and materials take place.


Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

IT Program Deadlines
Admissions are made for the fall and spring semesters only. The selection process is competitive.

**FALL:** international applicants and domestic applicants seeking financial support must apply by the international admissions deadline of January 2nd. Domestic applicants who do not seek financial support must apply by the general USF domestic application deadline of March 15th.

**SPRING:** Applicants seeking financial support should not apply for spring admission. All other applicants must apply by the general USF application deadline.

Program Admission Requirements
In order to be admitted to the program, students must have the following minimum qualifications: Meet all general requirements for the College of Education.

http://www.coedu.usf.edu/
• A Master’s degree from a regionally accredited institution of higher education (or international equivalent).
• An undergraduate grade point average of 3.0 on a 4.0 scale in upper division level coursework in the Baccalaureate degree or a GPA of 3.5 at the Master’s level.
• Three favorable academic and professional recommendations (submitted to the program coordinator, or the Coordinator of Graduate Studies for the department; and,
• Favorable recommendation to the Graduate School by the Department of Secondary Education.

In addition, all applicants must meet the following IT program-specific requirements:

1. Hold a Master’s degree in a field related to IT
2. Submit strong, Graduate Record Examination Verbal, Quantitative, & Analytical Writing sub-scores. (Means among current active students are greater than V:550, Q:600, & AW:4.5)
3. Provide an appropriate written statement of Personal and Professional Goals
4. Provide a Curriculum Vita (CV) that documents professional experiences related to teaching and learning
5. Demonstrate personal and ready access to sophisticated computing equipment
6. Demonstrate substantial expertise in areas of Instructional Technology, equivalent a masters of IT.

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:
• An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
• A social security number in degree programs requiring practica or internships;
• Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

College Requirements:
Core Requirements
Process Core:

Psychological and Social Foundations of Education:  7 hours minimum
At least one course from each of the above areas. The courses should be consistent with the student’s program of study and selected from the College's pre-approved listing (refer to College of Education section of the Graduate Catalog) with the approval of a program committee.

Statistics/Measurement/Research Design:  11 hours minimum
EDF 6407 Statistical Analysis I (4) and EDF 7408 Statistical Analysis II (4)
Select one of the following courses:
  EDF 7410 Design of Systematic Studies in Education (4)
  EDF 7437 Advanced Educ Measurement I (3)
  EDF 7484 Stat Anal Educ III (4)
  EDF 7493 Sys Approaches for Program Planning, Evaluation, and Dev (4)
  EDF 7477 Qual Res in Educ I (4) AND EDF 7478 Qual Res in Educ II (4)

http://www.coedu.usf.edu/
Curriculum and Instruction: 3 hours
One of the following:
- EDH 7225 Curriculum Development in Higher Ed (3)
- EDG 7667 Analysis of Curriculum and Instruction (3)
- EDG 7692 Issues in Curriculum and Instruction (3)

Concentration Requirements 21 graduate hours
- EME 6613 - Development Of Technology-Based Instruction (3)
- EME 7938 - Computer-Augmented Instructional Paradigms in Education (3)
- EME 7939 - Research In Technology-Based Education (3)

Concentration Electives 12 appropriate hours
from among:
- EME 6930 - Programming Languages for Education (3)
- EME 6936 - Applications of Computers as Educational Tools (3)
- EME 7458 - Research in Distance Learning (3)
- EME 7631 - Research in Technology Project Management (3)
- EME 7910 - Directed Research (3)
- Other appropriate course(s) as approved by the student’s program committee

Cognate 12 graduate hours
Courses selected are consistent with the student’s program of study and selected with the approval of a program committee and should be coursework other than in the concentration area. Courses in the cognate area must be taken at the graduate level.

Dissertation 24 hours
- EME 7980 - Dissertation

Examinations that will be required, (e.g. Qualifying Examination)
All students will be required to pass a written qualifying examination of twelve hours duration (three successive four-hour days) that integrates work in the specialization area, cognate area and foundations area.

Residency requirements
Students must be enrolled for 9 hours for each of two semesters in a 12 month period to fulfill the residency requirement. Students in Ph.D. programs should be engaged in no more than half time employment during the residency period.

COURSES
See [http://www.coedu.usf.edu/it/curriculum/phd/](http://www.coedu.usf.edu/it/curriculum/phd/)
INTERDISCIPLINARY EDUCATION CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Interdisciplinary Education

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions.
Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CIE

CONTACT INFORMATION

College: Education
Department: Interdisciplinary
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, no students are being admitted to this program.
INTERDISCIPLINARY EDUCATION CONCENTRATION

Education Specialist (Ed.S.) Degree in the Curriculum and Instruction Program
With a concentration in Interdisciplinary Education

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Specialist
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: SIE

CONTACT INFORMATION

College: Education
Department: Interdisciplinary
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The purpose of the Interdisciplinary track in the Ed.S. degree is to provide opportunities for those students who have educational backgrounds and interests that span a variety of disciplines that may include work outside as well as inside the College of Education. Students who have the ability and desire to integrate study and research among several departments/programs are encouraged to apply to the Interdisciplinary track.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: consult program coordinator

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

Admission Requirements
Satisfy the general College and university admission requirements as specified for the Ed. S. Degree in the current USF graduate catalog. Prospective students must:

- Submit GRE scores of at least 500 Verbal, 600 Quantitative, and 4.5 Analytical Writing
- Hold an earned master’s degree from a regionally accredited institution of higher education or its international equivalent
- Have earned a grade point average (GPA) of at least 3.5 for the master’s degree
- Provide three letters of recommendation
Copies of transcripts and the record of GRE scores should be presented to the Interdisciplinary Program Coordinator before proceeding to meet the other requirements. The recommendation letters should be sent to the Program Coordinator.

1. Articulate in a clearly written statement the scope and rationale for the proposed program of study and research.
2. Ed. S. students need to identify a fully credentialed College faculty member who is willing to serve as major professor.
3. In consultation with the major professor, form an Ed. S. Committee in accordance with the College policies stated in the College’s Graduate Handbook: Policies and Procedures.
4. With the advice and approval of the Ed.S. Committee, submit a Planned Program of Study to the Interdisciplinary Program Coordinator.

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

Consult with the program coordinator prior to applying.

Total
Core Requirements 36 hours minimum
Concentration Requirements 27 hours
At least 15 semester hours must be at the 7000 level, or 6000 level courses requiring advanced graduate standing. 5000 level courses are not acceptable. Note: Due to the variability of program goals in the Interdisciplinary Program, students should select their coursework in consultation with the major professor.

Thesis
Thesis–(6971) 9 hours minimum

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
INTERDISCIPLINARY EDUCATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a concentration in Interdisciplinary Education

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 75-81
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DIE

CONTACT INFORMATION

College: Education
Department: Interdisciplinary
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Program Description
The purpose of the Interdisciplinary track in the Ph.D. degree is to provide opportunities for those students who have educational backgrounds and interests that span a variety of disciplines that may include work outside as well as inside the College of Education. Students who have the ability and desire to integrate study and research among several departments/programs are encouraged to apply to the Interdisciplinary track.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: consult program coordinator

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

Admission Requirements

1. Satisfy the general College and university admission requirements as specified for the Ph.D. Degree in the current USF graduate catalog.
   - taken the GRE and have the following scores: Verbal, 500; Quantitative, 600 and Analytical 4.5.
   - An earned master’s degree from a regionally accredited institution of higher education or its international equivalent.
   - A grade point average (GPA) of at least 3.5 on a 4.0 scale for the master’s degree.
   - Three letters of recommendation
Copies of transcripts and record of GRE scores should be presented to the Interdisciplinary Program Coordinator before proceeding to meet the other requirements. The recommendation letters should be sent to the Program Coordinator.

2. Articulate in a clearly written statement the scope and rationale for the proposed program of study and research.
3. Identify a fully credentialed College faculty member who is willing to serve as major professor.
4. In consultation with the major professor, form a Doctoral Committee in accordance with the College policies stated in the College’s Graduate Handbook: Policies and Procedures.
5. With the advice and approval of the Doctoral Committee, submit a Planned Program of Study to the Interdisciplinary Program Coordinator.

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS
Consult with the program coordinator prior to applying.

Program Requirements – Ph.D. 75 hours minimum

Core Requirements
Courses: One of the following three-credit hour courses:

EDG 7667 Analysis of Curriculum and Instruction;
EDG 7692 Issues in Curriculum and Instruction;
EDH 7225 Curriculum Development in Higher Education.

A. Concentration Requirements 18 hours minimum
Note: At least 12 semester hours must be at 7000 level, or 6000 level courses requiring advanced graduate standing. Given the variability of students’ goals, the Interdisciplinary concentration coursework should be selected in consultation with the major professor.

B. Cognate Area 12 hours minimum

C. Measurement, Statistics, and Research Design 11 hours minimum

a. The following four-credit hour courses are required: EDF 6407 Statistical Analysis of Education I and EDF 7408 Statistical Analysis of Education II.

b. One of the following courses: EDF 7410 Design of Systematic Studies in Education (4 credit hours); EDF 7437 Advanced Educational Measurement (3 credit hours); EDF 7484 Statistical Analysis of Education III (4 credit hours); EDF 7493 Systems Approaches for Program Planning, Evaluation, and Development (4 credit hours) or each of the following four-credit hour courses: EDF 7477 Qualitative Research in Education I and EDF 7478 Qualitative Research in Education II.
D. Foundations

7 hours minimum

**Philosophical, Social, Historical Foundations**

One of the following courses satisfies this requirement:

- EDF 6531 History of Childhood: Disability and Deviance (3 credit hours);
- EDF 6705 Gender and the Educational Process (3 credit hours);
- EDF 6736 Education, Communication, and Change (3 credit hours);
- EDF 6765 Schools and the Future (4 credit hours);
- EDF 6883 Issues in Multicultural Education (4 credit hours);
- EDF 7586 Classics in Educational Research (4 credit hours);
- EDF 7682 Education in Metropolitan Areas (4 credit hours);
- EDF 7934 Seminar in Social Foundations (4 credit hours)

E. Educational Psychology

Prospective students need to consult with Program Coordinator for Educational Psychology in the Psychological and Social Foundations Department for appropriate courses, or consult the listing in the general College of Education section of the graduate catalog.

F. Doctoral Dissertation

24 hours minimum

**COURSES**

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
MATHEMATICS EDUCATION PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.1311
Dept Code: EDI
Program (Major/College): AMA EJ

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
This degree is designed primarily for secondary school teachers desiring to improve their skills in the teaching of mathematics to secondary students,

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

MA Plan I
Meet one of the following criteria:

- Shall have earned a “B” (3.0 on a 4.0 scale) average or better in all upper division level undergraduate coursework in the baccalaureate degree.
  OR
- Shall have GRE scores of 450 verbal and 550 quantitative or higher taken within five years

- Certification in mathematics education (Include copy of your Florida State Teaching Certification with your application. Temporary Certificates are not acceptable.)

MA Plan II Inactive
MA Plan III Inactive

For international applicants
Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See the Graduate Admissions website for further clarification and possible exemptions. Please check with program regarding the
policy on evaluation of transcripts. For more information, please visit http://www.grad.usf.edu/graduate-admissions-checklist.asp.

DEGREE PROGRAM REQUIREMENTS

Plan I Option
Core Requirements: (minimum of 9 hours)
- EDF 6432 Foundation of Measurement
- EDF 6481 Foundation of Ed Research
- EDF 6211 or EDF 6215 – Psych Foundations

Current Trends:
- MAE 6136 Current Trends in Secondary School Mathematics

Concentration Requirements: 18 hours minimum
- Graduate level mathematics courses to be approved by the student’s advisor.
- Courses with the following prefixes are acceptable: MAA, MAD, MAE, MAP, MAT, MHF, and STA

Elective: 3 hours of mathematics education

Comprehensive Examination
The comprehensive examination will consist of a written and/or oral examination in the concentration area.

A Plan III option is available for individuals who are neither certified nor desire certification.

Process Core: (minimum of 9 hours)
- EDF 6432 Foundation of Measurement
- EDF 6481 Foundation of Ed Research
- EDF 6211 or EDF 6215 – Psych Foundations

The Master of Arts in Teaching (M.A.T.) in Mathematics Education Degree program is currently available at the middle grades (5-9) level and secondary grades (6-12). Please check the Mathematics Education website for an update as well as other sections of this catalog.

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

COURSES
See www.coedu.usf.edu/main/departments/seced/math/mathma_course.htm
MIDDLE GRADES MATHEMATICS PROGRAM (5-9)

Master of Arts in Teaching (M.A.T.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15
Spring: October 15
Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.1311
Dept Code: EDI
Program (Major/College): TMA ED

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

The M.A.T. in Middle Grades Mathematics Education (5-9) is designed for individuals seeking initial certification to teach mathematics at the middle grades level. Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida Department of Education program approval standards, and accreditation criteria.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools, the Florida Department of Education and the National Council for the Accreditation of Teacher Education.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions), including an earned degree from a regionally accredited institutions or an international equivalent as well as requirements listed below.

Program Admission Requirements
Admissions Requirements include:

- A bachelor’s degree or equivalent from a regionally accredited university or its international equivalent
- Have an earned minimum grade point average of 3.0 on a 4.0 scale average or higher in all upper division level undergraduate coursework taken in the baccalaureate degree
  or
  Shall have GRE scores of 450 Verbal and 550 Quantitative or higher taken within five years
- Meet one of the following criteria:
  o Have passed the Florida Subject Area Exam in Mathematics 5-9
  or
  Have completed at least 18 credit hours in mathematics at the level of college algebra
- Demonstrate mastery of general knowledge including the ability to read, write, and compute by passing the Florida General Knowledge Test (GKT) or College Level Academic Skills Test (CLAST), if taken and passed prior to July 1, 2004. For graduate level teacher preparation programs, GRE scores of 450 verbal and 550 quantitative or higher, taken within the last 5 years may be accepted in lieu of GKT or CLAST.
International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:
- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours 33

Pre-Requisites 6 hrs
EDF 6432 Foundations of Measurement (3) (Or Equivalent)
FLE 5366 ESOL Competencies in Content Area (3)

Core Requirements
Required Courses 6 hrs
ESE 5344 Classroom Management (3)
ESE 5342 Teaching the Adolescent Learner (3)

Concentration Requirements 9 hrs
MAE 6328 Algebra for Middle Grade Teachers (3)
MAE 6329 Geometry for Middle Grade Teachers (3)
MAE 6127 Prob & Stat for Middle Grade Teachers (3)

Math Education 18 hrs
MAE 6356 Teaching Pre-secondary Math (3)
MAE 6126 Current Trends Middle Grade Math (3)
MAE 6643 Comm. Skills in Math (3)
MAE 6945 Practicum in Math Ed (3)
MAE 6947 Grad Internship Math Ed (6)

Project
Action Research Project to be taken in the last fall or spring: Can only be taken while enrolled in at least two credits

COURSES

See http://www.coedu.usf.edu/main/departments/seced/math/mathma_course.htm
MATHEMATICS EDUCATION PROGRAM (6-12)

Master of Art in Teaching (M.A.T.) Degree

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DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 40

Program Level: Masters

CIP Code: 13.1311

Dept Code: EDI

Program (Major/College): TSM ED

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CONTACT INFORMATION

College: Education
Department: Secondary Education

Contact Information: [www.grad.usf.edu](http://www.grad.usf.edu)
Other Resources: [www.usf4you](http://www.usf4you)

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PROGRAM INFORMATION

Program Description

The MAT in Mathematics Education (6-12) is designed for individuals seeking initial certification to teach mathematics at the High School or Middle School levels. Please be advised that program and/or course requirements are subject to change per state legislative mandates, Florida Department of Education program approval standards and accreditation criteria.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools, the Florida Department of Education, and the National Council for the Accreditation of Teacher Education.

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ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions), including an earned degree from regionally accredited institutions or an international equivalent as well as requirements listed below.

Program Admission Requirements

Other Admissions Requirements include:

- A bachelor’s degree or equivalent from a regionally accredited university or its international equivalent
- An earned minimum grade point average of 3.0 on a 4.0 scale average or higher in all upper division undergraduate coursework in the baccalaureate degree.
- Meet one of the following criteria: Have passed the Florida Subject Area Exam in Mathematics 6-12 Or Have completed at least 30 credit hours in mathematics to include 6 hours of calculus, 3 hours of linear or abstract algebra, 3 hours of number theory
- Demonstrate mastery of general knowledge including the ability to read, write, and compute by passing the Florida General Knowledge Test (GKT) or College Level Academic Skills Test (CLAST). For graduate level teacher preparation programs, GRE scores of 450 verbal and 550 quantitative or higher, taken within the last 5 years may be accepted in lieu of GKT or CLAST.
International Students

All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours 40

Program Pre-requisites

Students without appropriate ESOL training and/or a measurement course must complete graduate course(s) to satisfy those two program prerequisites. Students admitted without a 30 hour mathematics background will have to take undergraduate course work to insure that their background reflects at least:

- 6 hours of Calculus
- 3 hours of linear algebra or abstract algebra
- 3 hours of Number Theory or Discrete Mathematics
- 3 hours of geometry
- 3 hours of History of Mathematics
- 3 hours of Probability or Statistics

Core Requirements

12 hrs

Required Courses

- EDF 6432 Foundations of Measurement (3)
- ESE 5344 Classroom Management for a Diverse School and Society (3)
- ESE 5342 Teaching the Adolescent Learner (3)
- TSL 5325 ESOL Strategies for Content for Content Area Teachers (3)

Current Trends in Teaching Concentration

3 hours

- MAE 6136 Current Trends Secondary Math Education (3)

Concentration

15 minimum

Students may waive up to 6 hours of course credit based upon approval of their academic advisor and the department.

- MAE 6643 Communication Skills in Mathematics (3)
- MAE 6337 Topics in Teaching Algebra (3)
- MAE 6338 Topics in Teaching Geometry (3)
- MAE 6317 Topics in Teaching Probability and Statistics (3)
- MAE 6336 Topics in Teaching Calculus (3)
- MAE 6370 Mathematics for High School Teachers (3)
- MAE 6362 Senior High Mathematics Methods (3)

Practicum, Internship, Field Work, etc.

10 hours

- MAE 6945 Practicum in Mathematics Education (3)
- MAE 6947 Internship (6)
- MAE 6899 Internship Seminar in Mathematics Education (1)
Testing
All portions of the General Knowledge Test (GK) of the Florida Teacher Certification Exam (FTCE) must be passed prior to internship. Both the Mathematics 6 – 12 test and the Professional Education test of the FCTE must be passed prior to completion of internship.

Comprehensive Examination:
A comprehensive exam/final project is required during the Spring or Fall semester just prior to graduation.

Other Information
Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

Mathematics Education Program (5-9)
Please refer to the Mathematics Education Program (5-9) for specific information.

COURSES
See http://www.coedu.usf.edu/main/departments/seced/math/mathma_course.htm
MATHEMATICS EDUCATION CONCENTRATION

Education Specialist (Ed.S.) Degree in the Curriculum and Instruction Program
With a concentration in Mathematics Education

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15 1

Minimum Total Hours: 36
Program Level: Specialist
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: SMA

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The Ed.S. Degree in Curriculum and Instruction with concentration in Mathematics Education prepares specialists for classroom instruction or leadership/supervisory roles.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. Admissions Requirements include:

- Submit official GRE scores. Scores of 600 on the quantitative portion and 475 on the verbal portion are expected.
- An earned a “B” (3.0 on a 4.0 scale) average or higher in all work attempted while registered as an upper division student in the Baccalaureate degree, or a 3.5 grade point at the Master’s level.
- Proof of educational or professional experience

For international applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See the Graduate Admissions website for further clarification and exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://www.grad.usf.edu/graduate-admissions-checklist.asp
DEGREE PROGRAM REQUIREMENTS

The Ed.S. program is highly individualized. Within the program structure, candidates’ programs are planned on the basis of previous educational and professional experience and future goals. The program of study must be approved by a faculty committee.

The program of study requires a minimum of:

**Core Requirements**
Professional Education
12 hours in professional education, and

**Concentration Requirements**
15 hours of specialization in mathematics education and/or mathematics

**Thesis/Project**
A minimum of nine (9) hours towards a thesis/project

**Comprehensive Exam**
A comprehensive exam is also required.

COURSES
MEASUREMENT AND EVALUATION CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Measurement and Evaluation

DEGREE INFORMATION
Program Admission Deadlines:
  - Fall: February 15
  - Spring: October 15
  - Summer: February 15
Minimum Total Hours: 42
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CME

CONTACT INFORMATION
College: Education
Department: Educational Measurement and Research
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
This degree program is designed to prepare mid-level testing and evaluation personnel for employment in school districts, government agencies, commercial test development companies, and program research and evaluation enterprises. The program prepares personnel with specialized skills in test construction, data analysis, program evaluation, and research design.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
In order to be admitted to the M.ED program with a concentration in Measurement and Evaluation, the applicant must meet the following admission criteria:

- Have a bachelor’s degree or equivalent from a regionally accredited university or international equivalent
- Have earned a GPA of at least 3.0 on a 4.0 scale while an upper division student in a Baccalaureate degree
- Submit official Graduate Record Examination (GRE) scores
- Have a minimum of two years relevant experience in education
- Have three letters of recommendation from professionals who are familiar with the applicant’s scholarship and work history
- Demonstrate the ability to write professionally by submitting a scholarly paper completed as part of their prior coursework
- Present self professionally in an oral interview with two or more faculty members
- Write a statement of professional goals (immediate, intermediate, and long term) and research interests. Professional goals and research interests need to be compatible with the opportunities afforded through a degree in educational measurement and evaluation
- Receive endorsement by the majority of tenured and tenure earning faculty members in the department
For international applicants: Applicants whose native language is not English or who have not earned a degree in the United States must, also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 550 on the paper-based test, are required. Applications submitted with TOEFL scores that do not meet the minimum requirements will be denied.

The TOEFL requirement may be waived if the applicant meets one of the following conditions:

• The applicant’s native language is English, or
• Has scored 500 or higher on the GRE Verbal Test, or
• Has earned a college degree at a U.S. institution of higher learning, or
• Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or
• Has scored 6.5 on the International English Language Testing System (IELTS) http://www.ielts.org/

An external course by course evaluation of a foreign (i.e., non-U.S.) degree by an approved external agency is required with the admissions application. For more information on the admissions application process, please visit http://web.usf.edu/iac/admissions.

DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours (42 hours)
Core requirements (14 hours)
EDF 6432 (3) Foundations of Measurement
EDF 6481 (3) Foundations of Educational Research
EDF 6215 (4) Learning Principles Applied to Instruction
EDF 6606 (4) Socio-Economic Foundations of American Education

Concentration Requirements (9 hours)
EDG 6627 (3) Foundations of Curriculum and Instruction
EDF 6492 (3) Applied Educational Program Evaluation
EDF 6288 (3) Instructional Design I

Specialization Requiremens (19 hours)
EDF 6407 (4) Statistical Analysis for Educational Research I
EDF 7408 (4) Statistical Analysis for Educational Research II
EDF 7488 (2) Problems in Educational Data Analysis
EME 6930 (3) Programming Languages for Education
EDF 6446 (3) Development and Validation of Tests in Education
EME Computer Elective (3)

Comprehensive Examination Requirements
Students must perform satisfactorily on a written comprehensive examination taken on completion of all coursework or during the last semester of enrollment in the program. Students must be enrolled for a minimum of two graduate hours during the semester in which this examination is taken.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
MEASUREMENT AND EVALUATION CONCENTRATION

Education Specialist (Ed. S.) Degree in the Curriculum and Instruction Program
With a concentration in Measurement and Evaluation

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Specialist
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: SME

CONTACT INFORMATION

College: Education
Department: Educational Measurement and Research
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The Ed. S. program prepares specialists for work in school districts, government agencies, commercial test development companies, and program research and evaluation enterprises.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
In order to be admitted to the Ed.S. Program with a concentration in Measurement and Evaluation, applicants must satisfy the following admission criteria. Applicants must:

• Have a master’s or educational specialist’s degree or equivalent from a regionally accredited university or international equivalent.
• Have earned a GPA of at least 3.0 on a 4.0 scale in upper division coursework while in a Baccalaureate degree, or a minimum GPA of 3.5 on a 4.0 scale in graduate coursework
• Submit official Graduate Record Examination (GRE) score
• Have three letters of recommendation from professionals who are familiar with the applicant’s scholarship and work history
• Demonstrate the ability to write professionally by submitting a scholarly paper completed as a part of their prior coursework
• Present self professionally in an oral interview with two or more faculty members
• Write a statement of professional goals (immediate, intermediate, and long term) and research interests. Professional goals and research interests need to be compatible with the opportunities afforded through an education specialist degree in educational measurement and evaluation
• Receive endorsement by the majority of tenured and tenure-earning faculty members in the department
• Minimum two years relevant experience in education
For international applicants: Applicants whose native language is not English or who have not earned a degree in the United States must, also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 550 on the paper-based, test, are required. Applications submitted with TOEFL scores that do not meet the minimum requirements will be denied.

The TOEFL requirement may be waived if the applicant meets one of the following conditions:

- The applicant’s native language is English, or
- Has scored 500 or higher on the GRE Verbal Test, or
- Has earned a college degree at a U.S. institution of higher learning, or
- Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or
- Has scored 6.5 on the International English Language Testing System (IELTS) http://www.ielts.org/.

An external course by course evaluation of a foreign (i.e., on-U.S.) degree by an approved external agency is required with the admissions application. For more information on the admissions application process, please visit http://web.usf.edu/iac/admissions.

DEGREE PROGRAM REQUIREMENTS

The Ed.S degree in Curriculum and Instruction with a concentration in Measurement and Evaluation requires 36 semester hours (minimum) beyond the Master’s Degree. The program is individually planned with an advisor to include coursework in systematic planning, test development, program evaluation, research design, and statistical analysis.

Total Minimum Hours 36 hours

Core Requirements

Concentration Requirements 27 hours

The program is individually planned with an advisor to include coursework in systematic planning, test development, program evaluation, research design, and statistical analysis.

Thesis/Project (EDF 6971) 9 hours

Students will be required to complete a thesis or applied project. An oral defense of the thesis/project is required.

Comprehensive Examination

Students will be required to complete a written comprehensive examination on completion of coursework.

Other Information:

Students may be required to take additional hours depending on the course of study and or academic deficiencies. Please check with the program before applying.

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
# Measurement and Evaluation Concentration

**Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program**  
**With a concentration in Measurement and Evaluation**

## Degree Information

<table>
<thead>
<tr>
<th>Program Admission Deadlines:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall: Fall Admission only</td>
<td></td>
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</tbody>
</table>

| Minimum Total Hours:       | 93 hours |
| Program Level:             | Doctoral |
| CIP Code:                  | 13.0301  |
| Dept Code:                 | CNI      |
| Program (Major/College):   | CUR ED   |
| Concentration Code:        | DME      |

## Contact Information

<table>
<thead>
<tr>
<th>College:</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department:</td>
<td>Educational Measurement and Research</td>
</tr>
</tbody>
</table>

| Contact Information:        | [www.grad.usf.edu](http://www.grad.usf.edu) |

## Program Information

**Program Description**  
The Ph.D. in Curriculum and Instruction with a concentration in Measurement and Evaluation focuses on the development of systematic inquiry skills essential to the study and evaluation of education processes and outcomes. The intent of the program is to develop personnel to work in universities, school districts, government agencies, commercial test publishing and program evaluation enterprises. The doctoral program emphasizes research in inquiry methodology and applied problems in education and the behavioral sciences. A supervised practicum provides opportunities to apply methods in systematic inquiry or evaluation in various settings. In sum, methodological skills are developed within a programmatic context that encourages growth of knowledge about education, considers important principles of research, and provides a clinical setting in which these elements can be fused into professional applications.

Emphasis is placed on those aspects of research and evaluation design, measurement, statistical analysis, and systems approaches that are relevant to both decision-oriented and conclusion-oriented research. Inquiry methods include traditional experimental and quasi-experimental designs as well as survey, policy analysis, historical, ethnographic, case study, naturalistic and mixed methods approaches. The intent of the program is to develop instructional and research personnel who can strengthen the training, research and development capabilities of agencies and institutions concerned with education. While the doctoral program in measurement, research, and evaluation emphasizes methodology, concentration in substantive disciplines within education and/or the social sciences is possible. Concentration in a cognate provides a context within which the methods of systematic inquiry may be applied.

**Accreditation:** Accredited by the Commission on Colleges of the Southern Association of College and Schools.

## Admission Information

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

**Program Admission Requirements**  
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. In order to be admitted to the Ph.D. program with a concentration in Measurement and Evaluation, the applicant must meet the following admission criteria.
Applicants must:

- Have a master’s or educational specialist’s degree or equivalent from a regionally accredited university or international equivalent
- Have earned a GPA of at least 3.0 on a 4.0 scale in the upper division coursework while in a Baccalaureate degree program
- Submit official Graduate Record Examination (GRE) score
- Have three letters of recommendation from professionals who are familiar with their scholarship and work history
- Demonstrate the ability to write professionally by submitting a scholarly paper completed as a part of their prior coursework
- Present self professionally in an oral interview with two or more faculty members
- Write a statement of professional goals (immediate, intermediate, and long term) and research interests.
- Professional goals and research interests need to be compatible with the opportunities afforded through a degree in educational measurement and evaluation
- Receive endorsement by the majority of tenured and tenure-earning faculty members in the department
- Minimum two years relevant experience in education

For international applicants: Applicants whose native language is not English or who have not earned a degree in the United States must, also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 550 on the paper-based test, are required. Applications submitted with TOEFL scores that do not meet the minimum requirements will be denied.

The TOEFL requirement may be waived if the applicant meets one of the following conditions:

- The applicant’s native language is English, or
- Has scored 500 or higher on the GRE Verbal Test, or
- Has earned a college degree at a U.S. institution of higher learning, or
- Has earned a college degree from an institution whose language of instruction is
- English (must be noted on the transcript), or
- Has scored 6.5 on the International English Language Testing System (IELTS)

An external course by course evaluation of a foreign (i.e., non-U.S.) degree by an approved external agency is required with the admissions application. For more information on the admissions application process, please visit the Graduate Admissions website.

For more information on the admissions application process, please visit [http://www.grad.usf.edu/graduate-admissions-checklist.asp](http://www.grad.usf.edu/graduate-admissions-checklist.asp)

**DEGREE PROGRAM REQUIREMENTS**

The Department of Educational Measurement and Research offers the Ph.D. in Curriculum and Instruction with a concentration in Measurement and Evaluation. Students must complete a minimum of 93 semester hours of graduate level work to satisfy program requirements.

Core Requirements

**Process Core**

**Psychological and Social Foundations of Education**  
(7 hours minimum)

Students must take at least one course from each of the following areas:

- Psychological Foundations of Education
- Social Foundations of Education

[http://www.coedu.usf.edu/]
**Statistics/Measurement/Research Design**

<table>
<thead>
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<tr>
<td>EDF 6407</td>
<td>Statistical Analysis for Educational Research I (4)</td>
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<tr>
<td>EDF 7408</td>
<td>Statistical Analysis for Educational Research II (4)</td>
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<td>EDF 7484</td>
<td>Statistical Analysis for Educational Research III (4)</td>
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<td>EDF 7437</td>
<td>Advanced Educational Measurement I (3)</td>
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<td>EDF 7438</td>
<td>Advanced Educational Measurement II (4)</td>
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<tr>
<td>EDF 7410</td>
<td>Design of Systematic Studies in Education (4)</td>
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**Curriculum and Instruction**

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<th>Course Title</th>
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<tbody>
<tr>
<td>EDG 7667</td>
<td>Analysis of Curriculum and Instruction (3)</td>
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<tr>
<td>EDG 7692</td>
<td>Issues in Curriculum and Instruction (3)</td>
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<tr>
<td>EDH 7225</td>
<td>Curriculum Development in Higher Education (3)</td>
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**Concentration Requirements**

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<th>Course Code</th>
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<tr>
<td>EDF 7484</td>
<td>Statistical Analysis for Educational Research III (4)</td>
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<tr>
<td>EDF 7485</td>
<td>Theory and Practice of Educational Evaluation (3)</td>
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<tr>
<td>EDF 7488</td>
<td>Problems in Educational Data Analysis (2)</td>
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<tr>
<td>EDF 7493</td>
<td>Systems Approaches for Program Planning, Evaluation and Development (4)</td>
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<tr>
<td>EDF 7655</td>
<td>Organization Development in Educational Institutions (4) OR course recommended by doctoral committee</td>
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<tr>
<td>EDG 7910</td>
<td>Directed Research (3)</td>
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<tr>
<td>EDF 7940</td>
<td>Practicum In Educational Planning, Evaluation, and Development (8)</td>
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</tbody>
</table>

**Cognate**

Coursework to be selected from area other than concentration area based on student’s professional interests with approval of the doctoral supervisory committee

**Dissertation**

(24 hours minimum)

**Examination**

The student will be required to take the doctoral comprehensive qualifying examination on completion of formal coursework as outlined on the approved program of study (or in the semester in which all formal coursework will be completed). The student in consultation with his/her major professor and/or doctoral committee will select one of the two options for the qualifying examinations: a) a 12-hour written examination administered over a 3-day period that will integrate the work in the student’s area of concentration, cognate area and educational foundations area, or b) the development of a comprehensive scholarly paper that requires the student to demonstrate a depth of understanding and appropriate application of principles in the areas of measurement, evaluation, research design, statistical analyses, and educational foundations.

**Residency**

Each student in the doctoral program must satisfy the academic residency requirement that requires enrollment in a minimum of 9 hours per semester for 2 semesters (i.e., a total of 18 hours minimum) within at least one academic year on the USF Tampa Campus. Semesters of residency must be declared on the Program of Study Form and must be approved by the major professor and doctoral committee.

**OTHER INFORMATION**

Students may be required to take additional hours depending on the course of study and or academic deficiencies. Please check with the program before applying.

**COURSES**

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
MIDDLE SCHOOL EDUCATION, ENGLISH CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Middle School Education, English Education

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions.
Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CJE

CONTACT INFORMATION

College: Education
Department:
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, students are not being admitted to this program.
MIDDLE SCHOOL EDUCATION, GENERAL EDUCATION CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Middle School Education, General Education

DEGREE INFORMATION

Program Admission Deadlines:
Closed for new admissions.

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CJE

CONTACT INFORMATION

College: Education
Department:
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, students are not being admitted to this program.
MIDDLE SCHOOL EDUCATION, MATH CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Middle School Education, Mathematics Education

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions.
Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CJM

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, students are not being admitted to this program.
MIDDLE SCHOOL EDUCATION, SCIENCE CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Middle School Education, Science Education

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions.
Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CJS

CONTACT INFORMATION

College: Education
Department:
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, students are not being admitted to this program.
MIDDLE SCHOOL EDUCATION, SOCIAL STUDIES CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Middle School Education, Social Studies Education

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions
Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CJH

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, students are not being admitted to this program.
PHYSICAL EDUCATION PROGRAM
Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:

- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30

Program Level: Masters

CIP Code: 13.1314

Dept Code: EDP

Program (Major/College): EPH ED

Concentrations:

- Exercise Science (EXS)

See separate listing for Physical Education – Exercise Science

CONTACT INFORMATION

College: Education
Department: School of Physical Education & Exercise Science

Contact Information: www.grad.usf.edu

Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description

The master’s degree in Physical Education is offered online only. The degree is designed for anyone interested in the lifelong process of becoming a reflective, effective teacher who is prepared to lead youngsters to become physically active for a lifetime.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools, National Council for Accreditation of Teacher Education, National Association for Sport and Physical Education.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. Requirements:

- A bachelor’s degree from a regionally accredited institution or international equivalent and satisfying at least one of the following criteria:
  - A “B” average (3.0 on a 4.0 scale) or higher in all work attempted while registered as an upper division student in a Baccalaureate degree OR A previous graduate degree from a regionally accredited institution with a grade point average of at least a 3.5

- Exercise Science specialization additionally requires a C (a 2.0 on a 4.0 scale) or higher in the following courses:
  1. Anatomy & Physiology I & II or equivalent (minimum 3 credit hours each)
  2. Kinesiology/Biomechanics
  3. Exercise Physiology
  4. Nutrition
  5. Recommended: Physics, Chemistry, Computer Proficiency

- Proof of initial certification (Plan I)
International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:
- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

Physical Education K-12
Two plans are available (Plan I, Plan III).

Plan I
Program of Study

<table>
<thead>
<tr>
<th>Core Requirements:</th>
<th>6 hrs. minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 6432, Foundations of Measurement (3 hours), EDF 6481, Foundations of Educational Research (3 hours)</td>
<td></td>
</tr>
</tbody>
</table>

Concentration Requirements
Required
Select from the following or other graduate coursework approved by the faculty advisor:
- PET 6419 Clinical Supervision in Physical Education (3)
- PET 6443 Instructional Design and Content: Games (3)
- PET 6444 Instructional Design and Content: Dance and Gymnastics (3)
- PET 6516 Learner Assessment in School Based Physical Education (3)
- PET 6706 Analysis of Research in Physical Education (3)
- PET 6716 Analysis of Teaching in Physical Education (3)

Concentration Electives
6 hours from the list below
- PET 6256 Sport in Society: Contemporary Issues (3)
- PET 6419: Sport Psychology (3)
- PET 6447 Grant Writing in PE (3)
- PET6447 Adapted PE (3)

Comprehensive Examination - A written comprehensive examination is required during the semester in which the student completes the requirements for the master’s degree.

Plan III
Program of Study

<table>
<thead>
<tr>
<th>Core Requirements</th>
<th>6 hours minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 6432, Foundations of Measurement (3 hours), EDF 6481, Foundations of Educational Research (3 hours)</td>
<td></td>
</tr>
</tbody>
</table>

Concentration Requirements
PET 6419 Clinical Supervision in Physical Education (3)
PET 6443 Instructional Design and Content: Games (3)
PET 6444 Instructional Design and Content: Dance and Gymnastics (3)
PET 6516 Learner Assessment in School Based Physical Education (3)
PET 6706 Analysis of Research in Physical Education (3)
PET 6716 Analysis of Teaching in Physical Education (3)
Electives
PET 6419: Sport Psychology (3)
PET 6447 Grant Writing in PE (3)
PET 6447 Adapted PE (3)

Comprehensive Exam
A written comprehensive examination is required during the semester in which the student completes the requirements for the master’s degree.

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

COURSES
http://www.ugs.usf.edu/sab/sabs.cfm
PHYSICAL EDUCATION PROGRAM
EXERCISE SCIENCE CONCENTRATION

Master of Arts (M.A.) Degree in the Physical Education Program
With a concentration in Exercise Science

DEGREE INFORMATION

Program Admission Deadlines:
  Fall: February 15
  Spring: October 15
  Summer: February 15

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 13.1314
Dept Code: EDP
Program (Major/College): EPH ED
Concentration Code: EXS

CONTACT INFORMATION

College: Education
Department: School of Physical Education, and Exercise Science
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

The Exercise Science program provides the theoretical, practical, and professional skills needed to pursue employment opportunities in exercise science, fitness/wellness, and hospital rehabilitation centers. The course work is designed to prepare students for advanced positions in their respective fields and is based on national standards and competencies established by professional organizations.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools, National Council for Accreditation of Teacher Education, National Association for Sport and Physical Education.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

- A bachelor’s degree from a regionally accredited institution or international equivalent and satisfying at least one of the following criteria:
- A “B” average (3.0 on a 4.0 scale) or higher in all work attempted while registered as an upper division in a Baccalaureate degree OR A previous graduate degree from a regionally accredited institution with a grade point average of 3.5.
- Exercise Science specialization additionally requires a C (a 2.0 on a 4.0 scale) or higher in the following courses:
  - Anatomy & Physiology I & II or equivalent (minimum 3 hours each)
  - Kinesiology/Biomechanics
  - Exercise Physiology
  - Nutrition
  - Recommended: Physics, Chemistry, Computer Proficiency
International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:
- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;

DEGREE PROGRAM REQUIREMENTS

Exercise Science Concentration

Program of Study 36 hrs minimum

Core requirements 6 hrs minimum
EDF 6481: Foundations of Educational Research (3)
EDF 6432: Foundations of Measurement (3) or
EDF 6407: Statistical Analysis for Ed Research 1 (4)

Concentration Requirements 30 hrs minimum
Required Courses
PET 6535C: Professional Assessment Process (3)
EDG 6931: Advanced Exercise Phys (3)
EDG 6931: Lab Techniques in ES (3)
PET 6396: Applied Biomechanics (3)
EDG 6931: Topics in Sports Medicine (3)

Concentration Electives 15 hrs Minimum
Select from the list below
PET 6003: Theories and Models of Health and Physical Activity (3)
PET 6081: Lifespan Fitness (3)
PET 6085: Body Composition and Assessment (3)
PET 6367: Sports Nutrition and Exercise Metabolism (3)
PET 6388: Physical Activity, Health, and Disease (3)
PET 6389: Fitness Assessment and Prescription (3)
PET 6396: Legal Aspects of Physical Activity (3)
PET 6419: Sport Psychology (3)
PET 6496: Developmental Exercise Physiology (3)
PET 6496: Motor Learning (3)
PET 6496: Exercise Psychology (3)
PET 6971: Thesis
PET 6906: Independent Study
PET 6910: Research Project

Comprehensive Exam
A written comprehensive examination is required during the semester in which the student completes the requirements for the master’s degree

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
READING EDUCATION PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

<table>
<thead>
<tr>
<th>Program Admission Deadlines:</th>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall: February 15</td>
<td>College: Education</td>
</tr>
<tr>
<td>Spring: October 15</td>
<td>Department: Childhood Education and Literacy Studies</td>
</tr>
<tr>
<td>Summer: February 15</td>
<td>Contact Information: <a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
</tr>
</tbody>
</table>

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 13.1305
Dept Code: EDR
Program (Major/College): ARD ED

CONTACT INFORMATION

College: Education
Department: Childhood Education and Literacy Studies
Contact Information: [www.grad.usf.edu](http://www.grad.usf.edu)
Other Resources: [www.usf4you](http://www.usf4you)

PROGRAM INFORMATION

Program Description
This degree is designed to prepare special reading teachers, clinicians, supervisors, directors, and coordinators of reading for school systems.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools, the National Council for the Accreditation of Teacher Education, and the Department of Education.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

In order to be considered for admission, first-time or transferring graduate applicants must:

- Have a bachelor’s degree or equivalent from a regionally accredited university,
- Have earned a “B” (3.0 on a 4.0 scale) average or higher in all work attempted while registered as an upper division student working in a baccalaureate degree in a regionally accredited institution
- Have an earned, valid teaching certificate OR
- Be eligible for professional certification through the completion of a Bachelor’s degree in Education

Exceptions to minimum requirements will be considered for National Board Certification and an outstanding professional record.

For International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number for purposes of State testing, internship and practica;

http://www.coedu.usf.edu/
DEGREE PROGRAM REQUIREMENTS

Program of Study 36 hours minimum

Core Requirements
Process Core
EDF 6481: Foundations of Educational Research 3 hours

Research
LAE 6316: Trends in Literature in a Diverse Society 3 hours

Concentration Requirements: 30 hours
RED 6247: District and School Level Supervision in Reading 3 hours
RED 6449: Literacy and Technology 3 hours
RED 6540: Assessment in Literacy 3 hours
RED 6544: Cognition, Comprehension, and Content Area Reading: Remediation of Reading Problems 3 hours
RED 6545: Issues in Vocabulary and Word Study 3 hours
RED 6747: History and Models of Reading: Prevention and Intervention of Reading Difficulties 3 hours
RED 6748: Teacher Research Methods in Reading 3 hours
RED 6846: Practicum in Reading 3 hours
LAE 6315: Writers and Writing: Trends and Issues 3 hours
TSL 5085: ESOL I: Teaching limited English Proficiency Students in K-12 3 hours
TSL 5085 may be waived with appropriate documentation by the COEDU ESOL Coordinator.

Program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria. Please contact program for more information.

Comprehensive Examination
Successful performance on a Comprehensive Examination is required for degree completion.

PRACTICUM
Students are required to take RED 6846 Practicum in Reading.

TRANSITION POINT PROJECTS
Students must successfully complete a Transition Point Project after each block of courses, culminating in an action research project.

TESTS
Passing scores on the PED (Professional Education Test) is required for admission to the program. Passing scores on the Subject Area Exam - Reading K-12 are required for graduation. Students must provide an official FCTE score report (no copies) to their advisor in addition to having the scores reported to USF.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
READING EDUCATION CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Reading Education

DEGREE INFORMATION

Program Admission Deadlines:
   This program is closed to new admissions

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CRD

CONTACT INFORMATION

College: Education
Department: Childhood Education and Literacy Studies
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

The Master of Education (M.Ed.) degree in Curriculum and Instruction with a concentration in Reading Education is being replaced by the Master of Arts (M.A.) degree in Reading Education. Please refer to the M.A. in Reading Education for information.
READING-LANGUAGE ARTS EDUCATION CONCENTRATION

Education Specialist (Ed. S.) Degree in the Curriculum and Instruction Program
With a concentration in Reading-Language Arts Education

DEGREE INFORMATION

<table>
<thead>
<tr>
<th>Program Admission Deadlines:</th>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall: February 15</td>
<td>College: Education</td>
</tr>
<tr>
<td>Spring: October 15</td>
<td>Department: Childhood Education and Literacy Studies</td>
</tr>
<tr>
<td>Summer: February 15</td>
<td></td>
</tr>
</tbody>
</table>

Minimum Total Hours: 36
Program Level: Specialist
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: SRD

PROGRAM INFORMATION

Program Description
The degree prepares leaders in the field of literacy. The program is designed to promote expertise in literacy research, theory, and practice. An Ed.S. degree in Reading/Language Arts emphasizes a critical analysis of reading policy and the need for applied, community-based research. The Ed.S. program extends students’ research and analysis skills so they may conduct program evaluations to guide classroom practice and school-based reform.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. Requirements for all applicants include:

- A 35th percentile GRE score in the verbal and quantitative sections; at least a 3 on analytic writing
- Minimum GPA of 3.5 Masters
- Proof of educational or professional experience
- Proof of initial certification
- Letters of recommendation
- Interview
- Concept Paper or goal statement

For international applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See the Graduate Admissions website for further clarification and possible exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://www.grad.usf.edu/graduate-admissions-checklist.asp.

http://www.coedu.usf.edu/
DEGREE PROGRAM REQUIREMENTS

The program requires a minimum of 36 hours beyond the Master’s degree, including coursework, written comprehensive examination, and a project. The Ed.S. program is separate from the Ph.D. It is individually planned with an advisor to include coursework in areas such as reading, elementary education, literacy, and research.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Minimum Hours</td>
<td>36</td>
</tr>
<tr>
<td>Core Requirements</td>
<td></td>
</tr>
<tr>
<td>Concentration Requirements</td>
<td>27</td>
</tr>
<tr>
<td>Thesis</td>
<td></td>
</tr>
<tr>
<td>Comprehensive Exam Required</td>
<td>9</td>
</tr>
</tbody>
</table>

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
READING AND LANGUAGE ARTS EDUCATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a concentration in Reading and Language Arts Education

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15
Fall Admission Only
Minimum Total Hours: 75
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DRD

CONTACT INFORMATION

College: Education
Department: Childhood Education and Literacy Studies
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Program Description
The program has been designed primarily to prepare professionals in the area of literacy who will work as teacher educators and researchers at the university level, and leaders and researchers at the district level. The philosophical underpinnings of the program lie in the identification of the roles of teacher educators working in the university settings. The doctoral program in Reading/Language Arts prepares research scholars with expertise in literacy processes, literacy instruction, and literacy teacher education. The program features an in-depth focus on literacy theoretical models and processes, research on struggling and under-performing students (K through adult), literature and content texts, critical literacy, multi-media literacies, literacy within and across the content areas, and literacy teacher education. The program features a broad study of systematic inquiry skills essential to the study of literacy. The program also guides students through an apprenticeship experience as they learn various research methodologies and establish lines of research.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. Requirements for all applicants include:

- 40th Percentile GRE scores in verbal, qualitative, and analytical sections.
- Minimum GPA of 3.5 Masters
- Proof of educational or professional experience
- Writing samples
- Letters of recommendation
- Interview
- Concept Paper or goal statement

For international applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80
internet-based test). See http://web.usf.edu/iac/admissions/language.html for further clarification and possible exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://web.usf.edu/iac/admissions

DEGREE PROGRAM REQUIREMENTS

The program requires a minimum of 75-81 hours beyond the Master’s degree. Each student’s program is individually planned in consultation with a faculty program committee.

Program of Study: 75 hours minimum

Core Requirements

Concentration Requirements: 18 hours
To be determined with program director

Cognate 12 hours
To be determined with program director

Measurement/Statistics/Research/Design: 9 hours
EDF 6407
EDF 7408
EDF 7410 or EDF 7437 or EDF 7484 or EDF 7493 or EDF 7477 or EDF 7478

Foundations 7 hours minimum
Electives in Psychological and Social foundations, Philosophical or Historical foundations

Dissertation 24 hours

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
SCHOOL PSYCHOLOGY PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: January 1
Fall Admission Only

Minimum Total Hours: 32
Program Level: Masters*
Program Status: Active
CIP Code: 42.1701
Dept Code: EDF
Program (Major/College): ASP EJ

*Only available when combined with the Ed. S. or Ph.D.

CONTACT INFORMATION

College: Education
Department: Psychological and Social Foundations
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The M.A. degree in School Psychology is offered only when combined with the Ed.S. and/or Ph.D. degrees. The M.A. in School Psychology is not a terminal degree and cannot be used for certification or licensure as a school psychologist.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below. Admission occurs once each year for the Fall class. The School Psychology program is a limited access program. This means that only a limited number of students are able to be accepted each year.

Program Admission Requirements
For all admission, all programs require earned degrees from regionally accredited institutions. International students are also required to:
1. Provide a course-by-course evaluation of foreign transcripts from an approved external agency
2. Submit passing TOEFL scores

Prerequisite Coursework for Admission
• Bachelor’s degree or higher
• An undergraduate (or graduate) course in Statistics
• An undergraduate (or graduate) course in Tests and Measurements (including issues such as reliability, validity, standard error of measurement, etc.)
• An undergraduate (or graduate) course in Research Methods or Experimental Design with a lab component.

Required Admissions Materials
All admissions materials should be submitted directly to our program. A complete application includes the following:

• A completed Application to Graduate Studies. All applications must be submitted online and can be located on our program website: http://www.coedu.usf.edu/schoolpsych/
• The application fee ($30) - payable by credit card.
• Submit official GRE scores (Note: Verbal, Quantitative, and Analytical Writing scores are required; scores should not be more than 5 years old).
• Provide official transcripts from all colleges and universities where you have completed coursework. Applicants must have an undergraduate GPA of 3.5 or higher in upper division level undergraduate coursework.
- Provide a statement of professional goals. In a 2-3 page statement, explain your immediate, intermediate, and long term goals as well as your research interests. Professional goals and research interests must be compatible with the School Psychology Program.
- Submit three letters of recommendation from professionals who are familiar with your scholarship and work history.
- Demonstrate the ability to write professionally by submitting a scholarly paper completed as part of your prior course work.
- If invited for an interview, a) present self professionally in an oral interview with two or more faculty members and graduate students, and b) provide a writing sample related to a relevant topic to the field of school psychology during the interview process.

For international applicants: Applicants whose native language is not English or who have not earned a degree in the United States must also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 550 on the paper-based test, are required. Applications submitted with TOEFL scores that do not meet the minimum requirements will be denied. The TOEFL requirement may be waived if the applicant meets one of the following conditions:

- The applicant’s native language is English, or
- Has scored 500 or higher on the GRE Verbal Test, or
- Has earned a college degree at a U.S. institution of higher learning, or
- Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or
- Has scored 6.5 on International English Language Testing System (IELTS) http://www.ielts.org/.

DEGREE PROGRAM REQUIREMENTS

Core Requirements
EDF 6938 Issues in Child Dev (3hrs)
EDF 6214 Classroom Learn (4 hrs)
EDF 6217 Behavior Learn (4 hrs)

Concentration Requirements
SPS 6936 Sem in School Psy (3 hrs)
EDF 6407 Statistics I (4 hrs)
SPS 6197 Assessment I (4 hrs)
SPS 6198 Assessment II (4 hrs)
EDF 6288 Instructional Des (3 hrs)
EDF 6166 Consultation (3 hrs)

Note: Students may be required to take additional hours depending on the course of study and or academic deficiencies.

Practicum
Students must complete a school-based practicum consisting of eight (8) hours per week for a minimum of 32 weeks (2 semesters) for a total of 256 contact hours.

Comprehensive Exam
Prior to clearance for the MA degree, candidates must satisfactorily complete a portfolio of performance-based accomplishments that is evaluated by the School Psychology faculty.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm and www.coedu.usf.edu/schoolpsych
SCHOOL PSYCHOLOGY CONCENTRATION

Education Specialist (Ed.S.) Degree in the Curriculum and Instruction Program
With a concentration in School Psychology

DEGREE INFORMATION

Program Admission Deadlines:
Fall: January 1
Fall Admission Only

Minimum Total Hours: 82
Program Level: Specialist
Program Status: Active
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: SSP

CONTACT INFORMATION

College: Education
Department: Psychological and Social Foundations
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The Ed.S. Program is fully approved by the National Association of School Psychologists and the Florida Department of Education. Students who complete the School Psychology Training Program at USF automatically meet the academic and field training requirements for certification as a Nationally Certified School Psychologist (NCSP)

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools, NCATE, and Approved by the National Association of School Psychologists.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below. Admission occurs once each year for the Fall class. The School Psychology program is a limited access program. This means that only a limited number of students are able to be accepted each year.

Program Admission Requirements
For all admission, all programs require earned degrees from regionally accredited institutions. International students are also required to:
1. Provide a course-by-course evaluation of foreign transcripts from an approved external agency
2. Submit passing TOEFL scores

Prerequisite Coursework for Admission
- Bachelor’s degree or higher
- An undergraduate (or graduate) course in Statistics
- An undergraduate (or graduate) course in Tests and Measurements (including issues such as reliability, validity, standard error of measurement, etc.)
- An undergraduate (or graduate) course in Research Methods or Experimental Design with a lab component.

Required Admissions Materials
All admissions materials should be submitted directly to our program. A complete application includes the following:
- A completed Application to Graduate Studies. All applications must be submitted online and can be located on our program website: [http://www.coedu.usf.edu/schoolpsych/](http://www.coedu.usf.edu/schoolpsych/).
- The application fee ($30) - payable by credit card.
- Submit official GRE scores (Note: Verbal, Quantitative, and Analytical Writing scores are required; scores should not be more than 5 years old).
- Provide official transcripts from all colleges and universities where you have completed coursework. Applicants must have an undergraduate GPA of 3.5 or higher in upper division level undergraduate coursework.
- Provide a statement of professional goals. In a 2-3 page statement, explain your immediate, intermediate, and long term goals as well as your research interests. Professional goals and research interests must be compatible with the School Psychology Program.
- Submit three letters of recommendation from professionals who are familiar with your scholarship and work history.
- Demonstrate the ability to write professionally by submitting a scholarly paper completed as part of your prior course work.
- If invited for an interview, a) present self professionally in an oral interview with two or more faculty members and graduate students, and b) provide a writing sample related to a relevant topic to the field of school psychology during the interview process.

**For international applicants**

Applicants whose native language is not English or who have not earned a degree in the United States must also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 550 on the paper-based test, are required. Applications submitted with TOEFL scores that do not meet the minimum requirements will be denied. The TOEFL requirement may be waived if the applicant meets one of the following conditions:

- The applicant’s native language is English, or
- Has scored 500 or higher on the GRE Verbal Test, or
- Has earned a college degree at a U.S. institution of higher learning, or
- Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or

**DEGREE PROGRAM REQUIREMENTS**

School Psychology is offered as a concentration under the Ed.S. Curriculum and Instruction degree program. The Educational Specialist (Ed.S.) degree consists of approximately 82 graduate semester hours beyond the bachelor’s degree, and includes two years of practica experiences and a full year, 1,500 clock hour internship, and a thesis or research project. Completion of the Ed.S. degree requires three (3) years of full-time study, including summer semesters beyond the bachelors degree. A Master of Arts (M.A.) degree is earned by most students during the first year of their Ed.S. program. However, the M.A. is not considered a terminal degree and is not sufficient for state certification in school psychology.

**Program of Study**

- **82 hours**

**Core Requirements**

**Concentration Requirements**

- SPS 6700 Psychoed Interventions I (4 hrs)
- SPS 6701 Psychoed Interventions II (4 hrs)
- SPS 6702 Psychoed Interventions III (4 hrs)
- SPS 6940 Psychoed Interv Pract I (2 hrs)
- SPS 6941 Psychoed Interv Pract II (2 hrs)
- SPS 6196 Personality Assessment (4 hrs)
- EDF 6213 Biological Bases (3 hrs)
- EDF 6938 Social Psych Apld to Ed (3 hrs)
- SPS 6101 Behavior Disorders in Child (3 hrs)
EDF 6883 Multicultural Education (4 hrs)
TSL 6700 ESOL for School Psychologists and Guidance Counselors (3 hrs)
SPS 6947 Internship (12 hrs)
SPS 6971 Thesis (2 hrs minimum)

Note: Students may be required to take additional hours depending on the course of study and or academic deficiencies.

Comprehensive Examination
Successful completion of the thesis requirement serves as the comprehensive examination for the Ed.S. degree in School Psychology. School psychology students completing their program at the Ed.S. level must demonstrate competency in the skill areas of research and evaluation through the completion of a thesis or a project. The procedures for completion of the thesis parallel those for the completion of the project and include the following:

1. selection of members of the thesis or project committee, including a Chair;
2. completion of a written proposal and oral defense of the proposal to the committee for approval;
3. approval from the IRB to initiate study;
4. completion of the research study and formal written final document;
5. final oral defense of the thesis or project, and final approval by the Chair and committee members.

Tests or Examinations
All students must complete the General Knowledge Exam prior to internship. It is recommended that students take both the General Knowledge Examination and the Professional Education Examination (required for degree completion) at the same time. All students are required to take and pass the National Association of School Psychology Certification Exam during the internship year, prior to graduation.

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm) or [www.coedu.usf.edu/schoolpsych](http://www.coedu.usf.edu/schoolpsych)
SCHOOL PSYCHOLOGY PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: January 1
  - Fall Admission Only

Minimum Total Hours: 84

Program Level: Doctoral

Program Status: Active

CIP Code: 42.1701

Dept Code: EDF

Program (Major/College): DSG ED

CONTACT INFORMATION

College: Education
Department: Psychological and Social Foundations

Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Program Description

The Ph.D. program in School Psychology at the University of South Florida is offered through the College of Education’s Department of Psychological and Social Foundations. The program has been designed specifically for training in school psychology and has been developed to meet all relevant national accreditation standards. The Ph.D. program is fully accredited by the American Psychological Association and fully approved by the National Association of School Psychologists and the Florida Department of Education. Students who complete the School Psychology Training Program at USF automatically meet the academic and field training requirements for certification as a Nationally Certified School Psychologist (N.C.S.P.)

The Ph.D. program in School Psychology is committed to training professionals who have expertise in the depth and diversity of both psychology and education. This training is accomplished within a scientist-practitioner model that emphasizes comprehensive school psychological services using a social and cognitive behavioral learning theory orientation that recognizes the impact of children’s individual differences and the importance of multicultural awareness and skills. Graduates of the Ph.D. program move to positions of employment as university faculty and researchers, as psychologists in school, hospital, and agency settings, and as program leaders in applied settings. The program also offers professional development opportunities for practitioners in the field.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools, NCATE, and the American Psychological Association, and Approved by the National Association of School Psychologists.

Major Research Areas:
- Pediatric School Psychology
- Organizational Development and Consultation
- Academic Assessment and Intervention
- Problem-Solving and Response to Intervention
- School-Based Mental Health Services
- Positive Psychology
- Behavior Disorders
- Home-School Collaboration
- Gender-Related Issues in Education and Adolescent Development
- ADHD
ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below. Admission occurs once each year for the Fall class. The School Psychology program is a limited access program. This means that only a limited number of students are able to be accepted each year.

Program Admission Requirements
For all admission, all programs require earned degrees from regionally accredited institutions. International students are also required to:
1. Provide a course-by-course evaluation of foreign transcripts from an approved external agency
2. Submit passing TOEFL scores

Prerequisite Coursework for Admission
- Bachelor’s degree or higher
- An undergraduate (or graduate) course in Statistics
- An undergraduate (or graduate) course in Tests and Measurements (including issues such as reliability, validity, standard error of measurement, etc.)
- An undergraduate (or graduate) course in Research Methods or Experimental Design with a lab component.

Required Admissions Materials
- All admissions materials should be submitted directly to our program. A complete application includes the following:
  - A completed Application to Graduate Studies. All applications must be submitted online and can be located on our program website: http://www.coedu.usf.edu/schoolpsych/
  - The application fee ($30) - payable by credit card.
  - Submit official GRE scores (Note: Verbal, Quantitative, and Analytical Writing scores are required; scores should not be more than 5 years old).
  - Provide official transcripts from all colleges and universities where you have completed coursework. Applicants must have an undergraduate GPA of 3.5 or higher in upper division level undergraduate coursework.
  - Provide a statement of professional goals. In a 2-3 page statement, explain your immediate, intermediate, and long term goals as well as your research interests. Professional goals and research interests must be compatible with the School Psychology Program.
  - Submit three letters of recommendation from professionals who are familiar with your scholarship and work history.
  - Demonstrate the ability to write professionally by submitting a scholarly paper completed as part of your prior course work.
  - If invited for an interview, a) present self professionally in an oral interview with two or more faculty members and graduate students, and b) provide a writing sample related to a relevant topic to the field of school psychology during the interview process.

For international applicants: Applicants whose native language is not English or who have not earned a degree in the United States must also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 550 on the paper-based test, are required. Applications submitted with TOEFL scores that do not meet the minimum requirements will be denied. The TOEFL requirement may be waived if the applicant meets one of the following conditions:

- The applicant’s native language is English, or
- Has scored 500 or higher on the GRE Verbal Test, or
- Has earned a college degree at a U.S. institution of higher learning, or
- Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or
- Has scored 6.5 on International English Language Testing System (IELTS) http://www.ielts.org/
DEGREE PROGRAM REQUIREMENTS

The Doctor of Philosophy (Ph.D.) degree consists of approximately 84 semester hours beyond the Masters degree in School Psychology and includes advanced leadership coursework and practica experiences, concentration and area of emphasis courses in school psychology, a 2,000 clock hour internship, and the dissertation. A Master of Arts (M.A.) degree is earned by most students during the first year of their Ph.D. program. However, the M.A. is not considered a terminal degree and is not sufficient for state certification in school psychology.

Core Requirements
Research Competencies
- EDF 7410 Research Design (4 hrs)
- EDF 6407 Statistics I (4 hrs)
- EDF 7408 Statistics II (4 hrs)
- EDF 7484 Statistics III (4 hrs)*
- SPS 7980 Dissertation (9 hrs)
*or similar course as recommended by doctoral committee and approved by the College and/or Graduate School.

Psychological Foundations
- SPS 6101 Behavior Disorders (3 hrs)
- EDF 6938 Social Psychology (3 hrs)
- EDF 6883 Issues in Multi Eductn (4 hrs)
- EDF 6213 Biological Bases of Beh (3 hrs)

Consultation/Intervention/Problem-Solving
- SPS 6700 Intervention I (4hrs)
- SPS 6701 Intervention II (4 hrs)
- SPS 6702 Intervention III (4 hrs)
- SPS 7205 Advanced Consult (3 hrs)
- SPS 7700 Adv Behav Intervention (3 hrs)

Professional Practice
- SPS 7936 Advanced Seminar (2 hrs)
- SPS 6940 Intervention Practicum (2hrs)
- SPS 6941 Intervention Practicum (2 hrs)
- EDG 7931 Advanced Practicum (2 hrs)
- SPS 7090 Supervision (4 hrs)
- SPS 6947 Internship (16 hrs)

Note: Students may be required to take additional hours depending on the course of study and or academic deficiencies.

Area of Emphasis
All doctoral students in School Psychology must specialize in at least one Area of Emphasis. An area of emphasis is defined by course work, practice, research, and internship experiences taken by the student. Possible Areas of Emphasis include: Pediatric School Psychology, Organizational Development and Consultation, Academic Assessment and Intervention, Problem-Solving and Response to Intervention, School-Based Mental Health Services, Positive Psychology, Behavior Disorders, Home-School Collaboration, Gender-Related Issues in Education and Adolescent Development, and ADHD.

Qualifying Examination
The purpose of the qualifying examination is to evaluate the student’s ability to apply and synthesize the skills and knowledge acquired during graduate study. Students must successfully complete the qualifying examination and complete all required coursework before admission to doctoral candidacy.
Tests or Examinations
All students must complete the General Knowledge Exam prior to internship. It is recommended that students take both the General Knowledge Examination and the Professional Education Examination (required for degree completion) at the same time. Both of these requirements should be completed as a part of the Ed.S. degree. All students are required to take and pass the National Association of School Psychology Certification Exam during the internship year, prior to graduation.

Residency Requirement
University academic residency is defined as registration for at least 9 semester hours, two semesters in a 12 month period.

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
SCIENCE EDUCATION PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.1316
Dept Code: EDI
Program (Major/College): SCE EJ

Concentrations:
- Biology (ASB)
- Chemistry (ASC)
- Physics (ASY)

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Currently, no students are being admitted to this program. Please refer to the M.Ed. program.

Program Description
Plan I – The Plan I track is a program of graduate study designed for those with initial certification in the area of concentration (typically with a baccalaureate degree from a college of education) who desire to increase their competence in the subject specialization. It is an individually planned program of study in consultation with a departmental advisor.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools, the National Council for Accreditation of Teacher Education, and the Department of Education.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions), including an earned degree from regionally accredited institutions or an international equivalent as well as requirements listed below.

Program Admission Requirements

- A bachelor’s degree in a science field (biology, chemistry, physics, geology, etc.) or coursework in a science teaching field acceptable to the program faculty. Students should provide a typed listing of science courses as part of their application. Students who do not meet this requirement can enroll in undergraduate courses prior to application. These courses will not be counted toward the master’s degree and can be taken at any regionally accredited university or community college.

- A “B” (3.0 on a 4.0 scale) average or higher in all work attempted while registered as an upper division student working for a baccalaureate degree, or students seeking admission by completing three graduate courses with a B or higher in each course while a non-degree seeking student should take: * EDF 6432 Foundations of Measurement and * EDF 6211 or 6215 Psychological Foundations and * SCE 5337 or SCE 5364, and
• CLAST, GKT, Praxis I or GRE is required. For the GRE the following scores are required: V:430, Q:570, AW:4.

• Proof of educational or professional experience.

• Proof of initial certification or relevant degree (Plan I).

**International Students**
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

• An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
• A social security number in degree programs requiring practica or internships;
• Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

**DEGREE PROGRAM REQUIREMENTS**

**Plan I**
Program of Study 33 hours minimum

**Core Requirements**
12 hours minimum
EDF 6432 Foundations of Measurement (3)
EDF 6211 Psychological Foundations of Education (3) or EDF 6215 Learning Principles Applied to Instruction (3)

Select one from the following:
EDF 6517 Historical Foundations of American Education (4)
EDF 6544 Philosophical Foundations of American Education (3)
EDF 6606 Socio-Economic Foundations of American Education (4)
EDF 6481 Foundations of Educational Research (3)
OR an equivalent research methods course.

**Current Trends in Teaching Concentration**
3 hours minimum
SCE 6634 Current Trends in Science Education (3)

**Concentration Requirements**
18 hours minimum
Courses to be taken in the College of Arts and Sciences based on the prior background and interests of the student.

**Comprehensive Examination**
The comprehensive exam will consist of a written and/or oral examination in the major area.

**COURSES**
SCIENCE EDUCATION PROGRAM

Master of Arts in Teaching (M.A.T.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 39
Program Level: Masters
CIP Code: 13.1316
Dept Code: EDI
Program (Major/College): TSC ED

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The Masters of Arts in Teaching (M.A.T.) in Science Education is designed for individuals with a bachelor’s degree in science (or equivalent) who wish to become certified teachers in science education at the middle or senior high school level. This program leads to teaching certification in grades 6-12 science education as part of the master’s degree program. For the general program structure, admission and program requirements, please see contact the program coordinator.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) including an earned degree in science discipline taught in school from regionally accredited institutions or an international equivalent as well as requirements listed below.

Program Admission Requirements

Requirements for all applicants include:
- Minimum GPA of 3.0 in upper division coursework in the Baccalaureate degree
- CLAST or GKT
- Graduate coursework may be allowed in lieu of GPA

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).
### DEGREE PROGRAM REQUIREMENTS

The courses required for the M.A.T. in Science Education are listed below. Please check with the program for other program requirements.

#### Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 4330:</td>
<td>Measurement for Teachers</td>
<td>3</td>
</tr>
<tr>
<td>ESE 5342:</td>
<td>Teaching the Adolescent Learner</td>
<td>3</td>
</tr>
<tr>
<td>ESE 5344:</td>
<td>Classroom Management for a Diverse School and Society</td>
<td>3</td>
</tr>
<tr>
<td>TSL 5325:</td>
<td>ESOL Education in Content Areas</td>
<td>3</td>
</tr>
<tr>
<td>SCE 5564:</td>
<td>Reading and Communication Science Education</td>
<td>3</td>
</tr>
<tr>
<td>SCE 5334:</td>
<td>Methods for Middle Grades Science Education</td>
<td>3</td>
</tr>
<tr>
<td>SCE 4330:</td>
<td>Methods for Secondary Science Education</td>
<td>3</td>
</tr>
<tr>
<td>SCE 4330:</td>
<td>Teaching the Life Sciences</td>
<td>3</td>
</tr>
<tr>
<td>SCE 6436:</td>
<td>Teaching the Physical Sciences</td>
<td>3</td>
</tr>
<tr>
<td>SCE 6634:</td>
<td>Current Trends in Science Education</td>
<td>3</td>
</tr>
<tr>
<td>SCE 6938:</td>
<td>Topics in Science Education: Field Practicum</td>
<td>3</td>
</tr>
<tr>
<td>SCE 6947:</td>
<td>Internship: Science Education</td>
<td>6 (PR: CI and passing scores of FTCE exam)</td>
</tr>
</tbody>
</table>

**TOTAL** 39 semester hours

#### Comprehensive Examination:

A written narrative exam tailored to the individual student. Exam needs to be completed by two weeks before final exam week of the student’s graduating semester. Exams will only be accepted during fall or spring semester, unless previous contract is established with the student’s advisor.

### COURSES

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm).
SCIENCE EDUCATION CONCENTRATION

Education Specialist (Ed. S.) Degree in the Curriculum and Instruction Program
With a concentration in Science Education

DEGREE INFORMATION

Program Admission Deadlines:
Closed for new admissions.

Minimum Total Hours: 36
Program Level: Specialist
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: SSC

CONTACT INFORMATION

College: Education
Department: Secondary Education

Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, no students are being admitted to this program.
SECOND LANGUAGE ACQUISITION AND
INSTRUCTIONAL TECHNOLOGY PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Domestic applicants:
Fall: February 15
Fall Admission Only

International applicants not in the U.S.:
Fall: February 1
Fall Admission Only

International applicants currently in the U.S.:
Fall: February 15
Fall Admission Only

Minimum Total Hours: 74
Program Level: Doctoral
CIP Code: 13.401
Dept Code: EDI
Program (Major/College): DLT EJ

Cross-listed under the College of Arts and Sciences, the
College of Education, and the Interdisciplinary Programs
Sections.

CONTACT INFORMATION

Colleges: Education and
Arts and Sciences
Department: Secondary Education
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

This is an interdisciplinary program between the College of Education and the College of Arts and Sciences. It combines the expertise of both faculties to provide a curriculum in pedagogy, second language acquisition, sociocultural theory, instructional technology, statistics, and research design. The goal of the program is to prepare students for careers in academia.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
Second Language Acquisition, Instructional Technology, Foreign Language Education, ESOL, Distance Learning.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Admission Requirements

In addition to the general admission requirements under the advanced graduate education programs, applicants must:

- Submit a “Statement of Purpose” relating their career goals specifically to this doctoral program and describing their experience with instructional technology and language teaching;
- Supply a current curriculum vitae;

http://www.coedu.usf.edu/
• Provide 3 letters of recommendation from professors or other individuals who can attest to the applicant’s experience and background;
• Offer evidence of research experience and/or scholarly promise in the statement of purpose and cover letter;
• Meet with the graduate faculty for a personal interview;
• In addition to proficiency in their native language (L1), students must demonstrate proficiency in two other world languages (L2, L3). Proficiency in speaking the L2 must be at the “Advanced” level or higher, as measured on the Oral Proficiency Guidelines (OPI) of the American Council on the Teaching of Foreign Languages (ACTFL). Speaking proficiency in L3 must be at the “Novice” level or higher, again as measured by ACTFL. For specific information, consult www.actfl.org. The program advisors will determine whether the students have met this requirement based on these as well as other criteria identified by the SLA/IT faculty. Criteria and documentation for L2 and L3 should be submitted before the student is accepted into the SLA/IT program.

Most students admitted to this program will:

• Possess a Master’s degree (or equivalent academic level) from a regionally accredited institution or its international equivalent;
• present a minimum GPA of 3.5 at the Master’s level (or international equivalent)
• score at or above 500 on the GRE verbal reasoning and 4 on the GRE analytical writing section;
• Submit a TOEFL score of minimum 550 (paper-based), 213 (computer-based), or 80 (internet-based), if applicable.
• I evaluate each applicant’s dossier based on a composite of variables and appropriateness of fit with the program

For international applicants: Applicants whose native language is not English or who have not earned a degree in the United States must also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 550 on the paper-based test, are required. Applications submitted with TOEFL scores that do not meet the minimum requirements will be denied. The TOEFL requirement may be waived if the applicant meets one of the following conditions:

• The applicant’s native language is English, or
• Has scored 500 or higher on the GRE Verbal Test, or
• Has earned a college degree at a U.S. institution of higher learning, or
• Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or
• Has scored 6.5 on International English Language Testing System (IELTS) http://www.ielts.org/

In addition to these university requirements, applicants to the College of Education must provide the following:
- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

Prerequisites:
The prerequisite courses are based on the needs of the individual student; they are not counted towards the 44 hours of required core course work. No minimum or maximum number of prerequisites must be taken. Their selection quantity is reviewed by the student in consultation with his/her SLA/IT supervisory committee chair prior to the student’s first semester of study, and is begun during the first year. Please refer to the Program of Study at http://www.coedu.usf.edu/slait/programStudy.htm
Prerequisite Coursework
LIN 5700 Applied Linguistics (3)
FLE 6665 Current Trends in Foreign Language Education (3)
LIN 6720 Second Language Acquisition (3)
LIN 6081 Introduction to Graduate Studies (3)
TSL 5371 Methods of TESOL (3)
TSL 5372 ESOL Curriculum and Instruction (3)
EME 5403 Computers in Education (3)
TSL 5440 Language Testing (3)
FLE 4314/5313 or FLE 4333/5331 Methods of Teaching Foreign Languages (3)

Program of Study
44 hours of core requirements (with suggested credit hours for different sub-categories);
12 credit hours of electives;
18 hours of dissertation work.
See each section (immediately below) for specific information and course suggestions.

Core Requirements
44 hours

Statistics/Measurement/Research Design
14 hours minimum
EDF 6407 Statistical Analysis of Education I (4)
EDF 7408 Statistical Analysis of Education II (4)
and either
EDF 7477 Qualitative Research I (4) and
EDF 7478 Qualitative Research II (4)
or
EDF 7410 Design for Systematic Studies in Education (4) and
EEX 7743 Philosophies of Inquiry (3) or
EDG 7931 Introduction to Qualitative Research (3)

Second Language Acquisition:
18 hours
SLA 7776 Research Lab 1 (2)
SLA 7776 Research Lab 2 (2)
SLA 7776 Research Lab 3 (2-4)
SLA 7776 Research Lab 4 (1-4)
SLA 7776 Research Lab 5 (1-4)
SLA 7776 Research Lab 6 (1-4)
SLA 7938 Advanced Seminar in SLA (3)
SLA 7939 Advanced Seminar in FLE (3)
EDG 7937 Sociocultural Theory in SLA (3)

Instructional Technology:
12 hours
EME 6936 ACET Interactive Media (3)
FLE 6932 Applications of Technology to SLA/FLE (3)
EDF 6284 Problems in Instructional Design (3) (prereq. for EME 6613)
EME 7938 Computer-Augmented Instructional Paradigms (3) (Survey of research in instructional technology)

Electives:
12 hours
Courses (not inclusive of these) are selected with the approval of the student’s program advisor or committee. Elective coursework must be taken at the graduate and/or advanced graduate level. Select a total of 12 hours of electives from the following three groups (A, B, and C).
Group A: Second Language Acquisition (6-9 hours are required from Group A)
LIN 6018 Topics in Theoretical Linguistics (3)
LIN 6117 History of Linguistic Thought (3)
LIN 6601 Sociolinguistics (3)
LIN 6748 Contrastive Analysis (3)
LIN 6722 Writing Processes in SLA (3)
EDG 6931 Heritage Language Teaching & Learning (3)
LIN 6932 Discourse Analysis (3)
FLE 6932 Dual Language in Education (3)

Group B: Technology
EME 6613 Development of Technology-Based Instruction (3)
EME 6930 PLE: FLASH (3)
EME 6930 PLE: Web Programming I (3)
EME 6936 ACET: Digital Video (3)
EME 6936 ACET: Instructional Graphics (3)
EME 6936 ACET: Current Trends in Ed Technology (3)
EME 6936 ACET: Web Design (3)
EME 7939 Research Methods in Technology-Based Education (3) (EDF 7410 as prerequisite)
EME 7458 Research in Distance Learning (3)
EME 7631 Research in Technology Proj Management (3)
EME 6936 Internet in Education (3)

Group C: Education, Anthropology, Psychology
EXP 6643 Psychology of Language (3)
EDF 7145 Educational Psychology (3)
EDF 6883 Issues in Multicultural Education (4)
EDF 7586 Classics in Educational Research (4)
EDF 7934 Seminar in Social Foundations of Educ (4)
EDG 7692 Issues in Curriculum and Instruction (3)
EDG 7931 Practicum in Teacher Education (3)
EDG 7931 Curriculum Frameworks in Teacher Education (3)
ANG 6766 Seminar in Anthropological Linguistics (3)

Dissertation 18 hours
SLA 7980 – SLAIT Dissertation (18)

Qualifying Examination
All students will be required to pass a written qualifying examination (QE). The QE integrates work in the specialization, cognate, and foundations areas, in this case, in Second Language Acquisition, Instructional Technology, and Teacher Education.

Residency requirements
Students must enroll in a minimum of 9 hours for each of two semesters in a 12 month period to fulfill the residency requirements. Students in the Ph.D. program should be engaged in no more than half-time employment during the residency period.

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida Department of Education program approval standards and accreditation criteria.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
SECONDARY EDUCATION CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a Concentration in Secondary Education

DEGREE INFORMATION

Program Admission Deadlines:

- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33

Program Level: Masters

CIP Code: 13.0301

Dept Code: CNI

Program (Major/College): CUR ED

CONCENTRATION CODE:

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Program Description
This concentration is intended for experienced/certified educators (broadly defined to include not only teachers but all those working in educational agencies, educational publishing, supervision and administration, technology agencies, and so forth) as well as individuals, who hold an undergraduate degree in some field relevant to the area of specialization, interested in advanced study of education but who are not seeking teacher certification. The aim is to provide advanced preparation for professional educators who are willing to apply what they learn to the creation, implementation, and evaluation of effective instructional programs.

ADMISSIONS INFORMATION

Contact program for information.

DEGREE PROGRAM REQUIREMENTS

Core Requirements

Process Core Courses

- EDF 6211 Psychological Foundations of Education (3)
- or EDF6215 Principles of Learning (4)

EDF6481 Foundations of Educational Research (3)
- or EDF6432 Foundations of Measurement, (3)

EDG6627 Foundations of Curriculum and Instruction (3)

Concentration Requirements

18 hours minimum

Current Trends (EME, LAE, MAE, SSE, SCE, FLE) and courses in the content of the instructional area. Courses on methods of teaching that content. The student’s program of study is individualized and planned with approval of an advisor.
Electives: 6 hours minimum
These courses are intended to complement the specialization. Choices should be made with the approval of an advisor.

Comprehensive exam

COURSES
SECONDARY EDUCATION: BIOLOGY CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Secondary Education, Biology

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15
Spring: October 15
Summer: February 15

Minimum Total Hours: 33
Program Level: Masters

CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CBI

PROGRAM INFORMATION

Formerly offered under the title M.Ed. in Curriculum and Instruction with a Concentration in Science Education, Biology

Program Description
This concentration is intended for experienced/certified educators (broadly defined to include not only teachers but all those working in educational agencies, educational publishing, supervision and administration, technology agencies, and so forth) as well as individuals, who hold an undergraduate degree in some field relevant to the area of specialization, interested in advanced study of education but who are not seeking teacher certification. The aim is to provide advanced preparation for professional educators who are willing to apply what they learn to the creation, implementation, and evaluation of effective instructional programs.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions), including an earned degree from regionally accredited institutions or an international equivalent as well as requirements listed below.

Program Admission Requirements

Requirements for all applicants include:
- Minimum GPA of 3.0 in work done as an upper division student in the Baccalaureate degree
- Proof of at least two years of educational or professional experience as judged by the program faculty
- Evidence of successful professional experiences supporting the fit between professional background and program goals
- A degree in science education or education
- Professional Certificate
- CLAST, GKT, Praxis or GRE.

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

http://www.coedu.usf.edu/
International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

• An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
• A social security number in degree programs requiring practica or internships;
• Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

Program of Study

The M.Ed. degree requires a minimum of 33 semester hours with 60 percent or more of the courses at the 6000 level.

Core Requirements

9 hours minimum

EDF 6432 Foundations of Measurement (3)
OR EDF 6481 Foundations of Educational Research (3)

EDF 6211 Psychological Foundations of Education (3)
or EDF 6215 Learning Principles Applied to Instruction (4)

EDG 6627 Curriculum and Instruction (3)

Secondary Education: Biology Concentration Requirements

18 hours

18 hours in the area of emphasis, to include courses in content and/or the teaching of this content

Electives

6 hours- 5000 or 6000 level coursework subject to area advisor approval. These courses are intended to complement the specialization.

Comprehensive Examination

A comprehensive examination must be taken in the College of Education at the completion of the program. Check with the program coordinator for specific requirements.

COURSES

SECONDARY EDUCATION, CHEMISTRY CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Secondary Education, Chemistry

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CCH

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Formerly offered under the title M.Ed. in Curriculum and Instruction with a Concentration in Science Education, Chemistry

Program Description
This concentration is intended for experienced/certified educators (broadly defined to include not only teachers but all those working in educational agencies, educational publishing, supervision and administration, technology agencies, and so forth) as well as individuals, who hold an undergraduate degree in some field relevant to the area of specialization, interested in advanced study of education but who are not seeking teacher certification. The aim is to provide advanced preparation for professional educators who are willing to apply what they learn to the creation, implementation, and evaluation of effective instructional programs.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

Requirements for all applicants include:
- Minimum GPA of 3.0 in work done as an upper division student in the Baccalaureate degree
- Proof of at least two years of educational or professional experience as judged by the program faculty
- Evidence of successful professional experiences supporting the fit between professional background and program goals
- Degree in science education or education
- Professional certificate
- CLAST, GKT, Praxis, or GRE.
International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.)

DEGREE PROGRAM REQUIREMENTS

Program of Study 33 hours minimum
The M.Ed. degree requires a minimum of 33 semester hours with 60 percent or more of the courses at the 6000 level.

Core Requirements 9 hours minimum
EDF 6432 Foundations of Measurement (3)
OR EDF 6481 Foundations of Educational Research (3)
EDF 6211 Psychological Foundations of Education (3)
or EDF 6215 Learning Principles Applied to Instruction (4)
EDG 6627 Curriculum and Instruction (3)

Secondary Education: Chemistry Concentration Requirements 18 hours
18 hours in the area of emphasis, to include courses in content and/or the teaching of this content

Electives:
hours- 5000 or 6000 level coursework subject to area advisor approval. These courses are intended to complement the specialization.

Comprehensive Examination
A comprehensive examination must be taken in the College of Education at the completion of the program. Check with the program coordinator for specific requirements.

COURSES
SECONDARY EDUCATION: ENGLISH CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Secondary Education: English

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### DEGREE INFORMATION

- **Program Admission Deadlines:**
  - Fall: February 15
  - Spring: October 15
  - Summer: February 15

- **Minimum Total Hours:** 33
- **Program Level:** Masters
- **CIP Code:** 13.0301
- **Dept Code:** CNI
- **Program (Major/College):** CUR ED
- **Concentration Code:** CEN

### CONTACT INFORMATION

- **College:** Education
- **Department:** Secondary Education
- **Contact Information:** [www.grad.usf.edu](http://www.grad.usf.edu)
- **Other Resources:** [www.usf4you](http://www.usf4you)

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### PROGRAM INFORMATION

Formerly offered under the title M.Ed. in Curriculum and Instruction with a Concentration in English Education

#### Program Description

This concentration is intended for experienced/certified educators (broadly defined to include not only teachers but all those working in educational agencies, educational publishing, supervision and administration, technology agencies, and so forth) as well as individuals, who hold an undergraduate degree in some field relevant to the area of specialization, interested in advanced study of education but who are not seeking teacher certification. The aim is to provide advanced preparation for professional educators who are willing to apply what they learn to the creation, implementation, and evaluation of effective instructional programs.

#### Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

### ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

#### Program Admission Requirements

For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. Requirements for all applicants include:

- Minimum GPA of 3.0 in upper division coursework in the Baccalaureate degree
- Proof of educational or professional experience
- Evidence of successful professional experiences supporting the fit between professional background and program goals.

For international applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550paper-based, 213 computer-based, or 80 internet-based test). See the Graduate Admissions website for further clarification and exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit [http://www.grad.usf.edu/graduate-admissions-checklist.asp](http://www.grad.usf.edu/graduate-admissions-checklist.asp).
DEGREE PROGRAM REQUIREMENTS

Program of Study 33 hours min

Core Requirements 9 hours minimum
- EDF 6432 Foundations of Measurement (3)
  OR EDF 6481 Foundations of Educational Research (3)
- EDF 6211 Psychological Foundations of Education (3)
  or EDF 6215 Learning Principles Applied to Instruction (4)
- EDG 6627 Curriculum and Instruction (3)

Secondary Education: English Concentration Requirements 18 hours
18 hours in the area of emphasis, to include courses in content and/or the teaching of this content.

Electives
6 hours- 5000 or 6000 level coursework subject to area advisor approval. These courses are intended to complement the specialization.

Comprehensive Examination
A comprehensive examination must be taken in the College of Education at the completion of the program. Check with the program coordinator for specific requirements.

COURSES
See http://www.coedu.usf.edu/main/departments/seced/English/Engma_courswk.htm
SECONDARY EDUCATION: FOREIGN LANGUAGE CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Secondary Education: Foreign Language

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CFE
Offered with emphases in French, German, or Spanish

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Formerly offered under the title M.Ed. in Curriculum and Instruction with a Concentration in Foreign Language Education

Program Description
This concentration is intended for experienced/certified educators (broadly defined to include not only teachers but all those working in educational agencies, educational publishing, supervision and administration, technology agencies, and so forth) as well as individuals, who hold an undergraduate degree in some field relevant to the area of specialization, interested in advanced study of education but who are not seeking teacher certification. The aim is to provide advanced preparation for professional educators who are willing to apply what they learn to the creation, implementation, and evaluation of effective instructional programs.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. Requirements for all applicants include:

- Minimum GPA of 3.0 in upper division coursework in the Baccalaureate degree
- Proof of educational or professional experience
- Evidence of successful professional experiences supporting the fit between professional background and program goals.

For international applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See the Graduate Admissions website for further clarification and possible exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://www.grad.usf.edu/graduate-admissions-checklist.asp.
DEGREE PROGRAM REQUIREMENTS

Total minimum hours: 33
The M.Ed. degree requires a minimum of 33 semester hours with 60 percent or more of the courses at the 6000 level.

Core Requirements 9 hours minimum
- EDF 6432 Foundations of Measurement (3)
- OR EDF 6481 Foundations of Educational Research (3)
- EDF 6211 Psychological Foundations of Education (3)
or EDF 6215 Learning Principles Applied to Instruction (4)
- EDG 6627 Curriculum and Instruction (3)

Foreign Language Education Concentration Requirements 18 hours
18 hours in the area of emphasis, to include courses in content and/or the teaching of this content, one of which must be
FLE 6665: Current Trends in Foreign Language Education

Electives
6 hours- 5000 or 6000 level coursework subject to area advisor approval. These courses are intended to complement the
specialization.

Comprehensive Examination
A comprehensive examination must be taken in the College of Education at the completion of the program. Check with
the program coordinator for specific requirements.

COURSES
See http://coedu.usf.edu/main/departments/seced/ForLang/fle_ma.html
SECONDARY EDUCATION: INSTRUCTIONAL TECHNOLOGY CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Secondary Education: Instructional Technology

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CCO

Please refer to the Secondary Education Concentration for information on this concentration.

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Formerly offered under the title M.Ed. in Curriculum and Instruction with a Concentration in Instructional Technology

Program Description
The M.Ed. in Instructional Technology is intended for students interested in working as instructional designers/developers in industry or academic environments.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools and the National Association for the Accreditation of Teacher Education.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) including an earned degree from regionally accredited institutions or an international equivalent as well as requirements listed below.

Admission Program Requirements

In addition the applicant must:

- Have an undergraduate grade point average of “B” (3.0 on a 4.0 scale) average or higher as an upper division in the Baccalaureate degree, or the international equivalent.
  OR
- Have successfully completed a graduate certificate in instructional technology with a grade point average of 3.5 or better and an undergraduate grade point average of at least 2.75 on a 4.0 scale as an upper division undergraduate student, or the international equivalent.
  OR
- Have completed a prior graduate degree from a regionally accredited institution, or international equivalent with a grade point average of 3.5 or higher.
OR
  • Submit official GRE scores with the following minimums: scores V:430, Q:570, and AW:4.

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:
  • An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
  • A social security number in degree programs requiring practica or internships;
  • Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

The M.Ed. in Instructional Technology is 37-38 semester hours in length and consists of 12 courses; 7 courses in the major area of Instructional Technology and 5 courses in Educational Foundations.

Total minimum hours: 33
The M.Ed. degree requires a minimum of 33 semester hours with 60 percent or more of the courses at the 6000 level.

Core Requirements 9 hours minimum
EDF 6432 Foundations of Measurement (3)
OR EDF 6481 Foundations of Educational Research (3)

EDF 6211 Psychological Foundations of Education (3)
or EDF 6215 Learning Principles Applied to Instruction (4)

EDG 6627 Curriculum and Instruction (3)

Secondary Education: Instructional Technology Concentration Requirements 18 hours
18 hours in the area of emphasis, to include courses in content and/or the teaching of this content

Electives
6 hours- 5000 or 6000 level coursework subject to area advisor approval. These courses are intended to complement the specialization.

Comprehensive Examination
A comprehensive examination must be taken in the College of Education at the completion of the program. Check with the program coordinator for specific requirements.

COURSES
See http://www.coedu.usf.edu/it/curriculum/med/
SECONDARY EDUCATION: MATHEMATICS CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program With a concentration in Secondary Education: Mathematics

DEGREE INFORMATION
Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CMA

CONTACT INFORMATION
College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION
Formerly offered under the title M.Ed. in Curriculum and Instruction with a Concentration in Mathematics Education

Program Description
The M.Ed. degree in Curriculum and Instruction is a flexible program intended to improve the skills of the classroom teacher. The program will be planned with the student’s advisor. At least 60 percent of the program hours must be at the 6000 level.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION
Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. Admission Requirements include:
- A bachelor’s degree or equivalent from a regionally accredited university or its international equivalent
- Certification in Mathematics (Include a copy of your Florida State Teaching Certificate)
- Verification of at least two years of successful pre-college teaching
- Meet one of the following criteria:
- Shall have earned a “B” (3.0 on a 4.0 scale) average or higher in all upper division level undergraduate coursework OR Shall have GRE scores of 450 verbal and 550 quantitative or higher, taken within five years.

For international applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See http://web.usf.edu/iac/admissions/language.html for further clarification and exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://web.usf.edu/iac/admissions
DEGREE PROGRAM REQUIREMENTS

Total minimum hours
The M.Ed. degree requires a minimum of 33 semester hours with 60 percent or more of the courses at the 6000 level.

Core Requirements
- EDF 6432 Foundations of Measurement (3)
- OR EDF 6481 Foundations of Educational Research (3)
- EDF 6211 Psychological Foundations of Education (3)
- or EDF 6215 Learning Principles Applied to Instruction (4)
- EDG 6627 Curriculum and Instruction (3)

Secondary Education: Mathematics Concentration Requirements
18 hours in the area of emphasis, to include courses in content and/or the teaching of this content

Electives
6 hours- 5000 or 6000 level coursework subject to area advisor approval. These courses are intended to complement the specialization.

Comprehensive Examination
A comprehensive examination must be taken in the College of Education at the completion of the program. Check with the program coordinator for specific requirements.

COURSES
See http://www.coedu.usf.edu/main/departments/secem/math/mathma_course.htm
SECONDARY EDUCATION: PHYSICS CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Secondary Education: Physics

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CPY

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Formerly offered under the title M.Ed. in Curriculum and Instruction with a Concentration in Physics Education

Program Description
The M.Ed. degree in Curriculum and Instruction is a flexible program intended to improve the skills of the classroom teacher. The program will be planned with the student’s advisory committee. At least 60 percent of the program hours must be at the 6000 level.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

Requirements for all applicants include:
- Minimum GPA of 3.0 in work done as an upper division student in the Baccalaureate degree
- Proof of at least two years of educational or professional experience as judged by the program faculty
- Degree in science education or education
- Professional certificate
- CLAST, GKT, Praxis, or GRE

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).
DEGREE PROGRAM REQUIREMENTS

Total minimum hours 33
The M.Ed. degree requires a minimum of 33 semester hours with 60 percent or more of the courses at the 6000 level.

Core Requirements 9 hours minimum
EDF 6432 Foundations of Measurement (3)
OR EDF 6481 Foundations of Educational Research (3)

EDF 6211 Psychological Foundations of Education (3)
or EDF 6215 Learning Principles Applied to Instruction (4)

EDG 6627 Curriculum and Instruction (3)

Secondary Education: Physics Concentration Requirements 18 hours
18 hours in the area of emphasis, to include courses in content and/or the teaching of this content

Electives
6 hours- 5000 or 6000 level coursework subject to area advisor approval. These courses are intended to complement the specialization.

Comprehensive Examination
A comprehensive examination must be taken in the College of Education at the completion of the program. Check with the program coordinator for specific requirements.

COURSES
SECONDARY EDUCATION: SOCIAL SCIENCE CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Secondary Education: Social Science

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CSO

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: [www.grad.usf.edu](http://www.grad.usf.edu)
Other Resources: [www.usf4you](http://www.usf4you)

PROGRAM INFORMATION

Formerly offered under the title M.Ed. in Curriculum and Instruction with a Concentration in Social Science Education

Program Description
This program does not include teaching certification. Individuals interested in certification should consult the Master of Arts in Teaching in Social Science Education. This concentration is intended for experienced/certified educators (broadly defined to include not only teachers but all those working in educational agencies, educational publishing, supervision and administration, technology agencies, and so forth) as well as individuals, who hold an undergraduate degree in some field relevant to the area of specialization, interested in advanced study of education but who are not seeking teacher certification. The aim is to provide advanced preparation for professional educators who are willing to apply what they learn to the creation, implementation, and evaluation of effective instructional programs.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools and the National Council for the Social Studies.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

Requirements for all applicants include:
- Minimum GPA of 3.0 upper division undergraduate coursework
- 3.0 in graduate coursework can be used to augment the undergraduate GPA.
- Resume
- 250-word letter of interest stating your objectives in pursuing this course of study
- Two letters of recommendation attesting to the applicants’ potential success as a graduate student and his/her ability to work with adolescents.
For international applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See [http://web.usf.edu/iac/admissions/language.html](http://web.usf.edu/iac/admissions/language.html) for further clarification and possible exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit [http://web.usf.edu/iac/admissions](http://web.usf.edu/iac/admissions).

DEGREE PROGRAM REQUIREMENTS

Program of Study 33 hours min.

The requirements are as follows or as recommended by the program advisor and approved by the College and/or Graduate School.

Core Requirements 12 hours minimum

EDF 6432 Foundations of Measurement (3)
EDF 6481 Foundations of Educational Research (3)
EDF 6211 Psychological Foundations of Education (3)
or EDF 6215 Learning Principles Applied to Instruction (4)
or EDF 6217 Behavior Theory and Classroom Learning (4)
or EDF 6354 Human Development and Personality Theory (4)
EDG 6627 Curriculum and Instruction (3)

Concentration Requirements 21 hours minimum

SSE 5946 Practicum Social Science Education (3)
SSE 6932 Special Topics (3)
SSE 6932 Special Topics (3)
SSE 6636 Current Trends (3)
Electives Taken in COEDU and/or CAS at the 5000 or 6000 level (9)

Comprehensive Exam

The Comprehensive exam is taken while enrolled in SSE 6636 Trends and Issues.

Consult the Program website, [http://www.coedu.usf.edu/main/departments/seced/SSE/SSE_HomePage.html](http://www.coedu.usf.edu/main/departments/seced/SSE/SSE_HomePage.html), or the program’s coordinator for specific requirements.

COURSES

SECONDARY EDUCATION: TESOL CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Secondary Education: TESOL

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CTL

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
This program is designed for professionals who have at least two years of relevant experience in the field, typically, teachers certified in social science education with a baccalaureate degree from a College of Education. Within the M.Ed. framework, the degree is an individually planned program based on a student’s background and professional goals. Contact the program coordinator for more information.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools and the National Council for the Social Studies.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

Requirements for all applicants include:
- Minimum GPA of 3.0 upper division undergraduate coursework
- Proof of 2 years of relevant educational or professional experience as judged by program faculty
- Proof of teaching certification
- Graduate coursework may be allowed in lieu of GPA or GRE requirement

For international applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See the Graduate Admissions website for further clarification and possible exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://www.grad.usf.edu/graduate-admissions-checklist.asp.
DEGREE PROGRAM REQUIREMENTS

The M.Ed. degree requires a minimum of 33 semester hours with 60 percent or more of the courses at the 6000 level.

Core Requirements
EDF 6432 Foundations of Measurement (3)
OR EDF 6481 Foundations of Educational Research (3)

EDF 6211 Psychological Foundations of Education (3)
or EDF 6215 Learning Principles Applied to Instruction (4)

EDG 6627 Curriculum and Instruction (3)

Secondary Education: TESOL Concentration Requirements
18 hours
18 hours in the area of emphasis, to include courses in content and/or the teaching of this content

Electives
6 hours- 5000 or 6000 level coursework subject to area advisor approval. These courses are intended to complement the specialization.

Comprehensive Examination
A comprehensive examination must be taken in the College of Education at the completion of the program. Check with the program coordinator for specific requirements.

COURSES
SECONDARY EDUCATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a Concentration in Secondary Education

DEGREE INFORMATION

Program Admission Deadlines:
This concentration is currently inactive. Please refer to Teaching and Learning in the Content Area: General Education for information on the replacement for this concentration.

Minimum Total Hours: 75 post masters
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DSD

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Program Description
The department of Secondary Education offers this program with a concentration entitled Teaching and Learning in the Content Area: General Education. For information in this catalog, refer to “Teaching and Learning in the Content Area: General Education Concentration”.

This degree program is available in the following major content areas:
- English Education
- Mathematics Education
- Science Education
- Social Science Education

ADMISSIONS INFORMATION

Refer to individual content areas for information.
In addition to University and College requirements, applicants must also satisfy the following:
- Have two years of teaching experience
- Be approved by the department chairperson and program committee

DEGREE PROGRAM REQUIREMENTS

Core Requirements
Curriculum and Instruction (3 hours)
Cognate Area (12 hours)
Statistics/Measurement/Research Design (11 hours minimum)
Foundations (7 hours minimum)
Concentration Requirements (18 hours minimum)
Dissertation (24 hours minimum)

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm

http://www.coedu.usf.edu/
SOCIAL SCIENCE EDUCATION PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Admission to this program has been temporarily Suspended
Fall: February 15
Spring: October 15
Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 13.1317
Dept Code: EDI
Program (Major/College): ASO EJ

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Admission to this program has been temporarily suspended. Please see the M.Ed. in Secondary Education-Social Studies or the MA programs in the College of Arts and Sciences.

PROGRAM INFORMATION

Program Description
Plan I. This program is designed for teachers certified in social science education, typically with a baccalaureate degree from a college of education.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools and by the National Council for the Social Studies.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions), including an earned degree from regionally accredited institutions or an international equivalent as well as requirements listed below.

Program Admission Requirements

Requirements for all applicants include:
• Minimum GPA of 3.0 upper division undergraduate coursework in the baccalaureate degree
• 3.0 in graduate coursework can be used to augment the undergraduate GPA.
• Proof of teaching K-12 full-time experience
• Proof of professional teaching certificate
• Resume
• 250-word letter of interest stating your objectives in pursuing this course of study
• Two letters of recommendation attesting to the applicants' potential success as a graduate student and his/her ability to work with adolescents.
International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:
- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.)

DEGREE PROGRAM REQUIREMENTS

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<thead>
<tr>
<th>Program of Study</th>
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<tbody>
<tr>
<td></td>
<td>The requirements are as follows or as recommended by the program advisor and approved by the college and/or Graduate School.</td>
</tr>
</tbody>
</table>

Core Requirements
Select one of the following:
- EDF 6432 Foundations of Measurement (3)
- EDF 6481 Foundations of Educational Research (3)
- EDF 6211 Psychological Foundations of Education (3)
- EDF 6215 Learning Principles Applied to Instruction (3)
- EDF 6517 Historical Foundations of American Education (4)
- EDF 6544 Philosophical Foundations of American Education (3)
- EDF 6606 Socio-Economic Foundations of American Education (4)

Current Trends in Teaching Concentration
SSE 6636 Current Trends in Social Science Education (3)

Concentration Requirements
SSE 6932 Special Topics (6)

Electives
Taken in 5000 or higher courses in social sciences teaching fields in the College of Arts and Sciences.
Any Prefix of AFA, AMS, ANT, GEA, GEO, HIS, HUM, ISS, PHI, CPO, INR, POS, POT, PUP, SYG, SYO, WST, ECO, OR ECP

Comprehensive examination
The Comprehensive exam is taken while enrolled in SSE 6636 Trends and Issues.

COURSES
SOCIAL SCIENCE EDUCATION PROGRAM

Master of Arts in Teaching (M.A.T.) Degree

DEGREE INFORMATION

<table>
<thead>
<tr>
<th>Program Admission Deadlines:</th>
<th>CONTACT INFORMATION</th>
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</thead>
<tbody>
<tr>
<td>Fall: February 15</td>
<td>College: Education</td>
</tr>
<tr>
<td>Spring: October 15</td>
<td>Department: Secondary Education</td>
</tr>
<tr>
<td>Summer: February 15</td>
<td>Contact Information: <a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
</tr>
</tbody>
</table>

| Minimum Total Hours: 39    | Other Resources: [www.usf4you](http://www.usf4you) |
| Program Level: Masters     | |
| CIP Code: 13.1317          | |
| Dept Code: EDI             | |

TSS ED

PROGRAM INFORMATION

The MAT degree is for individuals with a bachelor’s degree in a field other than education who wish to become certified teachers in social science at the middle or senior high school level. This program leads to teaching certification in grade 6-12 social sciences as part of the master’s degree program.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools, the Florida State Department of Education, and the National Council for the Social Studies.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions), including an earned degree from regionally accredited institutions or an international equivalent as well as requirements listed below.

Program Admission Requirements
The requirements are as follows or as recommended by the program advisor and approved by the college and/or Graduate School.

Prerequisites:

Major: A bachelor’s degree in a social studies field that is taught at the 6-12 grade level.

Specific Courses: In addition, the applicant’s transcript should include the following prerequisite courses:

- Survey of American History 1 & 2;
- Survey of Western Civilization, World History or Humanities 1 & 2; and
- Geography, economics, psychology, and either anthropology or sociology

Students who do not have these 8 courses can submit passing scores on the [Florida 6-12 Social Sciences Subject Area Exam](http://www.coedu.usf.edu/) with their application.
Requirements for all applicants include:

- Minimum GPA of 3.0 in upper division coursework in the Baccalaureate degree
- 3.0 in graduate coursework can be used to augment the undergraduate GPA.
- Resume
- 250-word letter of interest stating your objectives in pursuing this course of study
- Two letters of recommendation attesting to the applicants’ potential success as a graduate student and his/her ability to work with adolescents.
- The Florida FTCE General Knowledge Test (GKT) an original version of the passing scores must be on file in the COEDU Graduate Office.
- Disclosure of arrest and conviction information

International Students

All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

Program of Study

39 hours Minimum

The requirements are as follows or as recommended by the program advisor and approved by the college and/or Graduate School.

Core Requirements

12 hours

ESE 5342 Teaching the Adolescent Learner (3)
TSI 5325 ESOL Strategies for Content Area Teachers (3)
EDF 6432 Foundations of Measurement (3)
ESE 5344 Classroom Management for the Diverse School & Society (3)

Current Trends in teaching Concentration

3 hours

SSE 6636 Current Trends in Social Science Education (3)

Concentration Requirements

18 hours

SSE 5331 Foundations, Curriculum & Instruction (3)
SSE 5332 Methods and Strategies in Social Science Education (3)
SSE 5641 Reading & Basic Skills (3)
SSE 5946 Practicum in SSE (Prereq: SSE 5331) (3)
SSE 6932 Special Topics (6)

Practicum, Internship, Field Experiences, etc.

9 hours

SSE 5946 Practicum in SSE (Prereq: SSE 5331) (3)
SSE 6947 Internship (6)

All sections of the GKT, the FTCE Prof., and Educ. & Subj. Area: Social Science 6-12 must be passed prior to internship.
Program of studies will be planned so that all course work will be completed prior to the internship. However, should there be a need for an exception; M.A.T. students may take one 3-credit course during internship—although this is unadvisable given the full-time nature of the teaching experience and one 3-credit course after internship. The only courses that can be taken during or after internship are:

- SSE 6932: Special Topics
- SSE 6636: Current Trends

All school districts require finger prints and will conduct a background check prior to assignment of the final internship. Some districts also require drug testing.

Comprehensive examination
The Comprehensive exam is taken while enrolled in SSE 6636 Trends and Issues.

COURSES

SPECIAL EDUCATION, BEHAVIOR DISORDERS PROGRAM

Master of Arts (M.A.) Degree

<table>
<thead>
<tr>
<th>DEGREE INFORMATION</th>
<th>CONTACT INFORMATION</th>
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<tbody>
<tr>
<td>Program Admission Deadlines:</td>
<td>College: Education</td>
</tr>
<tr>
<td>Fall: February 15</td>
<td>Department: Special Education</td>
</tr>
<tr>
<td>Spring: October 15</td>
<td>Contact Information: <a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
</tr>
<tr>
<td>Summer: February 15</td>
<td>Other Resources: <a href="http://www.usf4you">www.usf4you</a></td>
</tr>
</tbody>
</table>

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 13.1005
Dept Code: EDS
Program (Major/College): ABD ED

PROGRAM INFORMATION

Program Description
The Master’s Programs in the Department of Special Education prepare special education teacher leaders for work in public and private schools and in state, federal, or community settings. Specific areas of education and training include behavior disorders, mental retardation, specific learning disabilities, and varying exceptionalities (exceptional student education.) The program is designed to ensure that all graduates are prepared to be reflective practitioners, able to evaluate and continuously learn from their own teaching; collaborative professionals who affirm diversity; knowledgeable of theory and research; and skilled in the best practices of special education. Graduates of this program will have advanced clinical and pedagogical skills in working with children with disabilities and their families. The program is structured so that students can maintain full-time employment while pursuing their degrees through traditional, web-enhanced and on-line course delivery.

After admission to a program, the candidate and the department advisor together chart a program of study incorporating both core requirements and courses of specific interest to the student. All programs stress field application.

Accreditation: Accredited by the Commission on Colleges and Schools of the Southern Association of College and Schools and the National Coouncil for the Accreditation of Teacher Education (NCATE).

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, programs require earned degrees from regionally accredited institutions or an international equivalent.

- An earned baccalaureate degree or its equivalent from a regionally accredited college or university.
- Scholastic evidence to successfully perform in the academic program, as indicated by one of the following:
  - An earned graduate degree from a regionally accredited college or university, or
  - An undergraduate GPA of 3.0 or higher in all work attempted while registered as an upper division student working for a baccalaureate degree, or
  - A GRE score on the Verbal and Quantitative Subtests, or
  - Completion of 9 hours of specified graduate course work in special education with a GPA of 3.0 or higher, and the endorsement of a Special Education faculty member.
• A letter of application that addresses why the candidate desires to pursue a master’s degree in special education.
• At least two (2) letters of recommendation from persons who have seen the candidate teach and/or work with children and youth.

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

• An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
• A social security number in degree programs requiring practica or internships;
• Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

All Special Education programs are currently under review. Students are advised to work closely with program advisors in the department when developing their programs of study.

Plan I
The M.A. program in special education is a 36-hour program, designed for students with an undergraduate degree in special education. This program is delivered through a number of formats. Evening and on-line courses are offered during the Fall, Spring and Summer semesters. Daytime courses are sometimes offered during the summer. Students usually take one or two courses a semester and complete their program of study within two to four years. Students are required to take courses two of the three semesters each calendar year and they must complete their program of study within 7 years of their admission date.

Program of Study

36 hour minimum

Core Requirements
Process Core
EDF 6481 Foundations of Educational Research

Concentration Requirements:

21 hours minimum

EE 6612 Management and Motivation
EE 6222 Advanced Psychological Assessment
EE 6245 Transitional Programming
EE 6732 Consultation and Collaboration
EE 5752 Working with Families
EE 6248 Instructional Approaches
EE 6939 Advanced Seminar in Special Education

Concentration in Behavior Disorders
EED 6215 Advanced Theories/Practices in Behavior Disorders (3 hours)
Electives: (6 hours)
Elective coursework relevant to the student’s concentration is required and must be approved by the faculty advisor prior to registering for the course.

Practicum
EE 6943 Practicum in Exceptional Student Education

Comprehensive Examination

3 hours
The successful completion of a comprehensive exam in the form of a portfolio is required of all students in their final semester of the program.
Plan II
This program is no longer offered. See the M.A.T. in Exceptional Student Education-ESE to earn a graduate degree and certification in ESE and ESOL.

Plan III
This option is available for students who do not hold an undergraduate degree in special education.

Program of Study 45 hour minimum

Pre-requisite
EEX 6025*  Trends and Issues in Special Education

College Requirement

Core Requirements 12 hours
EDF 6481  Foundations of Educational Research
EDF 6432  Foundations of Measurement
EDF 6211 or EDF 6215  Psychological Foundations of Education
EDF 6517: Social/Historical/or EDF 6544 or EDF 6606  Philosophical Foundations of Education)

Concentration Requirements 21 hours minimum
EEX 6612  Management and Motivation
EEX 6222  Advanced Psychological Assessment
EEX 6245  Transitional Programming
EEX 6732  Consultation and Collaboration
EEX 5752  Working with Families
EEX 6248  Instructional Approaches
EEX 6939  Advanced Seminar in Special

Specialization in Behavior Disorders: 9 hours
EED 6215  Advanced Theories and Practices in Behavior Disorders

Practicum
EEX 6943  Practicum in Exceptional Student Education

Comprehensive Examination
The successful completion of a comprehensive exam in the form of a portfolio is required of all students in their final semester of the program.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
SPECIAL EDUCATION, GIFTED PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 13.1004
Dept Code: EDS
Program (Major/College): AGI ED

CONTACT INFORMATION

College: Education
Department: Special Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The Master’s Program in Gifted Education (Plan I) provides advanced training for certified teachers to work with gifted and talented students and with other teachers on a consultant or collaborative basis. The courses for this program are offered through an on-line format, though some courses may be taken on campus. Emphasis is placed on developing specific skills in identification of gifted students; focusing on the characteristics and needs of special populations; assessing students’ cognitive and affective strengths; modifying educational programs to develop gifted students’ potential; and consulting with gifted students, their families, and teachers. This program qualifies students for the State of Florida Endorsement in Gifted Education.

After admission to a program, the candidate and the department advisor together chart a program of study incorporating core requirements. Courses stress field based experiences. Students provide their own transportation to practicum sites in K-12 education settings. The practicum experience requires candidates to access assessment information about K-12 students in their school setting, including performance on individualized intelligence tests, achievement tests, and educational programs (EPs). Practicum coursework also requires candidates to conduct extended projects focused on the development and educational progress of K-12 gifted students. Employment in a K-12 classroom as a licensed educator is required to successfully complete program coursework.

Accreditation: Accredited by the Commission on Colleges and Schools of the Southern Association of Colleges and Schools, National Council for Accreditation of Teacher Education, and the Florida Department of Education

Plan III: Inactive

ADMISSION INFORMATION

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.
Admissions Requirements include:

- An earned bachelor’s degree or its equivalent from a regionally accredited college or university
- An undergraduate GPA of 3.0 on a 4.0 scale as an upper division student in a baccalaureate degree or the following GRE Scores:
  - Verbal: 550 or Analytical Writing: 3.5
  - Quantitative: 520
- Two letters of recommendation from administrators familiar with applicant’s professional teaching experience and expertise
- A statement of professional goals
- Copy of professional teaching certificate (not a temporary certificate)
- Evidence that applicant currently holds a teaching position in a K-12 setting

International Students
Applicants whose native language is not English or who have not earned a degree in the United States must also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 550 on the paper-based test, are required. Applications submitted with TOEFL scores that do not meet the minimum requirements will be denied. The TOEFL requirement may be waived if the applicant meets one of the following conditions:

- The applicant’s native language is English, or
- Has scored 500 or higher on the GRE Verbal Test, or
- Has earned a college degree at a U.S. institution of higher learning, or
- Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or
- Has scored 6.5 on International English Language Testing System (IELTS) [http://www.ielts.org/]

DEGREE PROGRAM REQUIREMENTS

(co-requisite)
EEX 6025 Trends and Issues in Special Education (3 hours)

Program of Study

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<th>Core Requirements</th>
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<tr>
<td>EDF 6481 Foundations of Educational Research</td>
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<tr>
<td>EEX 6939 Current Trends in Special Education</td>
<td>3 hours</td>
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<tr>
<td>Special Education Program Core</td>
<td>3 hours</td>
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<td>EEX 6222 Psychoeducational Assessment of Exceptional Students</td>
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<table>
<thead>
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<tr>
<td>EGI 5051 Nature and Needs of the Gifted</td>
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<tr>
<td>EGI 5307 Theory and Development of Creativity</td>
<td>3 hours</td>
</tr>
<tr>
<td>EGI 6232 Advanced Strategies for Teaching the Gifted</td>
<td>3 hours</td>
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<tr>
<td>EGI 6415 Seminar in Special Populations of the Gifted</td>
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</tr>
<tr>
<td>EGI 6416 Consultation, Counseling, and Guide of the Gifted</td>
<td>3 hours</td>
</tr>
<tr>
<td>EGI 6943 Supervised Practicum in Gifted Education</td>
<td>12 hours</td>
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</table>
Comprehensive Examination (Portfolio)
In lieu of a comprehensive examination, candidates maintain an electronic portfolio of required critical tasks completed at specific timepoints during the program of study, which is evaluated by the program faculty. Completion of the portfolio occurs during the final semester of coursework with a culminating statement reflective of the field standards and the candidate’s competence in these domains.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
SPECIAL EDUCATION, INTELLECTUAL DISABILITIES PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 13.1006
Dept Code: EDS
Program (Major/College): AMR ED

CONTACT INFORMATION

College: Education
Department: Special Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The Master’s Programs in the Department of Special Education prepare special education teacher leaders for work in public and private schools and in state, federal, or community settings. Specific areas of education and training include behavior disorders, mental retardation, specific learning disabilities, and varying exceptionalities (exceptional student education). The program is designed to ensure that all graduates are prepared to be reflective practitioners, able to evaluate and continuously learn from their own teaching; collaborative professionals who affirm diversity; knowledgeable of theory and research; and skilled in the best practices of special education. Graduates of this program will have advanced clinical and pedagogical skills in working with children with disabilities and their families. The program is structured so that students can maintain full-time employment while pursuing their degrees through traditional, web-enhanced and on-line course delivery. After admission to a program, the candidate and the department advisor together chart a program of study incorporating both core requirements and courses of specific interest to the student. All programs stress field application.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools and the National Council for the Accreditation of Teacher Education (NCATE).

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. Requirements include:

- An earned baccalaureate degree or its equivalent from a regionally accredited college or university.
- Scholastic evidence to successfully perform in the academic program, as indicated by one of the following:
  - An earned graduate degree from a regionally accredited college or university, or
  - An undergraduate GPA of 3.0 or higher in all work attempted while registered as an upper division student working for a baccalaureate degree, or
  - A GRE score on each of the Verbal and Quantitative Subtests that when combined equals at least 1000 or higher, or Completion of 9 hours of specified graduate course work in special education with a GPA of 3.0 or higher, and the endorsement of a Special Education faculty member.
A letter of application that addresses why the candidate desires to pursue a master’s degree in special education.

At least two (2) letters of recommendation from persons who have seen the candidate teach and/or work with children and youth.

**Special Instructions for international applicants:**
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number for purposes of practicum and internship;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

**DEGREE PROGRAM REQUIREMENTS**

All Special Education programs are currently under review. Students are advised to work closely with program advisors in the department when developing their programs of study.

**Plan I** - The M.A. program in special education is a 36-hour program, designed for students with an undergraduate degree in special education. This program is delivered through a number of formats. Evening and online courses are offered during the Fall, Spring and Summer semesters. Daytime courses are sometimes offered during the summer. Students usually take one or two courses a semester and complete their program of study within two to four years. Students are required to take courses two of the three semesters each calendar year and they must complete their program of study within 5 years of their admission date.

**Program of Study**

**College Requirements**

**Core Requirements**

EDF 6481  Foundations of Educational Research  
3 hours minimum

**Concentration Requirements**

EEX 6612  Management and Motivation*  
EEX 6222  Advanced Psychological Assessment  
EEX 6245  Transitional Programming  
EEX 6732  Consultation and Collaboration  
EEX 5752  Working with Families  
EEX 6248  Instructional Approaches  
EEX 6939  Advanced Seminar in Special

* Not required, if equivalent course taken in undergraduate program.

**Intellectual Disabilities Concentration**

EMR 6052: Advanced Theories/Practices in Mental Retardation  
9 hours

**Electives**

Elective coursework relevant to the concentration is required and must be approved by the faculty advisor prior to registering for the course.

6 hours
Comprehensive Examination
EEX 6943
The successful completion of a comprehensive exam in the form of a portfolio is required of all students in their final semester of the program.

Plan II
This program is no longer offered. See the M.A.T. in Exceptional Student Education-ESE to earn a graduate degree and certification in ESE and ESOL.

Plan III
This option is available for students who do not hold an undergraduate degree in special education. An interview is required for all students seeking admission to the Plan III Program. Contact student advisor to schedule.

Program of Study (Plan III Option) 45 hours minimum

Core Requirements 12 hours
EDF 6481 Foundations of Educational Research
EDF 6432 Foundations of Measurement
EDF 6211 or EDF 6215 Psychological Foundations of Education
EDF 6517: Social/Historical/or EDF 6544 or EDF 6606: Philosophical Foundations of Education)

Pre-Requisite
EEX 6025* Trends and Issues in Special Education

Concentration Requirements 21 hours minimum
EEX 6612 Management and Motivation
EEX 6222 Advanced Psychological Assessment
EEX 6245 Transitional Programming
EEX 6732 Consultation and Collaboration
EEX 5752 Working with Families
EEX 6248 Instructional Approaches
EEX 6939 Advanced Seminar in Special

Intellectual Disabilities Concentration 9 hours
EMR 6053: Advanced Theories/Practices in Mental Retardation

Electives 6 hours
Elective coursework relevant to the concentration is required and must be approved by the faculty advisor prior to registering for the course.

Practicum
EEX Practicum in Exceptional Student Education 3 hours

Comprehensive Examination:
The successful completion of a comprehensive exam in the form of a portfolio is required of all students in their final semester of the program.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
SPECIAL EDUCATION, MOTOR DISABILITIES PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

<table>
<thead>
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CONTACT INFORMATION

Currently, no students are being admitted to this program.
SPECIAL EDUCATION, SPECIFIC LEARNING DISABILITIES PROGRAM

Master of Arts (M.A.) Degree

<table>
<thead>
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PROGRAM INFORMATION

Program Description
The Master’s Programs in the Department of Special Education prepare special education teacher leaders for work in public and private schools and in state, federal, or community settings. Specific areas of education and training include behavior disorders, mental retardation, specific learning disabilities, and varying exceptionalities (exceptional student education). The program is designed to ensure that all graduates are prepared to be reflective practitioners, able to evaluate and continuously learn from their own teaching; collaborative professionals who affirm diversity; knowledgeable of theory and research; and skilled in the best practices of special education. Graduates of this program will have advanced clinical and pedagogical skills in working with children with disabilities and their families. The program is structured so that students can maintain full-time employment while pursuing their degrees through traditional, web-enhanced and on-line course delivery. After admission to a program, the candidate and the department advisor together chart a program of study incorporating both core requirements and courses of specific interest to the student. All programs stress field application.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent.

Other requirements include:
- An earned baccalaureate degree or its equivalent from a regionally accredited college or university.
- Scholastic evidence to successfully perform in the academic program, as indicated by one of the following:
  - An earned graduate degree from a regionally accredited college or university,
  - An undergraduate GPA of 3.0 or higher in all work attempted while registered as an upper division student working for a baccalaureate degree,
  - A GRE score on the Verbal and Quantitative Subtests, or
  - Completion of 9 hours of specified graduate course work in special education with a GPA of 3.0 or higher, and the endorsement of a Special Education faculty member.
• A letter of application that addresses why the candidate desires to pursue a master’s degree in special education.
• At least two (2) letters of recommendation from persons who have seen the candidate teach and/or work with children and youth.

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

• An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
• A social security number in degree programs requiring practica or internships;
• Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

All Special Education programs are currently under review. Students are advised to work closely with program advisors in the department when developing their program of study.

Plan I
The M.A. program in special education is a 36-hour program, designed for students with an undergraduate degree in special education. This program is delivered through a number of formats. Evening and online courses are offered during the Fall, Spring and Summer semesters. Daytime courses are sometimes offered during the summer. Students usually take one or two courses a semester and complete their program of study within two to four years. Students are required to take courses two of the three semesters each calendar year and they must complete their program of study within 7 years of their admission date.

Program of Study 36 hour minimum

Core Requirements 3 hours
EDF 6481 Foundations of Educational Research

Concentrartion Requirements 21 hours minimum
EEX 6612 Management and Motivation
EEX6222 Advanced Psychological Assessment
EEX 6245 Transitional Programming
EEX 6732 Consultation and Collaboration
EEX 5752 Working with Families
EEX 6248 Instructional Approaches
EEX 6939 Advanced Seminar in Special Education
EEX 6943 Practicum

Specific Learning Disabilities course 3 hours
ELD 6015 Advanced Theories of Behavior Disorders

Electives
Elective coursework relevant to the concentration is required and must be approved by the faculty advisor prior to registering for the course.

Comprehensive Examinatio 3 hours
A project is required to fulfill the comprehensive examination requirement.
EEX 6943
Plan II
This program is no longer offered. See the M.A.T. in Exceptional Student Education-ESE to earn a graduate degree and certification in ESE and ESOL.

Plan III
This option is available for students who do not hold an undergraduate degree in special education. An interview is required for all students seeking

Program of Study

Core Requirements
- EDF 6481 Foundations of Educational Research
- EDF 6432 Foundations of Measurement
- EDF 6211 or EDF 6215 Psychological Foundations of Education
- EDF 6517: Social/Historical/or EDF 6544 or EDF 6606: Philosophical Foundations of Education

PreRequisite
- EEX 6025* Trends and Issues in Special Education

Concentration Requirements (21 hours minimum)
- EEX 6612 Management and Motivation
- EEX 6222 Advanced Psychological Assessment
- EEX 6245 Transitional Programming
- EEX 6732 Consultation and Collaboration
- EEX 5752 Working with Families
- EEX 6248 Instructional Approaches
- EEX 6939 Advanced Seminar in Special

Concentration in Specific Learning Disabilities
- EED 6215 Advanced Theories and Practices in Behavior Disorders (3)

Electives
Elective coursework relevant to the concentration is required and must be approved by the faculty advisor prior to registering for the course.

Practicum
- EEX6943 Practicum in Exceptional Student Education

Comprehensive Exam
The successful completion of a comprehensive exam in the form of a portfolio is required of all students in their final semester of the program.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
SPECIAL EDUCATION, EXCEPTIONAL STUDENT EDUCATION (ESE) PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 13.1001
Dept Code: EDS
Program (Major/College): AVE ED

CONTACT INFORMATION

College: Education
Department: Special Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The Master’s Programs in the Department of Special Education prepare special education teacher leaders for work in public and private schools and in state, federal, or community settings. Specific areas of education and training include behavior disorders, mental retardation, specific learning disabilities, and varying exceptionalities (exceptional student education). The program is designed to ensure that all graduates are prepared to be reflective practitioners, able to evaluate and continuously learn from their own teaching; collaborative professionals who affirm diversity; knowledgeable of theory and research; and skilled in the best practices of special education. Graduates of this program will have advanced clinical and pedagogical skills in working with children with disabilities and their families. The program is structured so that students can maintain full-time employment while pursuing their degrees through traditional, web-enhanced and on-line course delivery. After admission to a program, the candidate and the department advisor together chart a program of study incorporating both core requirements and courses of specific interest to the student. All programs stress field application.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. Other requirements include:

- An earned baccalaureate degree or its equivalent from a regionally accredited college or university, or its international equivalent.
- Scholastic evidence to successfully perform in the academic program, as indicated by one of the following:
  - An earned graduate degree from a regionally accredited college or university.
  - A minimum GPA of 3.0 on a 4.0 scale in upper division undergraduate coursework.
  - The following minimum GRE scores:
    1. Verbal 430
    2. Quantitative 470
    3. Analytical Writing 4
- A Professional Goals Statement that addresses why the candidate desires to pursue an MA degree in special education.
• At least two (2) letters of recommendation from persons who have observed the candidate teach and/or work with children and youth.
• Interview with the MA program faculty.

For international applicants: Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). See the Graduate Admissions website for further clarification and possible exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit http://www.grad.usf.edu/graduate-admissions-checklist.asp.

DEGREE PROGRAM REQUIREMENTS

All Special Education programs are currently under review. Students are advised to work closely with program advisors in the department when developing their program of study.

Plan I
The M.A. program in special education is a 36-hour program, designed for students with an undergraduate degree in special education. This program is delivered through a number of formats. Evening and online courses are offered during the Fall, Spring and Summer semesters. Daytime courses are sometimes offered during the summer. Students usually take one or two courses a semester and complete their program of study within two to four years. Students are required to take courses two of the three semesters each calendar year and they must complete their program of study within 7 years of their admission date.

Program of Study

36 hour minimum

Core Requirements

24 hours

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<td>EEX 6248</td>
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<tr>
<td>EEX 6939</td>
<td>* Not required, if equivalent course taken in undergraduate program.</td>
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</table>

Concentration Requirements

9 hours

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<tr>
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<tr>
<td>Varying Exceptionalities courses</td>
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<tr>
<td>EED 6215</td>
<td>Adv Theories and Practices in Behavior Disorders</td>
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<tr>
<td>ELD 6015</td>
<td>Adv Theories and Practies in Specific Learning Disabilities</td>
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<td>EMR 6052</td>
<td>Advanced Theories and Practices in Intellectual Disabilities (3 hrs)</td>
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Comprehensive Examination

3 hours

A project is required to fulfill the comprehensive examination requirement. EEX 6943

Plan III
This option is available for students who do not hold an undergraduate degree in special education. An interview is required for all students seeking admission to the Plan III Program. Contact Student Advisor to schedule.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
SPECIAL EDUCATION, EXCEPTIONAL STUDENT EDUCATION (ESE) PROGRAM

Master of Arts in Teaching (M.A.T.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 13.1001
Dept Code: EDS
Program (Major/College): TVE ED

CONTACT INFORMATION

College: Education
Department: Special Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The Master of Arts in Teaching (MAT) is a graduate program in special education for individuals teaching with temporary certification and/or individuals who hold an undergraduate degree in an area other than special education. This program leads to a Master of Arts in Teaching degree, certification in Exceptional Student Education (ESE) and endorsement in Reading and ESOL. Students can be admitted to the program during any semester throughout the year; however, the special education core course sequence begins in the summer. Students in the M.A.T. Program benefit from an integrated curriculum taught in six-hour blocks; mentors who are master teachers within the district that provide one-on-one mentoring for each program participant; and accelerated delivery of course content which allows for completion of the degree in two summers and three academic semesters. All students are required to conduct action research in their classrooms, investigating how they may more effectively use research-based interventions. This requires that students link theory and practice and encourages an inquiring approach to teaching.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools, the National Council for the Accreditation of Teacher Education, and the Department of Education.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Admission Requirements
- An earned baccalaureate degree or its equivalent from a regionally accredited college or university.
- Evidence of ability to perform successfully in the academic program, as indicated by one of the following:
  - An earned graduate degree from a regionally accredited college or university, OR
  - An undergraduate GPA of 3.0 or higher in all work attempted while registered as an upper division student working for a baccalaureate degree, OR
  - Minimum GRE scores of: 430 Verbal; 470 Quantitative; and 4 Analytical Writing.
- Evidence of passing scores on all portions of the General Knowledge or CLAST subtests.
A letter of application that addresses why the candidate desires to pursue a master’s degree in special education.

At least two (2) letters of recommendation, one from a person who has seen the candidate teach and/or work with children/youth and the other from an administrator or supervisor.

A completed application submitted to the Graduate School

Interview with the MAT program faculty.

For international applicants

All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 550 on the paper-based test, are required. Applications submitted with TOEFL scores that do not meet the minimum requirements will be denied. The TOEFL requirement may be waived if the applicant meets one of the following conditions:

- The applicant’s native language is English, or
- Has scored 500 or higher on the GRE Verbal Test, or
- Has earned a college degree at a U.S. institution of higher learning, or
- Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or
- Has scored 6.5 on International English Language Testing System (IELTS) http://www.ielts.org/

**DEGREE PROGRAM REQUIREMENTS**

**Program of Study**

50 hours*

(Students entering with an ESOL endorsement and certification in Elementary Education have a minimum of 36 hours required to complete the program)

**College Requirements**

**Core Requirements:**

- EDF 6211 Psychological Foundations of Education (3)
- EDF 6432 Foundations of Measurement (3)

6 hrs minimum

**Concentration Requirements**

- EEX 6051 Creating Positive Learning Environments for Students with Disabilities (6)
- EEX 6224 Developing Individualized Educational Programs for students with Disabilities (6)
- EEX 6247 Implementing and Evaluating Individualized Programs for Students with Disabilities (6)
- EEX 6943 Practicum in Exceptional Student Education (2)
- RED 6514 The Reading Process in the Elementary School (3)
- RED 6544 Remediation of Comprehension Problems (3)
- MAE 6117 Math Methods

29 hrs minimum

**ESOL Requirements**

- TSL 5085 Theory and Practice of Teaching English Language Learners (3)
- TSL 5086 Second Language Acquisition and Literacy in Children and Adolescents (3)
- TSL 5240 Language Principles, Acquisition, and Assessment for Teaching English Language Learners (3)

9 hrs

NOTE: The special requirements for ESOL endorsement through infusion are as follows: Successful completion of (1) TSL 5085, TSL 5086, and TSL 5240, with a minimum grade of 70% or better on all three sections of the ESOL Comprehensive Exam administered in the three ESOL courses; (2) a 20-hour early ESOL field experience in ESOL 1; (3) a late ESOL field experience where students plan, implement, and evaluate lessons for one or more ESOL students over a series of weeks; and (4) an ESOL folder, containing all assignments and test results from ESOL 1, 2, and 3.
Note: If a student obtains a state approved ESOL Endorsement prior to internship, consideration will be given to waiving TSL 5085, TSL 5086 and TSL 5240 with the appropriate program and college approvals.

**Internship**

EDG 6947 Internship and Classroom Research

### Practicum and Internship

**Practicum Requirements**

All students are required to register for and complete a 1-hour practicum (EEX 6943) during the semesters they are taking EEX 6225 Developing Individualized Educational Programs for students with Disabilities and EEX 6247 Implementing and Evaluating Individualized Programs for Students with Disabilities. Students who are employed as a teacher as teaching assistant/paraprofessional may complete the practicum in the classroom where they are employed. Students who are not employed as a teacher or teaching assistant/para position will be placed in a classroom practicum setting with a mentor teacher in the local school district.

**Internship Requirements**

All students are required to complete a full-time semester long internship as a special education teacher in a K-12 classroom setting. The internship can be a supervised paid internship which an employed teacher can complete in his/her own classroom. If a student is not employed as a special education teacher, he/she must complete the internship (non-paid) in a supervising teacher’s (Professional Practice Partner) classroom.

**Comprehensive Exam**

The successful completion of a comprehensive exam in the form of a portfolio is required of all students in their final semester of the program.

**Tests and Examinations**

All students must pass the following examinations:

- General Knowledge Test (all four subtests) – if the CLAST (taken after July 1, 2002) was used to fulfill admission requirements instead of the General Knowledge Test (GKT), the GKT must be passed before internship.
- Florida Teacher Certification Professional Education Test – must be passed prior to graduation.
- Florida Teacher Certification ESE Subject Area Test – must be passed prior to graduation.

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

**COURSES**

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
SPECIAL EDUCATION, BEHAVIOR DISORDERS CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Special Education, Behavior Disorders

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions.
Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CBD

CONTACT INFORMATION

College: Education
Department: Special Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, no students are being admitted to this program.
SPECIAL EDUCATION, GIFTED CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Special Education, Gifted

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions
Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CGI

CONTACT INFORMATION

College: Education
Department: Special Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, no students are being admitted to this program.
# SPECIAL EDUCATION, MENTAL RETARDATION CONCENTRATION

**Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program**

With a concentration in **Special Education, Mental Retardation**

## DEGREE INFORMATION

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</tr>
<tr>
<td>Other Resources:</td>
<td><a href="http://www.usf4you">www.usf4you</a></td>
</tr>
</tbody>
</table>

Currently, no students are being admitted to this program.
SPECIAL EDUCATION, MOTOR DISABILITIES CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Special Education, Motor Disabilities

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions
Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CMD

CONTACT INFORMATION

College: Education
Department: Special Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, no students are being admitted to this program.
SPECIAL EDUCATION, SPECIFIC LEARNING DISABILITIES CONCENTRATION

Master of Education (M.Ed.) Degree in the Curriculum and Instruction Program
With a concentration in Special Education, Specific Learning Disabilities

DEGREE INFORMATION

Program Admission Deadlines:
Closed for new admissions

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: CLD

CONTACT INFORMATION

College: Education
Department: Special Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, no students are being admitted to this program.
SPECIAL EDUCATION CONCENTRATION

Education Specialist (Ed.S.) Degree in the Curriculum and Instruction Program
With a concentration in Special Education

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions
Minimum Total Hours: 36
Program Level: Specialist
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: SSE

CONTACT INFORMATION

College: Education
Department: Special Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Currently, no students are being admitted to this program.
SPECIAL EDUCATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a concentration in Special Education

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15*
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 84
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DSE

*Applicants who submit their materials by February 15 will be given first consideration for admission to the doctoral program in Special Education.

CONTACT INFORMATION

College: Education
Department: Special Education
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Program Description
The doctoral program in special education focuses on urban special education and university-school partnerships in preparing researchers, teacher educators, and school leaders. Graduates of the program will have an informed perspective on ethical issues in the interactions of race, ethnicity, social class, gender, and disability; and the impact of these issues on special education policies, research, teacher education and services. Program graduates will demonstrate knowledge and skills in the design, implementation and maintenance of university-school partnerships; an interdisciplinary grounding in and respect for multiple genres and methods of inquiry; the ability to conceptualize, plan and conduct research; and the ability to value the conceptual and analytical skills of a scholar. The Department emphasizes interdisciplinary research and development. Faculty members in several departments have joint appointments in special education. After admission to a program, the student will be assigned a doctoral program advisor who will assist in identifying a major professor.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. All students applying for admission to the doctoral program in the Department of Special Education must meet the USF admission requirements. In addition, the Department of Special Education has the following admission requirements.

http://www.coedu.usf.edu/
Requirements for all applicants:
- Have a master’s or educational specialist’s degree, or equivalent, from a regionally accredited college or university (or international equivalent).
- Have earned a GPA of at least 3.0 on a 4.0 scale in upper division undergraduate coursework, or a minimum GPA of 3.5 on a 4.0 scale in graduate coursework.
- Have submitted official Graduate Record Examination (GRE) scores.
- Provide three letters of recommendation from professionals who are familiar with their scholarship and work history.
- Provide evidence of at least three years of successful work experience in relevant professional roles.
- Present self professionally in an oral interview with two or more faculty members.
- Demonstrate the ability to write professionally by submitting a spontaneous writing sample at the time of the interview.
- Provide a statement of professional goals (immediate, intermediate, and long term) and research interests. Professional goals and research interests should be compatible with the opportunities provided through a doctoral degree in special education.
- Receive endorsement by the majority of tenured and tenure-earning faculty members in the department.

For international applicants: Applicants whose native language is not English or who have not earned a degree in outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores). In addition to these university requirements, applicants to the college of Education must provide the following: 1) An external, courses by course evaluation of the foreign degree by an approved external agency, and based on official transcripts; 2) A social security number in degree programs requiring practica or internships; 3) Other information as required of all other applicants to the Ph.D. Program in Special Education.

DEGREE PROGRAM REQUIREMENTS

The program requirements for the Ph.D. in Special Education include:

Core Requirements

<table>
<thead>
<tr>
<th>Concentration Requirements</th>
<th>24 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEX 7743 Philosophies of Inquiry (3 hrs)</td>
<td></td>
</tr>
<tr>
<td>EEX 7744 C&amp;I Issues in Urban Spec Ed (3 hrs)</td>
<td></td>
</tr>
<tr>
<td>EEX 7815 Research Seminar (7 hrs)</td>
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</tr>
<tr>
<td>EEX 7939 Teacher Education in Special Education (8 hrs)</td>
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</tr>
<tr>
<td>EDF 7230 Special Education Law (3 hrs)</td>
<td></td>
</tr>
<tr>
<td>EEX 7911 Special Ed Leadership Seminar (3 hrs)</td>
<td></td>
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</tbody>
</table>

Measurement/Statistics/Research Design: 18 hrs

In addition to the specialization requirements, all students must complete at least 18 hours of coursework in Measurement/Statistics/Research Design, including:
- EDF 6407: Stat Anal Educ I (4 hrs)
- EDF 7408: Stat Anal Educ II (4 hrs)
- And,
- Two qualitative research methods courses (6 hrs. minimum).
- And,
- EDF 7410 Design of Systematic Studies in Education (4 hrs.)
Foundations 6 hrs

EEX 7745: Historical, Ethical, & Disciplinary Foundations of Special Education (3 hrs.)
EDG ___ (Students may select from the College of Education approved listing of courses in Educational Psychology Foundations) (3 hrs.)

Doctoral Program Cognate 12 hrs
The cognate consists of an organized course of study consisting of at least 12 hours in an area of interest to the student, and as approved by the Major Professor. Students in special education complete cognates in areas such as:

- Teacher Education
- Education Policy and Leadership
- History, culture, families, and politics in urban settings
- Positive behavior supports
- Philosophy, ethics, and disability
- Gifted education and talent development
- Low incidence disabilities and autism

Dissertation 24 hrs

EEX 7980: Dissertation: Doctoral

Doctoral Qualifying Examination:
All students must perform successfully on a doctoral qualifying examination as part of the criteria for admission to candidacy.

COURSES:
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
# SPECIAL EDUCATION CONCENTRATION

**Doctor of Education (Ed.D.) Degree in the Educational Program Development Program with a concentration in Administration of Special Education**

## DEGREE INFORMATION

<table>
<thead>
<tr>
<th>Program Admission Deadlines:</th>
<th>Closed for new admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Total Hours:</td>
<td>76</td>
</tr>
<tr>
<td>Program Level:</td>
<td>Doctoral</td>
</tr>
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<td>CIP Code:</td>
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<tr>
<td>Dept Code:</td>
<td>CNI</td>
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<tr>
<td>Program (Major/College):</td>
<td>EPD ED</td>
</tr>
<tr>
<td>Concentration Code:</td>
<td>ESE</td>
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</table>

## CONTACT INFORMATION

<table>
<thead>
<tr>
<th>College:</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department:</td>
<td></td>
</tr>
<tr>
<td>Contact Information:</td>
<td><a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
</tr>
</tbody>
</table>

Currently, no students are being admitted to this program.
STUDENT AFFAIRS ADMINISTRATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a concentration in Student Affairs Administration

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions
Minimum Total Hours: 75
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DSA

CONTACT INFORMATION

College: Education
Department: Psychological and Social Foundations
Contact Information: www.grad.usf.edu

Currently, no students are being admitted to this program.
TEACHING AND LEARNING IN ENGLISH CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a concentration in Teaching and Learning in English

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 74
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DCE

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Formerly offered under the title Ph.D. in Curriculum and Instruction with a Concentration in English Education

Program Description
The Curriculum and Instruction degree is offered with a concentration area in Teaching and Learning in the Content Area: English Education.

Each program is highly individualized. Candidates’ programs are planned with the approval of a faculty committee based upon previous experience and future goals.

ADMISSION INFORMATION

Admission Requirements:
To be admitted to the English Education doctoral program prospective students must meet the university’s minimum admissions requirements which include presenting an earned Bachelor’s and Master’s degree. A 3.0 grade point average is required for all work completed as an upper division student in the Bachelor’s degree, OR a 3.5 grade point average for any work completed in the Master’s degree. Additionally, students must provide the following documents to the doctoral program coordinator:

- A current curriculum vitae
- Three letters of recommendation from people who can attest to the candidate’s capacity to do doctoral work and/or excellence as a classroom teacher
- A written statement of professional goals
- Transcripts from previous academic work
- A writing sample. This could be a published article or a scholarly paper prepared for a previous class that demonstrates capacity as a thinker and writer
- Official scores from the Graduate Record Exam.

Formal application to the Graduate School must also be made at the time the above documents are submitted.

http://www.coedu.usf.edu/
Admission Criteria
The admissions committee will consider each candidate in light of his or her unique submission and qualifications. The expectations used by the faculty are:

- GPA on a 4.0 scale for all graduate work and 3.0 for the last 60 hours of undergraduate studies,
- An undergraduate major in the social sciences or humanities, social sciences education or a closely related field from a regionally accredited institution,
- A master’s degree in social sciences education or closely related field from a regionally accredited institution,
- Successful teaching experience in a K-12 setting,
- Demonstrated commitment to personal professional growth and development,
- Strong academic, analytic and communications skills.

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours 74

Core Requirements

Curriculum and Instruction
One of the following:
EDG 7931 Tching & Lrning in Content Areas (3)
EDH 7225 Curr Dev in Higher Ed (3)
EDG 7667 Analysis of Curriculum and Instruction (3)
EDG 7692 Issues in Curriculum and Instruction (3)

Statistics/Measurement/Research Design 16 hours minimum
EDF 6407 Statistical Analysis I (4)
EDF 7408 Statistical Analysis II (4)
EDF 7410 Design of Systematic Studies in Education (4)
EDF 7477 Qual Res in Educ I (4)

Psychological and Social Foundations 7 hours
EEX 7743 Phil. of Scholarly Inquiry (3)
EDF 7145 Cogn. Issues in Instruction (4)

Concentration/Specializations 18 hours minimum

English Education:
The following four seminars are required:
EDG 7931 Research and Theory in Teaching Literature and Language (3)
EDG 7931 Research and Theory in Teaching Writing (3)
EDG 7931 Education of English Teachers (3)
EDG 7931 Research in English Education (3)
Additional courses in this area will be determined by the student’s research interests.
Cognate  12 hours
Courses consistent with the student’s program of study selected with the approval of a program committee. Courses in the Cognate must be taken at the graduate level.

Dissertation  18 hours minimum

Doctoral Qualifying Examination
Students must demonstrate satisfactory performance on the Doctoral Qualifying Examination before admission to candidacy. English Education uses the College of Education Qualifying Exam Option. Consult Faculty Program contact for specific information.

Residency
Students must be registered for nine (9) hours of coursework, two semesters

COURSES
See http://www.coedu.usf.edu/main/departments/seced/English/Engma_courswk.htm
TEACHING AND LEARNING IN MATHEMATICS CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a concentration in Teaching and Learning in Mathematics

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 74
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DMA

PROGRAM INFORMATION

The Curriculum and Instruction degree is offered with a concentration area in Teaching and Learning in the Content Area: Mathematics Education

Each program is highly individualized. Candidates’ programs are planned with the approval of a faculty committee based upon previous experience and future goals.

Accreditation
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas
Curriculum development and research, teaching and teacher development, assessment, technology.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions), including an earned degree from regionally accredited institutions or an international equivalent as well as requirements listed below.

Program Admission Requirements
Admissions Requirements include:

- An earned degree from regionally accredited institutions or an international equivalent
- Submit official GRE scores taken within the last 5 years. Scores of 600 on the quantitative portion and 475 on the verbal portion are expected.
- Shall have earned a “B” (3.0 on a 4.0 scale) average or higher in all work attempted while registered as an upper division student in the Baccalaureate degree, or a 3.5 grade point at the Master’s level.
- Proof of educational or professional experience at the secondary or community college level
- Statement of purpose
• Three letters of recommendation

Admission Criteria
The admissions committee will consider each candidate in light of his or her unique submission and qualifications. The expectations used by the faculty are:
• 3.5 GPA on a 4.0 scale for all graduate work and 3.0 for the last 60 hours of undergraduate studies,
• An undergraduate major in the social sciences or humanities, social sciences education or a closely related field from a regionally accredited institution,
• A master’s degree in social sciences education or closely related field from a regionally accredited institution,
• Successful teaching experience in a K-12 setting,
• Demonstrated commitment to personal professional growth and development,
• Strong academic, analytic and communications skills.

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

• An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
• A social security number in degree programs requiring practica or internships;
• Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

Core Requirements

Curriculum and Instruction
One of the following: 3 hours minimum
EDG 7931 Tching & Lning in Content Areas (3)
EDH 7225 Curr Dev in Higher Ed (3)
EDG 7667 Analysis of Curriculum and Instruction (3)
EDG 7692 Issues in Curriculum and Instruction (3)

Statistics/Measurement/Research Design
EDF 6407 Statistical Analysis I (4)
EDF 7408 Statistical Analysis II (4)
EDF 7410 Design of Systematic Studies in Education (4)
EDF 7477 Qual Res in Educ I (4)

Psychological and Social Foundations
EEX 7743 Phil. of Scholarly Inquiry (3)
EDF 7145 Cogn. Issues in Instruction (4)

Concentration/Specialization

Mathematics Education: 18 hours minimum
MAE 7655 Research Issues in Technology (3)
MAE 7146 Curriculum History and Research (3)
MAE 7794 Preparing K-12 Math Teachers (3)
MAE 7796 Research Issues (3)
MAE 7138 Assessment Issues (3)
MAE 7945 Practicum (3) (must be taken twice)
Cognate
Courses consistent with the student’s program of study selected with the approval of a program committee. Courses in the Cognate must be taken at the graduate level.

Dissertation
18 hours minimum

Doctoral Qualifying Examination
Students must demonstrate satisfactory performance on the Doctoral Qualifying Examination before admission to candidacy.

Mathematics Education
The Qualifying Exam is composed of three distinct sections that represent expected areas of student competency (Synthesis of Mathematics Education Research, Utilization of Professional Expertise, and Evaluation and Design of Research Studies). A student’s cognate area is viewed as connected to his or her mathematics experiences, rather than a separate and unrelated area. As such the cognate will be embedded into the QE as appropriate.

Residency
Students must be registered for nine (9) hours of coursework, two semesters in a twelve month period. The expectation is that students will work no more than half time employment during the residency period.

COURSES
See http://www.coedu.usf.edu/main/departments/seced/Math/Mathdoc_course.html
TEACHING AND LEARNING IN SCIENCE CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a concentration in Teaching and Learning in Science

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 74
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DSC

CONTACT INFORMATION

College: Education
Department: Secondary Education
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The Curriculum and Instruction degree is offered with a concentration area in Teaching and Learning in the Content Area: Science Education. Each program is highly individualized. Candidates’ programs are planned with the approval of a faculty committee based upon previous experience and future goals.

ADMISSION INFORMATION

Program Admission Requirements

Admissions Requirements include:
- Earned degrees from regionally accredited institutions or an international equivalent
- Submit official GRE scores. Scores of 600 on the quantitative portion and 475 on the verbal portion are expected.
- An earned a “B” (3.0 on a 4.0 scale) average or higher in all work attempted while registered as an upper division student in the Baccalaureate degree, or a 3.5 grade point at the Master’s level.
- Proof of educational or professional experience
- Three letters of recommendation
- Interview
- Personal Statement
- Recommendations from Program Faculty

Admission Criteria

The admissions committee will consider each candidate in light of his or her unique submission and qualifications. The expectations used by the faculty are:
• GPA on a 4.0 scale for all graduate work and 3.0 for the last 60 hours of undergraduate studies,
• An undergraduate major in the social sciences or humanities, social sciences education or a closely related field from a regionally accredited institution,
• A master’s degree in social sciences education or closely related field from a regionally accredited institution,
• Successful teaching experience in a K-12 setting,
• Demonstrated commitment to personal professional growth and development,
• Strong academic, analytic and communications skills.

International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:
• An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
• A social security number in degree programs requiring practica or internships;
• Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

### DEGREE PROGRAM REQUIREMENTS

#### Core Requirements

**Curriculum and Instruction**

One of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDG 7931 Tching &amp; Learning in Content Areas</td>
<td>3</td>
</tr>
<tr>
<td>EDH 7225 Curr Dev in Higher Ed</td>
<td>3</td>
</tr>
<tr>
<td>EDG 7667 Analysis of Curriculum and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EDG 7692 Issues in Curriculum and Instruction</td>
<td>3</td>
</tr>
</tbody>
</table>

**Statistics/Measurement/Research Design**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>EDF 6407 Statistical Analysis I</td>
<td>4</td>
</tr>
<tr>
<td>EDF 7408 Statistical Analysis II</td>
<td>4</td>
</tr>
<tr>
<td>EDF 7410 Design of Systematic Studies in Education</td>
<td>4</td>
</tr>
<tr>
<td>EDF 7477 Qual Res in Educ I</td>
<td>4</td>
</tr>
</tbody>
</table>

**Psychological and Social Foundations**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEX 7743 Phil. of Scholarly Inquiry</td>
<td>3</td>
</tr>
<tr>
<td>EDF 7145 Cogn. Issues in Instruction</td>
<td>4</td>
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</tbody>
</table>

**Concentration/Specializations**

**Science Education:**

Courses may include, but not be limited to:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tr>
<td>SCE 7220 Socioscientific Issues in Science Education</td>
<td>3</td>
</tr>
<tr>
<td>SCE 6634 Current Trends in Science Education (Secondary)</td>
<td>3</td>
</tr>
<tr>
<td>SCE 6616 Current Trends in Science Education (Elementary)</td>
<td>3</td>
</tr>
<tr>
<td>SCE 6865 Technology: Solving Societal Problems</td>
<td>3</td>
</tr>
<tr>
<td>SCE 7910 Directed Research</td>
<td>3</td>
</tr>
</tbody>
</table>

Courses from related program areas may be used in this area with permission of program coordinator.

**Cognate**

Courses consistent with the student’s program of study selected with the approval of a program committee.

Courses in the Cognate must be taken at the graduate level.

**Dissertation**

18 hours minimum
**Doctoral Qualifying Examination**
Students must demonstrate satisfactory performance on the Doctoral Qualifying Examination before admission to candidacy.

**Residency**
Students must be registered for nine (9) hours of coursework, two semesters in a twelve month period. The expectation is that students will work no more than half time during the residency period.

**COURSES**
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
# Teaching and Learning in Social Science Concentration (Ph.D.)

## Degree Information

<table>
<thead>
<tr>
<th>Program Admission Deadlines:</th>
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</thead>
<tbody>
<tr>
<td>Fall: February 15</td>
</tr>
<tr>
<td>Fall admission only</td>
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</tbody>
</table>

- Minimum Total Hours: 74
- Program Level: Doctoral
- CIP Code: 13.0301
- Dept Code: CNI
- Program (Major/College): CUR ED
- Concentration Code: DSO

## Contact Information

- College: Education
- Department: Secondary Education
- Contact Information: [www.grad.usf.edu](http://www.grad.usf.edu)

## Program Information

The Curriculum and Instruction degree is offered with a concentration area in Teaching and Learning in the Content Area: **Social Science Education**. Each program is highly individualized. Candidates’ programs are planned with the approval of a faculty committee based upon previous experience and future goals.

## Admission Information

### Program Admission Requirements

For consideration for admission, students must submit:

- Official GRE scores (dating back no longer than five years)
- Official transcripts from regionally accredited institutions
- A statement of professional goals
- 3 letters of recommendation from prior professors, and
- Complete an interview with the doctoral program coordinator.

### Admission Criteria

The admissions committee will consider each candidate in light of his or her unique submission and qualifications. The expectations used by the faculty are:

- GPA on a 4.0 scale for all graduate work and 3.0 for the last 60 hours of undergraduate studies,
- An undergraduate major in the social sciences or humanities, social sciences education or a closely related field from a regionally accredited institution,
- A master’s degree in social sciences education or closely related field from a regionally accredited institution,
- Successful teaching experience in a K-12 setting,
- Demonstrated commitment to personal professional growth and development,
- Strong academic, analytic and communications skills.

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http://www.coedu.usf.edu/
International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

DEGREE PROGRAM REQUIREMENTS

Core Requirements

Curriculum and Instruction
One of the following:
EDG 7931 Tching & Lrning in Content Areas (3)
EDH 7225 Curr Dev in Higher Ed (3)
EDG 7667 Analysis of Curriculum and Instruction (3)
EDG 7692 Issues in Curriculum and Instruction (3)

Statistics/Measurement/Research Design
EDF 6407 Statistical Analysis I (4)
EDF 7408 Statistical Analysis II (4)
EDF 7410 Design of Systematic Studies in Education (4)
EDF 7477 Qual Res in Educ I (4)

Psychological and Social Foundations
EEX 7743 Phil. of Scholarly Inquiry (3)
EDF 7145 Cogn. Issues in Instruction (4)

Concentration/Specializations

Social Science Education:
The requirements are as follows or as recommended by the doctoral coordinator, program faculty, or doctoral committee, and approved by the college and/or Graduate School.
SSE 7700 Social Science Curriculum and Instruction Issues (4)
SSE 7710 Research in Social Science Education (4)
SSE 7720 Social Science Education Technological Innovations (4)
SSE 7730 Philosophy of Social Science Education (4)
SSE 7740 History of Social Studies Education (4)
SSE 7945 Appld Rsch Soc Sc Ed – SSE (8)

Cognate
Courses consistent with the student’s program of study selected with the approval of a program committee. Courses in the Cognate must be taken at the graduate level.
Dissertation

Doctoral Qualifying Examination
Students must demonstrate satisfactory performance on the Doctoral Qualifying Examination before admission to candidacy.

Residency
Students must be registered for nine (9) hours of coursework, two semesters in a twelve month period. The expectation is that students will work no more than half time during the residency period.

COURSES
See concentration area website listed above and [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
TEACHING AND LEARNING IN THE CONTENT AREA: GENERAL EDUCATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program
With a Concentration in Teaching and Learning in the Content Area: General Education

DEGREE INFORMATION

Program Admission Deadlines:
Currently Closed for Admissions

English Education and Mathematics Education:
Fall: February 15
Spring: October 15
Summer: February 15

Science Education:
Fall: February 15
Spring: October 15
Summer: February 15

Social Science Education:
Fall: February 15
Fall admission only

Minimum Total Hours: 74
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: DTL

CONTACT INFORMATION

College: Education
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Admission to this program has been temporarily Suspended

The Curriculum and Instruction degree is offered with a concentration area in Teaching and Learning in the Content Area: General Education. Areas of study are available in the following:

- English Education
- Mathematics Education
- Science Education
- Social Science Education

Each program is highly individualized. Candidates’ programs are planned with the approval of a faculty committee based upon previous experience and future goals.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.
ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

English Education:
To be admitted to the English Education doctoral program prospective students must provide the following documents to the doctoral program coordinator:
- A current curriculum vitae
- Three letters of recommendation from people who can attest to the candidate’s capacity to do doctoral work and/or excellence as a classroom teacher
- BA degree and “B” or better in coursework, BA+MA
- A written statement of professional goals
- Official transcripts from previous academic work
- A writing sample. This could be a published article or a scholarly paper prepared for a previous class that demonstrates capacity as a thinker and writer
- Official scores from the Graduate Record Exam, (GRE).

Formal application to the Graduate School must also be made at the time the above documents are submitted.

Mathematics Education/Science Education:
Admissions Requirements include:
- Submit official GRE scores taken within the last 5 years. Scores of 600 on the quantitative portion and 475 on the verbal portion are expected.
- Shall have earned from a regionally accredited institution a “B” (3.0 on a 4.0 scale) average or higher in all work attempted while registered as an upper division student in the Baccalaureate degree, or a 3.5 grade point at the Master’s level.
- Proof of educational or professional experience at the secondary or community college level
- Statement of Purpose
- Three letters of Recommendation

Social Science Education:

Admission Process
For consideration for admission, students must submit:
- Official GRE scores (dating back no longer than five years),
- Official transcripts from regionally accredited institutions,
- A statement of professional goals,
- 3 letters of recommendation from prior professors, and
- Complete an interview with the doctoral program coordinator.

Admission Criteria
The admissions committee will consider each candidate in light of his or her unique submission and qualifications. The expectations used by the faculty are:
- 3.5 GPA on a 4.0 scale for all graduate work and 3.0 for the last 60 hours of undergraduate studies,
- An undergraduate major in the social sciences or humanities, social sciences education or a closely related field from a regionally accredited institution,
- A masters degree in social sciences education or closely related field from a regionally accredited institution,
- Successful teaching experience in a K-12 setting,
- Demonstrated commitment to personal professional growth and development,
- Strong academic, analytic and communications skills.
International Students
All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- An external, course by course evaluation of the foreign degree by an approved external agency, and based on official transcripts;
- A social security number in degree programs requiring practica or internships;
- Other information as required by the program of interest, (e.g. Graduate Record Exam scores, etc.).

PROGRAM DEGREE REQUIREMENTS
General Program Requirements for the Curriculum and Instruction degree, (minimum requirements):

Core requirements
Curriculum and Instruction 3 hours minimum
One of the following:
ESE 7415 Teaching & Learning in Content Areas (3)
EDH 7225 Curr Dev in Higher Ed (3)
EDG 7667 Analysis of Curriculum and Instruction (3)
EDG 7692 Issues in Curriculum and Instruction (3)

Statistics/Measurement/Research Design 16 hours minimum
EDF 6407 Statistical Analysis I (4)
EDF 7408 Statistical Analysis II (4)
EDF 7410 Design of Systematic Studies in Education (4)
EDF 7477 Qual Res in Educ I (4)

Psychological and Social Foundations 7 hours
EEX 7743 Phil. of Scholarly Inquiry (3)
EDF 7145 Cogn. Issues in Instruction (4)

Concentration Requirements 18 hours minimum

**English Education:**
The following four seminars are required:
EDG 7931 Research and Theory in Teaching Literature and Language (3)
EDG 7931 Research and Theory in Teaching Writing (3)
EDG 7931 Education of English Teachers (3)
EDG 7931 Research in English Education (3)
Additional courses in this area will be determined by the student’s research interests.

**Mathematics Education:**
MAE 7655 Research Issues in Technology (3)
MAE 7146 Curriculum History and Research (3)
MAE 7794 Preparing K-12 Math Teachers (3)
MAE 7796 Research Issues (3)
MAE 7138 Assessment Issues (3)
MAE 7945 Practicum (3) (must be taken twice)

**Science Education:**
Courses may include, but not be limited to:
SCE 7220 Socioscientific Issues in Science Education (3)
SCE 6634 Current Trends in Science Education (Secondary) (3)
SCE 6616 Current Trends in Science Education (Elementary) (3)
SCE 6865 Technology: Solving Societal Problems (3)
SCE 7910 Directed Research
Courses from related program areas may be used in this area with permission of program coordinator.

**Social Science Education:**
The requirements are as follows or as recommended by the doctoral coordinator, program faculty, or doctoral committee, and approved by the college and/or Graduate School.

SSE 7700 Social Science Curriculum and Instruction Issues (4)
SSE 7710 Research in Social Science Education (4)
SSE 7720 Social Science Education Technological Innovations (4)
SSE 7730 Philosophy of Social Science Education (4)
SSE 7740 History of Social Studies Education (4)
SSE 7945 Appld Rsch Soc Sc Ed – SSE (8)

**Cognate**
Courses consistent with the student’s program of study selected with the approval of a program committee. Courses in the Cognate must be taken at the graduate level.

**Dissertation**
12 hours minimum

xxx 7980

**Doctoral Qualifying Examination**
Students must demonstrate satisfactory performance on the Doctoral Qualifying Examination before admission to candidacy.

*English Education, Science Education, and Social Science Education* use the College of Education Qualifying Exam Option. Consult Faculty Program contact for specific information.

**Mathematics Education:**
The Qualifying Exam is composed of three distinct sections that represent expected areas of student competency (Synthesis of Mathematics Education Research, Utilization of Professional Expertise, and Evaluation and Design of Research Studies). A student’s cognate area is viewed as connected to his or her mathematics experiences, rather than a separate and unrelated area. As such the cognate will be embedded into the QE as appropriate.

**Residency**
Students must be registered for nine (9) hours of coursework, two semesters in a twelve month period. The expectation is that students will work no more than half time during the residency period.

**COURSES**
See concentration area website listed above and [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
VOCATIONAL EDUCATION CONCENTRATION

Education Specialist (Ed.S.) Degree in the Curriculum and Instruction Program
With a concentration in Vocational Education

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Specialist
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): CUR ED
Concentration Code: SVO

CONTACT INFORMATION

College: Education
Department:
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

Students are considered for this degree on a case by case basis. Please contact the Program Coordinator prior to applying.

PROGRAM INFORMATION

Program Description
The program prepares professionals for leadership positions in K-12 schools, postsecondary education, and other settings where career and workforce education is organized and delivered either formally or informally. This is an advanced graduate degree beyond master’s level preparation and one step below a doctoral degree.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

To be considered for admission, all applicants must meet the requirements listed below unless a particular requirement can be waived or additional/alternative documentation can be accepted as stated in Admissions Criteria.

To be submitted to the University’s Graduate Admissions Office:

- The University’s Graduate Admissions Application and related items (see Office of Graduate Admissions website at: http://admissions.grad.usf.edu/)
- Official Graduate Record Examination (GRE) scores submitted in a sealed envelope or recorded on an official transcript
- Official transcripts from previous educational institutions

http://www.coedu.usf.edu/
For International Students
Applicants whose native language is not English or who have not earned a degree in the United States must also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 550 on the paper-based test, are required. Applications submitted with TOEFL scores that do not meet the minimum requirements will be denied. The TOEFL requirement may be waived if the applicant meets one of the following conditions:

- The applicant’s native language is English, or
- Has scored 500 or higher on the GRE Verbal Test, or
- Has earned a college degree at a U.S. institution of higher learning, or
- Has earned a college degree from an institution whose language of instruction is
- English (must be noted on the transcript), or
- Has scored 6.5 on International English Language Testing System (IELTS) http://www.ielts.org/

To be submitted directly to the Program Coordinator:

1. A cover letter including a statement of professional and personal goals, and reasons that earning the Education Specialist degree is important to those goals
2. A current professional vita or resume
3. Three Program Recommendation Forms completed by former professors or supervisors rating the applicant’s likelihood of success in the Ed.S. program (available for downloading at program website)

Admissions Criteria
The program employs a holistic approach to admissions taking into account all the information provided by applicants to balance test scores, previous grade point averages, recommendation forms, professional experiences, and accomplishments. This information is used to assess academic, analytical, and communication skills, the applicant’s commitment to personal and professional growth and development, and potential for successful completion of the Ed.S. program. In particular, the program gives preference to candidates presenting the following evidence:

- Hold a Master’s degree from an accredited institution in an area that clearly serves as the foundation for advanced study aligned with the premises of the Ed.S. degree, and with 3.5 or better Graduate Point Average (GPA) on a 4.0 scale.

- Strong GRE scores having no more than one sub-score below the 33rd percentile. If a score in one area is very low, the other should be considerably higher. The GRE must have been taken no more than 5 years prior to the date of application for graduate admission. In exceptional cases: (a) students not meeting this criterion may submit additional or alternative documentation of their potential for success in the program, or (b) GRE scores may be waived in the case of applicants who have graduated from master’s degree programs in the Adult, Career, and Higher Education Department at USF with a GPA of 3.9 or higher (on a scale of 4.0) and received excellent ratings from program faculty (i.e., recommendation forms).

- Track record of significant successful professional experiences supporting the fit between professional background and career goals.

Applicants are responsible for evaluating their individual alignment with criteria for admission to the program and ensuring that all pertinent materials are submitted to the Graduate Admissions Office and Program Coordinator as indicated above. Contacting the Program Coordinator prior to applying to Graduate Admissions is strongly advised.

Applicants should be aware that meeting admissions requirements does not guarantee admission to the program. To ensure appropriate faculty support, the program accepts only a limited number of students and in some cases applicants meeting or exceeding admission requirements may not be accepted for the requested starting date.
DEGREE PROGRAM REQUIREMENTS

The program requires a minimum of 36 credit-hours of post-master’s degree work.

Core Requirements

Coursework

Students must take 15 semester-hours at the 7000 level including EVT 7761 (Research Seminar) and at least two other courses from doctoral coursework in Career and Workforce Education.

Eligible courses include:

- ECT 7066 Foundations of Career and Workforce Education (3)
- EVT 7168 Principles of Contextual Teaching and Learning (4)
- ECW 7105 Program Plan and Implementation (3)
- EVT TBD Comparative Study of CWE systems (3)

Complementary specialized coursework at the 7000 level could be drawn from other areas relevant to the particular interests and career goals of individual students (e.g., adult education, higher education, educational leadership).

Master’s or advanced 6000 graduate level coursework, can be drawn from an appropriate area (e.g., career and technical education, adult education, instructional technology) that clearly builds upon prior experience, career goals, and core specialization for a minimum of 9 hours. In all cases, the selection of the coursework for this degree must be done in consultation with the major professor and the student’s committee.

Thesis: 6971

To complete the program, students must successfully prepare and defend a thesis/project

Required Examinations

Students must take and pass a comprehensive examination to satisfy program requirements prior to graduation.

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
VOCATIONAL EDUCATION CONCENTRATION

Doctor of Education (Ed.D.) Degree in the Educational Program Development Program
With a concentration in Vocational Education

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15
Fall admission only on a two-year cycle. Contact coordinator for next entry point.

Minimum Total Hours: 76
Program Level: Doctoral
CIP Code: 13.0301
Dept Code: CNI
Program (Major/College): EPD ED
Concentration Code: EVO

CONTACT INFORMATION

College: Education
Department: Adult, Career and Higher Education
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Program Description
The Ed.D. in Vocational Education is designed to develop the competencies of career and workforce education practitioners in a variety of employment settings. Practitioners will also obtain and synthesize knowledge for the solution of education problems and practices in the field.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet university requirements (see Graduate Admissions) as well as program requirements. Admission to the Ph.D. program in Career and Workforce Education is based on an evaluation of the applicants’ demonstrated potential to complete successfully program coursework and research requirements. Success in the program requires a commitment to rigorous and systematic inquiry in the field along with excellent research skills and high quality scholarship.

Program faculty employ a holistic approach to admissions consideration, taking into account all of the information provided by applicants to balance test scores, previous grade point averages, recommendation forms, professional experiences and successes, etc.

Application Materials
To be considered for admission, all applicants must submit the application materials listed below unless a particular requirement can be waived or additional/alternative documentation can be accepted as stated in the Admissions Requirements.

To be submitted to the Graduate Admissions Office:
- The University’s Graduate Admissions Application and related items (see Office of Graduate Admissions website at: http://admissions.grad.usf.edu/).
- Official Graduate Record Examination (GRE) scores.
- Official transcripts from previous educational institutions.
- Other application materials as required for international students who must apply through the Office of International Admissions. For a complete list of related requirements visit the office website at:

http://www.coedu.usf.edu/
To be submitted directly to Program Coordinator:

- A current professional vita or resume.
- A cover letter including a statement of professional and personal goals, and reasons that earning the doctorate is important to those goals.
- Three Program Recommendation Forms (available for downloading at program website) completed by former professors or supervisors rating the applicant’s likelihood of success in the doctoral program.

**PROGRAM ADMISSION REQUIREMENTS**

- A master’s degree from a regionally accredited university with a 3.5 or higher graduate grade point average (GPA) on a 4.0 scale.
- GRE scores with no more than one sub-score below the 33rd percentile. If a score in one area is very low, the other should be considerably higher.
  - In exceptional cases, students not meeting this criterion may submit additional or alternative documentation of their potential for success in doctoral level studies.
  - GRE scores may be waived in exceptional cases for applicants who have graduated from master’s degree programs in the Adult, Career, and Higher Education Department at USF with a GPA of 3.9 or higher (on a scale of 4.0) and received excellent ratings from program faculty (i.e., recommendation forms).
- Evidence of significant successful professional experiences supporting the fit between professional background, goals, and the applicant’s potential doctoral program of study.
- Demonstrated commitment to personal and professional growth and development and to the completion of the rigorous course and research demands of the Ph. D. program.
- Excellent academic, analytical and communication skills.
- On campus or phone interview.

Applicants are responsible for evaluating their individual alignment with criteria for admission to the program, and ensuring that all pertinent materials are submitted for application to the program.

**Admission Process.** Applicants are responsible for submitting applications and fees directly to the Office of Graduate Admissions before the program or university application deadlines (see Graduate Admissions website at: [http://admissions.grad.usf.edu/](http://admissions.grad.usf.edu/)).

Applications are considered on a continuous basis throughout the year, although students are formally admitted into the program every two years beginning in the fall semester (see program website for upcoming program cycle). Applicants should be aware that meeting admissions requirements does not guarantee admission to the program. To ensure appropriate faculty support, the program will accept only a limited number of students every two years and in some cases applicants meeting or exceeding admission requirements may not be accepted for the requested starting date. To this end, applicants are strongly encouraged to apply early to the program.

**Special Instructions for International Students**

Applicants whose native language is not English or who have not earned a degree in the United States must also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test, or 550 on the paper-based test, are required. Applications submitted with TOEFL scores that do not meet the minimum requirements will be denied. The TOEFL requirement may be waived if the applicant meets one of the following conditions:

- The applicant’s native language is English, or
- Has scored 500 or higher on the GRE Verbal Test, or
- Has earned a college degree at a U.S. institution of higher learning, or
- Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or
- Has scored 6.5 on International English Language Testing System (IELTS) [http://www.ielts.org/]
DEGREE PROGRAM REQUIREMENTS

The program requires a minimum of 76 hours beyond the master’s degree.

Core Requirements 22 hrs minimum

Psychological and Social Foundations of Education (11 hours min. with at least one course from Psychological Foundations, and one course from Social Foundations) Courses can be selected from the pre-approved listing in the College of Education section of the catalog.

Statistics/Measurement/Research Design 11 hours minimum
EDF 6407 Statistical Analysis in Education I
EDF 7408 Statistical Analysis in Education II
And at least one course in research design depending on research interests (See the pre-approved listing in the College of Education section of the catalog.)

Curriculum and Instruction 6 hours minimum
(See the pre-approved listing in the College of Education section of the catalog.)

Concentration Coursework 24 hours minimum
At least 12 hours must be at 7000-level, or 6000-level courses requiring advanced graduate standing. Eligible courses include:

ECT 7066  Foundations and philosophy of vocational, technical and adult education
EVT 7168  Instructional development for vocational, technical and adult education
ECW 7105  Vocational and adult education program planning and implementation
EVT 7761  Research seminar in vocational, technical and adult education
EDG 7931  Comparative study of career and workforce education systems
EDG 6931  Equity and access in the new economy

Other coursework needed to complete the 24 hours in concentration should be selected in consultation with the major professor and doctoral committee.

Electives
Selected specialization courses may be substituted with elective courses with the approval of the major professor.

Dissertation 24 hours minimum
Students must be admitted to candidacy before they are permitted to enroll in dissertation hours.

Required Examinations
Students must take and successfully complete: (a) a qualifying examination prior to becoming a candidate for a doctoral degree, and (b) an oral examination of dissertation research.

Residency Requirements
Students must spend at least one academic year of residence requiring a minimum of 9 credit hours of graduate work per semester, including 2 semesters within a 12-month period.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
SECTION 16

COLLEGE OF ENGINEERING

http://www.eng.usf.edu/
Changes to Note

The follow curricular changes for the College of Engineering were approved by the USF-Tampa Graduate Council on the date noted.

New Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>CES 6118</td>
<td>Applied Finite Elements</td>
<td>2/1/10</td>
</tr>
<tr>
<td>ENV 6105</td>
<td>Air Pollution</td>
<td>2/1/10</td>
</tr>
<tr>
<td>EES 6107</td>
<td>Biological Principles of Environmental Engineering</td>
<td>2/1/10</td>
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<tr>
<td>ENV 6564</td>
<td>Environmental Engineering Design</td>
<td>3/1/10</td>
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<tr>
<td>TTE 5620</td>
<td>Air Transportation</td>
<td>5/3/10</td>
</tr>
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</table>

Other Revisions (GC approval not needed)

Minor Course edits throughout section (e.g. course numbers, title updates, etc.)
Minor edits to College section
Biomedical Engineering (M.S.E.S.) – closed for admission
Civil Engineering – adding in the missing information for degree requirements
Mechanical Engineering (M.M.E.) – corrected TOEFL score requirement
University of South Florida  
College of Engineering  
4202 E. Fowler Ave ENB118  
Tampa, FL 33620

Web address: http://www2.eng.usf.edu/

Phone: 813-974-3780  
Fax: 813-974-0460  
Email: n/a

College Dean: John Wiencek  
Associate Dean: Rafael Perez

Accreditation:  
The Commission on Colleges of the Southern Association of College and Schools. Contact College for additional accreditation information

MISSION STATEMENT  
The mission of the USF College of Engineering is to improve the quality of life in our community by providing a high quality education for our engineering graduates and practicing professionals; by creating new knowledge and solving real world problems via innovative research; and by engaging in effective community service and outreach.

WHAT WE DO  
At the graduate level students work in close collaboration with faculty, pursuing advanced topics within their disciplines, which will result in advancements in their fields and society at large.

Utilizing the expertise of its individual and collective faculty, the College is dedicated to the development of new fundamental knowledge and processes or procedures, which will benefit all humanity. The College promotes multi-disciplinary approaches, commitment to life-long learning and awareness of societal issues, which are requisite for meeting technological challenges.

The College provides technical assistance and technology transfer to the region, state and nation. In all facets of teaching, research and service, the College emphasizes close liaisons with industry and government to provide students and faculty with the skills and perspectives needed to ensure effective technological leadership.
Degrees Offered:
See individual listings for current active status
- Master of Chemical Engineering (M.C.H.E.)
- Master of Civil Engineering (M.C.E.)
- Master of Engineering (M.E.)
- Master of Environmental Engineering (M.E.V.E.)
- Master of Industrial Engineering (M.I.E.)
- Master of Mechanical Engineering (M.M.E.)
- Master of Science in Biomedical Engineering (M.S.B.E.)
- Master of Science in Chemical Engineering (M.S.C.H.)
- Master of Science in Civil Engineering (M.S.C.E.)
- Master of Science in Computer Engineering (M.S.C.P.)
- Master of Science in Computer Science (M.S.C.S.)
- Master of Science in Electrical Engineering (M.S.E.E.)
- Master of Science in Engineering Management (M.S.E.M.)
- Master of Science in Engineering Science (M.S.E.S.)
- Master of Science in Environmental Engineering (M.S.E.V.)
- Master of Science in Industrial Engineering (M.S.I.E.)
- Master of Science in Materials Science and Engineering (M.S.M.S.E.)
- Master of Science in Mechanical Engineering (M.S.M.E.)
- Doctor of Philosophy (Ph.D.)

Programs Offered:
See individual listings for current active status
- Master of Chemical Engineering (M.C.H.E.)
  Chemical Engineering

  Master of Civil Engineering (M.C.E.)
  Civil Engineering

  Master of Engineering (M.E.)
  Chemical Engineering
  Electrical Engineering
  Industrial Engineering
  Mechanical Engineering

  Master of Environmental Engineering (M.E.V.E.)
  Environmental Engineering

  Master of Industrial Engineering (M.I.E.)
  Industrial Engineering

  Master of Mechanical Engineering (M.M.E.)
  Mechanical Engineering
  Master of Science in Biomedical Engineering (M.S.B.E.)
  Biomedical Engineering

  Master of Science in Chemical Engineering (M.S.C.H.)
  Chemical Engineering
Master of Science in Civil Engineering (M.S.C.E.)
Civil Engineering

Master of Science in Computer Engineering (M.S.C.P.)
Computer Engineering

Master of Science in Computer Science (M.S.C.S.)
Computer Science

Master of Science in Electrical Engineering (M.S.E.E.)
Electrical Engineering

Master of Science in Engineering Management (M.S.E.M.)
Engineering Management

Master of Science in Engineering Science (M.S.E.S.)
Biomedical Engineering
Chemical Engineering
Civil Engineering
Electrical Engineering
Engineering Science
Environmental Engineering
Mechanical Engineering

Master of Science in Environmental Engineering (M.S.E.V.)
Environmental Engineering

Master of Science in Industrial Engineering (M.S.I.E.)
Industrial Engineering

Master of Science in Materials Science and Engineering (M.S.M.S.E.)
Materials Science and Engineering

Master of Science in Mechanical Engineering (M.S.M.E.)
Mechanical Engineering

Doctor of Philosophy (Ph.D.)
Biomedical Engineering
Chemical Engineering
Civil Engineering
Computer Science and Engineering
Electrical Engineering
Engineering Science
Industrial Engineering
Mechanical Engineering

Dual Degree Program:
Dual degrees in Biomedical Engineering (M.S.) and Entrepreneurship in Applied Technologies (M.S.)
Concentrations:
- Biomedical and Biotechnology (Chemical Engineering)
- Engineering Management (Industrial Engineering)
- Geotechnical (Civil Engineering)
- Interdisciplinary Transportation (Civil Engineering)
- Manufacturing (Chemical Engineering)
- Manufacturing Systems (Industrial Engineering)
- Materials (Civil Engineering)
- Physics (Engineering Science)
- Quantitative Analysis (Industrial Engineering)
- Structures (Civil Engineering)
- Transportation (Civil Engineering)
- Water Resources (Civil Engineering)

Graduate Certificates Offered: See Graduate Certificates

COLLEGE REQUIREMENTS

General Program Requirements
The requirements for graduate degrees from the College of Engineering consist of University requirements, College requirements, and Program requirements. For University requirements refer to the Graduate School Policies and Procedures. College requirements are listed below. Refer to the degree program sections for other requirements.

Master’s Degree Programs
The Master’s degree is awarded for advanced study beyond the baccalaureate degree within an area of specialty. The College of Engineering offers several programs leading to degrees at the master’s level.

Master of Science in Designated Engineering Field - This degree is normally awarded to a Master’s graduate who holds a Bachelor’s degree in the designated field. Some programs offer this degree in two options: (1) thesis option (30 credits), and (2) non-thesis option (30 credits).

Master of Science in Engineering Science - This program is designed to meet the needs of students who wish to pursue an interdisciplinary course of study and research. This degree is individually tailored to student needs. Some programs offer this degree in two options: (1) thesis option (30 credits), and (2) non-thesis option (30 credits).

Master of Science in Engineering - This degree is normally awarded to a Master’s graduate who has a Bachelor’s degree from a non-engineering program and has completed a prescribed series of undergraduate engineering courses. Some programs offer this degree in two options: (1) thesis option (30 credits), and (2) non-thesis option (30 credits). (Program withdrawn.)

Master of Designated Discipline - This degree is normally awarded to a Master’s graduate who has an undergraduate degree in the discipline and who follows an all coursework program or a project program.

Master of Engineering - This degree is normally awarded to a Master’s graduate who has a Bachelor’s degree from a non-engineering program and has completed a prescribed series of undergraduate engineering courses.
Manufacturing Option - In addition, the departments of Chemical & Biomedical Engineering, Computer Science and Engineering, Electrical Engineering and Mechanical Engineering, offer a Master of Science in Engineering with a Manufacturing Systems Option (consisting of an 18-hour core and 18 hours of electives). The degree is administered by the Industrial Engineering Department and is a true interdisciplinary degree with areas of Robotics, Automation, Computer Aided Design, Computer Integrated Manufacturing, Control Systems, Software Systems, Hardware Systems, and Production Systems available for emphasis. The student, upon completion of the core courses, may choose electives and concentrate within one of the above departments or may choose to acquire an in depth knowledge in one of the above emphasis areas by making elective course choices from several departments. (Program withdrawn.)

College of Engineering Requirements for Master’s Degree
1. A thesis program must contain a minimum of 24 credit hours of coursework and a minimum of 6 credit hours of thesis. (If a student transfers from a thesis program to an all coursework program, no thesis hours may be transferred, converted or counted toward the degree.)
2. Non-thesis program requirements vary according to department but must contain a minimum of 30 credits of approved coursework.
3. Students must maintain an overall grade point average of 3.00. No grade below “C” will be accepted in a graduate program. If a student’s average falls below 3.00, the student will be placed on probation.
4. Most programs require students to pass a final oral or written comprehensive examination prior to receiving the degree. These examinations are arranged and administered by the student’s department.

Accelerated Programs Leading to Accelerated Bachelor and Master’s Degrees
Students who, at the end of the junior year, clearly are interested in graduate study are invited to pursue a five-year program leading simultaneously to the Bachelor of Science in Engineering or Engineering Science and Master Degrees. This program offers the opportunity to take graduate courses during the fourth year and deferring senior courses to the fifth year. Students in the Five-Year Program may apply 6 credit hours of coursework, which must be approved by the Graduate Program Coordinator, to count towards both degrees.

Students apply for admission to this program through their advisors, who should be consulted regarding additional requirements. Several factors, which vary by academic department, are considered for admission. However, all applicants must have a minimum GPA of at least 3.00.

Doctoral Degree Programs
The Doctor of Philosophy degree is awarded in recognition of demonstrated scholarly competence and ability to conduct and report original and significant research. Unlike the baccalaureate and Master’s degrees, the Ph.D. degree cannot be earned by an accumulation of course credits over a period of residence alone. After adequate fundamental preparation to gain competence, the student must demonstrate research capability through completion of an authoritative investigation in the chosen engineering field, culminating in a written dissertation. The dissertation must demonstrate that the student possesses the ability to reason logically, the talent for engaging in significant and original research, and the ability to organize and present conclusions in a professional manner.

Doctor of Philosophy in Designated Engineering Field - This degree is awarded to students pursuing a program in one of the following Engineering disciplines: Biomedical Engineering, Chemical Engineering, Civil Engineering, Computer Science and Engineering, Electrical Engineering, Industrial Engineering, and Mechanical Engineering. Students receiving this degree must demonstrate a thorough foundation in the designated discipline.
Doctor of Philosophy in Engineering Science - This program is designed to meet the needs of students who wish to pursue doctoral studies in interdisciplinary areas closely related to engineering.

College of Engineering Requirements for Doctoral Degrees

1. Supervisory Committee. An advisor will be appointed by the chair of the appropriate department or program for each student during the first semester of registration at the University of South Florida. The advisor will help determine the student’s area of research interest and will delineate preliminary course assignments. At the earliest possible date, a major professor will be appointed and a supervisory committee formed. This committee will monitor the student’s program of studies and has full responsibility for conducting the student’s qualifying examination. The Supervisory Committee consists of a minimum of five members. One member of the committee must be outside the College of Engineering. (The requirement may be waived if special reasons exist and prior approval is obtained from the Engineering Associate Dean for Academic Affairs.) A majority of the committee will be from the College of Engineering, with at least two departments of the College represented.

2. Credit Hours. A minimum of 60 hours of coursework beyond the baccalaureate degree plus a minimum of 20 hours of dissertation research is required. Total hours of credit must equal or exceed 90 hours. A minimum of 27 hours coursework in an engineering area of concentration is required. The 27 hours need not be coursework in the same department, but must focus directly upon the areas of concentration; at least 20 hours must be at the 6000 level. In addition, a minimum of 8 hours of mathematics or statistics is required. Engineering Mathematics may be approved by the committee if appropriate. Also, a minimum of 8 hours of coursework as defined by the committee outside the major area of concentration is required. Further requirements may be imposed by the candidate’s committee.

3. Learning Focus. Throughout the student’s program of study, independent learning will be emphasized. For the first time in the participant’s career, in most cases, the student will be responsible for mastering a new domain of knowledge without the aid of organized lectures and textbooks. The principal information source will be current literature. Such experience is a necessary preparation for a meaningful career in engineering and other fields where the professional must keep pace with a large, ever-changing body of knowledge.

4. Qualifying Examination. A written and oral qualifying examination, conducted by the supervisory committee, will be taken by each Ph.D. student as soon as a substantial majority of coursework is completed.

5. Admission to Candidacy. Students must be admitted to candidacy before they register for dissertation. Before admission to candidacy, students must have officially formed a Ph.D. Supervisory Committee and passed the qualifying examination of paragraph 4. Once admitted to candidacy students must enroll for a minimum of 2 credit hours each semester of the academic year until completion of program.

6. Dissertation Research. The student must carry out an investigation resulting in an original and significant contribution to the knowledge in the field of research. The requirement of uniqueness means that the dissertation research will provide an important creative experience for the student. As the final stage of the student’s program, the candidate must prepare a written dissertation covering the research. Students in the Ph.D. program must take an appropriate number of doctoral dissertation credits, but not less than 20 hours; the exact number is determined by department and/or individual requirements. The defense of the dissertation will conform to Graduate School general rules.
7. **Residency.** Minimum residency requirements may be satisfied by completing the University’s minimal requirement at the University of South Florida. Any graduate work counted toward the fulfillment of the requirement for the Ph.D. degree after admission to candidacy must be accomplished within 5 calendar years.

**Collaboration with Other Colleges and Departments**

Advanced study and research challenges exist at the interfaces between engineering and other academic disciplines. Examples include surface physics and chemistry applied to semiconductor processing technology; semiconductor physics applied to VLSI and analog integrated circuit design, manufacture and quality control; chemical processing and its relation to chemical principles; environmental engineering and chemical identification of minute impurities; environmental and transportation engineering and its relation to public health and public administration; water resources engineering and geo-hydrology; and biomedical engineering, to name only a few. The College collaborates with other academic units of the University in research activities and selectively educates students to become proficient in such interdisciplinary fields.
The University of South Florida Graduate Catalog is organized with the degree programs offered listed in the section of the college that offers them. For example, the Master of Science degree with a “program” (also known as major) in Biology is listed in the College of Arts and Sciences section. Some colleges offer areas of specialization, or “concentrations” within a degree program.

**EXAMPLE OF PROGRAM PAGE**

Black denotes degree

**ELECTRICAL ENGINEERING PROGRAM**

Master of Electrical Engineering (M.E.) Degree

**DEGREE INFORMATION**

**EXAMPLE OF CONCENTRATION PAGE**

Black denotes degree

**ADULT EDUCATION CONCENTRATION**

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program With a concentration in Adult Education

**DEGREE INFORMATION**

Green denotes Program (or Major)

Blue denotes Concentration (or area of specialization)

The name of the program and/or concentration does not appear on the diploma – only the name of the degree (i.e., Master of Arts) is listed. The program and concentration information is listed on the official transcript. Other areas, such as application track, are not listed on the transcript.
BIOMEDICAL ENGINEERING PROGRAM

Master of Science in Biomedical Engineering (M.S.B.E.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.0501
Dept Code: DEA
Program (Major/College): EBI EN

CONTACT INFORMATION

College: Engineering
Department: Chemical & Biomedical Engineering
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Biomedical Engineering is a highly interdisciplinary program that combines engineering and the medical sciences. The student works with an advisor to develop a graduate program that draws on courses from engineering, medicine, public health, and the life sciences. Current active areas of research include: biomechanics, biomaterials, medical imaging, tissue engineering, sensors, cellular-level drug delivery, and rehabilitation engineering. In addition to USF Health, participating institutions include the James Haley Veterans Administration Hospital, Shriners Orthopedic Hospital for Children, Florida Orthopedics Institute, and Tampa General Hospital. For more information, please contact the BME Program Advisor.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- Undergraduate GPA of 3.00 or higher.
- Minimum GRE, Quantitative >620; Analytical written score of 4 or >;
- An undergraduate Bachelor’s degree or equivalent in Engineering or Science;
- TOEFL 550 (paper-based total) for international students or 213 (computer-based total);
- Three (3) letters of recommendation;
- A statement of purpose.

Note: Exceptionally qualified students with undergraduate degrees in the Life and Physical Sciences may be admitted into the BME M.S. Program. Such students will typically have to complete a series of remedial courses before formal admission into the program. Any remedial courses will normally not count towards the degree requirements. The BME Program Advisor should be consulted for details.
DEGREE PROGRAM REQUIREMENTS
Both the thesis and non-thesis options are available at the M.S. level. A total of 30 credit hours are required for either option.

Core Requirements
Currently there are three (3) required courses:

- GMS 6440 Basic Medical Physiology  
- GMS 6605 Basic Medical Anatomy  
- PHC 6052 Biostatistics II

Students select from additional approved courses to complete the 30 hour requirement. A minimum of 16 hours must be at the 6000 level. In addition, all of the elective courses must consist of engineering-prefix courses, although the Thesis Committee (thesis option) or the BME Program Advisor (non-thesis option) may approve 1 or 2 courses in relevant areas such as chemistry or physics. Thesis option students can count up to 6 hours of thesis research towards the requirements.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
BIOMEDICAL ENGINEERING PROGRAM

Master of Science in Engineering Science (M.S.E.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Currently closed for admission
Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.0501
Dept Code: DEA
Program (Major/College): EBI EN

CONTACT INFORMATION

College: Engineering
Department: Chemical & Biomedical Engineering
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

This program is inactive and not accepting applications for admission.

PROGRAM INFORMATION

Biomedical Engineering is a highly interdisciplinary program that combines engineering and the medical sciences. The student works with an advisor to develop a graduate program that draws on courses from engineering, medicine, public health, and the life sciences. Current active areas of research include: biomechanics, biomaterials, medical imaging, tissue engineering, sensors, telehealth, cellular-level drug delivery, and rehabilitation engineering. Participating institutions include the James Haley Veterans Administration Hospital, Shriners Orthopedic Hospital for Children, Florida Orthopedics Institute, and Tampa General Hospital. Dr. William Lee (Lee@eng.usf.edu) is the Program Director

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- Undergraduate GPA of 3.00 or higher.
- Minimum GRE, Quantitative >620; Analytical written score of 4 or >;
- An undergraduate Bachelor’s degree or equivalent in Engineering or Science;
- TOEFL 550 (paper-based total) for international students or 213 (computer-based total);
- Three (3) letters of reference;
- Statement of research interests.

DEGREE PROGRAM REQUIREMENTS

The thesis option consists of 30 hours of coursework, including 6 hours of thesis. Students with non-engineering undergraduate degrees can apply; remedial courses may be required that will not count towards the degree.
Currently there are three required classes:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMS 6xxx</td>
<td>Anatomy and Physiology for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>PHC 6051</td>
<td>Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>BME 6xxx</td>
<td>Foundations of Biomedical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>BME 5740</td>
<td>Theory and Design of Bioprocesses</td>
<td>3</td>
</tr>
<tr>
<td>BME 5742</td>
<td>Pharmaceutical Engineering</td>
<td>2</td>
</tr>
<tr>
<td>BME 5746</td>
<td>Introduction to Biomedical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>BME 5748</td>
<td>Selected Topics in Biomedical Engineering</td>
<td>1-3</td>
</tr>
<tr>
<td>BME 5910</td>
<td>Directed Research in Bioengineering</td>
<td>1-3</td>
</tr>
</tbody>
</table>

**COURSES**

See [http://www.ups.usf.edu/sab/sabs.cfm](http://www.ups.usf.edu/sab/sabs.cfm)
BIOMEDICAL ENGINEERING PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 14.0501
Dept Code: ECH
Program (Major/College): EBI EN

CONTACT INFORMATION

College: Engineering
Department: Chemical & Biomedical Engineering
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The Ph.D. in Biomedical Engineering at the University of South Florida prepares individuals to contribute in this highly interdisciplinary field both as individuals and as members of interdisciplinary teams. Graduates are prepared to solve complex problems in areas such as diagnostic instrumentation, artificial organs, prosthetic devices, rehabilitation, and health care system design and operations. The doctoral program capitalizes on USF’s strong programs in Engineering and in the Health Sciences as well as the contiguously located H. Lee. Moffitt Cancer Center and Research Institute, the Shriners Orthopedic Hospital and the James Haley Veterans Administration Hospital.

Students in the program may choose to concentrate in one of several nationally recognized areas of Biomedical Engineering strength at USF including:

- Medical Imaging
- Rehabilitation Engineering
- Biomechanics and Biomaterials
- Molecular, Cellular and Tissue Engineering
- Drug and Gene Delivery

The Biomedical Engineering Program at USF provides students with an integrated knowledge of engineering, biomedical science and other appropriate disciplines to allow participation in and advancement of the interdisciplinary field of Biomedical Engineering. The program also facilitates biomedical engineering research at USF through interactions with USF faculty and with industry and other health care institutions and catalyzes the growth of biomedical product companies throughout the region by the development, dissemination, and commercialization of new biomedical technologies. Overall, the program strives to develop and promote technologies and processes that will lead to better health care and improved quality of life.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.
Program Admission Requirements
Successful applicants to the Ph.D. degree program in biomedical engineering will typically have presented the following preferred qualifications:

- GRE scores (V and Q) > 75 %tile and an AW > 4.0.
- An undergraduate GPA of >3.5 (out of a possible 4.0) based on official transcripts.
- Completion of a Master’s degree in biomedical engineering or a related field including a Master’s thesis.
- Evidence of sustained interest in biomedical engineering
- A statement of purpose
- Three Letters of recommendation.

Note: Admissions decisions will be made using multiple measures indicated above. We strongly encourage applicants to contact specific faculty conducting research related to the student’s interests. Such direct contact with individual faculty members can greatly strengthen an application.

DEGREE PROGRAM REQUIREMENTS
Total Minimum Hours: 90

1) Core Courses:
A minimum of 15 credits including:
- GMS 6440 Basic Medical Physiology (3)
- GMS 6605 Basic Medical Anatomy (3)
- PHC 6052 Biostatistics II (3)

Plus one additional approved course in Biostatistics and one approved courses in the Medical Sciences.

2) Specialization Courses:
A minimum of 18 credit hours selected from one of the four areas of specialization:
- Medical Imaging
- Rehabilitation Engineering
- Biomechanics and Biomaterials
- Cardiovascular Engineering

Courses completed as part of a Master’s degree may be used to partially meet the above course requirements.

3) Dissertation:
A minimum of 50 credits of dissertation research are required. As with other engineering Ph.D. degrees, evidence of the significance of the conducted research is provided by publication in appropriate refereed journals.

OTHER INFORMATION
Graduate Assistantships and Fellowships
A limited number of financially competitive teaching and research graduate assistantships will be offered to incoming students. The College of Engineering is also home to several national graduate student support programs including NSF sponsored IGERT, GK-12 and Bridge to the Doctorate programs, the latter particularly emphasizing support for underrepresented minorities. Of special importance are the research opportunities and support available through affiliated institutions including the H. Lee Moffitt Cancer Center and Research Institute, the James Haley VA Hospital and the Shiners’ Hospital. In addition, particularly outstanding applicants will be nominated for university fellowships including Presidential Fellowships which provide competitive stipends plus tuition, fees and Health Insurance renewable for five years.
Results
Doctoral graduates of this program have been prepared for and are successfully engaged in research careers in Government, Corporate, and University Laboratories. In addition, since much of Biomedical Engineering research translates directly into biomedical devices and instrumentation, graduates have also been directly involved in technology transfer, including the establishment of new Biomedical Engineering related businesses.

Graduate Certificates
As a valuable complement to graduate training in Biomedical Engineering, students are encouraged to also consider earning a graduate certificate particularly in the areas of:

- Aging and Neuroscience
- Biochemistry and Molecular Biology
- Bioinformatics
- Biostatistics
- Biotechnology
- Clinical Epidemiology
- Entrepreneurship
- Health Management and Leadership
- Infection Control
- Materials Science & Engineering
- Regulatory Affairs – Medical Devices.
- Technology Management
- Total Quality Management

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
BIOMEDICAL ENGINEERING AND ENTREPRENEURSHIP IN APPLIED TECHNOLOGIES DUAL DEGREE PROGRAM

Master of Science in Biomedical Engineering (M.S.B.E.) Degree and Master of Science (M.S.)

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.0501 / 52.0701
Dept Codes: ECH / DEA
Program (Major/College): EBI EN / EAT GS

CONTACT INFORMATION

Colleges: Engineering and Graduate Studies
Department: Chemical & Biomedical Engineering
Entrepreneurship
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The M.S. Biomedical Engineering (BME) and M.S. Entrepreneurship In Applied Technologies (EAT) Dual Degree Program is designed to prepare students who can effectively function in the complex world of Biotechnology companies (“Biotechs”). The program’s objectives are to provide a strong Bme foundation for technical product development and research and development along with the skill set to effectively participate in the entrepreneurship, venture capital, business and financial aspects of Biotechs. Students would pursue appropriate coursework within both the College of Engineering and the Center For Entrepreneurship, double counting a total of nine credit hours.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements for each program. Students must satisfy the requirements for the two degrees separately. Refer to the individual program listings for the specific requirements for each degree.

DEGREE PROGRAM REQUIREMENTS

Course requirements:

Biomedical Engineering

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMS 6440 Basic Medical Physiology</td>
<td>(3)</td>
</tr>
<tr>
<td>GMS 6605 Basic Medical Anatomy</td>
<td>(3)</td>
</tr>
<tr>
<td>PHC 6051 Biostatistics II</td>
<td>(3)</td>
</tr>
<tr>
<td>Additional approved BME courses</td>
<td>(12)</td>
</tr>
<tr>
<td>(can include up to 6 thesis hours for thesis option)</td>
<td></td>
</tr>
<tr>
<td>Common BME/EAT courses</td>
<td>(9)</td>
</tr>
<tr>
<td>30 hours total</td>
<td></td>
</tr>
</tbody>
</table>

Accredited by the Commission on Colleges of the Southern Association of College and Schools.
Common Courses (counted towards both the BME and EAT degrees)
- BME 6000 Biomedical Engineering (3)
- GMS 7930 Principles of Intellectual Property (3)
- EIN 6936 New Product Development (3)

9 hrs total

Entrepreneurship in Applied Technologies
- EIN 6324 Technical Entrepreneurship (3)
- EIN 6935 Technology Venture Strategies (3)
- EIN 6935 Strategic Marketing Assessments (3)
- EIN 6934 Venture Cap Private Equity (3)
- GMS 7930 Medical Ethics and Humanities (2)
- EIN 6430 Overview of Regulated Industries (3)
- MAN 6930 Entrepreneurship Research Seminar (1)
- EIN 6936 Strategies in Entrep Technology (3)

Common BME/EAT courses (9)

30 hrs total

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
CHEMICAL ENGINEERING PROGRAM

Master of Chemical Engineering (M.Ch.E) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters

CIP Code: 14.0701
Dept Code: ECH
Program (Major/College): ECH EN

Concentrations:
- Biomedical and Biotechnology (BEB)

CONTACT INFORMATION

College: Engineering
Department: Chemical & Biomedical Engineering

Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Contract Program for Information

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
The Chemical & Biomedical Engineering faculty research and development interest cover a broad range of areas in reacting systems, thermodynamics, transport phenomena, systems engineering and characterization, all fundamental as well as applied in biomedical, materials including microelectronic, and environmental domains. Strong collaboration with the College of Medicine, Center of Microelectronic Research, as well as, Departments of Biology, Chemistry, Industrial Engineering, Civil Engineering, Mechanical Engineering, Electrical Engineering, and Computer Science makes most programs in Chemical engineering truly interdisciplinary.

The Department offers core courses in thermodynamics, transport phenomena, reacting systems, math, and process analysis and modeling. A rich variety of electives are available regularly within the department as well as the University. Chemical & Biomedical Engineering research facilities include modern laboratories for polymer synthesis and characterization, supercritical fluid technology, life sciences, process control, instrumentation, computer aided process design, and phase behavior.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- GRE required, Applicants must score >720 (Q), >350 (V) and Analytical of 3.0 or greater.
- An undergraduate Bachelor's degree or equivalent in Chemical Engineering;
- TOEFL 550 (paper-based total) for international students or 213 (computer-based total);
- Two (2) letters of reference;
- Statement of Purpose.
DEGREE PROGRAM REQUIREMENTS

This is a non-thesis option degree and requires an undergraduate degree in Chemical Engineering.

Complete Background courses in Chemical Engineering as needed. Students in this program are also required to complete the FE (Fundamentals of Engineering Examination) offered by the Society of Professional Engineers.

Course requirements:

ECH 6105 Advance Thermodynamics (3)
ECH 6285 Advance Transport (3) or
BME 6634 Bioreactor Phenomenon (3)
ECH 6515 Advance Reaction Engineering (3)
ECH 6840 Math Methods (3) or
ECH 6112 Process Analysis and Modeling (3)

6 hours in other 6000 course or ECH 6907 Ind. Study (3 hrs each)
9 hours in other 5000 or 6000 course or ECH 6907 Ind. Study (3 hrs each)
3 hours in other 5000 or 6000 courses (3)
Total 30

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
CHEMICAL ENGINEERING PROGRAM

Master of Engineering (M.E.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.0701
Dept Code: ECH
Program (Major/College): ECH EN

Concentrations:
- Biomedical and Biotechnology (BEB)

CONTACT INFORMATION

College: Engineering
Department: Chemical & Biomedical Engineering
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

This degree is normally awarded to a Master's graduate who has an undergraduate degree in engineering or who has completed a prescribed series of undergraduate engineering courses, and completes an all coursework program.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
The Chemical & Biomedical Engineering faculty research and development interest cover a broad range of areas in reacting systems, thermodynamics, transport phenomena, systems engineering and characterization, all fundamental as well as applied in biomedical, materials including microelectronic, and environmental domains. Strong collaboration with the College of Medicine, Center of Microelectronic Research, as well as, Departments of Biology, Chemistry, Industrial Engineering, Civil Engineering, Mechanical Engineering, Electrical Engineering, and Computer Science makes most programs in Chemical engineering truly interdisciplinary.

The Department offers core courses in thermodynamics, transport phenomena, reacting systems, math, and process analysis and modeling. A rich variety of electives are available regularly within the department as well as the University. Chemical & Biomedical Engineering research facilities include modern laboratories for polymer synthesis and characterization, supercritical fluid technology, life sciences, process control, instrumentation, computer aided process design, and phase behavior.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- GRE required. Applicants must score >720 (Q), >350 (V) and Analytical of 3.0 or greater.
- An undergraduate Bachelor’s degree or equivalent in Engineering or Science;
- TOEFL 550 (paper-based total) for international students or 213 (computer-based total);
- Two (2) letters of reference;
- Statement of Purpose.
DEGREE PROGRAM REQUIREMENTS
This is a non-thesis degree normally awarded to a Masters’ Candidate who has an undergraduate degree in any engineering or related science field. Complete Background courses in Chemical Engineering as needed. Students in this program are also required to complete the FE (Fundamentals of Engineering Examination) offered by the Society of Professional Engineers.

Core Requirements (6):
Take two Courses from the list below: (6)
   ECH 6105 Advance Thermodynamics (3)
   ECH 6285 Advance Transport (3)
   ECH 6840 Math Methods (3)
   ECH 6515 Advanced Reaction Engineering (3)
   ECH 6230 Advance Mass Transport (3)
   ECH 6112 Process Model

Electives (24)
   One ECH 6000 Level Course (3)
   Remaining electives are taken from other 5/6000 level courses (21)

Total 30

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
CHEMICAL ENGINEERING PROGRAM

Master of Science in Chemical Engineering (M.S.Ch.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.0701
Dept Code: ECH
Program (Major/College): ECH EN

Concentrations:
Biomedical and Biotechnology (BEB)

CONTACT INFORMATION

College: Engineering
Department: Chemical & Biomedical Engineering

Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The Master of Science in Chemical Engineering degree is usually awarded to a student who has an undergraduate degree in Chemical engineering or strong evidence of undergraduate chemical engineering experience.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
The Chemical & Biomedical Engineering faculty research and development interest cover a broad range of areas in reacting systems, thermodynamics, transport phenomena, systems engineering and characterization, all fundamental as well as applied in biomedical, materials including microelectronic, and environmental domains. Strong collaboration with the College of Medicine, Center of Microelectronic Research, as well as, Departments of Biology, Chemistry, Industrial Engineering, Civil Engineering, Mechanical Engineering, Electrical Engineering, and Computer Science makes most programs in Chemical engineering truly interdisciplinary.

The Department offers core courses in thermodynamics, transport phenomena, reacting systems, math, and process analysis and modeling. A rich variety of electives are available regularly within the department as well as the University. Chemical & Biomedical Engineering research facilities include modern laboratories for polymer synthesis and characterization, supercritical fluid technology, life sciences, process control, instrumentation, computer aided process design, and phase behavior.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- GRE required. Applicants must score >720 (Q), >350 (V) and Analytical of 3.0 or greater.
- An undergraduate Bachelor’s degree or equivalent in Chemical Engineering;
- TOEFL 550 (paper-based total) for international students or 213 (computer-based total);
- Two (2) letters of reference;
- Statement of research interests.
DEGREE PROGRAM REQUIREMENTS

This is a thesis option degree that requires an undergraduate degree in Chemical Engineering. A background with undergraduate chemical engineering courses is needed.

**Course Requirements:**

ECH 6105 Advance Thermodynamics (3)
ECH 6285 Advance Transport (3) or BME 6634 Biotransport Phenomenon (3)
ECH 6515 Advance Reaction Engineering (3)
ECH 6840 Math Methods (3) or ECH 6112 Process Analysis and Modeling (3)
ECH 6971 Masters Thesis (6)

Other 5000 or 6000 course or ECH 6907 Individual Study (3)
Other 5000 or 6000 course or ECH 6907 Individual Study (3)
Other 5000 or 6000 course or ECH 6907 Individual Study (3)
Other 5000 or 6000 course or ECH 6907 Individual Study (3)
Total 30

- (must have a minimum of 16 hours at 6000 level)
- (must have a minimum of 12 hours of ECH 6000 level)
- (may include a maximum of 4 hours of independent study)

At least 2 members of the Thesis committee must be from tenured or tenure track Chemical & Biomedical Engineering faculty. All thesis option students are required to present a departmental seminar based on their research as part of their oral examination. The examination must be scheduled after the Thesis Supervisory Committee has approved the Thesis. The Graduate Coordinator should be notified so he can coordinate the seminar scheduling. Students in this program are also required to pass the FE (Fundamentals of Engineering Examination) offered by the Society of Professional Engineers. Candidates who have at least one publication in a journal or proceedings or presentation at a conference (based on their M.S. Thesis research) may be exempted from this comprehensive examination requirement. Students wishing to continue on for a Ph.D. must apply to the Graduate School.

**COURSES**

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
CHEMICAL ENGINEERING PROGRAM

Master of Science in Engineering Science (M.S.E.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.0701
Dept Code: ECH
Program (Major/College): ECH EN

Concentrations:
- Biomedical and Biotechnology (BEB)

PROGRAM INFORMATION

This degree is normally awarded to a Master's graduate who has an undergraduate degree in engineering or who has completed a prescribed series of undergraduate engineering courses, and completes an all coursework program.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
The Chemical & Biomedical Engineering faculty research and development interest cover a broad range of areas in reacting systems, thermodynamics, transport phenomena, systems engineering and characterization, all fundamental as well as applied in biomedical, materials including microelectronic, and environmental domains. Strong collaboration with the College of Medicine, Center of Microelectronic Research, as well as, Departments of Biology, Chemistry, Industrial Engineering, Civil Engineering, Mechanical Engineering, Electrical Engineering, and Computer Science makes most programs in Chemical engineering truly interdisciplinary.

The Department offers core courses in thermodynamics, transport phenomena, reacting systems, math, and process analysis and modeling. A rich variety of electives are available regularly within the department as well as the University. Chemical & Biomedical Engineering research facilities include modern laboratories for polymer synthesis and characterization, supercritical fluid technology, life sciences, process control, instrumentation, computer aided process design, and phase behavior.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- GRE required. Applicants must score >720 (Q), >350 (V) and Analytical of 3.0 or greater.
- An undergraduate Bachelor’s degree or equivalent in Engineering or Science;
- TOEFL 550 (paper-based total) for international students or 213 (computer-based total);
- Two (2) letters of reference;
- Statement of research interests.
DEGREE PROGRAM REQUIREMENTS

Requires an undergraduate degree in engineering or science. This is an interdisciplinary program that involves a combination of engineering and science courses. It requires a thesis. Complete Background courses in Chemical Engineering as needed.

Course Requirements:
* 6000 level ECH course 1 (3)
* 6000 level ECH course 2 (3)
Independent study (3 hours Max) (3)
Other formal course work (5000 or 6000) (15)
ECH 6971 Masters Thesis (6)
Total 30

• (must have a minimum of 16 hours at the 6000 level)
• (must have a minimum of 6 hours of ECH 6000 level)

*Require 2 courses out of
  ECH 6105 Advance Thermodynamics (3)
  ECH 5285 Advance Transport (3)
  ECH 6840 Math Methods (3)
  ECH 6515 Advance Reaction Engineering (3)
  ECH 6112 Process Analysis Model (3)
  ECH 5324 Auto Control II (3)

(may include a maximum of 4 hours of independent study)
At least 2 members of the Thesis committee must be from tenured or tenure track Chemical & Biomedical Engineering faculty.

All thesis option students are required to present a departmental seminar based on their research as part of their oral examination. The examination must be scheduled after the Thesis Supervisory Committee has approved the Thesis. The Graduate Coordinator should be notified so he can coordinate the seminar scheduling. The Thesis must be on file at the USF library prior to scheduling of the oral examination.

Students in this program are also required to pass the FE (Fundamentals of Engineering Examination) offered by the Society of Professional Engineers. Candidates who have at least one publication in a journal or proceedings or presentation at a conference (based on their M.S. Thesis research) may be exempted from this comprehensive examination requirement. Students wishing to continue on for a Ph.D. must apply to the Graduate School.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
CHEMICAL ENGINEERING PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 14.0701
Dept Code: ECH
Program (Major/College): ECH EN

Concentrations:
- Manufacturing (MFT)
- Biomedical and Biotechnology (BEB)

CONTACT INFORMATION

College: Engineering
Department: Chemical & Biomedical Engineering
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Contact Program for Information

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
The Chemical & Biomedical Engineering faculty research and development interest cover a broad range of areas in reacting systems, thermodynamics, transport phenomena, systems engineering and characterization, all fundamental as well as applied in biomedical, materials including microelectronic, and environmental domains. Strong collaboration with the College of Medicine, Center of Microelectronic Research, as well as, Departments of Biology, Chemistry, Industrial Engineering, Civil Engineering, Mechanical Engineering, Electrical Engineering, and Computer Science makes most programs in Chemical engineering truly interdisciplinary.

The Department offers core courses in thermodynamics, transport phenomena, reacting systems, math, and process analysis and modeling. A rich variety of electives are available regularly within the department as well as the University. Chemical & Biomedical Engineering research facilities include modern laboratories for polymer synthesis and characterization, supercritical fluid technology, life sciences, process control, instrumentation, computer aided process design, and phase behavior.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- GRE required. Applicants must score >720 (Q), >500 (V), and Analytical of 4.0 or greater;
- An undergraduate Bachelor’s degree or equivalent in Chemical Engineering.
- TOEFL 550 (paper-based total) for international students or 213 (computer-based total);
- Three (3) letters of reference.
- Statement of Research Interests.
DEGREE PROGRAM REQUIREMENTS
Requires an undergraduate degree in Chemical Engineering. Complete Background courses in Chemical Engineering as needed.

Course Requirements:
ECH 6105 Advance Thermodynamics (3)
ECH 5285 Advance Transport (3)
ECH 6840 Math Methods (3)
ECH 6515 Advance Reaction Engineering (3)
ECH 6112 Process Analysis and Model (3)
Seminar courses (At least 3 required)
2 Tools of Research (Directed Research in 1st year of study) (At least 4 hours)
Concentration area (Engineering) (Minimum 27 hours in one area, At least 20 at 6000 level)
5000 or 6000 Math level Courses (at least 9 hours)
Dissertation hours (Can register only after you have been admitted as a candidate for Ph.D.) (At least 20 hours but no more than 30 hours)

Other 5000 or 6000 course (need a total of 60 hours of coursework)

Other Elements:
1. Diagnostic Examination completed by the end of first year of study. Waived for students who have successfully passed the FE (Fundamentals of Engineering Examination) offered by the Florida Society of Professional Engineers. See details of the diagnostic exam under Departmental requirements for a PhD

2. Qualifying Examination, Complete by the end of the second year of study.

3. Publication in a refereed journal with the student as the first and primary author. At least 1 is required with the expectation that most PhD students will have 3 or more. The publication must be based on your Dissertation research. Presentation at a conference or publication in a proceeding (even if refereed) is not sufficient.

4. See complete list of requirements under Departmental requirements for a PhD

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
CIVIL ENGINEERING PROGRAM

Master of Civil Engineering (M.C.E.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.0801
Dept Code: EGX
Program (Major/College): ECE EN

Concentrations:
- Geotechnical Engineering (GTL)
- Interdisciplinary Transportation (ITP)
- Materials Engineering and Science (MTL)
- Structural Engineering (STR)
- Transportation Engineering (TPT)
- Water Resources (WRS)

PROGRAM INFORMATION

The field of Civil Engineering has long been known for its breadth and ability to adapt to the new technological needs of society. The traditional areas of public works, such as highways, bridges, water supply, building design, and wastewater treatment, remain very important. In addition, the modern area of managing the environment has been included in the Civil Engineering domain. Graduates of the programs are prepared for careers with public agencies or private industry and firms involved in planning, design, research and development, or regulation.

College computer facilities are available to all departmental students. In addition, the department has a variety of microcomputers available for student use. The department also has a high bay structures laboratory, which includes an MTS 250 kip testing machine. There are also well-equipped environmental, soils, pavement and hydraulics laboratories. These laboratories include equipment such as an ion chromatograph, atomic absorption unit, environmental chamber, constant rate of stress consolidometer, triaxial units and superpave testing equipment.

The M.C.E. degree provides a student with the opportunity to earn the advanced degree by coursework only. These degrees are recommended for part-time students who find it difficult to do thesis research because of their work commitment or those who wish to complete degree requirements quickly. Many of the department's graduate courses are offered online or on weekday evenings, which permits working students the opportunity to seek a graduate degree

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.
Program Admission Requirements
- Overall GPA 2.75; GPA in major 3.00
- GRE 650Q, 350V and 3.0 AW
- TOEFL (International applicants only) 79 (550 paper based exam) or 6.5 (IELTS).
- Two (2) Letters of Reference
- Statement of Purpose
- Exceptions made on a case-by-case basis where warranted.

DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours: 30
The minimum coursework requirement is 30 credit hours for students with an undergraduate Engineering degree. Students without an engineering BS will be required to complete undergraduate engineering pre-requisite courses as determined by the Department. Please consult the graduate program coordinator for the list of required courses.

Core Requirements
- A maximum of 12 credits taken outside the CEE department may be applied to meet the degree requirements.
- A maximum of 6 credits of 4000 level courses may be applied to meet the degree requirements.
- A maximum of 6 credits of independent study may be applied to meet the degree requirements.

Portfolio
These degrees are coursework only degrees and do not require a thesis; however, a portfolio providing examples of the following is required at the end of the program: (1) design of complex systems, (2) written and oral communication skills, (3) solution of ill defined or open ended problems.

The Department supports MCE concentration areas in Geotechnical Engineering (GTL), Interdisciplinary Transportation (ITP), Materials Engineering and Science (MTL), Structural Engineering (STR), Transportation Engineering (TPT) and Water Resources (WRS). Students work with a member of the graduate program committee to map out their graduate coursework.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
CIVIL ENGINEERING PROGRAM

Master of Science in Civil Engineering (M.S.C.E.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 14.0801
Dept Code: EGX
Program (Major/College): ECE EN

Concentrations:
- Geotechnical Engineering (GTL)
- Interdisciplinary Transportation (ITP)
- Materials Engineering and Science (MTL)
- Structural Engineering (STR)
- Transportation Engineering (TPT)
- Water Resources (WRS)

PROGRAM INFORMATION

The field of Civil Engineering has long been known for its breadth and ability to adapt to the new technological needs of society. The traditional areas of public works, such as highways, bridges, water supply, building design, and wastewater treatment, remain very important. In addition, the modern area of managing the environment has been included in the Civil Engineering domain. Graduates of the programs are prepared for careers with public agencies or private industry and firms involved in planning, design, research and development, or regulation.

College computer facilities are available to all departmental students. In addition, the department has a variety of microcomputers available for student use. The department also has a high bay structures laboratory, which includes an MTS 250 kip testing machine. There are also well-equipped environmental, soils, pavement and hydraulics laboratories. These laboratories include equipment such as an ion chromatograph, atomic absorption unit, environmental chamber, constant rate of stress consolidometer, triaxial units and superpave testing equipment.

The MSCE is a research oriented degree in which the student writes, as a major part of the degree requirements, a thesis that defines, examines, and reports in depth on a subject area relevant to engineering. The purpose of the thesis is to instill in the student the ability to inspect, evaluate, and report on a subject of interest to the engineering profession.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.
Program Admission Requirements

- Overall GPA 2.75; GPA in major 3.00
- GRE 650Q, 350V and 3.0AW.
- TOEFL (International applicants only) 79 (550 paper based exam) or 6.5 (IELTS).
- Two (2) letters of reference.
- Statement of Purpose.
- Exceptions made on a case-by-case basis where warranted.

DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours: 30

These degrees are for students doing a Master’s thesis. The program consists of a minimum of 24 credit hours of coursework and 6 credit hours of thesis for students with an undergraduate degree in Civil Engineering: Students without an Engineering BS will be required to complete undergraduate engineering pre-requisite courses as determined by the Department. Please consult the graduate program coordinator for the list of required courses.

Core Requirements (24 hours)

- A maximum of 9 credits taken outside the CEE department may be applied to meet the degree requirements.
- A maximum of 6 credits of 4000 level courses may be applied to meet the degree requirements.
- A maximum of 6 credits of independent study may be applied to meet the degree requirements.

Thesis Requirements (6 hours)

The Department supports M.S.C.E. concentration areas in Geotechnical Engineering (GTL), Interdisciplinary Transportation (ITP), Materials Engineering and Science (MTL), Structural Engineering (STR), Transportation Engineering (TPT) and Water Resources (WRS). Students work with a Major Professor and thesis committee to map out their graduate programs.

COURSES

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
CIVIL ENGINEERING PROGRAM

Master of Science in Engineering Science (M.S.E.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 14.0801
Dept Code: EGX
Program (Major/College): ECE EN

Concentrations:
- Geotechnical Engineering (GTL)
- Interdisciplinary Transportation (ITP)
- Materials Engineering and Science (MTL)
- Structural Engineering (STR)
- Transportation Engineering (TPT)
- Water Resources (WRS)

PROGRAM INFORMATION

The field of Civil Engineering has long been known for its breadth and ability to adapt to the new technological needs of society. The traditional areas of public works, such as highways, bridges, water supply, building design, and wastewater treatment, remain very important. In addition, the modern area of managing the environment has been included in the Civil Engineering domain. Graduates of the programs are prepared for careers with public agencies or private industry and firms involved in planning, design, research and development, or regulation. College computer facilities are available to all departmental students. In addition, the department has a variety of microcomputers available for student use. The Department also has a high bay structures laboratory, which includes an MTS 250 kip testing machine. There are also well-equipped environmental, soils, pavement and hydrailics laboratories. These laboratories include equipment such as an ion chromatograph, atomic absorption unit, environmental chamber, constant rate of stress consolidometer, triaxial units and superfave testing equipment.

The M.S.E.S. is a research oriented degree for students without an undergraduate degree in engineering. As a major part of the degree requirement, the student is expected to write a thesis that defines, examines, and reports in depth on a subject area relevant to engineering. The purpose of the thesis is to instill in the student the ability to inspect, evaluate, and report on a subject of interest to the engineering profession.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- Overall GPA 2.75; GPA in major 3.00
- GRE 650Q, 350V, 3.0AW.
- TOEFL (International applicants only) 79 (550 paper based exam) or 6.5 (IELTS).

http://www.eng.usf.edu/
• Two (2) letters of reference.
• Statement of Purpose.
Exceptions made on a case-by-case basis where warranted

DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours: 30
These degrees are for students without an undergraduate engineering degree who wish to pursue a Master’s degree in CEE. This program consists of a minimum of 24 credit hours of coursework and 6 credit hours of thesis:

Pre-Requisites
Students will be required to complete undergraduate engineering pre-requisite courses required for specific courses or as determined by their major professor.

Core Requirements (24 hours)
• A maximum of 9 credits taken outside the CEE department may be applied to meet the degree requirements.
• A maximum of 6 credits of 4000 level courses may be applied to meet the degree requirements.
• A maximum of 6 credits of independent study may be applied to meet the degree requirements.

The Department supports M.S.E.S. concentration areas in Geotechnical Engineering (GTL), Interdisciplinary Transportation (ITP), Materials Engineering and Science (MTL), Structural Engineering (STR), Transportation Engineering (TPT) and Water Resources (WRS). Students work with a Major Professor and thesis committee to map out their graduate programs.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
CIVIL ENGINEERING PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 60/90
Program Level: Doctoral
CIP Code: 14.0801
Dept Code: EGX
Program (Major/College): ECE EN

Concentrations:
- Geotechnical Engineering (GTL)
- Interdisciplinary Transportation (ITP)
- Materials Engineering and Science (MTL)
- Structural Engineering (STR)
- Transportation Engineering (TPT)
- Water Resources (WRS)

CONTACT INFORMATION

College: Engineering
Department: Civil and Environmental Engineering
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The field of Civil Engineering has long been known for its breadth and ability to adapt to the new technological needs of society. The traditional areas of public works, such as highways, bridges, water supply, building design, and wastewater treatment, remain very important. In addition, the modern area of managing the environment, including sustainable development, has been included in the Civil Engineering domain. Graduates of the programs are prepared for careers in academia and with public agencies or private industry and firms involved in planning, design, research and development, or regulation.

College computer facilities are available to all departmental students. In addition, the department has a variety of microcomputers available for student use. The department also has a high bay structures laboratory, which includes an MTS 250 kip testing machine. There are also well-equipped environmental, soils, pavement and hydraulics laboratories. These laboratories include equipment such as an ion chromatograph, atomic absorption unit, environmental chamber, constant rate of stress consolidometer, triaxial units and superfave testing equipment.

The Ph.D. degree is awarded in recognition of demonstrated scholarly competence and ability to conduct and report original and significant research. Ph.D. students may work in all of the areas of Civil Engineering: Engineering Mechanics, Environmental Engineering, Geotechnical Engineering, Pavement Engineering, Materials Engineering and Science, Structural Engineering, Transportation Engineering and Planning, and Water Resources Engineering.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.
ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- GRE 700Q, 450V, 4.0AW.
- TOEFL (International applicants only) 550 or 213 (CBT).
- Three (3) letters of reference.
- Statement of Purpose.

DEGREE PROGRAM REQUIREMENTS

For students with a master’s degree, the program consists of a minimum of 60 credits

Total Minimum Hours 60

Core Requirements
- A minimum of 30 credits coursework are required:
  - A minimum 12 credits of coursework are required within the CEE department
  - A minimum 6 credits of coursework are required outside of the CEE department
  - A minimum of 6 credits of math and/or statistics are required
  - A maximum of 6 credits at the 4000 level may be applied to meet the degree requirements
  - Three credits of graduate instruction methods (CGN 6941) are required

- Dissertation Requirements – A minimum of 20 credits of dissertation are required
- 10 credits of additional coursework, dissertation or directed research are required

For students without a master’s degree, the program consists of a minimum of 90 credits beyond the bachelor’s level:

Total Minimum Hours 90

Core Requirements
- A minimum of 60 credits coursework are required:
  - A minimum 24 credits of coursework are required within the CEE department
  - A minimum 6 credits of coursework are required outside of the CEE department
  - A minimum of 6 credits of math and/or statistics are required
  - Three credits of graduate instruction methods (CGN 6941) are required

Dissertation Requirements
- A minimum of 20 credits of dissertation are required
- 10 credits of additional coursework, dissertation or directed research are required

The Department supports Ph.D. concentration areas in Geotechnical Engineering (GTL), Interdisciplinary Transportation (ITP), Materials Engineering and Science (MTL), Structural Engineering (STR), Transportation Engineering (TPT) and Water Resources (WRS). Students work with a Major Professor and a Ph.D. committee to determine their course of study.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
COMPUTER ENGINEERING PROGRAM

Master of Science in Computer Engineering (M.S.C.P.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
U.S. Students
Fall: February 15
Spring: October 15
Summer: no admit

International Students:
Fall: January 2
Spring: July 1
Summer: no admit

Minimum Total Hours: 30 thesis; 30 non-thesis
Program Level: Masters
CIP Code: 14.0901
Dept Code: ESB
Program (Major/College): ECP EN

PROGRAM INFORMATION

The Department of Computer Science and Engineering offers both a thesis and non-thesis option for the degree of Master of Science in Computer Engineering (MSCP). The thesis option requires students to pursue a more concentrated range of topics, while the non-thesis option allows students to explore various areas of computer engineering. There is considerable freedom in the choice of the courses.

The breadth of subjects that comprise computer engineering together with the immense diversity of its applications, make it imperative that students in the program maintain close contact with the Graduate Program Director, or, if choosing the thesis option, with their major professor to achieve a coherent plan of study directed towards a specific goal. In particular, selection of courses should only be made with prior consultation and approval of the major professor or the Graduate Program Director.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
An excellent selection of courses and laboratories support graduate studies in algorithms, artificial intelligence, bioinformatics, computer architecture, graphics, networks, computer vision, distributed systems, expert systems, formal verification, human-computer interface, image processing, pattern recognition, robotics, software engineering, software security, and VLSI design and CAD.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
The GRE may be waived for MS-degree applicants with an undergraduate degree from an accredited United States university.
The GRE is required for all PhD and MS applicants who apply for TA, RA, GA, or Fellowships. The median GRE scores of recently admitted students include 770 on the Quantitative portion and a Quantitative + Verbal Total of 1220. If a candidate is admitted to the MS program and later decides to apply to the Ph.D. program, the GRE requirement must be met by the candidate as part of the application process.

- Minimum grade point average (GPA) of B or equivalent for all coursework completed during the last two years of undergraduate program
- Minimum TOEFL score for international students is 550 (paper-based total) or 213 (computer-based total) or 79 (internet-based total).
- Three letters of recommendation
- Statement of purpose

The applicant must also have mathematical preparation equivalent to that obtained from courses in Calculus through Differential Equations; knowledge of computer science and computer engineering, including logic design, computer architecture, data structure, operating systems and analysis of algorithms. The majority of students accepted to the program possess an undergraduate degree in Computer Science, Computer Engineering, Electrical Engineering, or Mathematics; however, students who hold an undergraduate degree in a related field are encouraged to apply.

For teaching assistantship consideration, applicants from non-English speaking countries must take and pass the speaking component of the internet-based TOEFL with a score of 26 or above.

**DEGREE PROGRAM REQUIREMENTS**

**Total Minimum Hours:** 30

**Core Requirements:** (9 hrs)
Successful completion of three core graduate-level courses is required:

- EEL 6764  Principles of Computer Architecture (3)
- COP 6611  Operating Systems (3)
- COT 6405  Introduction to the Theory of Algorithms (3)

**Electives:**
Thesis option students should pick 15 hours from the following and non-thesis option should pick 21 hours from the following:

- CAP 5400  Digital Image Processing  3
- CAP 5625  Introduction to Artificial Intelligence  3
- CAP 5682  Expert and Intelligent Systems  3
- CAP 5771  Data Mining  3
- CAP 6100  Human Computer Interface  3
- CAP 6415  Computer Vision  3
- CAP 6455  Advanced Robotic Systems  3
- CAP 6615  Neural Networks  3
- CAP 6672  Robot Intelligence and Computer Vision  3
- CAP 6736  Geometric Modeling  3
- CDA 5416  Introduction to Computer-Aided Verification  3
- CIS 6900  Independent Study  1-19
- CIS 6930  Special Topics  1-5
- CIS 6940  Graduate Instruction Methods  1-4
- CIS 6971  Thesis: Masters  2-19
The thesis option requires completion of 24 credit hours of CSE graduate-level courses (9 credit hrs core and 15 hrs of electives) and 6 credit hours of thesis. At least 16 credit hours must be at the 6000 level. Maximum of 3 hours of Independent Study and maximum of 3 hours of one-hour seminar courses may be applied.

Non-Thesis Option:
The non-thesis option requires 30 credit hours, with 9 credit hours core, 21 hours of electives. At least 16 credit hours must be at the 6000 level. Maximum of 3 hours of Independent Study and maximum of 3 hours of one-hour seminar courses may be applied. Students must make a grade of “B” or higher in the core courses.

Additional Requirements:
For the thesis option, 6 hours of the thesis (CIS 6971 Thesis: Masters) should be in computer engineering related problems, as determined by the Major Professor and document in the Plan of Work.

For Non-Thesis Option, at least 6 hours of electives should be in the following topic areas:

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
COMPUTER SCIENCE PROGRAM

Master of Science in Computer Science (M.S.C.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: No admit

International Students:
- Fall: January 2
- Spring: July 1
- Summer: No admit

Minimum Total Hours: 30 thesis; 30 non-thesis

Program Level: Masters

CIP Code: 14.0901

Dept Code: ESB

Program (Major/College): ECC EN

CONTACT INFORMATION

College: Engineering
Department: Computer Science and Engineering

Contact Information: www.grad.usf.edu

Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The Department of Computer Science and Engineering offers the degree the degree of Master of Science in Computer Science (M.S.C.S.), with thesis and non-thesis options. The thesis option requires students to pursue a more concentrated range of topics. The non-thesis option offers students some experience in many areas of computer science. There is considerable freedom in the choice of the courses.

The great breadth of subjects which are part of computer science together with the immense diversity of its applications, make it imperative that students in the Master’s program maintain close contact with the Graduate Program Director, or, if choosing the thesis option, with their major professor in order to achieve a coherent plan of study directed towards a specific goal. In particular, election of courses should only be made with prior consultation and approval of the Major Professor or the Graduate Program Director.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
An excellent selection of courses and laboratories support graduate studies in algorithms, artificial intelligence, bioinformatics, computer architecture, graphics, networks, computer vision, distributed systems, expert systems, formal verification, human-computer interface, image processing, pattern recognition, robotics, software engineering, software security, and VLSI design and CAD.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
The GRE will be waived for MS-degree applicants with an undergraduate degree from an accredited United States university.
• The GRE is required for all PhD and MS applicants who apply for TA, RA, GA, or Fellowships. If a candidate is admitted to the MS program and later decides to join the Ph.D. program then the GRE will be required. For reference, in 2008/2009 the median GRE scores of admitted students were Quantitative of 770.
• Minimum grade point average (GPA) of “B” (or equivalent) for all coursework completed during the last two years of undergraduate program
• Minimum TOEFL score for international students is 550 (paper-based total) or 213 (computer-based total) or 79 (internet-based total)
• Three letters of recommendation
• Statement of purpose
• The applicant must also have mathematical preparation equivalent to that obtained from courses in Calculus through Differential Equations; knowledge of computer science and computer engineering, including logic design, computer architecture, data structure, operating systems and algorithms. The majority of our accepted students have an undergraduate degree in Computer Science, Computer Engineering, Electrical Engineering, or Mathematics. Well prepared students in other majors are encouraged to apply.
• For teaching assistantship consideration, applicants from non-English speaking countries must take and pass the speaking component of the internet-based TOEFL with a score of 26 or above.

DEGREE PROGRAM REQUIREMENTS

Total Minimum hours: 30

Core Requirements: 9 hrs.
Successful completion of three core graduate-level courses is required. For non-thesis option, students must make a grade of “B” or higher in these core courses:

COP 6611 Operating Systems (3)
EEL 6764 Principles of Computer Architecture (3)
COT 6405 Introduction to the Theory of Algorithms (3)

Electives:
Thesis option students should pick 15 hours from the following and non-thesis option should pick 21 hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 5400</td>
<td>Digital Image Processing</td>
<td>3</td>
</tr>
<tr>
<td>CAP 5625</td>
<td>Introduction to Artificial Intelligence</td>
<td>3</td>
</tr>
<tr>
<td>CAP 5682</td>
<td>Expert and Intelligent Systems</td>
<td>3</td>
</tr>
<tr>
<td>CAP 5771</td>
<td>Data Mining</td>
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<tr>
<td>CAP 6100</td>
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<td>Neural Networks</td>
<td>3</td>
</tr>
<tr>
<td>CAP 6672</td>
<td>Robot Intelligence and Computer Vision</td>
<td>3</td>
</tr>
<tr>
<td>CAP 6736</td>
<td>Geometric Modeling</td>
<td>3</td>
</tr>
<tr>
<td>CDA 5416</td>
<td>Introduction to Computer-Aided Verification</td>
<td>3</td>
</tr>
<tr>
<td>CIS 6900</td>
<td>Independent Study</td>
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<td>CIS 6930</td>
<td>Special Topics</td>
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<td>CIS 6940</td>
<td>Graduate Instruction Methods</td>
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<td>CIS 6971</td>
<td>Thesis: Master’s</td>
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<td>CIS 7910</td>
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<td>CIS 7980</td>
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<td>CNT 6215</td>
<td>Computer Networks</td>
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<tr>
<td>COP 6621</td>
<td>Programming Languages and Translation</td>
<td>3</td>
</tr>
<tr>
<td>EEL 5771</td>
<td>Introduction to Computer Graphics I</td>
<td>3</td>
</tr>
<tr>
<td>EEL 6706</td>
<td>Testing and Fault Tolerance in Digital Systems</td>
<td>3</td>
</tr>
<tr>
<td>EEL 6766</td>
<td>Advanced Computer Architecture</td>
<td>3</td>
</tr>
</tbody>
</table>
Thesis Option:
The thesis option requires the completion of 24 credit hours of CSE graduate-level courses (9 credit hrs core and 15 hrs of electives) and 6 credit hours of thesis. At least 16 credit hours must be at the 6000 level. Maximum of 3 hours of Independent Study and maximum of 3 hours of one-hour seminar courses may be applied.

Non-Thesis Option:
The non-thesis option requires 30 credit hours, with 9 credit hrs core, 21 hrs of electives. At least 16 credit hours must be at the 6000 level. Maximum of 3 hours of Independent Study and maximum of 3 hours of one-hour seminar courses maybe applied.

Additional Requirements:
For the thesis option, 6 hours of the thesis (CIS 6971Thesis: Masters) should be in computer science related problems, as determined by the Major Professor and documented in the Plan of Work.

For Non-Thesis Option, at least 6 hrs of electives should be in the following topic areas: advanced algorithms, compilers, databases, parallel computing and distributed systems, security, programming languages, or software engineering, as determined by the Graduate Program Director and documented in the Plan of Work.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
COMPUTER SCIENCE AND ENGINEERING PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
US Students:
Fall: February 15
Spring: October 15
Summer: No admit

International Students:
Fall: January 2
Spring: July 1
Summer: No admit

Minimum Total Hours: 90/60
Program Level: Doctoral
CIP Code: 14.0901
Dept Code: ESB
Program (Major/College): CSE EN

CONTACT INFORMATION

College: Engineering
Department: Computer Science and Engineering
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The degree of Doctor of Philosophy is conferred in recognition of a candidate’s highest level of scholarly competence and demonstrated capability to independently conduct and report significant research in computer science and engineering. This achievement requires more than an accumulation of course credits over a stated period of residence. Scholarly competence is achieved through systematic study and investigation in the chosen discipline at an advanced level. The major professor and at least two committee members will be from the Computer Science and Engineering department. Research capability is developed during the course of study and is achieved through the completion of significant and independent research. The results of this research must be formally presented in a written dissertation and successfully defended before an examining committee. The dissertation must demonstrate the significance of the research as well as the candidate’s ability to organize and present her/his results in a professional manner.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
An excellent selection of courses and laboratories support graduate studies in algorithms, artificial intelligence, bioinformatics, computer architecture, graphics, networks, computer vision, distributed systems, expert systems, formal verification, human-computer interface, image processing, pattern recognition, robotics, software engineering, software security, and VLSI design and CAD.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.
Program Admission Requirements

- The GRE is required for all Ph.D. applicants. If a candidate is admitted to the MS program without GRE and later decides to join the PhD program then the GRE will be required. For reference, in 2008/2009 the median GRE scores of admitted students were Quantitative of 770.

- Minimum grade point average (GPA) of B average (or equivalent) for all coursework completed during the last two years of undergraduate program

- Minimum TOEFL score for international students is 550 (paper-based total) or 213 (computer-based total) or 79 (internet-based total).

- Three letters of recommendation

- Statement of purpose

- The applicant must also have mathematical preparation equivalent to that obtained from courses in Calculus through Differential Equations; knowledge of computer science and computer engineering, including logic design, computer architecture, data structure, operating systems and analysis of algorithms. The majority of students accepted to the program possess an undergraduate degree in Computer Science, Computer Engineering, Electrical Engineering, or Mathematics; however, students who hold an undergraduate degree in a related field are encouraged to apply.

- For teaching assistantship consideration, applicants from non-English speaking countries must take and pass the speaking component of the internet-based TOEFL with a score of 26 or above.

DEGREE PROGRAM REQUIREMENTS

The requirements for obtaining the doctoral degree can be met by fulfilling the minimum requirements below. These requirements and the various committees appointed to oversee the completion of these requirements are explained in detail below:

1. Completion of the requisite coursework and the successful completion of qualifying examinations in Computer Architecture, Operating Systems, and math/Algorithms, and the student’s specialty area.

2. Completion of a doctoral dissertation representing significant, original research.

3. PhD candidates are required to teach at least one semester course before the PhD is awarded.

Coursework

A minimum of 90 semester hours including dissertation hours beyond the baccalaureate degree is required of all Ph.D. students. Of these, a student must include courses in two minor fields of study, one of which must be mathematics. In each of the minor fields, a minimum of 8 units of graduate level course work is required (up to 3 units of 4000 level coursework may be counted toward the 8 units required) A student may apply up to 15 semester hours of independent study/directed research towards the coursework requirements with the approval of his supervisory committee. Students should also accumulate at least 20 hours of dissertation credits to count towards degree requirements. The remaining hours can be taken in the Computer Science and Engineering Department. The exact distribution of these hours in the Computer Science and Engineering discipline will be determined by the student and his supervisory committee to provide the student with a stimulating educational experience. The student’s progress in the program is monitored by a supervisory doctoral committee, which is usually appointed at an early state in the student’s program. This committee consists of at least four members, one of which is outside the College of Engineering. The Major Professor will be a member of the Computer Science and Engineering Department. Normally, two more Computer Science and Engineering faculty serve on the committee with a member in another department in the college.
Doctoral Screening/Qualifying Examination
Students must pass the Ph.D. Qualifying examinations in Computer Architecture, Operating Systems, and math/Algorithms, and the student’s specialty area.

Admission to Candidacy
A student will not be admitted to candidacy until a Doctoral committee has been appointed, and the committee has certified that the student has successfully completed the comprehensive qualifying examination and demonstrated the qualifications necessary to successfully complete the requirements for the degree. The admission to Candidacy form must be approved by the Dean of the college and forwarded to the Dean of Graduate Studies for final approval. The student may elect to enroll in dissertation credits in the semester following approval of the Admission to Candidacy form by Graduate Studies.

Dissertation
The student must conduct research of sufficient quality that demonstrates an independent and original contribution to the field of computer science and engineering. Students must take at least 20 semester hours of doctoral dissertation credits; the exact number of credits is determined by the candidate’s supervisory committee. It is strongly recommended that doctoral students submit journal articles for publication relevant to dissertation research.

Dissertation Defense
A doctoral candidate must defend her/his research before her/his committee. The defense is usually open to the university community and conducted in accordance with the university’s general rules and regulations. The defense involves a formal presentation of the dissertation followed by a critical exchange between the candidate and the committee. The committee chairman moderates the proceedings and determines procedure, originality of the research, and contributions made by the candidate.

University Policy
All work applicable to the Ph.D. degree requirements must be completed within eight years from the time a student is admitted into the program.

Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COP 6611</td>
<td>Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>EEL 6764</td>
<td>Principles of Computer Architecture</td>
<td>3</td>
</tr>
<tr>
<td>COT 6405</td>
<td>Introduction to the Theory of Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>CAP 5400</td>
<td>Digital Image Processing</td>
<td>3</td>
</tr>
<tr>
<td>CAP 5625</td>
<td>Introduction to Artificial Intelligence</td>
<td>3</td>
</tr>
<tr>
<td>CAP 5682</td>
<td>Expert and Intelligent Systems</td>
<td>3</td>
</tr>
<tr>
<td>CAP 5771</td>
<td>Data Mining</td>
<td>3</td>
</tr>
<tr>
<td>CAP 6100</td>
<td>Human Computer Interface</td>
<td>3</td>
</tr>
<tr>
<td>CAP 6415</td>
<td>Computer Vision</td>
<td>3</td>
</tr>
<tr>
<td>CAP 6455</td>
<td>Advanced Robotic Systems</td>
<td>3</td>
</tr>
<tr>
<td>CAP 6615</td>
<td>Neural Networks</td>
<td>3</td>
</tr>
<tr>
<td>CAP 6672</td>
<td>Robot Intelligence and Computer Vision</td>
<td>3</td>
</tr>
<tr>
<td>CAP 6736</td>
<td>Geometric Modeling</td>
<td>3</td>
</tr>
<tr>
<td>CDA 5416</td>
<td>Introduction to Computer-Aided Verification</td>
<td>3</td>
</tr>
<tr>
<td>CIS 6900</td>
<td>Independent Study</td>
<td>1-19</td>
</tr>
<tr>
<td>CIS 6930</td>
<td>Special Topics</td>
<td>1-5</td>
</tr>
<tr>
<td>CIS 6940</td>
<td>Graduate Instruction Methods</td>
<td>1-4</td>
</tr>
<tr>
<td>CIS 6971</td>
<td>Thesis: Master’s</td>
<td>2-19</td>
</tr>
<tr>
<td>CIS 7910</td>
<td>Directed Research</td>
<td>1-19</td>
</tr>
<tr>
<td>CIS 7980</td>
<td>Dissertation: Doctoral</td>
<td>2-19</td>
</tr>
<tr>
<td>CNT 6215</td>
<td>Computer Networks</td>
<td>3</td>
</tr>
<tr>
<td>COP 6621</td>
<td>Programming Languages and Translation</td>
<td>3</td>
</tr>
<tr>
<td>EEL 5771</td>
<td>Introduction to Computer Graphics I</td>
<td>3</td>
</tr>
<tr>
<td>EEL 6706</td>
<td>Testing and Fault Tolerance in Digital Systems</td>
<td>3</td>
</tr>
<tr>
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<td>Advanced Computer Architecture</td>
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</tbody>
</table>

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)

http://www.eng.usf.edu/
ELECTRICAL ENGINEERING PROGRAM

Master of Engineering (M.E.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: No admit

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.1001
Dept Code: EGE
Program (Major/College): EEL EN

Also offered as:
- Dual M.S. Degree in Physics/Engineering;
- Joint degree with the Industrial Engineering (this permits simultaneous specialization in an Electrical Engineering discipline with an MSEM minor.)

PROGRAM INFORMATION

The Department of Electrical Engineering offers both doctoral and masters level degrees. The major areas of research and instruction in the Department are: semiconductor materials, microelectronic manufacturing, MEMS, nanotechnology, VLSI design, digital signal processing, communication theory, wireless communications, microwave engineering, power systems and controls, and biomedical materials and imaging. The Department's research efforts are supported by well-equipped laboratories in the areas of silicon processing, compound semiconductors, electro-optics, IC design, thin dielectric films, communications and signal processing, power systems, nanotechnology, MEMS, micro/millimeter waves, biomedical materials and imaging, and bioengineering.

Current and previous Ph.D. dissertations explored the areas of microelectronics (materials and devices of elemental and compound semiconductors, circuit design, modeling, testing, and reliability); communications and signal processing (communication networks, packet switching, satellite communications, communications software, and VLSI for signal processing); systems and controls; solid state material and device processing and characterization; electro-optics, electromagnetic, microwave and millimeter-wave engineering (antennas, devices, systems); and biomedical engineering. Master's programs include options in semiconductor materials and processes, VLSI design, communications and signal processing, power systems and controls, microwave and millimeter-wave engineering, and biomedical engineering. The M.E. degree is an option for students whose B.S. Degree is in an engineering discipline other than Electrical engineering. Both thesis and course work only master's options are available.

Accreditation: Accredited by the Commission on Colleges of the Southern Association of Colleges and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- Minimum GPA of 3.0
- GRE Required (Q>700, V+Q>1100)
- Three Letters of Recommendation
- TOEFL score of 550; 213 on computerized test; 79 internet based exam
DEGREE PROGRAM REQUIREMENTS

Thesis Option
Required Courses  24 hours
Thesis hours  6
Total hours  30

Course Work Only Option
Required courses  30

Students must take two of the following applied Mathematics courses as part of the degree program:
EGN 5421 Engineering Applications of Vector Analysis  3
EGN 5422 Engineering Applications of Partial Differential Equations  3
EGN 5423 Mathematics for Communications Engineering  3
EGN 5424 Engineering Applications of Complex Analysis  3
EGN 5425 Matrix Theory  3
EEL 6545 Random Processes  3

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ELECTRICAL ENGINEERING PROGRAM

Master of Science in Electrical Engineering (M.S.E.E.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.1001
Dept Code: EGE
Program (Major/College): EEL EN

CONTACT INFORMATION

College: Engineering
Department: Electrical Engineering
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

Also offered as:
- Dual M.S. Degree in Physics/Engineering;
- Joint degree with the Industrial Engineering (this permits simultaneous specialization in an Electrical Engineering discipline)

PROGRAM INFORMATION

The Department of Electrical Engineering offers both doctoral and masters level degrees. The major areas of research and instruction in the Department are: semiconductor materials, microelectronic manufacturing, MEMS, nanotechnology, VLSI design, digital signal processing, communication theory, wireless communications, microwave engineering, power systems and controls, and biomedical materials and imaging. The Department’s research efforts are supported by well-equipped laboratories in the areas of silicon processing, compound semiconductors, electro-optics, IC design, thin dielectric films, communications and signal processing, power systems, nanotechnology, MEMS, micro/millimeter waves, biomedical materials and imaging, and bioengineering.

Current and previous Ph.D. dissertations explored the areas of microelectronics (materials and devices of elemental and compound semiconductors, circuit design, modeling, testing, and reliability); communications and signal processing (communication networks, packet switching, satellite communications, communications software, and VLSI for signal processing); systems and controls; solid state material and device processing and characterization; electro-optics, electromagnetic, microwave and millimeter-wave engineering (antennas, devices, systems); and biomedical engineering. Master’s programs include options in semiconductor materials and processes, VLSI design, communications and signal processing, power systems and controls, microwave and millimeter-wave engineering, and biomedical engineering.

Accreditation
Accredited by the Commission on Colleges of the Southern Association of Colleges and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.
Program Admission Requirements
- Minimum 3.00 GPA
- GRE Required (Q>700, V+Q>1100)
- Three Letters of Recommendation
- Educational experience required
- TOEFL score of 550; 213 on computerized test; 79 on internet based exam

DEGREE PROGRAM REQUIREMENTS

Thesis Option
- Required Courses 24 hours
- Required Thesis Hours 6 hours
- Total hours: 30 hours

Course work only
- Required Courses 30 hours

Students must take two of the following applied mathematics courses as part of the degree program:
- EGN 5421 Engineering Applications of Vector Analysis 3
- EGN 5422 Engineering Applications of Partial Differential Equations 3
- EGN 5423 Mathematics for Communications Engineering 3
- EGN 5424 Engineering Applications of Complex Analysis 3
- EGN 5425 Matrix Theory 3
- EEL 6545 Random Processes 3
- PHC 6050 Bio-Statistics 3

All students must take two of the following approved in depth sequences as part of their degree program:
- EEL-6426 RF/MW Ckts I and EEL-6427 RF/MW Ckts II
- EEL-6486 EM Field Theory and EEL-6487 Adv EM Field Theory or EEL-6481 Num. Techniques in Electromagnetics
- EEL-5462 Antenna Theory and EEL-6463 Adv Antenna Theory or EEL-6481 Num. Techniques in Electromagnetics
- EEL-6935 Monolithic MW Ckts and EEL-6936 Adv Monolithic MW Ckts
- EEL-6534 Digital Communication Systems and EEL-6509 Satellite Comm. or EEL-6593 Mobile and Personal Comm
- ECH-6693 Intro to Biomedical Eng and GM-7930 Anatomy for Bio Engineers or EEL-6936 Bio Image Processing
- EEL-6935 Bioelectricity and EEL-6273 Chemical and Bio Sensor Microsystems
- EEL-6502 DSP-I and EEL-6752 DSP-II or EEL-6586Speech Signal Processing
- EEE-5344 Digital CMOS VLSI Design and EEE-6936 VHDL or EEE-6936 Low Power VLSI Design
- EEE-5382 Physical Basis of Microelectronics and EEE-6353 Semiconductor Device Theory I
- EEE-6353 Semi Conductor Device Theory I and EEE-6358 Semi Conductor Device Theory II
- EEE5356 Integrated Circuit Technology and EEE-6936 Adv Integrated Circuit Technology
- EEE-6355 Compound Semiconductor Technology and EEE-6318 Characterization of Semiconductors
- EEL-5631 Digital control Systems and EEL-6613 Modern Control Theory
- EEL-6936 VHDL and EEL-6936 Rapid System Prototyping
- EEL-5250 Electric Power Systems I and EEL-6935 Electric Power Systems II
- EEL-6935 Industrial Power Distribution I and EEL-6936 Industrial Power Distribution II
- EEL-5935 Utility Power Distribution I and EEL-6935 Utility Power Distribution II
- EEL-6935 Electric Machines and Drives and EEL-6936 Power Electronics
- EEL-6734 Intro to Nanotechnology and EEL-6936 Nanotechnology II
- EEL-6935 Micro Electro Mechanical Systems I and EEL-6936 Micro Electro Mechanical Systems II

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ELECTRICAL ENGINEERING PROGRAM

Master of Science in Engineering Science (M.S.E.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.1001
Dept Code: EGE
Program (Major/College): EEL EN

Also offered as:
- Dual M.S. Degree in Physics/Engineering;
- Joint degree with the Industrial Engineering (this permits simultaneous specialization in an Electrical Engineering discipline with an MSEM minor.)

CONTACT INFORMATION

College: Engineering
Department: Electrical Engineering
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The Department of Electrical Engineering offers both doctoral and masters level degrees. The major areas of research and instruction in the Department are: semiconductor materials, microelectronic manufacturing, MEMS, nanotechnology, VLSI design, digital signal processing, communication theory, wireless communications, microwave engineering, power systems and controls, and biomedical materials and imaging. The Department’s research efforts are supported by well-equipped laboratories in the areas of silicon processing, compound semiconductors, electro-optics, IC design, thin dielectric films, communications and signal processing, power systems, nanotechnology, MEMS, microwave/millimeter waves, biomedical materials and imaging, and bioengineering.

Current and previous Ph.D. dissertations explored the areas of microelectronics (materials and devices of elemental and compound semiconductors, circuit design, modeling, testing, and reliability); communications and signal processing (communication networks, packet switching, satellite communications, communications software, and VLSI for signal processing); systems and controls; solid state material and device processing and characterization; electro-optics, electromagnetic, microwave and millimeter- wave engineering (antennas, devices, systems); and biomedical engineering. Master’s programs include options in semiconductor materials and processes, VLSI design, communications and signal processing, power systems and controls, microwave and millimeter-wave engineering, and biomedical engineering. Non-thesis master’s studies, comprising 30 credit hours of coursework without a thesis are possible. The M.S.E.S. Degree is an option for students whose B.S. Degree is in a discipline other than engineering.

Accreditation
Accredited by the Commission on Colleges of the Southern Association of Colleges and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.
- Minimum 3.00 GPA
- GRE Required (Q>700, V+Q>1100)
• Three Letters of Recommendation
• TOEFL score of 550; 213 on computerized test; 79 internet based exam.

DEGREE PROGRAM REQUIREMENTS

Thesis Option

Required Courses 24 hours
Required Thesis Hours 6 hours
Total hours: 30 hours

Course work only

Required Courses 30 hours

Students must take two of the following applied mathematics courses as part of the degree program:

EGN 5421 Engineering Applications of Vector Analysis 3
EGN 5422 Engineering Applications of Partial Differential Equations 3
EGN 5423 Mathematics for Communications Engineering 3
EGN 5424 Engineering Applications of Complex Analysis 3
EGN 5425 Matrix Theory 3
EEL 6545 Random Processes 3
PHC 6050 Bio-Statistics 3

All students must take two of the following approved in depth sequences as part of their degree program:

EEL-6426 RF/MW Ckts I and EEL-6427 RF/MW Ckts II
EEL-6486 EM Field Theory and EEL-6487 Adv EM Field Theory or EEL-6481 Num. Techniques in Electromagnetics
EEL-5462 Antenna Theory and EEL-6463 Adv Antenna Theory or EEL-6461 Num. Techniques in Electromagnetics
EEL-6935 Monolithic MW Ckts and EEL-6936 Adv Monolithic MW Ckts
EEL-6534 Digital Communication Systems and EEL-6509 Satellite Comm. or EEL-6593 Mobile and Personal Comm
ECH-6693 Intro to Biomedical Eng and GM-7930 Anatomy for Bio Engineers or EEL-6936 Bio Image Processing
EEL-6935 Bioelectricity and EEL-6273 Chemical and Bio Sensor Microsystems
EEL-6502 DSP-I and EEL-6752 DSP-II or EEL-6586Speech Signal Processing
EEE-5344 Digital CMOS VLSI Design and EEE-6936 VHDL or EEE-6936 Low Power VLSI Design
EEE-5382 Physical Basis of Microelectronics and EEE-6353 Semiconductor Device Theory I
EEL-6353 Semi Conductor Device Theory I and EEE-6358 Semi Conductor Device Theory II
EEE5356 Integrated Circuit Technology and EEE-6936 Adv Integrated Circuit Technology
EEE-6355 Compound Semiconductor Technology and EEE-6318 Characterization of Semiconductors
EEL-5631 Digital control Systems and EEL-6613 Modern Control Theory
EEL-6936 VHDL and EEL-6936 Rapid System Prototyping
EEL-5250 Electric Power Systems I and EEL-6935 Electric Power Systems II
EEL-6935 Industrial Power Distribution I and EEL-6936 Industrial Power Distribution II
EEL-5935 Utility Power Distribution I and EEL-6935 Utility Power Distribution II
EEL-6935 Electric Machines and Drives and EEL-6936 Power Electronics
EEL-6734 Intro to Nanotechnology and EEL-6936 Nanotechnology II
EEL-6935 Micro Electro Mechanical Systems I and EEL-6936 Micro Electro Mechanical Systems II

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
ELECTRICAL ENGINEERING PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 90/60
Program Level: Doctoral

CIP Code: 14.1001
Dept Code: EGE
Program (Major/College): EEL EN

CONTACT INFORMATION

College: Engineering
Department: Electrical Engineering
Contact Information: [www.grad.usf.edu](http://www.grad.usf.edu)
Other Resources: [www.usf4you.usf.edu](http://www.usf4you.usf.edu)

PROGRAM INFORMATION

The Department of Electrical Engineering offers both doctoral and masters level degrees. The major areas of research and instruction in the Department are: semiconductor materials, microelectronic manufacturing, MEMS, nanotechnology, VLSI design, digital signal processing, communication theory, wireless communications, microwave engineering, power systems and controls, and biomedical materials and imaging. The Department’s research efforts are supported by well-equipped laboratories in the areas of silicon processing, compound semiconductors, electro-optics, IC design, thin dielectric films, communications and signal processing, power systems, nanotechnology, MEMS, micro/millimeter waves, biomedical materials and imaging, and bioengineering.

Current and previous Ph.D. dissertations explored the areas of microelectronics (materials and devices of elemental and compound semiconductors, circuit design, modeling, testing, and reliability); communications and signal processing (communication networks, packet switching, satellite communications, communications software, and VLSI for signal processing); systems and controls; solid state material and device processing and characterization; electro-optics, electromagnetic, microwave and millimeter- wave engineering (antennas, devices, systems); and biomedical engineering. Master’s programs include options in semiconductor materials and processes, VLSI design, communications and signal processing, power systems and controls, microwave and millimeter-wave engineering, and biomedical engineering.

Accreditation
Accredited by the Commission on Colleges of the Southern Association of Colleges and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- Minimum 3.00 GPA
- GRE (Q> 700, Q+V>1100)
- TOEFL score of 550; 213 on computerized test; 79 internet based exam...
- Three (3) Letters of Reference
- Statement of Purpose

http://www.eng.usf.edu/
DEGREE PROGRAM REQUIREMENTS

The student's supervisory committee is responsible for evaluating his/her overall transcript to ensure that the following distributional requirements are met:

Program of Study

Concentration Coursework 27 hours
Minimum 27 hours formal regularly scheduled graduate course work in the engineering area of concentration (not necessarily electrical engineering courses); at least 20 of these hours at the 6000 level.

Mathematics and Statistics 8 hours
Minimum 8 hours in mathematics or statistics courses (not necessarily math department courses).

Electives 8 hours
Minimum 8 hours outside the major area of concentration (these could be other courses in the Department).

Courses
Minimum 60 hours total course work (including i-iii above) beyond BS degree (EEL 6908-002 forward), directed research (EEL 6910-001 forward), seminars (EEL 6932-5). Each professor will have their own section for independent study and directed research section.

Dissertation 20 hours
Minimum 20 hours dissertation (EEL 7980). Each Professor will have their own section for dissertation hours.

Total hours: Minimum 90 hours total beyond BS degree

Please contact Electrical Engineering for information

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ENGINEERING MANAGEMENT PROGRAM

Master of Science in Engineering Management (M.S.E.M.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters

CIP Code: 14.3502
Dept Code: EGS
Program (Major/College): EMA EN

CONTACT INFORMATION

College: Engineering
Department: Industrial & Management Systems
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

This program is designed to prepare engineers from various disciplines to make the transition to technical management. Courses in the program involve concepts in engineering management, resource management, strategic planning, and productivity. They combine qualitative approaches with quantitative techniques. Courses are available on campus or through distance learning.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- BS in Engineering or equivalent.
- Minimum 3.00 GPA upper level
- GRE may be required Letter of recommendation.
- Resume
- TOEFL score of 79 or higher on internet-based test, 213 or higher on computer-based test, or 550 or higher on paper-based test
- Two years professional experience or internship may be required as part of the program

DEGREE PROGRAM REQUIREMENTS

A minimum of 30 credits of approved coursework beyond the bachelor level is required, 18 credits of core work and 12 credits of electives. Up to 6 hours of advanced courses in the student’s area of specialty may be taken as electives. A thesis option is available to M.S.E.M. students who are interested in applied research. In the thesis option, 18 credits of core work, 6 credits of electives, and 6 credits of thesis are the minimum required.

http://www.eng.usf.edu/
The required 18 credits of core work are divided into three components: 12 credits in the general core area, 3 credits in the quantitative core area, and 3 credits in the job design core area. An undergraduate statistics course with a grade of C or higher is a prerequisite for the quantitative core area. Otherwise students must additionally take EGN 3443 Probability & Statistics for Engineers as a prerequisite.

**General Core Area: 12 credits**

EIN 5182 Principles of Engineering Management  
EIN 6386 Management of Technological Change  
EIN 5350 Technology and Finance  
EIN 6183 Engineering Management Policy & Strategy (Capstone: must be taken after all core work requirements have been fulfilled)

**Quantitative Core Area: 3 credits must be selected from the following options, as approved by advisor. The other courses may be taken as electives.**

ESI 5306 Operations Research for Engineering Managers  
ESI 5219 Statistical Methods for Engineering Managers  
ESI 6247 Statistical Design Models

**Job Design Core Area: 3 credits must be selected from the following options, as approved by advisor. The other course may be taken as an elective.**

EIN 6108 Engineering Management: Human Relations  
EIN 6319 Work Design, Motivation & Productivity

**Electives: 12 credits minimum must be selected from the following options, as approved by advisor.**

EIN 6179 Advanced TQM - Six Sigma  
EIN 6936 Benchmarking  
ESI 5522 Computer Simulation  
EIN 6217 Construction Safety Engineering  
EIN 6934 Creativity in Technology  
EIN 6275 Design Controls for Medical Devices  
EIN 6936 Engineering a Lean Enterprise  
EIN 6215 Engineering Systems Safety  
ESI 6605 Engineering Data Mining  
EIN 6324 Engineering the Supply Chain  
EIN 6936 Graduate Research Seminar  
EIN 6433 Human Factors Engineering in Medical Devices  
EIN 6112 Information Systems Design for Engineering  
ESI 6448 Integer Programming  
EIN 6934 International Project Management  
EIN 6435 International Regulations for Medical Devices  
EIN 6178 ISO 9000/14000  
ESI 6491 Linear Programming & Network Optimization  
EIN 5510 Manufacturing Systems Analysis  
EIN 6934 New Product Development  
EIN 6936 Non-Linear Programming  
EIN 6216 Occupation Safety Engineering  
EIN 6430 Overview of Regulated Industries  
EIN 6336 Production Control Systems  
EIN 6145 Project Management  
EIN 6431 Regulatory Quality Systems & Controls for Medical Devices  
EIN 6432 Regulated Product Approval Process  
ESI 5236 Reliability Engineering  
EIN 6935 Strategic Marketing Assessment  
EIN 6936 Strategies in Technical Entrepreneurship
ESI 6213  Stochastic Decision Models I
EIN 6934  Tech Venture Strategy
EIN 6145  Technical Entrepreneurship
EIN 6106  Technology & Law
EIN 6121  Technology & Markets
EIN 5174  Total Quality Management (TQM) Concepts
EIN 6225  Total Quality Management (TQM) Seminar
EIN 6936  Venture Capital & Private Equity
EIN 5275  Work Physics / Biomechanics

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ENGINEERING SCIENCE (5-YEAR) PROGRAM

Master of Science in Engineering Science (M.S.E.S) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.0101
Dept Code: ESB
Program (Major/College): EGC EN

Also offered as:
- 5 year M.S.E.S. program -available in each department

PROGRAM INFORMATION

This program is designed to meet the needs of students who wish to pursue studies in interdisciplinary engineering areas. A strong foundation in rigorous scientific and engineering principles and practice is expected. It is normally awarded for completion of a thesis program.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Check the admission requirements of the host department; student’s interest of study.

DEGREE PROGRAM REQUIREMENTS

Each department in the College is authorized to offer the Master of Science in Engineering Science and the Master of Science in Engineering. These degrees are individually tailored to student needs. Please check with the individual department for requirements.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ENGINEERING SCIENCE PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 14.0101
Dept Code: DEA
Program (Major/College): EGC EN

Concentrations:
- Physics (ENP)

CONTACT INFORMATION

College: Engineering
Department: DEA
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

This program is designed to meet the needs of students who wish to pursue studies in interdisciplinary engineering areas.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
The student should have a strong background in scientific and engineering principles. At least one major professor in the College of Engineering should agree to guide the student by approving the admission.

DEGREE PROGRAM REQUIREMENTS

The student’s Ph.D. program must meet University and College requirements (see main College of Engineering section), but is individually designed by the student’s two Co-Major Professors based on the student’s main areas of interest. While the student is hosted by a department, program approvals and the degree are authorized by the Co-Major Professors and the College of Engineering.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ENGINEERING SCIENCE / PHYSICS PROGRAM

Joint Degree Program
Master of Science (M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.0101
Dept Code: ESB
Program (Major/College): EGC EN

Also offered as:
- Interdisciplinary - Ph.D. in Engineering Science

CONTACT INFORMATION

Colleges: Engineering and Arts and Sciences
Departments: Engineering / Physics
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Contact the program for information. Under an interdisciplinary arrangement with the College of Arts and Sciences and the College of Engineering, the physics graduate students may obtain a Ph.D. in Engineering under the dissertation direction of a Physics Director of Graduate Studies.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
See listings for Physics and Engineering Science.

DEGREE PROGRAM REQUIREMENTS

Contact the program for information.

COURSES
See http://www.ups.usf.edu/sab/sabs.cfm
ENGINEERING SCIENCE / PHYSICS PROGRAM

Joint Degree Program
Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 14.0101
Dept Code: DEA
Program (Major/College): EGC EN
Concentration Code: ENP

CONTACT INFORMATION

Colleges: Engineering and Arts and Sciences
Department: Engineering / Physics
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Contact the program for information. Under an interdisciplinary arrangement with the College of Arts and Sciences and the College of Engineering, the physics graduate students may obtain a Ph.D. in Engineering under the dissertation direction of a Physics Director of Graduate Studies.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
See listings for Physics and Engineering Science.

DEGREE PROGRAM REQUIREMENTS

Contact the program for information.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ENVIRONMENTAL ENGINEERING PROGRAM

Master of Environmental Engineering (M.E.V.E.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.1401
Dept Code: EGX
Program (Major/College): EVE EN

CONTACT INFORMATION

College: Engineering
Department: Civil and Environmental Engineering
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The M.E degree provides a student with the opportunity to earn the advanced degree by coursework only. Students must have an accredited first degree in engineering or complete a list of makeup engineering coursework. Many of the department’s graduate courses are offered on weekday evenings, which permits part-time and FEEDS (Florida Engineering Education Delivery System) students the opportunity to seek a graduate degree.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:

The field of Environmental Engineering has long been known for its breadth and ability to adapt to the new technological, societal, and global problems facing the environment. Major research areas include water quality engineering; air quality engineering; fate and transport of contaminants in the environment; environmental biotechnology and nanotechnology; waste management; sustainability and ecological engineering; surface water hydrology and hydraulics; and groundwater hydrology. Other focus areas include water reuse, green engineering, renewable energy, fate of emerging contaminants, and humanitarian engineering that has a developing world focus. Graduates of the programs are prepared for careers with governmental agencies, nongovernmental organizations (NGOs), or private industry and firms involved in planning, design, research and development, or policy. The environmental engineering laboratories provide state-of-the-art analytical equipment for chemical and biological research. Equipment includes an ion chromatograph, atomic absorption spectrophotometer, several gas chromatographs, HPLC, ICPs, TOC machine, and environmental chambers. Field research sites are available locally and in several international settings that include developing world communities.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- Overall GPA 2.75; GPA in major 3.00
- GRE 650Q; 350V with 3.0 AW
- TOEFL (international applicants only) 550 or 213 (CBT).
- Exceptions made on a case-by-case basis where warranted.
DEGREE PROGRAM REQUIREMENTS

The minimum coursework requirement for the Master of Engineering degrees is 30 credit hours. No research thesis is required. All students must take four principles courses in physical/chemical principles; biological principles; aquatic chemistry, and sustainability and two environmental engineering process elective courses. An international capstone design course is available that includes a field experience in the developing world.

Core Courses (required)
EN 6002 Physical Chemical Principles (3)
EES 6107 Biological Principles of Environmental Engineering (3)
EN 6666 Aquatic Chemistry (3)

CGN 6933 Green Engineering for Sustainability (3) or
CGN 6933 Green Infrastructure for Sustainable Communities (3) or CGN 6933 Sustainable Development Engineering (3)

Elective Courses (12 additional courses required, two courses must be from this list)
EN 6519 Physical/Chemical Processes (3)
CGN 6933 Environmental Biotechnology (3)
EN 6105 Air Pollution (3)

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ENVIRONMENTAL ENGINEERING PROGRAM

Master of Science in Engineering Science (M.S.E.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.1401
Dept Code: EGX
Program (Major/College): EVE EN

CONTACT INFORMATION

College: Engineering
Department: Civil and Environmental Engineering
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The M.S.E.S. degree provides a student with the opportunity to earn the advanced degree by combining coursework and a research thesis. This program is typically open to students who have a first degree in science or mathematics but do not have an accredited first degree in engineering and are not completing makeup coursework that would be required for the M.S. or M.E. degrees. A Master’s International Program in Civil & Environmental Engineering allows students to combine their graduate education and research with engineering service in the Peace Corps. Many of the department’s graduate courses are offered on weekday evenings, which permits part-time and FEEDS (Florida Engineering Education Delivery System) students the opportunity to seek a graduate degree.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
The field of Environmental Engineering has long been known for its breadth and ability to adapt to the new technological, societal, and global problems facing the environment. Major research areas include water quality engineering; air quality engineering; fate and transport of contaminants in the environment; environmental biotechnology and nanotechnology; waste management; sustainability and ecological engineering; surface water hydrology and hydraulics; and groundwater hydrology. Other focus areas include water reuse, green engineering, renewable energy, fate of emerging contaminants, and humanitarian engineering that has a developing world focus. Graduates of the programs are prepared for careers with academia, governmental agencies, nongovernmental organizations (NGOs), or private industry and firms involved in planning, design, research and development, or policy. The environmental engineering laboratories provide state-of-the-art analytical equipment for chemical and biological research. Equipment includes an ion chromatograph, atomic absorption spectrophotometer, several gas chromatographs, HPLC, ICPs, TOC machine, and environmental chambers. Field research sites are available locally and in several international settings that include developing world communities.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- Overall GPA 2.75; GPA in major 3.00
- GRE 650Q; 350V with 3.0 AW
- TOEFL (international applicants only) 550 or 213 (CBT).
- Exceptions made on a case-by-case basis where warranted.

http://www.eng.usf.edu/
DEGREE PROGRAM REQUIREMENTS

The programs consist of a minimum of 24 credit hours of coursework and 6 credit hours of thesis. All students must take four principles courses in physical/chemical principles; biological principles; aquatic chemistry, and sustainability and two environmental engineering process courses. An international capstone design course is available that includes a field experience in the developing world.

Core Courses (required)
ENV 6002 Physical Chemical Principles (3)
EES 6107 Biological Principles of Environmental Engineering (3)
ENV 6666 Aquatic Chemistry (3)

CGN 6933 Green Engineering for Sustainability (3) or
CGN 6933 Green Infrastructure for Sustainable Communities (3) or
CGN 6933 Sustainable Development Engineering (3)

Elective Courses (12 additional courses required based on approval of graduate committee)

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ENVIRONMENTAL ENGINEERING PROGRAM

Master of Science in Environmental Engineering (M.S.E.V.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.1401
Dept Code: EGX
Program (Major/College): EVE EN

CONTACT INFORMATION

College: Engineering
Department: Civil and Environmental Engineering
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The M.S. degree provides a student with the opportunity to earn the advanced degree with coursework and a required research thesis. Students must have an accredited first degree in engineering or complete a list of makeup engineering coursework. A Master’s International Program in Civil & Environmental Engineering allows students to combine their graduate education and research with engineering service in the Peace Corps. Many of the department’s graduate courses are offered on weekday evenings, which permits part-time and FEEDS (Florida Engineering Education Delivery System) students the opportunity to seek a graduate degree.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas:
The field of Environmental Engineering has long been known for its breadth and ability to adapt to the new technological, societal, and global problems facing the environment. Major research areas include water quality engineering; air quality engineering; fate and transport of contaminants in the environment; environmental biotechnology and nanotechnology; waste management; sustainability and ecological engineering; surface water hydrology and hydraulics; and groundwater hydrology. Other focus areas include water reuse, green engineering, renewable energy, fate of emerging contaminants, and humanitarian engineering that has a developing world focus. Graduates of the programs are prepared for careers with academia, governmental agencies, nongovernmental organizations (NGOs), or private industry and firms involved in planning, design, research and development, or policy. The environmental engineering laboratories provide state-of-the-art analytical and experimental equipment for chemical and biological research. Equipment includes an ion chromatograph, atomic absorption spectrophotometer, several gas chromatographs, HPLC, ICPs, TOC machine, and environmental chambers. Field research sites are available locally and in several international settings that include developing world communities.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- Overall GPA 2.75; GPA in major 3.00
- GRE 650Q; 350V with 3.0AW
- TOEFL (international applicants only) 550 or 213 (CBT).
- Exceptions made on a case-bay-case basis where warranted.
DEGREE PROGRAM REQUIREMENTS:

The programs consist of a minimum of 24 credit hours of coursework and 6 credit hours of thesis. All students must take four principles courses in physical/chemical principles; biological principles; aquatic chemistry, and sustainability and two environmental engineering process courses. An international capstone design course is available that includes a field experience in the developing world.

Core Courses (required)
- ENV 6002 Physical Chemical Principles (3)
- EES 6107 Biological Principles of Environmental Engineering (3)
- ENV 6666 Aquatic Chemistry (3)
- CGN 6933 Green Engineering for Sustainability (3) or
- CGN 6933 Green Infrastructure for Sustainable Communities (3) or
- CGN 6933 Sustainable Development Engineering (3)

Elective Courses (12 additional courses required based on approval of graduate committee)

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
INDUSTRIAL ENGINEERING PROGRAM

Master of Industrial Engineering (M.I.E.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.3501
Dept Code: EGS
Program (Major/College): EIE EN

Concentrations:
- Engineering Management (IMA)
- Quantitative Analysis (QAS)

PROGRAM INFORMATION

The Department participates in the College’s M.S.E., M.E. and, programs. The Department offers advanced degrees in areas of study pertinent to the design, evaluation, and operation of a variety of industrial systems, ranging from the analysis of public systems, to the service industry, to the operation of manufacturing concerns. Course topics and research opportunities include production planning, production control, facilities design, applied engineering statistics, quality control and reliability, operations research, engineering economic analysis, human factors engineering, productivity analysis, manufacturing systems, robotics, automation, and computer applications. The department has advanced laboratory facilities that support class projects and research in microcomputer applications, computer-aided design and manufacturing, flexible automation, quality control, and applications in robotics.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of Colleges and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- An undergraduate degree in industrial engineering with a 3.0/4.0 GPA; non engineering degrees will be required to take supplemental undergraduate courses
- GRE Required
- TOEFL for international students 213 (550 paper version)
- Three letters of reference
DEGREE PROGRAM REQUIREMENTS

Total of 30 approved credit hours, including the following 4 core courses:

Required Core Courses:
- ESI 6213 Stochastic Decision Making (3)
- ESI 5470 Manufacturing Systems Analysis (3)
- ESI 6247 Statistical Design Models (3)
- ESI 6491 Linear Programming and Network Optimization (3)

Elective Courses:
- EIN 5522 Computer Simulation (3)
- EIN 6119 Decision Support Systems (3)
- ESI 6605 Engineering Data Mining (3)
- ESI 6324 Engineering the Supply Chain (3)
- EIN 6433 Human Factors in Engineering Medical Devices (3)
- EIN 6112 Information Systems Design (3)
- ESI 6448 Integer Programming (3)
- EIN 6435 International Regs for Med Devices (3)
- EIN 6386 Management of Technology Change (3)
- EIN 6936 Non-Linear Programming (3)
- EIN 6336 Production Control Systems (3)
- EIN 6145 Project Management (3)
- ESI 5236 Reliability Engineering (3)
- EIN 6319 Work Design and Productivity (3)

In addition, students can choose electives from other department and/or non-departmental courses, with the approval of the program director. Contact the department for information. Also visit [http://imse.eng.usf.edu](http://imse.eng.usf.edu)

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
INDUSTRIAL ENGINEERING PROGRAM

Master of Science in Industrial Engineering (M.S.I.E.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.1401
Dept Code: EGX
Program (Major/College): EVE EN

Concentrations:
- Engineering Management (IMA)
- Quantitative Analysis (QAS)

CONTACT INFORMATION

College: Engineering
Department: Industrial and Management Systems Engineering
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The department participates in the college’s M.S.E. and M.E. programs. The department offers advanced degrees in areas of study pertinent to the design, evaluation, and operation of a variety of industrial systems, ranging from the analysis of public systems, to the service industry, to the operation of manufacturing concerns. Course topics and research opportunities include production planning, production control, facilities design, applied engineering statistics, quality control and reliability, operations research, engineering economic analysis, human factors engineering, productivity analysis, manufacturing systems, robotics, automation, and computer applications. The department has advanced laboratory facilities that support class projects and research in microcomputer applications, computer-aided design and manufacturing, flexible automation, quality control, and applications in robotics.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- An undergraduate degree in Industrial Engineering with a 3.0/4.0 GPA; non engineering degrees will be required to take supplemental undergraduate courses
- GRE Required
- TOEFL for international students 213 (550 paper version)
- Three letters of reference
- Statement of purpose including evidence of research potential
DEGREE PROGRAM REQUIREMENTS

Minimum of 24 credit hours of approved course work and six credit hours of thesis including the following 4 core courses:

Core Courses:
ESI 5470 Manufacturing Systems Analysis (3)
ESI 6213 Stochastic Decision Making (3)
ESI 6247 Statistical Design Models (3)
ESI 6491 Linear Programming and Network Optimization (3)

Elective Courses:
EIN 5522 Computer Stimulation (3)
EIN 6119 Decision Support Systems (3)
ESI 6605 Engineering Data Mining (3)
ESI 6324 Engineering the Supply Chain (3)
EIN 6433 Human Factors in Engineering Medical Devices (3)
EIN 6112 Information Systems Design (3)
ESI 6448 Integer Programming (3)
EIN 6435 International Regs for Med Devices (3)
EIN 6386 Management of Technology Change (3)
EIN 6936 Non-Linear Programming (3)
EIN 6336 Production Control Systems (3)
EIN 6145 Project Management (3)
ESI 5236 Reliability Engineering (3)
EIN 6319 Work Design and Productivity (3)

In addition, students can choose electives from other department and/or non-departmental courses, with the approval of major advisor or program director. Contact the department for information. Also visit http://imse.eng.usf.edu

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
INDUSTRIAL ENGINEERING PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15
Spring: October 15
Summer: February 15

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 14.3501
Dept Code: EGS
Program (Major/College): EIE EN

Concentrations:
Engineering Management (IMA)
Manufacturing Systems (MFS)
Quantitative Analysis (QAS)

CONTACT INFORMATION

College: Engineering
Department: Industrial and Management Systems Engineering
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Contact the department for information.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Although USF only requires Ph.D. Students to complete two consecutive semesters as full-time students, the IMSE Dept. policy is for Ph.D. Students to complete their total doctoral program as full-time Tampa campus students. Other requirements include:

- GRE Required
- TOEFL for international students 213 (550 paper version)
- Three letters of reference
- Statement of Purpose including evidence of research potential

DEGREE PROGRAM REQUIREMENTS

Minimum of 90 credit hours beyond BS degree. Minimum of 60 credit hours of approved course work and 20 credit hours of research. Contact the department for information.

Must have 2 (at least one accepted, the other submitted) referred journal publication before graduation.
Must take the following 4 core courses:
Core Courses:
ESI 5470  Manufacturing Systems Analysis (3)
ESI 6213  Stochastic Decision Making (3)
ESI 6247  Statistical Design Models (3)
ESI 6491  Linear Programming and Network Optimization (3)

Elective Courses:
EIN 5522  Computer Stimulation (3)
EIN 6119  Decision Support Systems (3)
ESI 6605  Engineering Data Mining (3)
ESI 6324  Engineering the Supply Chain (3)
EIN 6433  Human Factors in Engineering Medical Devices (3)
EIN 6112  Information Systems Design (3)
ESI 6448  Integer Programming (3)
EIN 6435  International Regs for Medical Devices (3)
EIN 6386  Management of Technology Change (3)
EIN 6936  Non-Linear Programming (3)
EIN 6336  Production Control Systems (3)
EIN 6145  Project Management (3)
ESI 5236  Reliability Engineering (3)
EIN 6319  Work Design and Productivity (3)

In addition, students may choose electives from other department and/or non-departmental courses, with the approval of major advisor or program director. Contact the department for information. Also visit http://imse.eng.usf.edu

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
MATERIALS SCIENCE AND ENGINEERING PROGRAM

Master of Science in Materials Science and Engineering (M.S.M.S.E.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 30

Program Level: Masters

CIP Code: 14.1801

Dept Code: PHY/All Engineering Dept. except Computer Science and Engineering

Program (Major/College): MSE AS or MSE EN

CONTACT INFORMATION

Colleges: Arts and Sciences Engineering

Departments: Physics
- Chemical & Biomedical Engineering
- Civil Engineering
- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering

Contact Information: www.grad.usf.edu

Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The field of Materials Science and Engineering (MSE) applies the fundamental principles of physics and chemistry to engineering materials, with a focus on the interrelationship between material structure, their properties, and the means by which they are processed. MSE impacts multiple facets of our economy, such as aerospace, electronics, transportation, communication, construction, recreation, entertainment, environment and energy. It is, by its very nature, an interdisciplinary field. The goal of the MS program in Materials Science and Engineering is to provide a route for well-qualified undergraduate students who desire in-depth graduate-level work including structured courses and research experience, in preparation for work in industry or for entrance into a relevant science or engineering Ph.D. program.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- Applicants should have a Bachelor’s degree in Engineering (Chemical, Mechanical, Industrial, Electrical, Civil, Materials Science, Ceramic, Metallurgy, Manufacturing, Polymer and related disciplines) or Natural Sciences (Physics, Chemistry or Biology) from an accredited institution.
- An applicant must have a cumulative GPA of 3.0 or higher during undergraduate studies.
- For specific GRE requirements all applicants should contact the admitting department
- At least 2 letters of reference
- Statement of objectives/purpose must be included with the application.

http://www.eng.usf.edu/
DEGREE PROGRAM REQUIREMENTS

Students will require a minimum of 30 total credit hours to qualify for the M.S. degree in MSE. The degree may be completed within 12 months by taking 12 credit hours in each of the fall and spring semesters followed by 6 credit hours during the summer. Students must take 15 credit hours of core courses (including a maximum of 3 credit hours for an interdisciplinary Graduate Materials Seminar), 9 hours of elective courses for the thesis option which requires an additional 6 hours of thesis research. For the non-thesis option, 6 additional hours of elective courses would be required in lieu of thesis hours. Courses taken for this program cannot be used to fulfill requirements of another Master’s degree program.

Core Requirements (6 credit hours)
- EML/ECH 6931 and PHY 6938
  - Materials Characterization (3)
- PHY/ENG 6935
  - Graduate Seminar Series in MSE (Min 2, Max 3)

And three of the following five courses (9 credit hours):
- EML/ECH 6930
  - Advanced Materials (3)
- PHY 6938
  - Materials Physics I (3)
- PHY 6938
  - Materials Physics 2 (3)
- ECH/EGN 6930
  - Diffusion, Transport and Kinetics in Solid Materials (3)
- PHZ 5405
  - Introduction to Solid State Physics (3)

Elective Courses (9 credit hours)

Thesis Hours (6 credit hours)
For Non-thesis Option six additional credit hours of elective courses is required in lieu of thesis hours.

Elective Courses:
- EEL 6318
  - Characterization of Semiconductors (3)
- EEL 6353, 6354
  - Semiconductor Device Theory I and II (3, 3)
- CHE/EEL 6355
  - Compound Semiconductor Technology (3)
- PHY 6446
  - Lasers and Applications (3)
- PHY 6447
  - Physics of Lightwave Devices and Applications (3)
- EEL 6386, 6389
  - Principles of Semiconductor Device Modeling I, II (3, 3)
- EEL 6935
  - Microsystems and MEMS Technology (3)
- PHZ 5156C
  - Computational Physics I (3)
- EEL 6935/ECH 6391
  - Chemical/Biological Sensors and Microfabrication (3)
- ECH 6749
  - Biomaterials and Biocompatibility (3)
- PHZ 6426
  - Solid State Physics II (3)
- CGN 6933
  - Corrosion of Engineering Materials (3)
- CGN 6933
  - Durability Issues in Cementitious Materials (3)
- EML 6930
  - Failure Mechanisms in Material (3)
- PHZ 6136
  - Physical Applications of Group Theory (3)
- EEL 6937
  - Introduction to Nanotechnology (3)
- ECH/EEL 6935
  - Wide Band Gap Semiconductor Technology I (3)
- ECH/EEL 6931
  - Wide Band Gap Semiconductor Technology II (3)
- CES 6107
  - Advanced Mechanics of Materials II (3)
- EEL 6935
  - Characterization of Defects in Electronic Materials (3)
- EIN 6935
  - Statistical Quality Control (3)
- ESI 6247
  - Statistical Design Models (3)
- EML 6232
  - Laminated Composite Materials (3)
- EML 6653
  - Applied Elasticity (3)
- EEL 5382
  - Physical Basis of Microelectronics (3)
- ECH 6230
  - Advanced Mass Transfer (3)
- EEE 5356
  - Integrated Circuit Technology (3)
- EEL 6935
  - Advanced I.C. Technology (3)
- EEL 6936
  - Bioelectricity (3)
- EML 6930
  - Cellular Engineering (3)
EIN 6934  Introduction to Haptic Interfaces for Virtual Environments (3)
EML 6930  Micro and Nano Manufacturing (3)
EEL 0000  Materials for Energy Applications (3)
EEL 6936  SiC Technology (3)

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
MECHANICAL ENGINEERING PROGRAM

Master of Engineering (M.E.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 33
Program Level: Masters
CIP Code: 14.1901
Dept Code: EGR
Program (Major/College): EME EN

CONTACT INFORMATION

College: Engineering
Department: Mechanical Engineering
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The Department offers graduate programs leading to the M.S. and Ph.D. in Mechanical Engineering.


Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- All applicants must take the GRE.
- A minimum score of 350V, 700Q must be obtained or the student must have a grade point average (GPA) of 3.0/4.0 for the last two years of coursework from an ABET accredited engineering program for admission to the Master’s Program.
- International students must score a minimum of 550 on the TOEFL examination.
DEGREE PROGRAM REQUIREMENTS

The Department of Mechanical Engineering has available, on request, the Mechanical Engineering Graduate Program Handbook, which delineates the Department’s entrance requirements, programs of study, supervisory committee formation, and program completion requirements. The M.M.E is a non-thesis program and the M.S.M.E. is a thesis or design project program.

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
Master of Science in Civil Engineering (M.S.C.E.)
Civil Engineering
Master of Science in Computer Engineering (M.S.C.P.)
Computer Engineering

Master of Science in Computer Science (M.S.C.S.)
Computer Science

Master of Science in Electrical Engineering (M.S.E.E.)
Electrical Engineering

Master of Science in Engineering Management (M.S.E.M.)
Engineering Management

Master of Science in Engineering Science (M.S.E.S.)
Biomedical Engineering
Chemical Engineering
Civil Engineering
Electrical Engineering
Engineering Science
Environmental Engineering
Mechanical Engineering

Master of Science in Environmental Engineering (M.S.E.V.)
Environmental Engineering

Master of Science in Industrial Engineering (M.S.I.E.)
Industrial Engineering

Master of Science in Materials Science and Engineering (M.S.M.S.E.)
Materials Science and Engineering

Master of Science in Mechanical Engineering (M.S.M.E.)
Mechanical Engineering

Doctor of Philosophy (Ph.D.)
Biomedical Engineering
Chemical Engineering
Civil Engineering
Computer Science and Engineering
Electrical Engineering
Engineering Science
Industrial Engineering
Mechanical Engineering

Dual Degree Program:
Dual degrees in Biomedical Engineering (M.S.) and Entrepreneurship in Applied Technologies (M.S.)
DEGREE PROGRAM REQUIREMENTS

The Department of Mechanical Engineering has available, on request, the Mechanical Engineering Graduate Program Handbook, which delineates the Department’s entrance requirements, programs of study, supervisory committee formation, and program completion requirements. The M.M.E is a non-thesis program and the M.S.M.E. is a thesis or design project program.

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
MECHANICAL ENGINEERING PROGRAM

Master of Science in Engineering Science (M.S.E.S.) Degree

DEGREE INFORMATION

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<th>Program Admission Deadlines:</th>
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<tr>
<td>Fall: February 15</td>
<td>College: Engineering</td>
</tr>
<tr>
<td>Spring: October 15</td>
<td>Department: Mechanical Engineering</td>
</tr>
<tr>
<td>Summer: February 15</td>
<td>Contact Information: <a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
</tr>
</tbody>
</table>

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 14.1901
Dept Code: EGR
Program (Major/College): EME EN

PROGRAM INFORMATION

The Department offers graduate programs leading to the M.S. and Ph.D. in Mechanical Engineering.


Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
All applicants must take the GRE. A minimum score of 350V, 700Q must be obtained or the student must have a grade point average (GPA) of 3.0/4.0 for the last two years of coursework from an ABET accredited engineering program for admission to the Master’s Program. International students must score a minimum of 550 on the TOEFL examination.
DEGREE PROGRAM REQUIREMENTS

The Department of Mechanical Engineering has available, on request, the Mechanical Engineering Graduate Program Handbook, which delineates the Department’s entrance requirements, programs of study, supervisory committee formation, and program completion requirements. The M.M.E. is a non-thesis program and the M.S.M.E. is a thesis or design project program.

COURSES

See http://www.ups.usf.edu/sab/sabs.cfm
MECHANICAL ENGINEERING PROGRAM

Master of Science in Mechanical Engineering (M.S.M.E.) Degree

PROGRAM INFORMATION

The Department offers graduate programs leading to the M.S. and Ph.D. in Mechanical Engineering.


Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
• All applicants must take the GRE.
• A minimum score of 350V, 700Q must be obtained or the student must have a grade point average (GPA) of 3.0/4.0 for the last two years of coursework from an ABET accredited engineering program for admission to the Master’s Program.
• International students must score a minimum of 550 on the TOEFL examination.
DEGREE PROGRAM REQUIREMENTS

The Department of Mechanical Engineering has available, on request, the Mechanical Engineering Graduate Program Handbook, which delineates the Department’s entrance requirements, programs of study, supervisory committee formation, and program completion requirements. The M.M.E. is a non-thesis program and the M.S.M.E. is a thesis or design project program.

COURSES
See http://www.ups.usf.edu/sab/sabs.cfm
MECHANICAL ENGINEERING PROGRAM

Doctor of Philosophy (Ph.D.) Degree

<table>
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<td>Summer: February 15</td>
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<td>Program Level: Doctoral</td>
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<td>CIP Code: 14.1901</td>
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<td>Dept Code: EGR</td>
<td></td>
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<tr>
<td>Program (Major/College): EME EN</td>
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<tr>
<td>Concentrations: Manufacturing (MFG)</td>
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</table>

PROGRAM INFORMATION

The Department offers graduate programs leading to the M.S. and Ph.D. in Mechanical Engineering.


Accreditation: Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- As a rule only students with an M.S. in Mechanical Engineering or a closely related field will be admitted into the Ph.D. Program.
- Students without an M.S. in Mechanical Engineering may also be admitted but will be required to take
  - a minimum of 6 credit hours from the Fluid and Thermal Sciences area and
  - a minimum of 6 credit hours from the Mechanics and Systems area.
- Minimum requirements for admission are 400V, 750Q on the GRE.
DEGREE PROGRAM REQUIREMENTS

The Department of Mechanical Engineering has available, on request, the Mechanical Engineering Graduate Program Handbook, which delineates the Department’s entrance requirements, programs of study, supervisory committee formation, and program completion requirements. The M.M.E. is a non-thesis program and the M.S.M.E. is a thesis or design project program.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
COLLEGE OF MARINE SCIENCE

http://www.marine.usf.edu/
Changes to Note

College of Marine Science

There were no curricular changes to the College of Marine Science programs for the 2011-2012 Graduate Catalog.
University of South Florida  
College of Marine Science  
140 7th Avenue S, MSL119  
St. Petersburg, FL 33701

Web address: [http://www.marine.usf.edu/](http://www.marine.usf.edu/)  
Email: advisor@marine.usf.edu  
Phone: 727-553-1130  
Fax: 727-553-1189

Interim College Dean: William T. Hogarth  
Associate Dean: n/a  
Graduate Coordinator: Ted Van Vleet

**Accreditation:**  
The Commission on Colleges of the Southern Association of College and Schools

**Mission Statement:**  
The College of Marine Science (CMS) was formed during 2000 from the previous Department of Marine Science, initiated in 1967 with three founding faculty members. The Florida Board of Regents declared it a University Center of Excellence in 1978 and approved the Marine Science Ph.D. program in 1982. Staff and faculty serve students on the St. Petersburg campus, Tampa, and the other regional campuses together with their surrounding communities, espousing goals of both diversity and equal opportunity. The CMS at the University of South Florida is constituted as a graduate-level research program that forms the basis for educational opportunities at the Ph.D. and M.S. degree levels and for public service to the State of Florida. The College administratively reports to the Provost of USF.

**Mission**  
The primary mission of the College is to conduct basic and applied research in ocean science. Here, ocean science is defined by application of the traditional fields of science to both the biology, chemistry, geology, and physics of the marine environment and to the interactions between the marine environment and the adjoining atmosphere and land systems – presently and throughout earth’s history. Included in the primary ocean science mission is the development of new technologies and tools for exploring the coupled ocean-atmosphere-land systems. The College expects its faculty to develop research programs of outstanding caliber and to fully engage the national and international scientific communities, through the reporting of research results in the most respected oral and written venues, and by professional service. Integral to the ocean science research mission is the education of graduate students.

The College recruits, trains, and graduates productive, creative scientists at the Ph.D. and M.S. levels that are prepared to make independent contributions to ocean science. The faculty are expected to develop outstanding graduate education programs that will afford students the opportunity to participate in all aspects of research. The College recognizes that graduate education requires strong mentoring along with traditional classroom instruction. An ancillary but important mission of the College is education outreach for students at all levels and for the public at large. Our outreach programs have significantly expanded our educational responsibilities, and they are intended to motivate all generations to become scientifically literate citizens and to understand the environment in which they live. The College pursues innovative avenues for educational outreach. Efforts are made to attract more junior and senior level undergraduates into both the ocean science core courses and into advanced courses for which they have pre-requisites. Historically, this is a way in which students have made career decisions to engage in ocean science. In this manner the College maintains close ties with the student body in other University of South Florida Colleges and campuses.
The College of Marine Science’s specialized laboratories include those for trace metal analysis, water quality, organic and isotope geochemistry, physical chemistry, optical oceanography, satellite imagery, sedimentology, geophysics, physical oceanography, micropaleontology, physiology, benthic ecology, microbiology, planktology, and ichthyology. The College has a large flume facility and laser Doppler velocimeter for interdisciplinary boundary layer studies. It is often the case that a student’s research is primarily conducted at sea. Bayboro Harbor can accommodate any ship in the fleet of the U.S. oceanographic vessels, and is home-port to the principal vessels operated by the Florida Institute of Oceanography for the entire State University System. Marine science students frequently participate in Gulf of Mexico cruises on either of two FIO vessels, the R/V Suncoaster (110ft) and the R/V Bellows (71ft). Ship time on other vessels in the U.S. fleet of oceanographic vessels, as well as foreign research vessels, is generally obtained through federal funding. Over the past decade, the College's students and faculty have conducted research in the Antarctic, Atlantic, Indian, and Pacific Oceans, as well as the Norwegian, Bering, Mediterranean and Caribbean Seas.

**Major Research Areas:** Refer to College Information above.

**Types of Degrees Offered:**
- Master of Science (M.S.)
- Doctor of Philosophy (Ph.D.)

**Name of Programs Offered:**
- **Master of Science M.S.**
  - Marine Science

- **Doctor of Philosophy Ph.D.**
  - Marine Science

**Concentrations:**
- Biological Oceanography (M.S., Ph.D.)
- Chemical Oceanography (M.S., Ph.D.)
- Geological Oceanography (M.S., Ph.D.)
- Interdisciplinary (M.S., Ph.D.)
- Marine Resource Assessment (M.S., Ph.D.)
- Physical Oceanography (M.S., Ph.D.)

**Graduate Certificates Offered:** n/a

**COLLEGE REQUIREMENTS**
- Refer to College website for information.
About the Catalog

The University of South Florida Graduate Catalog is organized with the degree programs offered listed in the section of the college that offers them. For example, the Master of Science degree with a “program” (also known as major) in Biology is listed in the College of Arts and Sciences section. Some colleges offer areas of specialization, or “concentrations” within a degree program.

EXAMPLE OF PROGRAM PAGE

MARINE SCIENCE PROGRAM

Master of Science (M.S.) Degree

EXAMPLE OF CONCENTRATION PAGE

ADULT EDUCATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program

With a concentration in Adult Education

This is the Concentration, or area of specialization

The name of the program and/or concentration does not appear on the diploma – only the name of the degree (i.e., Master of Arts) is listed. The program and concentration information is listed on the official transcript. Other areas, such as application track, are not listed on the transcript.
MARINE SCIENCE PROGRAM

Master of Science (M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:

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<td>Spring:</td>
<td>October 1</td>
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Internatational Students
(not currently residing in U.S.):

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<tr>
<th>Fall:</th>
<th>January 2</th>
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<tbody>
<tr>
<td>Spring:</td>
<td>June 1</td>
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</table>

International Students
(currently residing in U.S.):

Refer to U.S. Citizens deadlines

Minimum Total Hours: 32
Program Level: Masters
CIP Code: 40.0607
Dept Code: MSC
Program (Major/College): MSC MS

Concentrations:
- Biological Oceanography (BOC)
- Chemical Oceanography (COB)
- Geological Oceanography (GOG)
- Interdisciplinary (IDY)
- Marine Resource Assessment (MRA)
- Physical Oceanography (POG)

CONTACT INFORMATION

College: Marine Science
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

The College of Marine Science (CMS) offers M.S. and Ph.D. degrees in Marine Science. The student may emphasize biological, chemical, geological, or physical oceanography, or develop an interdisciplinary program in oceanography through course work and thesis or dissertation research. More than 100 students are currently pursuing degrees under the direction of 30 full-time faculty. Study areas range from estuarine and near-shore systems to remote areas of the Pacific, Atlantic and Indian Oceans, as well as the Arctic and Antarctic. Additional information on faculty research and college facilities is available from the College upon request.

The College’s location on St. Petersburg’s Bayboro Campus allows immediate access to Tampa Bay and the Gulf of Mexico. Bayboro Harbor is home-port to the R/V Bellows (71 ft.) and the R/V Suncoaster (110 ft.) operated by the Florida Institute of Oceanography (FIO) for the State University System. The College’s principal building is shared with FIO and is adjacent to the Fish and Wildlife Research Institute (FWRI), the research arm of the Florida Fish and Wildlife Conservation Commission (FWCC). A recently completed research building shared by CMS and FWCC houses a remote sensing, satellite data-acquisition center. With the Center for Coastal Geology and Regional Studies of the U.S. Geological Survey and the office of the Tampa Bay National Estuary Program also at Bayboro, our campus has one of the largest concentrations of marine scientists in the southeastern United States. Many of these scientists serve on advisory committees of CMS graduate students.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

http://www.marine.usf.edu/
ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Bachelor’s degree or equivalent from a regionally accredited university (Preferable majors include biology, chemistry, geology, physics or math)
- Have earned a “B” (3.0 on a 4.0 scale) average or better in all work attempted while registered as an upper division student working for a baccalaureate degree
- Have completed all of the coursework listed on our website (http://www.marine.usf.edu) under “Undergraduate Preparation”
- Have taken the Graduate Record Examination (GRE) within 5 years preceding application. The scores generally considered acceptable by the College are as follows: Verbal = 500, Quantitative = 600
- Have the commitment of a Marine Science faculty member to serve as advisor during the student’s graduate studies.

Contact Program for additional information and requirements (e.g., Research Interest Statement, Letters of Recommendation, etc.). (http://www.marine.usf.edu/graduate-programs/applications.shtml)

DEGREE PROGRAM REQUIREMENTS

A committee, consisting of a major advisor and at least 2 other members of the graduate faculty, will be appointed to supervise and guide the program of each student.

Total Minimum Hours: 32 hours

Students must complete a minimum of 32 credits under the following areas:

1. **CORE REQUIREMENTS (12 hours)**
   
   Core courses completed with a grade of “B” or better:
   
   a. OCB 6050 Biological Oceanography (3)
   b. OCC 6050 Chemical Oceanography (3)
   c. OCG 6051 Geological Oceanography (3)
   d. OCP 6050 Physical Oceanography (3)

2. **CONCENTRATION REQUIREMENTS (14 credit hours)**
   
   Students select one of the following concentrations and complete 14 hours of electives within the concentration subject area (or other courses as approved by the Graduate Program Director). *Note: 8 of these credit hours must be in formal courses to satisfy the USF requirement of 20 hours of formal coursework:*
   
   Biological Oceanography (BOC)
   Chemical Oceanography (COB)
   Geological Oceanography (GOG)
   Interdisciplinary (IDY)
   Marine Resource Assessment (MRA)
   Physical Oceanography (POG)
   
   Students in Marine Resource Assessment Concentration area are required to take 3 courses from the following list (totaling 9 credit hours):
   
   a. Population Dynamics (3)
   b. Fish Biology (3)
3. ELECTIVE REQUIREMENTS (5 hours)
   Electives are taken within each concentration area (see above)

4. COMPREHENSIVE EXAM REQUIREMENTS
   Students must pass a final oral examination conducted by members of the student’s advisory committee.

5. THESIS REQUIREMENTS (6 hours)
   Six (6) credits of OCE 6971
   Students must complete a thesis conducted by members of the student’s advisory committee.

6. OTHER REQUIREMENTS
   Other coursework as required by thesis advisory committee

COURSES
   See http://www.ugs.usf.edu/sab/sabs.cfm
MARINE SCIENCE PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

U.S. Citizens:
Fall: January 15
Spring: October 1

International Students
(not currently residing in U.S.):
Fall: January 2
Spring: June 1

International Students
(currently residing in U.S.):
Refer to U.S. Citizens deadlines

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 40.0607
Dept Code: MSC
Program (Major/College): MSC MS

CONTACT INFORMATION

College: Marine Science
Contact Information: www.grad.usf.edu

Concentrations:
- Biological Oceanography (BOC)
- Chemical Oceanography (COB)
- Geological Oceanography (GOG)
- Interdisciplinary (IDY)
- Marine Resource Assessment (MRA)
- Physical Oceanography (POG)

PROGRAM INFORMATION

The College of Marine Science (CMS) offers M.S. and Ph.D. degrees in Marine Science. The student may emphasize biological, chemical, geological, or physical oceanography, or develop an interdisciplinary program in oceanography through course work and thesis or dissertation research. More than 100 students are currently pursuing degrees under the direction of 28 full-time faculty. Study areas range from estuarine and near-shore systems to remote areas of the Pacific, Atlantic and Indian Oceans, as well as the Arctic and Antarctic. Additional information on faculty research and college facilities is available from the College upon request.

The college's location on St. Petersburg’s Bayboro Campus allows immediate access to Tampa Bay and the Gulf of Mexico. Bayboro Harbor is home-port to the R/V Bellows (71 ft.) and the R/V Suncoaster (110 ft.) operated by the Florida Institute of Oceanography (FIO) for the State University System. The college's principal building is shared with FIO and is adjacent to the Fish and Wildlife Research Institute (FWRI), the research arm of the Florida Fish and Wildlife Conservation Commission (FWCC). A recently completed research building shared by CMS and FWCC houses a remote sensing, satellite data-acquisition center. With the Center for Coastal Geology and Regional Studies of the U.S. Geological Survey and the office of the Tampa Bay National Estuary Program also at Bayboro, our campus has one of the largest concentrations of marine scientists in the southeastern United States. Many of these scientists serve on advisory committees of CMS graduate students.

http://www.marine.usf.edu/
Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Bachelor’s degree or equivalent from a regionally accredited university (preferable majors include biology, chemistry, geology, physics or math). Master’s degree in one of the above sciences highly preferable.

- Have earned a “B” (3.0 on a 4.0 scale) average or better in all work attempted while registered as an upper division student working for a baccalaureate degree.

- Have completed all of the coursework listed on our website [http://www.marine.usf.edu](http://www.marine.usf.edu) under “Undergraduate Preparation”

- Have taken the Graduate Record Examination (GRE) within 5 years preceding application. The scores generally considered acceptable by the college are as follows: Verbal = 500, Quantitative = 600

- Have the commitment of a Marine Science faculty member to serve as advisor during the student’s graduate studies.

Contact Program for additional information and requirements (e.g., Research Interest Statement, Letters of Recommendation, etc.). ([http://www.marine.usf.edu/graduate-programs/applications.shtml](http://www.marine.usf.edu/graduate-programs/applications.shtml))

DEGREE PROGRAM REQUIREMENTS

A committee, consisting of a major advisor and at least 4 other members of the graduate faculty, is appointed to supervise and guide the program of the candidate. One member shall be from a science department outside Marine Science.

Total Minimum Hours Required: 90 beyond the Bachelor’s

Students must complete a minimum of 90 credits beyond the Bachelor’s degree, (12 hours of core requirements, 16 hours of dissertation, and 62 hours split between coursework and research as determined by the committee) and must complete the following:

1. **CORE REQUIREMENTS (12 hours)**
   Core courses completed with a grade of “B” or better
   a. OCB 6050 Biological Oceanography (3)
   b. OCC 6050 Chemical Oceanography (3)
   c. OCG 6051 Geological Oceanography (3)
   d. OCP 6050 Physical Oceanography (3)

2. **CONCENTRATION REQUIREMENTS**
   Students select one of the following concentrations. There is no minimum credit requirement except for the Marine Resource Assessment Concentration:

   Biological Oceanography (BOC)
   Chemical Oceanography (COB)
   Geological Oceanography (GOG)
   Interdisciplinary (IDY)
Students in Marine Resource Assessment Concentration area are required to take 3 courses from the following list (totaling 9 credit hours):

a. Population Dynamics (3)
b. Fish Biology (3)
c. Dynamics of Marine Ecosystems (3)
d. Applied Multivariate Statistics (3)

3. ELECTIVE REQUIREMENTS
Electives are taken within each concentration area (see above)

4. QUALIFYING EXAM REQUIREMENTS
A comprehensive qualifying exam consisting of a written and oral portion. A student must receive a passing vote on the qualifying exam from at least 4 committee members before admission to Ph.D. candidacy.

5. DISSERTATION REQUIREMENTS (16 hours)
A minimum of 16 credits of OCE 7980. Following admission to candidacy, the student must enroll in OCE 7980 when engaged in research, data collection, or writing activities relevant to the dissertation. The student is required to accumulate a minimum of 6 credits during each previous 12 month period (previous 3 terms, e.g., Fall, Spring, Summer) until the degree is granted.

A dissertation, and a dissertation defense examination.

6. OTHER REQUIREMENTS
Other coursework as required by dissertation advisory committee

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm).
College of Medicine

http://health.usf.edu/medicine/
Changes to Note

The following curricular changes for the College of Medicine were approved by the USF-Tampa Graduate Council on the date noted.

**Graduate Certificate Changes**
- Biomedical Ethics: Add missing course, note total hours, clarify electives 4/5/10
- Health Sciences: Change curriculum 5/3/10

**Course Changes**
- GMS 6111 Human Pathology: Change title to Basic Human Medical Pathology 5/3/10

**Other Revisions (GC approval not needed)**
- Minor Course edits throughout section (e.g. course numbers, title updates, etc.)
University of South Florida  
College of Medicine  
12901 Bruce B. Downs Blvd. MDC40  
Tampa, FL 33612-4799  

Web address: www.health.usf.edu/medicine/graduatestudies  
Email: biomed@health.usf.edu  
Phone: 813-974-4181  
Fax: 813-974-4317  

College Dean: Steven Klasko  
Associate Dean: Michael Barber  
Graduate Coordinator: Michael Barber  

Accreditation:  
The Commission on Colleges of the Southern Association of College and Schools  

Mission Statement:  
The College of Medicine Graduate Faculty consist of scientists who conduct research in many fields of science basic to understanding disease processes and to the development of improved methods of diagnosis, treatment and prevention of disease. Students receive their research training in up-to-date methods of scientific investigation and gain experience in modern well-equipped laboratories. The faculty is dedicated to providing high quality education in an environment conducive to scholarly activity and scientific achievement.  

Candidates for the Ph.D. in Medical Science enter into an interdisciplinary program enabling them to major in any one of the six concentrations that are offered. Collaboration among laboratory scientists of all disciplines is encouraged. The programs of study allow students to tailor their programs to individual needs and interests. Thanks to faculty research awards, students have a multitude of opportunities to participate in cutting-edge research projects. Medical Science Ph.D. graduates go on to become deeply involved in research sponsored by academic, industrial and government institutions  

The master's degree in Medical Sciences (M.S.) can be completed in as little as one year and has been designed to assist students who are seeking admissions into doctoral programs (Ph.D. or M.D.). Successful graduates of the Medical Science master’s program can improve their chances for admissions into professional programs by further developing their foundational knowledge of biomedical science. Currently, the Medical Sciences master's degree program boasts a ninety percent success rate for adequately preparing students for entry into doctoral or professional programs.  

Financial Aid - A limited number of assistantships, fellowships, and tuition waivers are available for doctoral students.  

Major Research Areas:  
Allergy, Immunology and Infectious Diseases Cancer Biology, Cardiovascular Research, Neuroscience Research  

Degrees and Programs Offered:  
Master of Science in Medical Sciences (M.S.M.S.)  
Medical Sciences  

Master of Arts in Bioethics and Medical Humanities (M.A.B.M.H.)  
Bioethics and Medical Humanities
Master of Science in Bioinformatics and Computational Biology (M.S.B.C.B.)
Bioinformatics and Computational Biology

Master of Science in Biotechnology (M.S.B.)
Biotechnology

Doctor of Philosophy (Ph.D.)
Medical Sciences

Dual Programs:
Physical Therapy (D.P.T.) and Public Health (M.P.H.)
Biotechnology (MS) and Entrepreneurship in Applied Technologies (M.A.)
Combined M.D. / Ph.D. Program

The College of Medicine also offers the Doctor of Medicine (MD) and Doctor of Physical Therapy (DPT). Contact the USF Medical School for information and requirements.

Concentrations available in:
<table>
<thead>
<tr>
<th>Concentration</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aging and Neuroscience</td>
<td>(M.S.M.S.)</td>
</tr>
<tr>
<td>Allergy Immunology and Infectious Disease</td>
<td>(Ph.D.)</td>
</tr>
<tr>
<td>Anatomy</td>
<td>(M.S., Ph.D.)</td>
</tr>
<tr>
<td>Biochemistry and Molecular Biology</td>
<td>(M.S.M.S., Ph.D.) - Closed for admissions</td>
</tr>
<tr>
<td>Clinical and Translational Research</td>
<td>(M.S.M.S., Ph.D.)</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>(M.S.M.S.)</td>
</tr>
<tr>
<td>Interdisciplinary Medical Sciences</td>
<td>(M.S.M.S.)</td>
</tr>
<tr>
<td>Medical Microbiology and Immunology</td>
<td>(M.S.M.S., Ph.D.) - Closed for admissions</td>
</tr>
<tr>
<td>Metabolic and Nutritional Medicine</td>
<td>(M.S.)</td>
</tr>
<tr>
<td>Molecular Medicine</td>
<td>(M.S.M.S., Ph.D.)</td>
</tr>
<tr>
<td>Molecular Pharmacology and Physiology</td>
<td>(Ph.D.)</td>
</tr>
<tr>
<td>Neuroscience</td>
<td>(Ph.D.)</td>
</tr>
<tr>
<td>Pathology and Cell Biology</td>
<td>(Ph.D.)</td>
</tr>
<tr>
<td>Pathology &amp; Laboratory Medicine</td>
<td>(Ph.D.)</td>
</tr>
<tr>
<td>Pharmacology &amp; Therapeutics</td>
<td>(Ph.D.)</td>
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<tr>
<td>Physiology &amp; Biophysics</td>
<td>(Ph.D.)</td>
</tr>
<tr>
<td>Women’s Health</td>
<td>(M.S.M.S.)</td>
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Graduate Certificates Offered:
<table>
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<tr>
<th>Certificate</th>
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<tbody>
<tr>
<td>Aging and Neuroscience</td>
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<tr>
<td>Biochemistry &amp; Molecular Biology</td>
</tr>
<tr>
<td>Bioinformatics</td>
</tr>
<tr>
<td>Biotechnology</td>
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<tr>
<td>Cardiovascular Engineering</td>
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<tr>
<td>Clinical Investigation</td>
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<tr>
<td>Health Sciences</td>
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<tr>
<td>Medical Biochemistry, Microbiology and Immunology</td>
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<tr>
<td>Medicine and Gender</td>
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<tr>
<td>Molecular Medicine</td>
</tr>
<tr>
<td>Pharmacy Sciences</td>
</tr>
</tbody>
</table>

See: http://www.outreach.usf.edu/gradcerts/

COLLEGE REQUIREMENTS
Refer to College for information.
About the Catalog

The University of South Florida Graduate Catalog is organized with the degree programs offered listed in the section of the college that offers them. For example, the Master of Science degree with a “program” (also known as major) in Biology is listed in the College of Arts and Sciences section. Some colleges offer areas of specialization, or “concentrations” within a degree program.

EXAMPLE OF PROGRAM PAGE

Black denotes degree

MEDICAL SCIENCES PROGRAM

Green denotes Program (or Major)

Master of Medical Sciences (M.S.M.S.) Degree

DEGREE INFORMATION

EXAMPLE OF CONCENTRATION PAGE

Black denotes degree

ADULT EDUCATION CONCENTRATION

Green denotes Program (or Major)

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program

With a concentration in Adult Education

This is the Concentration, or area of specialization

DEGREE INFORMATION

The name of the program and/or concentration does not appear on the diploma – only the name of the degree (i.e., Master of Arts) is listed. The program and concentration information is listed on the official transcript. Other areas, such as application track, are not listed on the transcript.
BIOETHICS AND MEDICAL HUMANITIES PROGRAM

Master of Bioethics and Medical Humanities (M.A.B.M.H.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 36
Program Level: Masters
CIP Code: 51.3201
Dept Code: MED
Program (Major/College): BMH MD

CONTACT INFORMATION

College: Medicine
Department: Biomedical and Medical Humanities

Contact Information: www.grad.usf.edu
Other Resources: www.usf4you
http://hsc.usf.edu/medicine/internalmedicine/bioethics/index.htm

PROGRAM INFORMATION

This innovative program, the first in Florida to combine bioethics and medical humanities, is designed to prepare leaders for increasingly complex healthcare concerns, especially those raised by advancements in technology, the distribution of scarce resources, and emerging global tensions. It is designed to focus on questions associated with genetic research and therapy, new reproductive technologies, health care delivery systems, end-of-life decisions, bio-terrorism, and numerous challenges associated with cultural sensitivities and competencies. The program is founded on the premise that questions posed by contemporary health care dilemmas, whether local, national or international, do not reside within the province of any single discipline, but require collaborative integration of insights from science, humanities, history, law, medicine, public health, nursing, philosophy, education and social-behavioral sciences.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- BA or equivalent degree from a regionally accredited university, with a “B” (3.0 on a 4.0 scale) average or better in all work attempted while registered as an upper division student working toward a baccalaureate degree; AND Graduate Record Examination (GRE) scores (500V, 500Q) OR
- GMAT scores of 500 or better; OR
- An equivalent measure approved by the Board of Trustees, taken within five years preceding application

Applicants to the program will be expected to have some competency in basic research design and methods (either qualitative or quantitative) that will be determined from student transcripts. Students who do not meet this prerequisite will be encouraged to enroll in USF courses that provide this foundation.
DEGREE PROGRAM REQUIREMENTS

CORE REQUIREMENTS
Four required core courses 12 credit hours

Choose 4 of the available 6 options:

GMS6870 Medical Ethics & Humanities: Tools and Foundations (3)
ANG6469 Foundations of Medical Anthropology (3)
REL6938 Spirituality and Medicine (2-4)
NGR6137 Bioethics in Contemporary Society (3)
GMS7930 Biotechnology and Bioethics (1-3)
GMS7930 Health and Social Justice (1-3)

Electives (18 hours)
Six approved elective courses 18 hours

Internship and Independent/Directed study 6 credit hours

Total: 36 hours

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
BIOINFORMATICS AND COMPUTATIONAL BIOLOGY PROGRAM

Master of Bioinformatics and Computational Biology (M.S.B.C.B.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 42
Program Level: Masters
CIP Code: 26.1103
Dept Code: MED
Program (Major/College): BCB MD

CONTACT INFORMATION

College: Medicine
Department: Molecular Medicine

Contact Information: www.grad.usf.edu
Other Resources:
- http://health.usf.edu/medicine/graduatestudies/ms/index.htm
- http://ww.usf4you

PROGRAM INFORMATION

The Masters Program in Bioinformatics and Computational Biology at the University of South Florida represents a multi-college partnership and a truly interdisciplinary collaboration. Participating departments include the Departments of Biochemistry & Molecular Biology in the College of Medicine, Mathematics in the College of Arts and Sciences, Computer Sciences and Engineering and the Division of Biomedical Engineering in the College of Engineering, Epidemiology and Biostatistics in the College of Public Health and Information Systems and Decision Sciences in the College of Business Administration. The program is designed to meet the increasing demand for trained people in this emerging area, which crosses the traditional fields of biological, mathematical and computer sciences. The program, therefore, builds on and complements the current strengths of the university.

The goal of the Masters Program in Bioinformatics and Computational Biology is to provide students enrolled in the program with high quality training and education that will prepare them for careers in science, industry, health care and education. The curriculum has been designed accordingly and provides the theoretical background, the practical training and, with the internships, the “real life” experience, which will equip students with the essential tools for a successful career in the field of Bioinformatics and Computational Biology.

The Masters Program in Bioinformatics & Computational Biology is designed for 40 credit hours to be obtained during two years of study. Nine core courses will provide the foundation and basics before advanced work, including four electives, and a Master’s thesis or internship will be pursued. The curriculum is flexible and will be tailored to the individual student’s background, interests and career goals. However, electives must be selected from at least two of the participating departments to assure breadth of training.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- A bachelor’s degree or equivalent from a regionally accredited university
- Minimum overall grade-point average of 3.00 out of a possible 4.00 with a minimum grade-point average of 3.00 in the sciences
- Graduate Record Examination
- Completed pre-requisites in:
DEGREE PROGRAM REQUIREMENTS

Prerequisites:
Calculus I-III, linear algebra, biostatistics, at least "C" and "Maple" or "Mathematica" or "MATH-CAD", one year of general biology and one year of organic chemistry.

CORE REQUIREMENTS
Required courses:
- GMS6200 Biochemistry, Molecular and Cellular Biology 3-5
- BCH6888 Bioinformatics I 3
- MAT5932 Selected Topics in Combinatorics and Graph Theory 3
- BCH6411 Biomedical Genomics and Genetics
- GMS6889 Bioinformatics II 3
- MAT5932 Selected Topics in Probability Theory 3
- BCH6935 Scientific Writing and Ethics 2
- CIS6930 Advanced Data Structures 3
- MAT6932 Selected Topics in Bioinformatics and Computational Biology 2

Electives 12-16

Thesis
Complete M.S. Thesis Project or Internship 4-6

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
BIOTECHNOLOGY PROGRAM

Master of Science in Biotechnology (M.S.B.) Degree

DEGREE INFORMATION

Program Admission Deadlines:

<table>
<thead>
<tr>
<th>Fall</th>
<th>Domestic</th>
<th>June 1</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>International in country</td>
<td>January 2</td>
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</table>

<table>
<thead>
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<th>Spring</th>
<th>Domestic</th>
<th>October 1</th>
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<tbody>
<tr>
<td></td>
<td>International in-country</td>
<td>February 1</td>
</tr>
<tr>
<td></td>
<td>International out of country</td>
<td>June 1</td>
</tr>
</tbody>
</table>

Minimum Total Hours: 36

Program Level: Masters

CIP Code: 26.1201

Dept Code: MED

Program (Major/College): MSB MD

CONTACT INFORMATION

College: Medicine
Department: Molecular Medicine

Contact Information: www.grad.usf.edu
biotech@health.usf.edu

Other Resources:
Website:
http://health.usf.edu/medicine/graduatestudies/mscus/ms_biotechnology.htm
www.usf4you

PROGRAM INFORMATION

The USF Master’s Program in Biotechnology represents a multi-college partnership and a truly interdisciplinary collaboration. Participating colleges include the College of Medicine, the College Of Engineering, the College Of Public Health, the College of Arts And Sciences and the College of Business Administration. The program is designed to meet the increasing demand for trained people in this exploding area, which crosses the traditional fields of biological, chemical, engineering, health and computer sciences. It therefore builds on and complements the current strengths of the university. The curriculum has been designed accordingly and provides the theoretical background, the practical training and, with the internships, the “real life” experience, which will equip students with the essential tools for a successful career in the field of biotechnology.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
The USF Biotechnology Master’s Program will be available for full-time and part-time enrollment. In order to be considered for admission to the Master’s Program in Biotechnology, applicants must fulfill the following requirements:

Administrative Pre-Requirements:
- A bachelor’s degree
- A minimum undergraduate GPA of 3.00 on a 4.00 scale
- A minimum GRE test score of at least 500 verbal and at least 600 quantitative
- Three letters of recommendation
- Statement of purpose, indicating how the program would suit the student’s interests and serve his/her professional goals
- Complete transcripts of undergraduate work and any previous graduate work
- International students need an official transcript evaluation, see Graduate School Admissions
- A completed USF Application to Graduate Studies

http://health.usf.edu/medicine/
Program Pre Requirements:
A bachelor’s degree in either the biological or chemical sciences or at least one year of studies in those disciplines would be the optimal preparation for admission to the USF Master’s Program in Biotechnology. However, the faculty of the USF Biotechnology Program is aware that not all applicants who are interested in pursuing this degree will have this formal background. Instead, some might have accumulated substantial knowledge in one of these disciplines during their work as laboratory technicians, engineering assistants or environmental or public health service providers. Those students would be ideally suited to start their graduate education with a Graduate Certificate in Biotechnology that is offered by the Department of Molecular Medicine in the College of Medicine. http://www.outreach.usf.edu/gradcerts/certinfo.asp?ccode=XBT

The Biotechnology Graduate Certificate Degree has less stringent entrance requirements a GRE is not required) but its successful completion will serve several purposes:

- it will provide the students with a certificate of advanced studies independent of prospective additional studies in the Biotechnology Master’s Program,
- it will serve as a complete package of fulfilled pre requirements for admission into the Biotechnology Master’s Program,
- 12 credit hours of the Biotechnology Certificate Program can be transferred into the Master's Program.

DEGREE PROGRAM REQUIREMENTS

The Masters Program in Biotechnology is designed for 36 credit hours, which can be obtained in 3 semesters of study. The program will be available for full-time and part-time enrollment. Seven core courses will provide the foundation and basics before advanced work, including four electives and an internship, will be pursued. The curriculum is flexible and can be tailored to the individual student’s background, interests and career goals.

The core courses include introductory courses in biochemistry, molecular and cellular biology, introduction to biotechnology, bioinformatics, biotechnology and bioethics, Translational Biotechnology and a seminar on current topics in biotechnology. Most of these courses are part of the current graduate curricula in the involved colleges. Student will have the option to choose four electives out of a total of 22 electives that are contributed by five participating colleges. The electives are organized in four different categories i.e. science, engineering, public health and business/law and the students will be free to select according to their interests and career plans.

Core Requirements

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>36 hrs</th>
</tr>
</thead>
</table>

**Fall Semester**

GM56200: Biochemistry and Molecular and Cellular Biology 5 cr
BSC6436 Introduction to Biotechnology 3 cr
BCH6888: Bioinformatics 3 cr

**Spring Semester**

BCH7930: Translational Biotechnology 3 cr
BCH6070: Biotechnology and Bioethics 3 cr
GM57930: Graduate Seminar - 1 cr
Elective: 3 cr
Elective: 3 cr

**Fall Semester**

EIN6106: Technology and Law 3 cr
Elective: 3 cr
Elective: 3 cr
GM57930: (140 contact hrs minimum) 3 cr with Internship report & literature review

**Students must maintain an overall average of 3.0 ("B") in all courses**
### Electives

#### Science:
- BCH6411 Biomedical Genomics and Genetics 4
- BCH6746 Proteomics and Structural Biology 3
- BCH6135 Methods in Molecular Biology 4
- GMS6889 Advanced Bioinformatics 3
- GMS7930 Stem Cells in Brain Repair 3
- BCH6627 Metabolic and Genetic Basis of Human Diseases 3
- GMS6513 Principles of Pharmacology and Therapeutics 3
- GMS7930 Aging and Neuroscience 3

#### Engineering:
- BME6107 Biomaterials I: Material Properties 3
- BME6108 Biomaterials II: Biocompatibility 3
- BME6034 Biotransport Phenomena 3
- ECH6417 Bioseparations 3
- ECH5740 Theory and Design of Bioprocesses 3
- BME5040 Pharmaceutical Engineering 2
- ENV6667 Environmental Biotechnology 3

#### Public Health:
- PHC6310 Environmental Occupational Toxicology 3
- PHC6050 Biostatistics I 3
- PCH6051 Biostatistics II 3
- PHC6000 Epidemiology 3
- PHC6017 Design and Conduct of Clinical Trials 3

#### Business/Law:
- GEB6930/EIN 6935 Strategic Market Assessment for New Technologies 3
- GEB6115 New Venture Formation 3
- GEB6116 Business Plan Development 3
- 6EB6930 Fundamentals of Venture Capital and Private Equity in Entrepreneurship 3
- GMS7930 Principles of Intellectual Property 3

### Project or Thesis/Dissertation:
As an alternative to a Master’s Comprehensive Exam, biotechnology Master’s students will have to complete a practical internship and theoretical assignment which will both require the successful application of the knowledge they have acquired during their formal training. Required are:

- an internship with a written and an oral internship report and
- a review paper providing an overview of recent advancements in an area of biotechnology of the student’s choice.

### COURSES

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)

For more information on individual courses, please see [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm) or contact the program directly: biotech@health.usf.edu

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http://health.usf.edu/medicine/
BIOTECHNOLOGY AND ENTREPRENEURSHIP IN APPLIED TECHNOLOGIES
DUAL DEGREE PROGRAM

Master of Science in Biotechnology (M.S.B.) Degree and Master of Science in Entrepreneurship in Applied Technologies (M.S.)

DEGREE INFORMATION

Program Admission Deadlines:
Fall:
  Domestic              June 1
  International in country   January 2
Spring:
  Domestic              October 1
  International in-country February 1
  International out of country June 1

Minimum Total Hours: 57
Program Level: Masters
GIP Code: 26.1201
Dept Code: MED
Program (Major/College): MSB MD

CONTACT INFORMATION

Colleges: Business and Medicine
Department: Center for Entrepreneurship and Molecular Medicine
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

The Dual Degree Program in Biotechnology and Entrepreneurship is the combination of two existing programs that allows students to obtain two Master’s degrees in a concurrent rather than sequential effort. The time commitment will be about three years with a total of 57 credit hours. The combination of a Master’s in Biotechnology with a Master’s in Entrepreneurship educates students to understand the scientific process and its challenges and at the same time provides the training that will enable them to facilitate the translation of scientific data from mind to market. This combination makes graduate students outstandingly versatile and thereby lays an essential step-stone for their future success.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools. The Biotechnology Program has also been recognized as a “Professional Science Master’s Program” by the U.S. Council of Graduate Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Students will have to apply individually to each program. Admission to one program does not automatically grant admission to the other program. Once the student has been admitted to both programs, he/she seeks permission from the program directors of both programs for dual crediting of 9 credit hours; the USF Graduate School provides a form sheet for this process. For admission students must have:

- A bachelor’s degree with a minimum undergraduate GPA of 3.0 on a 4.0 scale
- A minimum GRE test score of at least 500 verbal and at least 600 quantitative, can be waived in some cases
DEGREE PROGRAM REQUIREMENTS

A total of 57 credits is required for graduation with a Dual Master’s in Biotechnology and Entrepreneurship. Beyond the dual crediting of 9 credit hours, all graduation requirements of the individual programs apply.

**Course Requirements:**
- GMS 6200 Biochemistry and Molecular and Cellular Biology (5)
- BSC 6436 Intro to Biotechnology (3)
- BCH 6888 Bioinformatics (3)
- GMS 6095 Principles of Intellectual Property (3)
- GMS 6847 Translational Biotechnology (3)
- BCH 6070 Biotechnology and Bioethics (3)
- Elective from Biotechnology Program (3)
- GMS 7939 Graduate Seminar (1)
- EIN 6106 Technology and Law (3)
- GEB 6115 New Venture Formation (3)
- GEB 6930 Fund of Venture Cap Priv Equity (3)
- EIN 6930 New Product Development (3)
- GMS 6943 Biotechnology Internship (140 contact hrs minimum) (3)
- GEB 6930 Strategies in Entrepreneurship (3)
- EIN 6430 Overview of Regulated Industries (3)
- GEB 6930 Strategies in Market Assessment (3)
- GEB 645 Social, Ethical, Legal Systems (3)
- GEB 6116 Business Plan Development (3)
- GEB 6930 Adv Topics in Entrepreneurship/Internship (3)
- GEM 7930 Biomedical Ethics (3)

**COURSES**
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
For more information on individual courses, please see [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm) or contact the program directly: biotech@health.usf.edu
MEDICAL SCIENCES PROGRAM

Master of Science in Medical Sciences (M.S.M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: June 1

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 26.9999
Dept Code: MED
Program (Major/College): MSG MD

Concentrations:
- Aging and Neuroscience (ANS)
- Anatomy (ANA)
- Biochemistry and Molecular Biology (BMB) - Closed for admissions; not accepting applications
- Clinical and Translational Research (CTR)
- Health Science (HSC)
- Interdisciplinary Medical Sciences (IMS)
- Medical Microbiology and Immunology - Closed for admissions; not accepting applications
- Metabolic and Nutritional Medicine
- Molecular Medicine (MLM)
- Women’s Health (WSH)

CONTACT INFORMATION

College: Medicine
Department: Medical Sciences
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you
Website: http://health.usf.edu/medicine/graduatestudies/index.htm

PROGRAM INFORMATION

The program is designed to provide students with advanced training in either Anatomy, Biochemistry, Medical Microbiology, or Pharmacology. Students successfully completing the program will have a foundation that will prepare them for a professional degree in biomedical science such as a M.D. or Ph.D. or qualify them to work as teachers or research assistants in academia or in the private sector. The program will provide a solid core of training in the latest findings, concepts, and experimental techniques. Students will be allowed to individualize their training through elective courses and will have the opportunity to conduct laboratory research. The program is intended for students who wish training beyond a baccalaureate degree but do not wish to commit to a Ph.D. program or do not meet the qualifications required for admissions into a M.D. or Ph.D. program.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- A bachelor’s degree or equivalent from a regionally accredited university
- Minimum overall grade-point average of 3.0 out of a possible 4.0 with a minimum grade-point average of 3.0 in the sciences*
GRE or MCAT
Completed pre-requisites in:
- General biology (1 year)
- General chemistry (1 year)
- General physics (1 year)
- Organic chemistry (1 year)
- Quantitative analysis (1 course)
- Mathematics including integral and differential calculus

APPLICATION PROCEDURES
Please refer to
http://health.usf.edu/medicine/graduatestudies/mscus/apply_domestic.htm?wbc_purpose=Basic

DEGREE PROGRAM REQUIREMENTS

Degree requirements are individualized according to research interests and goals. Thirty credit hours minimum.

Core Courses:
One or more of the following (Check with Program Advisor):

<table>
<thead>
<tr>
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<th>Course Title</th>
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<tbody>
<tr>
<td>GMS6001</td>
<td>Foundation in Biomedical Sciences</td>
<td>4-8</td>
</tr>
<tr>
<td>GMS6200C</td>
<td>Success Skills in Biomedical Sciences</td>
<td>1</td>
</tr>
<tr>
<td>GMS6020</td>
<td>Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>GMS6066</td>
<td>Molecular Medicine</td>
<td>11</td>
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<tr>
<td>GMS6605</td>
<td>Basic Medical Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>GMS6100</td>
<td>Medical Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>BCH6935</td>
<td>Scientific Writing and Ethics</td>
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Concentration Requirements

Aging and Neuroscience (ANS)

Neuroscience is one the fastest growing fields of biomedical sciences. There is an increasing demand for health care professionals and research scientists to meet the needs of the increasing number of the aging population affected with neurodegenerative diseases such as Alzheimer’s disease. The Aging and Neuroscience concentration within the masters program in Medical Sciences has been developed in collaboration with the School of Aging Studies to integrate neuroscience as well as biomedical aging in one-year curriculum. The program is targeted for students interested in pursuing a medical, professional degree or further graduate education in biomedical sciences and in aging studies. The core curriculum focuses on basic and applied neuroscience, with emphasis on neurodegenerative diseases. Classes on research methods, stem cell biology, neuropharmacology and other basic biomedical sciences, as well as several classes offered by the school of Aging Studies are offered as electives. The students can elect to engage in a research component where they will be supervised by mentors from the USF research faculty or affiliated institutes. Program graduates can pursue further professional training in medicine and allied health sciences, continue their graduate education in neuroscience or aging studies, or work in the diverse health care fields, especially those catered to the aging population

Coursework:
Core: GMS6020 Neuroscience (Interdisciplinary) 4-6 hours

Required Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMS7930</td>
<td>Aging and Neuroscience (Neurosurgery)</td>
<td>3 hours</td>
</tr>
<tr>
<td>GMS7930</td>
<td>Neuroscience Seminar Series (Neurosurgery)</td>
<td>1 hours</td>
</tr>
<tr>
<td>GEY 6613</td>
<td>Physical Change and Aging (Aging Studies)</td>
<td>3 hours</td>
</tr>
<tr>
<td>GMS7910</td>
<td>Aging and Neuroscience Directed Research (neurosurgery)</td>
<td>3-12 hours</td>
</tr>
</tbody>
</table>
All students are required to have a minimum of 20 hours of didactic lectures, and a minimum of 6 hours of directed research. Only students who opt for a research paper must and can accumulate a minimum of 15 hours of directed research and laboratory rotations in their mentor/mentors’ laboratories.

**Electives**
A minimum of 10 credit hours must be fulfilled by COM elective courses.

**College of Medicine Courses**
- GMS6091 Ethics and Skills in Research (Interdisciplinary) 2 hrs
- GMS6404 Systems Neurophysiology (Physiology) 4 hrs
- GMS6602 Neural Correlates of Behavior (Pathology and Cell Biology) 3 hrs
- GMS6610 Advanced Neuroanatomy (Pathology and Cell Biology) 4 hrs
- GMS6200 Biochemistry, Molecular & Cellular Biology (Molecular Medicine) 5 hrs
- GMS7930 Aging/Neuroscience Lab Rotations (Neurosurgery) 3 hrs
- GMS6735 Neuropharmacology (Pharmacology) 3 hrs
- GMS7930 Stem Cells in Brain Repair (Neurosurgery) 3 hrs
- GMS7930 Spec Topics in Alzheimer’s Disease (Neurosurgery) 1 hr
- NUR6931 Psychoneuroimmunology (Nursing) 3 hrs
- PCH6050 Biostatistics (Public Health) 3 hrs

**School of Aging Elective Courses**
- GEY6600 Human Development 3 hrs
- GEY5620 Sociological Aspects of Aging 3 hrs
- GEY6450 Gerontological Research and Planning 3 hrs
- GEY6614 Psychopathology and Aging I 3 hrs
- GEY6934 Alzheimer’s Diseases Management 3 hrs
- GEY6616 Mental Health assessment in Older Adults 3 hrs

Graduate students must maintain an overall average of 3.0 (B) in all courses.

**Anatomy**

**Total Minimum Hours** 31

**Core Requirements:**
- GMS6610 Advanced Neuroanatomy 4
- GMS6604 Human Embryology 3
- GMS6608 Advanced Microscopic Anatomy 4
- GMS6609 Advanced Gross Anatomy 6

**Required Courses:**
- GMS6001 Foundations in Biomedical Science 6

**Electives** (8 credit hours):
- GMS6091 Responsible Conduct in Research 1
- GMS6210 Basic Medical Biochemistry (on-line course) 3
- GMS6334 Pathobiology of Human Cancer 3
- GMS6601 Methods in Microscopy 3
- GMS6870 Medical Ethics and Humanities 3
- GMS7910 Directed Research 1-2
- GMS Directed Research 1-5
- GMS7910 Directed Research 2
- GMS7930 History of Pathology and Cell Biology 2
- GMS7930 Theory of Cell Culture 3
- PHC6050 Biostatistics (on-line course) 3

http://health.usf.edu/medicine/
Biochemistry and Molecular Biology

Contact program for information - **Closed for admissions; not accepting applications**

Clinical and Translational Research (CTR)

**Admission Criteria**
This is a two-year program of both didactic coursework and mentored research. Admission criteria will be to the Scholars in Patient-Oriented Research (SPOR) Program and include the following:

- Must have a doctoral or first professional degree (M.D., D.O., Ph.D., D.D.S., Pharm.D, Dr.P.T., Doctorate of Nursing Practice, Ph.D. in Nursing, or equivalent degrees)
- GRE score will be waived and replaced by a requirement for documentation of a professional doctorate degree.
- NIH eligibility for the SPOR Program requires U.S. citizenship or status as a non-citizen national or lawfully admitted permanent resident of the U.S.
- Applicants will be required to complete a 2-step application process. For Step 1 to enter the SPOR Program, there is an online application. Upon acceptance into the SPOR Program, Step 2 of the application process will consist of completing the standard application procedures to become a graduate degree-seeking student in the Master of Science in Medical Sciences degree program.

**Concentration Degree Requirements**
Minimum of 38 hours of credit, (26 hours core coursework, 6 hours directed research, and remaining 6 required hours in any combination of directed research and/or elective courses, as needed for each SPOR scholar’s particular research focus. In addition, each SPOR scholar will be required to submit a first author manuscript based on his/her research project (not a review article) to a peer-reviewed journal, and that manuscript must be judged by an appointed sub-panel of the SPOR Program Executive Committee and Key Faculty to be potentially acceptable for publication. This latter requirement is in lieu of a thesis requirement.

**Coursework:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMS7930</td>
<td>Special Topics: Research and Professional Ethics</td>
<td>3 credits</td>
</tr>
<tr>
<td>GMS7930</td>
<td>Special Topics: Cultural Influences &amp; Diversity Issues in Clinical Research</td>
<td>2 credits</td>
</tr>
<tr>
<td>GMS7930</td>
<td>Special Topics: Principles of Patient-Oriented Research</td>
<td>1 credit</td>
</tr>
<tr>
<td>PHC6050</td>
<td>Biostatistics I</td>
<td>3 credits</td>
</tr>
<tr>
<td>PHC6000</td>
<td>Epidemiology</td>
<td>3 credits</td>
</tr>
<tr>
<td>GMS7930</td>
<td>Special Topics: Fundamentals of Translational Research</td>
<td>1 credit</td>
</tr>
<tr>
<td>GMS7930</td>
<td>Special Topics: Scientific Communication</td>
<td>2 credits</td>
</tr>
<tr>
<td>BCH6627</td>
<td>Metabolic and Genetic Basis of Disease</td>
<td>3 credits</td>
</tr>
<tr>
<td>GMS7930</td>
<td>Grantsmanship</td>
<td>3 credits</td>
</tr>
<tr>
<td>PHC6017</td>
<td>Design and Conduct of Clinical Trials</td>
<td>3 credits</td>
</tr>
<tr>
<td>GMS7930</td>
<td>Colloquium on Building a Successful Patient-Oriented Research Career</td>
<td>2 credits</td>
</tr>
</tbody>
</table>

Directed Research 6
Electives/Directed Research 6

**Health Science (HSC)**

100% ONLINE. Health sciences, the study and research of the human body and health-related issues, are critical to our understanding of how humans function. The knowledge gained from these studies is vital to today’s mission of improving health and preventing and curing diseases. In the new millennium, in which science truly complements the art of medicine, advances in the health sciences contribute to our understanding of the structure and function of molecules key to normal body function and the pathogenesis of disease and to design new approaches for diagnosis, treatment and prevention. Recent changes in research and scholarship in the biomedical sciences has directed
attention to the development and training of students who are able to cross the barriers of traditional disciplines and embrace the concepts of interdisciplinary approaches to biomedical problems. The Health Sciences concentration, within the Master’s Program in Medical Sciences, has been developed to provide a new interdisciplinary and concentrated program of study that is designed for students interested in either future doctoral professional programs in the biomedical sciences. The program integrates an array of disciplines, including anatomy, biochemistry, histology, physiology, genetics, microbiology, immunology, pathology, pharmacology and ethics to provide a solid medically-relevant foundation. The rigorous program allows students to demonstrate their full academic ability for future graduate programs or medical school. The interdisciplinary program promotes the broad intellectual focus required of future graduate or professional students in the biomedical sciences or health-care related fields. The courses integrate modern distance teaching methods and are designed to improve their academic skills that are critical to their future professional development.

Curriculum

Course Requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMS6605</td>
<td>Basic Medical Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>GMS6630</td>
<td>Basic Medical Histology</td>
<td>3</td>
</tr>
<tr>
<td>GMS6201</td>
<td>Basic Medical Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>GMS6706</td>
<td>Basic Medical Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>GMS6012</td>
<td>Basic Medical Genetics</td>
<td>3</td>
</tr>
<tr>
<td>GMS6141</td>
<td>Basic Medical Immunology &amp; Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>MCB6433</td>
<td>Clinical Correlations in Molecular Medicine</td>
<td>3</td>
</tr>
<tr>
<td>GMS6871</td>
<td>Health Sciences Ethics</td>
<td>2</td>
</tr>
<tr>
<td>GMS6440</td>
<td>Basic Medical Physiology</td>
<td>3</td>
</tr>
<tr>
<td>GMS6111</td>
<td>Basic Human Medical Pathology</td>
<td>3</td>
</tr>
<tr>
<td>GMS6505</td>
<td>Basic Medical Pharmacology</td>
<td>3</td>
</tr>
</tbody>
</table>

Interdisciplinary Medical Sciences (IMS)

This concentration within the Master’s degree in Medical Sciences program is designed to provide qualified students with advanced training in the sciences basic to the practice of medicine. Students successfully completing the program will have a foundation that fosters opportunities in the private sector, teaching, or the pursuit of further advanced degrees. A goal of this concentration is to provide promising medical school applicants an opportunity to develop the knowledge, skills, and attitudes that would enable them to have a career in the medical sciences.

Students who perform well during this program could be considered for admission to medical, graduate, or other health professions programs. This concentration provides an opportunity for students interested in graduate work that has a broad medical base. Students will take courses that will provide the same level of depth, breadth and intensity as those taken by a first year medical student. This will allow successful participants to demonstrate their readiness for the rigor of a medical school curriculum. Alternatively, appropriate selection of elective courses will allow any student who completes the program to tailor their educational experience to best suit their future plans and aspirations.

Admission Information:

Applicants must hold a Bachelor’s degree from an accredited institution at the time of entrance into the program. They must have completed at least 1 year each of General Chemistry, Organic Chemistry, General Biology and General Physics and have achieved a total score of at least 22 on the MCAT. Applicants who are deficient in one or more of these requirements, but otherwise meet the College-wide requirements for admission to the Master’s Program may be considered on a case by case basis.

Core Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMS6066</td>
<td>Molecular Medicine</td>
<td>11 credits</td>
</tr>
</tbody>
</table>

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMS6XXX</td>
<td>Medical Science Learning Skills</td>
<td>3 credits</td>
</tr>
<tr>
<td>GMS6600c</td>
<td>Human Anatomy</td>
<td>8 credits</td>
</tr>
<tr>
<td>GMS6400c</td>
<td>Core Physiology</td>
<td>6 credits</td>
</tr>
</tbody>
</table>
Elective Courses
Students must select a minimum of two courses within one of the following elective tracks. Alternative “themed” elective tracks may also be developed with the approval of the Program Director (for example, education or laboratory management).

Medical Track
- GMS6020 Neuroscience 6 credits
- GMS6xxx Behavioral Medicine 4 credits

Research Track
- NGR6804 Foundations of Clinical Research for Health Professionals 3 credits
- PHC6050 Biostatistics 3 credits
- PHC6000 Epidemiology 3 credits

Pharmacology Track
- GMS6513 Principles of Pharmacology and Therapeutics 3 credits
- GMS5735 Neuropharmacology 3 credits
- GMS6541 Pharmacology for Health Care Professionals 4 credits

Total minimum hours: 34

Medical Microbiology and Immunology  - Closed for admissions; not accepting applications

Core Course
- GMS6200C Biochemistry, Cell & Molecular Biology (5)

Required Courses
- GMS6100C Medical Microbiology (3)
- GMS7930 Medical Parasitology and Mycology (2)
- GMS6101 Molecular and Cell Immunology (3)
- GMS6107 Adv in virology (2)
- GMS6110 Microbial Pathogenesis and Host-parasite Interactions (2)
- BCH6411 Biomedical Genomics and Genetics (4)

Electives
- Select one course of the following (2 hrs minimum)
  - BCH6935 Scientific Writing and Ethics (2)
  - BSC6436 Intro to Biotech (3)
  - GMS6876 Current Topics in Molecular Medicine (1)

- Select one or more from the following (9 hrs minimum):
  - GMS57910 Directed Research (3-9)
  - GMS6114 Vaccines and Applied Immunology (2)
  - BCH6135C Methods in Molecular Biology (4)
  - BCH6420 Clinical Correlations in Molecular Medicine (3)

Total minimum hours: 32

Metabolic and Nutritional Medicine

Core Requirements:
- GMS6xxx Clinical Intensives in Metabolic and Nutritional Medicine 3
**Required Courses:**

- GMS6xxx Clinical Approach to Endocrinology 3
- GMS6xxx Diabetes and Coronary Heart Disease 3
- GMS6xxx Integrated Clinical Neurobiology 3
- GMS6xxx Nutrition and Metabolism 3
- GMS6xxx Functional Medicine and Infectious Disease 3
- GMS6xxx Autoimmune Diseases and Cognitive Function 3
- GMS6xxx Laboratory Fundamentals and Adjunct Cancer Therapies 3
- GMS6871 Health Sciences Ethics 2

**Electives:**

- GMS7930 Biomedical Aging 3
- GMS6xxx Clinical Nutrition 3
- GMS7930 Aging and Neuroscience 3
- GMS 6xxx Medical Sciences Independent Study 3
- GMS7910 Directed Research 3

**Molecular Medicine (MLM)**

Considered the vanguard of the new millennium in which science truly complements the art of medicine, molecular medicine strives to understand the molecules key to normal body function and the pathogenesis of disease and to design molecular tools for diagnosis, treatment and prevention. Recent changes in research and scholarship in the biomedical sciences has directed attention to the development and training of students who are able to cross the barriers of traditional disciplines and embrace the concepts of interdisciplinary approaches to biomedical problems. The Molecular Medicine concentration, within the Master’s Program in Medical Sciences, has been developed to provide a novel interdisciplinary and concentrated program of study that is designed for students interested in either future doctoral or professional programs in the biomedical sciences. The program integrates several disciplines, including biochemistry, molecular biology, genetics, genomics, microbiology, immunology, virology and biomedical ethics to provide a solid medically-relevant foundation. The rigorous program allows students to demonstrate their full academic ability for future graduate programs or medical school. The interdisciplinary program promotes the broad intellectual focus required of future graduate students in the biomedical sciences or health-care profession. The courses integrate modern teaching methods with extensive student participation designed to improve their oral and presentation skills that are critical to their future professional development.

**Core requirements:** 6 hrs

- GMS6200C Biochemistry, Molecular and Cellular Biology 1
- BCH6935 Scientific Writing and Ethics 2
- GMS6100 Medical Microbiology 3

**Course Requirements:**

- BCH6411 Biomedical Genomics and Genetics 4
- GMS6101 Molecular and Cellular Immunology 3-4
- GMS6110 Host-Parasite Interactions
- GMS7930 Clinical Correlations in Molecular Medicine
- BCH6627 Metabolic and Genetic Basis of Human Diseases 3
- GMS6114 Vaccines and Applied Immunology

**Electives (3)**

- BCH6135C Methods in Molecular Biology
- GMS6104 Cellular Immunology
- GMS6107 Advances in Virology
- BCH6746 Proteomics and Structural Biology
- BCH6888 Bioinformatics
- PHC6050 Biostatistics I
- BCH6876 Current Topics in Molecular Medicine

**Total Minimum Hours:** 32
Women’s Health (WSH)

This innovative, interdisciplinary program, the first in Florida to provide an integrated approach to the subject area of holistic women’s health, is designed to develop leaders in the field of women’s health. The program, which has been constructed to prepare students for future educational or research endeavors in graduate or medical schools or health practice institutions, is designed to fulfill the M.S. M.S. Women’s Health Concentration increasing demand for trained individuals in this emerging area, which focuses on gender-specific issues. The program is founded on the premise that future health-care providers, researchers and educators will require extensive interdisciplinary training in order to develop novel solutions to current biomedical problems in women’s health. The interdisciplinary curriculum has been designed to provide the background training that will equip students with the essential tools for a successful career in the field of women’s health.

The program requires a minimum of 32 credit hours, which can be completed in one year of accelerated and intense study. Core courses provide both foundation and advanced training while electives in such topics as reproductive women’s cancers, endocrine mechanisms, feminism and women’s health, and biostatistics, provide students with additional educational opportunities.

Program Admission Requirements

- A bachelor’s degree or equivalent from a regionally accredited university in the biological or chemical sciences
- Minimum overall grade-point average of 3.0 out of a possible 4.0 with a minimum grade point average of 3.0 in the sciences
- Graduate Record Examination (MCAT scores can be submitted in lieu of the GRE)

Courses

**Core Courses:**
- BCH6935 Scientific Writing and Ethics (2)
- GMS7930 Women and Diabetes (3)
- GMS7930 Current Topics in Women’s Health (3)
- GMS7930 Women’s Health Lab (1-2 Interd.) (2-3) (2-3 hrs)
- Elective

**Elective**
- GMS6334 Pathobiology of Human Cancer (3)
- GMS7930 Why Do We Live Longer (3)
- PHC6532 Women’s Health Issues (3)
- GMS7910 Directed Research (Women’s Health) (3-6 hrs Interdisciplinary) (3 Hrs)
- Elective

**Directed Research (Women’s Health) (3-6 hrs Interdisciplinary)**
- GMS7910 (5-6 hrs)

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
MEDICAL SCIENCES PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall: February 15

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 26.9999
Dept Code: MED
Program (Major/College): MSG MD
Concentrations:
  - Allergy Immunology & Infectious Disease (All)
  - Anatomy (ANA)
  - Biochemistry and Molecular Biology (BMB) - Closed for admissions; not accepting applications
  - Clinical and Translational Research (CTR)
  - Microbiology and Immunology (MMI) - Closed for admissions; not accepting applications
  - Molecular Medicine (MLM)
  - Molecular Pharmacology and Physiology (MPY)
  - Neuroscience (NEU)
  - Pathology and Cell Biology (PCB)
  - Pathology and Laboratory Medicine (PLM)
  - Pharmacology and Therapeutics (PAT)
  - Physiology and Biophysics (PAB)

PROGRAM INFORMATION

The program is designed to provide students with a broad knowledge in the basic medical sciences, while preparing them for careers as effective and knowledgeable teachers, as well as productive and versatile researchers. To meet these objectives, students take courses in the medical sciences and related areas, participate in seminars, and receive individual research training. Departmental advisory committees counsel the entering students in planning their first year curriculum. In addition to course work and participation in seminars, first year students are expected to become familiar with ongoing research in their chosen department; when possible, they are encouraged to work on a part-time basis as research assistants in their department. Once the student selects a major professor, a formal dissertation committee is appointed. The dissertation committee assists the student in planning the research and course of study, evaluates the student’s progress, supervises the comprehensive examination, and conducts the final dissertation defense.

By the end of the second year, a student has usually completed sufficient course work and met the other research requirements to take the comprehensive qualifying examination. Successful completion of this examination leads to formal admission to candidacy for the Ph.D. degree. The final phase of the program emphasizes research and independent study and leads to a written dissertation. The Ph.D. degree is awarded upon successful completion and oral defense of the dissertation. Departments within the College of Medicine may have additional requirements that pertain to their respective training program. Contact the department for information.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.
Selected Research Areas:
Allergy, Immunology and Infectious Diseases Cancer Biology, Cardiovascular Research, Neuroscience Research

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- A bachelor’s degree or equivalent from a regionally accredited university
- Minimum overall grade-point average of 3.0 out of a possible 4.0 with a minimum grade-point average of 3.0 in the sciences
- Graduate Record Examination (minimum 600Q)
- Completed pre-requisites in:
  - General biology (1 year)
  - General chemistry (1 year)
  - General physics (1 year)
  - Organic chemistry (1 year)
  - Quantitative analysis (1 course)
  - Mathematics including integral and differential calculus
- Three (3) letters of recommendation
- Personal Interview
- One-two page personal statement

APPLICATION PROCEDURES

Please refer to http://health.usf.edu/medicine/graduatestudies/phd/apply_phd.htm

DEGREE PROGRAM REQUIREMENTS

Degree requirements are individualized according to research interests and goals. Ninety credit hours minimum including 24 minimum directed research hours.

Concentrations:

**Allergy, Immunology & Infectious Disease**
Research and education in the Ph.D. in Medical Sciences Program, concentration in Allergy, Immunology & Infectious Disease is focused on interdisciplinary approaches to the study of how the immune system functions properly to rid the body of foreign pathogens and how the immune system can go awry in autoimmunity. The process by which microbes interact with the host to cause disease is also a focus of this program.

**Anatomy**
**Biochemistry and Molecular Biology** - Closed for admissions; not accepting applications
**Clinical and Translational Research**

**Cardiovascular** disease is the leading cause of death, in the United States Atherosclerotic coronary artery disease, valvular heart disease, diseases of the heart muscle, electrical disturbances of the heart rhythm, high blood pressure, stroke, and peripheral vascular disease all contribute to this morbidity. According to current estimates, coronary heart disease, high blood pressure, congestive heart failure and stroke affect nearly 58 million Americans. The USF Signature Interdisciplinary Program in Cardiovascular Research is a comprehensive program that brings together resources in heart care, research and education to fight against cardiovascular disease. Clinicians and researchers at USF are working to improve our knowledge of cardiovascular disease in order to develop new methods of prevention and treatment that will make a difference in the lives of patients with cardiovascular disorders.
Medical Microbiology and Immunology - Closed for admissions; not accepting applications

Molecular Medicine
Research and education in the Ph.D. in Medical Sciences Program, concentration in Molecular Medicine is focused on interdisciplinary approaches to the study of bacteriology, biochemistry, immunology, molecular biology and virology as it relates to human health and disease such as allergy and immune dysfunction, cancer, cardiovascular disorders, infectious diseases and inheritable defects. Training will include a unique interdisciplinary blend of didactic coursework, journal clubs, seminar series, as well as significant research experience.

Molecular Pharmacology & Physiology
Research and education in the Ph.D. in Medical Sciences Program, concentration in Molecular Pharmacology and Physiology is focused on interdisciplinary approaches to the study of the nervous and cardiovascular systems and related disorders, including Alzheimer’s disease and other neurodegenerative disorders, cardiovascular disease and stroke, diabetes, and neuropsychiatric disorders such as depression and drug addiction. Training will include a unique interdisciplinary blend of didactic coursework, journal clubs, seminar series, as well as significant research experience.

Neuroscience
Research and education in the Ph.D. in Medical Sciences Program, concentration in Neuroscience is focused on interdisciplinary approaches to the study of the nervous systems and related disorders, including Alzheimer’s disease and other neurodegenerative disorders, stroke, and neuropsychiatric disorders such as depression and drug addiction. Areas of expertise include biochemistry and cellular and molecular neuroscience, neural systems and computational neuroscience, behavioral neuroscience, developmental neuroscience, neuroimmunology, and neuropsychopharmacology, among others. Students are encouraged to carry out research during their entire period of study. Training will include a unique interdisciplinary blend of didactic coursework, journal clubs, seminar series, as well as significant research experience. The interdisciplinary structure permits considerable flexibility in training; each student’s training is tailored to meet individual requirements.

Pathology & Cell Biology
Research and education in the Ph.D. in Medical Sciences Program, concentration in Pathology & Cell Biology is focused on interdisciplinary approaches to the study of cancer, reproductive pathobiology, neurological disease & injury and related diseases, including cancer biology, angiogenesis and morphogenesis, gene discovery, neurobiology, cell biology and new educational technologies.

Pathology and Laboratory Medicine
Pharmacology and Therapeutics
Physiology and Biophysics

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
MEDICINE / MEDICAL SCIENCES DUAL PROGRAM

Doctor of Medicine (MD) / Doctor of Philosophy (Ph.D.) Dual Degree

DEGREE INFORMATION

Program Admission Deadlines: Contact the College of Medicine
Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 26.9999
Dept Code: MED
Program (Major/College): MED MD / MSG MD
Concentrations:
- Allergy Immunology & Infectious Disease (All)
- Anatomy (ANA)
- Biochemistry and Molecular Biology (BMB) - Closed for admissions; not accepting applications
- Clinical and Translational Research (CTR)
- Microbiology and Immunology (MMI) - Closed for admissions; not accepting applications
- Molecular Medicine (MLM)
- Molecular Pharmacology and Physiology (MPY)
- Neuroscience (NEU)
- Pathology and Cell Biology ((PCB)
- Pathology and Laboratory Medicine (PLM)
- Pharmacology and Therapeutics (PAT)
- Physiology and Biophysics (PAB)

CONTACT INFORMATION

College: Medicine
Department: Medicine/Medical Sciences
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

The combined MD/PhD program is designed to provide well-qualified students who are interested in careers in translational medicine with a broad knowledge in the basic biomedical and clinical sciences that is integrated with the advanced experimental training that is critical for their development as productive and versatile researchers. To meet these objectives, student’s complete courses in both the basic and clinical sciences, participate in patient-care activities and seminars, and receive individual research training in one of the many research concentrations available within the College. Program advisory committees counsel the entering students on planning their curriculum and selecting a research mentor. During the first two years, students complete the basic science course work and participation in research rotations that assist in the selection of a dissertation mentor. Following the successful completion of the second year of medical training and the selection of a major professor, a formal dissertation committee is appointed which assists the student in planning the research and course of study, evaluates the student’s progress and supervises the comprehensive examination.

The successful completion of this examination leads to formal admission to candidacy for the PhD degree. The remainder of this phase of the program emphasizes research and independent study and leads to a written dissertation and its oral defense. Following the completion and defense of their PhD dissertation, students embark on the final two years of their medical training. The program culminates in the award of both MD and PhD degrees. Departments within the College of Medicine may have additional requirements that pertain to their respective portions of the training program. Contact the department for information.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

http://health.usf.edu/medicine/
Major Research Areas:
See College of Medicine website.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below. as well as requirements of the College of Medicine MD and PhD programs, listed below. Student applications must be submitted through AMCAS.

Program Admission Requirements
- A bachelor’s degree or equivalent from a regionally accredited university
- Minimum overall grade-point average of 3.70 out of a possible 4.00 with a minimum grade-point average of 3.7 in the sciences
- Medical College Admissions Test score of 30 (The MCAT substitutes for the GRE).
- Completed pre-requisites in:
  - General biology (1 year)
  - General chemistry (1 year)
  - General physics (1 year)
  - Organic chemistry (1 year)
  - Quantitative analysis (1 course)
  - Mathematics including integral and differential calculus
- Three (3) letters of recommendation
- Interview
- One-two page personal essay

DEGREE PROGRAM REQUIREMENTS

Contact programs for complete information. Degree requirements are individualized according to research interests and goals. Ninety credit hours minimum including 24 minimum directed research hours.

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
PHYSICAL THERAPY AND PUBLIC HEALTH PROGRAM

Dual Degree Program
Doctor of Physical Therapy (D.P.T.) and Master of Public Health (M.P.H.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Rolling Admissions. One class admitted each August. Contact program for details.

Minimum Total Hours: Contact Programs
Program Level: Professional/Masters
Program Status: Active
CIP Codes: 51.2308/
Dept Code: PHT/
Program (Major/College): MPT MD

CONTACT INFORMATION

Colleges: Medicine and Public Health
Departments: School of Physical Therapy and Rehabilitation Sciences and Public Health
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Physical therapists are health professionals with special expertise in the science of movement. They use this knowledge to provide preventive and therapeutic services and psychological support to people of all ages with movement dysfunction. Professional education includes study of basic sciences and the professional skills needed for client examination, evaluation, diagnosis, prognosis, intervention and outcomes. Students will participate in comprehensive clinical internships throughout the program. The School of Physical Therapy and Rehabilitation Sciences is a component of the College of Medicine and is a limited access first professional degree program with an annual enrollment of up to 36 students per year. Students complete the majority of their first year studies on a parallel path with the first year curriculum in medicine.

The Doctor of Physical Therapy is offered through the USF Medical School in the College of Medicine. For information regarding the DPT contact the School of Physical Therapy and Rehabilitation Sciences.

The Master of Public Health is offered through the USF College of Public Health. For information regarding the MPH contact the College of Public Health Graduate Studies office.

Accreditation:
Accredited by the Commission on Accreditation in Physical Therapy Education.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below. Contact programs for complete information.

Program Admission Requirements

- Have a bachelor’s degree or equivalent from a regionally accredited university, and completion of prerequisite courses.
- Have earned a "B" (3.0 on a 4.0 scale) average or better in all work attempted while registered as an upper division student working for a baccalaureate degree; overall GPA of 3.0 and on all prerequisite coursework.
- Interview upon request of the School of Physical Therapy and Rehabilitation Sciences.
• Have at least 20 total hours of documented, observational, volunteer or other work experience in both hospital outpatient and inpatient physical therapy settings

• English competency. Applicants who have completed a degree in which English is not the primary language of instruction must present evidence of competency to pursue studies in the English language prior to being extended an offer of admission. Acceptable English language proficiency tests for applicants to the Doctor of Physical Therapy program are: TOEFL (Test of English as a Foreign Language) a minimum score of 600 (paper version); 230 (computer version).

• Have a written autobiographical statement of personal values and purpose for attending USF’s DPT Degree Program.

DEGREE PROGRAM REQUIREMENTS

Contact programs for complete information.

Students must complete 107 credit hours of professional coursework and meet the general graduate requirements of the School of Physical Therapy and Rehabilitation Sciences and the College of Medicine for admission and graduation.

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
COLLEGE OF NURSING

http://health.usf.edu/nocms/nursing/
Changes to Note

The follow curricular changes for the College of Arts and Sciences were approved by the USF-Tampa Graduate Council on the date noted.

Changes to Programs
Nursing Science (Ph.D.) Change qualifying exam / manuscript requirement 5/3/10

Course Changes
NGR 6773L CNL Residency Change hours from 3 to 5 and prerequisites 3/1/10
NGR 6202 Primary Care of the Adult II typo correction changing “acute” to “chronic” in obj. 4/19/10

Course Terminations:
NGR 5151L Accelerated Fundamentals Clinical (no longer offered) 3/1/10
NGR 5580L Adv Integrated Clinical (no longer offered) 3/1/10
NGR 5680L Accel Integrated Clinical (no longer offered) 3/1/10
NGR 6037 Adv Health Assess for the Older Adult (no longer offered) 3/1/10
NGR 6205 Primary Care: Adolescents (no longer offered) 3/1/10
NGR 6205L Primary Care Pract: L Adol & Women (no longer offered) 3/1/10
NGR 6207 Primary Care: Adults (no longer offered) 3/1/10
NGR 6255 Primary Care of Older Adults (no longer offered) 3/1/10
NGR 6258 Adv Primary Care of Older Adults (no longer offered) 3/1/10
NGR 6259 Gerontological Nursing Practicum (remove 6259 from SCNS; 6253L from SAB) 3/1/10
NGR 6260 Geront Pathophys for Adv Pract Nrs (no longer offered) 3/1/10
NGR 6283 Geropsych Nursing (no longer offered) 3/1/10
NGR 6285 Geropharmac for Adv Nurse Pract (no longer offered) 3/1/10
NGR 6305 Primary Care: Children (no longer offered) 3/1/10
NGR 6362 Midwifery and Women’s Health Sem III (no longer offered) 3/1/10
NGR 6363 Intrapartum Complications (no longer offered; in SCNS, but not SAB) 3/1/10
NGR 6503L Practicum II: Adv Psyc Mtl Hlth Nursing (no longer offered) 3/1/10
NGR 6504 Practicum III: Adv Psyc Ment Hlth Nurs (no longer offered) 3/1/10
NGR 6700 Adv Pract Nurse Trans (no longer offered; in SCNS, but not SAB) 3/1/10
NGR 6749C Adv Pract Nurs Trans (SNCS assigned 6700C; Remove 6749C fr SAB) 3/1/10
NGR 6790 Consult Liaison Nurs (no longer offered) 3/1/10
NGR 6804 Fdtn of Clinical Research for Hlth Prof (no longer offered) 3/1/10
University of South Florida
College of Nursing
12901 Bruce B. Downs Blvd. MDC22
Tampa, FL 33612

Web address:  http://health.usf.edu/nocms/nursing/
Email:  nurstudent@health.usf.edu
Phone:  813-974-2191
Fax:  813-974-5418

College Dean:  Dianne Morrison-Beedy
Associate Dean, Academic Affairs:  Rita D’Aoust
Interim Associate Dean:  Kevin Kipp
Associate Dean of Doctoral Programs:  Mary Evans
Assistant Dean for Faculty Development and Program Evaluation:  Barbara Redding
Interim Associate Dean of Academics, Master Program:  Denise Maguire
Graduate Coordinator:  Denise Maguire
College Contact:  Michelle Kobus

Accreditation:
The Commission on Colleges of the Southern Association of College and Schools, and the Commission on Collegiate Nursing Education, One Dupont Circle, Suite 530, Washington D.C. 20036-1120; (202) 887-6791 and the Florida Board of Nursing, 4052 Bald Express Way, Bin#C02, Tallahassee, FL., 32399-3257. In addition, the Nurse Anesthesia Masters Concentration is accredited by the Council of Accreditation of Nurse Anesthesia Educational Programs.

Mission Statement:
The University of South Florida, College of Nursing is dedicated to improving health through excellence and innovation in:
• student-centered learning and academic success
• scholarly inquiry and research, and partnerships and engagement in communities

Major Research Areas:
Research opportunities include: End of Life Issues; Heart Disease and Women, Women, Children, Families and Communities; Health Services Research, Interdisciplinary Mental Health, Obesity, Psychoneuroimmunology, Post Traumatic Stress Disorder; Patient Safety.

Degrees Offered:
Master of Science (M.S.)
Doctor of Nursing Practice (D.N.P.)
Doctor of Philosophy (Ph.D.)
Dual Degree M.S./MPH in Adult Health Nursing/Occupational Health

Name of Programs Offered:
Nursing
Nursing Science

Concentrations:
Acute Care Nursing (NAC) (on hold)
Adult Health Nursing (NAH)
Pediatric Health Nursing (NCH)
Clinical Nurse Leader (NCL)
Family Health Nursing (NFH)
Nurse Anesthesia (NAN)
Nursing Education (NED)
Occupational Health Nursing (NAO)
Oncology Nursing (NON)
Psychiatric-Mental Health Nursing (NPM) (on hold)

Dual Degree:
Occupational Health/Adult Health Nurse Practitioner M.S./M.P.H. (NOH)

Graduate Certificates Offered:
See: http://www.outreach.usf.edu/gradcerts/
Hospice, Palliative Care and End of Life Studies, Adult Health, Pediatric Health, Family Health, Psychiatric/Mental Health (on hold), Oncology Nursing, Nursing Education, and Clinical Nurse Leader. The credit hours will vary depending on the area of specialization.

COLLEGE REQUIREMENTS

For specific degree requirements for the M.S., D.N.P., and Ph.D., programs in Nursing, refer to the Nursing Program Information. The GRE is required only for the Nurse Anesthesia Masters Concentration and for the Doctoral Programs (Ph.D. and D.N.P.)

Baccalaureate Degree (Nursing) to Master's Degree Program (B.S. to M.S.)
Nurses with a baccalaureate degree in nursing are prepared to enroll directly in graduate course work. The total number of credits required is specific to the nursing concentration. Admission criteria include:

- Baccalaureate degree in nursing from a regionally accredited program
- Earned grade point average of 3.00 or higher on 4.00 scale in all work attempted while registered as an upper division applicant working on a baccalaureate degree
- Current license as a registered nurse in the State of Florida
- Three letters of recommendation, indicating potential for graduate study, from persons who can attest to the applicant's academic ability, clinical competence, and commitment. (Optimally, these letters will be from nursing professors, or clinical supervisors.)
- Personal statement of goals
- Current resume or curriculum vitae
- A personal interview with designated faculty may also be required
- For Nurse Anesthetist program, the Graduate Record Examination (GRE) is required.

Applicants who do not meet these requirements may petition the Student Affairs Committee for consideration for admission.

Registered Nurse to Master’s Degree Program (NBM)
Registered nurses who have earned a baccalaureate degree in another discipline are eligible for admission to the Master’s program.
Admissions Requirements

- B.S./B.A. from a regionally accredited program
- Associate Degree in Nursing from a regionally accredited program
- Earned grade point average of 3.00 or higher on 4.00 scale in all work attempted while registered as an upper division applicant while working on a baccalaureate degree.*
- Current license as a registered nursing in the State of Florida
- Three letters of recommendation
- Current resume or curriculum vitae
- Written statement of professional goals
- A personal interview with a designated faculty member may also be required
- Completion of the following courses (in health assessment, research, statistics, community health and clinical with a letter grade of “B” or greater and a GPA of 3.00 or better:*
- Students must complete the bridge courses within 2 years admission to the undergraduate portion of the program.

<table>
<thead>
<tr>
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<td>(1)</td>
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<td>NUR 4807C</td>
<td>Management and Education Transitions for RNs</td>
<td>(3)</td>
</tr>
<tr>
<td>NUR 416S</td>
<td>Nursing Inquiry</td>
<td>(3)</td>
</tr>
<tr>
<td>NUR 4636</td>
<td>Community/Public Health Population-focused Nursing</td>
<td>(3)</td>
</tr>
<tr>
<td>NUR 4636L</td>
<td>Community/Health Nursing Clinic</td>
<td>(3)</td>
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</tbody>
</table>

(15-18 hours)

After satisfactory completion of the undergraduate courses, students will choose a Master’s concentration and complete additional graduate courses based on that concentration chosen.

*Note: The primary care and other selected concentrations in the Master’s program are highly competitive. Additional admission requirements and a higher GPA may be required for these concentrations.

Accelerated Graduate Program (NAS)

Registered nurses who have earned an Associate of Science Degree in nursing are also eligible for admission to the Master’s program. Students complete 15 credit hours of coursework in the baccalaureate program before applying to the Graduate Program.

Admission Requirements:

- Associate of Science Degree (Nursing) from a regionally accredited program
- Minimum cumulative grade point average of 3.00 or higher on 4.00 scale on all undergraduate coursework (excluding Associate of Science Nursing courses)*
- Current license as a registered nurse in the State of Florida
- Completion of general education and state mandated prerequisites
- Application to the Master’s program upon completion of the necessary undergraduate transitional courses
- Three letters of recommendation
- Current resume or curriculum vitae
- Written statement of professional goals
- A personal interview with a designated faculty member may also be required, as well as other admission requirements.
• A letter grade of “B” or greater and overall 3.00 GPA* or more is required in all Nursing (NUR) courses to be considered for application to the master portion of this program. Completion of 15 undergraduate nursing credits with 3.00 GPA or better* (see below). Students must complete the bridge courses within two years from admission to the undergraduate portion of the program.

NUR 3066  Physical Examination and Assessment (2)
NUR 3066L  Clinical Experience in Assessment (1)
NUR 4807C  Management and Education Transitions for RNs (3)
NUR 4165  Nursing Inquiry (3)
NUR 4636  Community/Public Health Population-focused Nursing (3)
NUR 4636L  Community/Health Nursing Clinic (3)
Total (15)

Upon admission to the Master’s program, students choose a Master’s concentration and complete additional courses based on that concentration.

*Note: The primary care and other selected concentrations in the Master’s program are highly competitive. Additional admission requirements and a higher GPA may be required for these concentrations.

PROGRESSION POLICY

1. Graduate students must earn the grade of ‘B’ or higher in each required course in their respective nursing program. An unsatisfactory (’U’) or any grade below a ’B’ minus is not acceptable.

2. Graduate students must also maintain an overall grade point average of 3.00 in order to be considered in academic "good standing". Students also must meet any special conditions of their admissions. No grade below ‘C’ will be accepted toward a graduate degree. All grades will be counted in computing the overall grade point average. Students must have an overall GPA of 3.00 at the completion of their respective program, or they will not be awarded a degree from the University of South Florida.

3. If a student earns a grade below a ‘B’ or receives a ‘U’ in a required course, she/he must repeat the course. The course must be taken in the next semester that it is offered and the student must earn a ‘B’ or higher. Any student, who earns below a ‘B’ (or ‘U’) in two or more required courses or earns below a ‘B’ (or ‘U’) in a required course twice, will be dismissed from the College. The Dean of the College of Nursing, or her designee (Associate Dean of Academic Affairs or the Associate Dean of Doctoral Studies), will notify students who are dismissed, in writing. Students may petition for re-admission pending approval of their respective Director of their concentration. A petition must be submitted to the Associate Dean of Academic Affairs and the Chairperson of the Student Affairs Committee.

Clinical Performance
Patient safety and welfare are the most critical criteria of the clinical rotation. If at any time during the clinical rotation the student places the patient in an actual or potentially hazardous or unsafe situation or the faculty judges the student to be deficient in clinical competence for patient care responsibility, the student will fail the course regardless of previous clinical performance. Students who receive an unsatisfactory grade for their clinical performance may be dismissed from the program, regardless of academic standing in other classes. (enacted Fall 2004)
**Human Research Conduct**
The protection of the rights of human subjects is the most critical criteria of any research study involving human subjects. If at any time during the conduction of a human subject study, a student violates the rights of the participants, the study will be stopped. Permission to continue with the study will be dependent upon an investigation by the University of South Florida Institutional Review Board, the student’s research advisor and the Dean of the College of Nursing. (enacted Fall 2004)

**Withdrawal Policy** Withdrawals are limited to 1 per course, with a limit of 2 per undergraduate or graduate program. Withdrawals are defined as officially withdrawing from any class after the drop/add period and before the final withdrawal date as outlined in the Academic Calendar. Any student withdrawing in excess of the stated policy may be dismissed from the College of Nursing unless the College has pre-approved a documented medical and/or emergent situation.
About the Catalog

The University of South Florida Graduate Catalog is organized with the degree programs offered listed in the section of the college that offers them. For example, the Master of Science degree with a “program” (also known as major) in Biology is listed in the College of Arts and Sciences section. Some colleges offer areas of specialization, or “concentrations” within a degree program.

EXAMPLE OF PROGRAM PAGE

Black denotes degree

NURSING PROGRAM

Master of Science (M.S.) Degree

DEGREE INFORMATION

EXAMPLE OF CONCENTRATION PAGE

Black denotes degree

ADULT EDUCATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program

With a concentration in Adult Education

DEGREE INFORMATION

Green denotes Program (or Major)

Blue denotes Concentration (or area of specialization)

The name of the program and/or concentration does not appear on the diploma – only the name of the degree (i.e., Master of Arts) is listed. The program and concentration information is listed on the official transcript. Other areas, such as application track, are not listed on the transcript.
NURSING PROGRAM

Master of Science (M.S.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: February 15*
- Spring: October 15
- Summer: February 15

Minimum Total Hours: 41
Program Level: Masters
CIP Code: 51.1601
Dept Code: NUR
Program (Major/College): NUR NR

Concentrations:
- Acute Care Nursing (NAC) (on hold)
- Adult Health Nursing (NAH)
- Pediatric Nurse Practitioner (NCH)
- Clinical Nurse Leader (NCL)
- Family Health Nursing (NFH)
- Nurse Anesthesia* (NAN)
- Nursing Education (NED)
- Occupational Health Nursing (NAO)
- Oncology Nursing (NON)
- Psychiatric-Mental Health Nursing (NPM) (on hold)

* Nurse Anesthesia students are admitted once per year in the Fall. Deadline is October 30, 2010 for Fall 2011 applications. Applications will be accepted from 6/1/2010 through 10/30/2010. See web site for more information.

Also offered:
- Dual Degree M.S./MPH
- Adult Health Nursing/Occupational Health (NOH)

CONTACT INFORMATION

College: Nursing
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

The program in nursing leading to a Master of Science degree prepares its graduates for careers as nurse practitioners, nurse educators, or clinical nurse leaders. Students choose from a variety of nursing specialty options in advanced practice roles and enroll in a prescribed set of core courses central to all specialty options as well as specialty courses and electives. Successful completion of the master’s practitioners program or Certified Registered Nurse Anesthetist program qualifies students to take appropriate national certification examinations and apply for licensure as an ARNP in Florida and other states. Nurse Educator and Clinical Nurse Leader are also eligible for national certification from the National League of Nursing, and the American Association of the Colleges of Nursing, respectively.

Graduate Program Objectives
- Promote evidence based practice based on synthesis of the most current research relevant to advanced nursing practice.
- Ensure excellence in written and oral communication emphasizing opportunities for publishing and presenting in areas of expertise locally and nationally.

http://health.usf.edu/nocms/nursing/
• Prepare leaders to implement and evaluate evidenced based practice.
• Create an environment that enhances the use of translational research to solve practice problems and improve health outcomes.
• Ensure excellence in the dissemination of findings from evidence-based practice at the national and international levels.

Major Research Areas
Research opportunities include: Quality of Life/ End of Life; Heart Disease and Treatment, Women, Children, Families and Communities; Health and Services Research, Interdisciplinary Mental Health, and Patient Safety.

Accreditation:
The Commission on Colleges of the Southern Association of Colleges and Schools, the Commission on Collegiate Nursing Education, and the Florida Board of Nursing. In addition Nurse Anesthesia Master’s Concentration is accredited by the Council of Accreditation of Nurse Anesthesia Educational Programs.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed in the introductory portion of the college catalog section. Certain concentrations are highly competitive. Additional admission requirements and a higher GPA may be required for primary care and other selected concentrations.

Baccalaureate Degree (in Nursing) to Master’s Degree Program (B.S. to M.S.)
Nurses with a baccalaureate degree in nursing are prepared to enroll directly in graduate course work. The total number of credits required is specific to the nursing concentration. Admission criteria include:

Admission Requirements
• Baccalaureate degree from a regionally accredited program
• Earned grade point average of 3.00 or higher on 4.00 scale* in all work attempted while registered as an upper division applicant working on a baccalaureate degree
• Current license as registered nurse in the State of Florida
• Three letters of recommendation, indicating potential for graduate study, from persons who can attest to the applicant’s academic ability, clinical competence, and commitment. (Optimally, these letters will be from nursing professors, or clinical supervisors.)
• Personal statement of goals
• Current resume or curriculum vitae
• A personal interview with a designated faculty member may also be required
• For the Nurse Anesthesia Concentration, the Graduate Record Examination (GRE) is required

Applicants who do not meet these requirements may petition the Student Affairs Committee for consideration for admission.

Registered Nurse to Master’s Degree Program (NBM)
Registered nurses who have earned a baccalaureate degree in another discipline are eligible for admission to the Master’s program.

Admissions Requirements
• BS/BA from a regionally accredited program
• Associate Degree in Nursing from a regionally accredited program
• Earned grade point average of 3.00 or higher on 4.00 scale in all work attempted while registered as an upper division applicant while working on a baccalaureate degree.*
• Current license as a registered nurse in the State of Florida
• Three letters of recommendation
• Current resume or curriculum vitae
• Written statement of professional goals
• A personal interview with a designated faculty member may also be required
• Completion of the following courses with a letter grade of “B/S” or greater and a GPA of 3.00 or better:*  

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(15-18 hours)

After satisfactory completion of the undergraduate courses, students will choose a Master’s concentration and complete additional graduate courses based on that concentration chosen.

*Note: The primary care and other selected concentrations in the Master’s program are highly competitive. Additional admission requirements and a higher GPA may be required for these concentrations.

Accelerated Graduate Program (NAS)
Registered nurses who have earned an Associate of Science Degree in nursing, but do not have a bachelor’s degree are also eligible for admission to the Master’s program. Students complete 15 credit hours of coursework in the baccalaureate program before applying to the Graduate Program.

Admissions Requirements
• Associate of Science Degree (Nursing) from a regionally accredited program
• Minimum cumulative grade point average of 3.00 or higher on 4.00 scale on all undergraduate coursework (excluding Associate of Science Nursing courses)*
• Current license as a registered nurse in the State of Florida
• Completion of general education and state mandated prerequisites
• Application to the Master’s program upon completion of the necessary undergraduate transitional courses
  ▪ Three letters of recommendation
  ▪ Current resume or curriculum vitae
  ▪ Written statement of professional goals
  ▪ A personal interview with a designated faculty member may also be required, as well as other admission requirements
• Completion of 15 undergraduate nursing credits with a letter grade of “B/S” or greater and a cumulative 3.00 GPA* or higher is required to be considered for application to the master portion of this program. Students must complete the bridge courses within two years from admission to the undergraduate portion of the program.

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(15 hours)

Upon admission to the Master’s program, students choose a Master’s concentration and complete additional courses based on that concentration.

*Note: The primary care concentrations in the Master’s program are highly competitive. Additional admission requirements and a higher GPA may be required for these concentrations. During the semester that the student is completing the undergraduate nursing transition courses, the student will meet with an advisor to review all requirements to complete the transition into the Masters program.
The M.S. program in nursing requires completion of the credit hours required by the concentration. Sequencing of courses is particularly important and academic advisors work with students to design both full-time and part-time program plans in the specialty areas. The curricula for all advanced practice concentrations include the following components: theory-research component, advanced practice component, and specialty core.

**Theory-Research Component**

- NGR6121 Theoretical Foundations (3)
- NGR6080 Health Promotion of Individuals, Families and Populations (3)
- NGR6800 Nursing Research (3)
- NGR6737 Ethical, Legal & Policy Issues in Advanced Practice (3)

**Advanced Practice Component**

- NGR6140 Pathophysiology for Advanced Practice (4)
- NGR6172 Pharmacology for Advanced Practice (4)
- NGR6002C Health Assessment for Advanced Practice (4)

**Concentrations**

### Acute Care Concentration – No longer offered, being terminated

- NGR6143 Pathophysiologic Concepts/Acute Care (3)
- NGR6944 Acute Care Practicum (4) Taken twice
- NGR6210 Clin. Mgt. of Acutely Ill Adult (3)
- NGR6649C Advanced Practice Nurse Transitions (5)
- NGR6931 Adult Health Management for Nursing Spec. (3)

### Adult Health Concentration

- NGR6201 Primary Care of Adults I (3)
- NGR6202C Primary Care of Adults II (6)
- NGR6343C Primary Care of Women (5)
- NGR6301 Primary Care of Children & Adolescents I (3)
- NGR6700C Advanced Practice Nurse Transitions (5)

### Family Health Concentration

- NGR6201 Primary Care of Adults I (3)
- NGR6202C Primary Care of Adults II (6)
- NGR6343C Primary Care of Women (5)
- NGR6301 Primary Care of Children & Adolescents I (3)
- NGR6305L Primary Care of Children Practicum (3)
- NGR6700C Advanced Practice Nurse Transitions (5)

### Pediatric Health Concentration

- NGR6301 Primary Care of Children & Adolescents I (3)
- NGR6302 Primary Care of Children & Adolescents II (6)
- NGR6343C Primary Care of Women (5)
- NGR6700C Advanced Practice Nurse Transitions (5)

### Nursing Education Concentration

- NGR6713 Foundations of Nursing Education (3)
- NGR6710 Teaching/Learning Principles of Nursing Ed (3)
- NGR6718 Evaluation Strategies for Nurse Educators (3)
- NGR6947 Practicum in Nursing Ed (3x1)

**577 credits**
Cognates* (6 credit-hours)  
*Selected courses with Advisor permission from the College of Public Health, College of Education, and the College of Nursing, which may be chosen from:

- NGR6723 Leadership and Applied Mgmt in Nursing Healthcare (3)
- NGRXXXX Advanced-Practice courses (with permission from instructor) (3)
- Selected College of Education courses (i.e., EDF, EDM, EME) (3)
- Selected Public Health courses (3)
- Research Project (3)

### Oncology Concentration 21 credit-hours
- NGR6221 Oncology-Nursing Concepts (3)
- NGR6220 Pathobiology-of Neoplasia (3)
- NGR6240 Adult Health Care for Nursing Specialties (3)
- NGR6222L Practicum-I in Advanced Oncology-Nursing (3)
- NGR6223L Practicum-II in Advanced Oncology-Nursing (3)
- NGR6224L Practicum-III in Advanced Oncology-Nursing (3)
- NGR6971 Thesis or NGR6905 Directed Independent Study (3)

### Psychiatric/Mental Health Concentration 26 credit-hours
- NGR6911 Adult Health for Nursing Specialties (3)
- NGR6500 Theoretical Foundations for Advanced Psychiatric Nursing (3)
- NGR6501 Psychopathology for Advanced Psychiatric Nursing (3)
- NGR6538 Psychopharmacology for Advanced Nursing Practice (3)
- NGR6502 Treatment Modalities for Advanced Psychiatric Nursing (3)
- NGR6500L Psychiatric-ARNP-Practicum-Out-Patient Setting (3)
- NGR6501L Psychiatric-ARNP-Practicum-In-Patient Setting (3)
- NGR6700C Transitions (5)

### Occupational/Adult Health Nursing Concentration (MS only) 39 credit-hours
- NGR6650 Occupational Health Nursing-I (2)
- NGR6651 Occupational Health Nursing-II (2)
- NGR6201 Primary Care of Adults-I (3)
- NGR6202C Primary Care of Adults-II (6)
- NGR6343C Primary Care of Women (5)
- NGR6301 Primary Care Children and Adolescents (3)
- NGR6700C Advanced Practice Nurse Transitions (5)
- NGR6650L Practicum in Occupational Health Nursing (1)
- PHC6356 Industrial Hygiene (2)
- PHC6360 Safety Principles and Practices (2)
- PHC6364 Plant Operations Interdisciplinary Field Experience or (2)
- PHC6945 COPH Field course (2)
- PHC6351 Occupational Medicine (3)
- PHC6977 Special Project (3)*

### Clinical Nurse Leader Concentration 17 credit-hours
- NGR6673 Epidemiology for Nursing Practice (3)
- NGR6898 Microsystem Concepts of Healthcare Finance (3)
- NGR6723 Leadership and Applied Management in Nursing Healthcare (3)
- NGR6770C Introduction to the Clinical Nurse Leader Role (1)
- NGR6872C Concepts in Information Management (1)
- NGR6777C Shaping the Practice Environment (1)
- NGR6773L Clinical Nurse Leader Residency (5)

---

*Other graduate course as approved by the advisor.
Nurse Anesthesia Concentration  72 credit hours

The curriculum is composed of the didactic phase (first 12 months) and the clinical phase (last 16 months)—the classes contain the principles and practices in all applications of anesthesia. The nurse anesthetist concentration is independent of the USF academic calendar. During certain rotations in the clinical phase, weekends, nights, and 24-hour rotations will be expected.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHC6050</td>
<td>Biostatistics</td>
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<tr>
<td>NGR6404</td>
<td>Anatomy and Physiology for Nurse Anesthesia I</td>
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<tr>
<td>NGR6400</td>
<td>Chemistry, Biochemistry, and Physics for Nurse Anesthesia</td>
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<td>Pharmacology for Nurse Anesthesia</td>
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<td>Nursing Research</td>
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<td>Pathophysiology for Advanced Practice</td>
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<td>GMS6461</td>
<td>Pharmacology and Physiology</td>
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<td>NGR6422</td>
<td>Principles of Nurse Anesthesia throughout the Life Span</td>
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<td>Advanced Health Assessment</td>
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<td>Principles for Nurse Anesthesia I</td>
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<td>NGR6492</td>
<td>Nurse Anesthesia-Role Development</td>
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<tr>
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<td>Foundations &amp; Methods of Nurse Anesthesia-Practice &amp; Lab Simulator</td>
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<td>Principles for Nurse Anesthesia II</td>
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<td>Evidenced-based Practice for Nurse Anesthesia</td>
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<td>Nurse Anesthesia-Clinical Residency-IV</td>
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<td>NGR6929</td>
<td>Clinical Correlational Conferences</td>
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<td>NGR6491</td>
<td>Nurse Anesthesia-Practice Comprehensive</td>
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Dual Degree (M.S./M.P.H.) in Occupational Health Nursing/Adult Nurse Practitioner  73 credit hours

<table>
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<td>NGR6800</td>
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<td>Pharmacology for Advanced Practice</td>
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<td>NGR6002C</td>
<td>Health Assessment for Advanced Practice</td>
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<tr>
<td>NGR6650</td>
<td>Occupational Health Nursing I</td>
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<tr>
<td>NGR6651</td>
<td>Occupational Health Nursing II</td>
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<td>NGR6650</td>
<td>Practicum in Occupational Health Nursing</td>
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<tr>
<td>NGR6201</td>
<td>Primary Care of Adults I</td>
<td>(3)</td>
</tr>
<tr>
<td>NGR6202</td>
<td>Primary Care of Adults II</td>
<td>(6)*</td>
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<tr>
<td>NGR6343C</td>
<td>Primary Care of Women</td>
<td>(5)*</td>
</tr>
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<td>NGR6301</td>
<td>Primary Care of Children &amp; Adolescents I</td>
<td>(3)</td>
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<tr>
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<td>Advanced Practice Nurse Transitions</td>
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<td>PHC6102</td>
<td>Principles of Health Policy Management</td>
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<td>PHC6423</td>
<td>Occupational Health Law</td>
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<td>PHC6360</td>
<td>Safety Principles and Practices</td>
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<tr>
<td>PHC 6945</td>
<td>COPH Field Experience</td>
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<tr>
<td>PHC6356</td>
<td>Industrial Hygiene</td>
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<tr>
<td>PHC6351</td>
<td>Occupational Medicine</td>
<td>(3)</td>
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</table>
PHC6354  Occupational Health and Safety Administration  (2)
PHC6977  Special Project  (3)
PHC6936  Public Health Capstone  (3)

** Can substitute PHC 6364 Plant Operations Interdisciplinary Field Experience course if filled.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
NURSING PROGRAM

Doctor of Nursing Practice (D.N.P.) Degree

DEGREE INFORMATION
Program Admission Deadlines:
Fall: February 1

CONTACT INFORMATION
College: Nursing

Minimum Total Hours: 52
Program Level: Doctoral
CIP Code: 51.1601
Dept Code: NUR
Program (Major/College): NUR NR

PROGRAM INFORMATION

The D.N.P. program is a practice-focused doctorate that provides an additional option for obtaining a terminal degree in the discipline. Advanced practice includes all nursing intervention that influences health care outcomes, including the direct care of patients, and management of care for individuals and populations.

D.N.P. Program Goals:

- Prepare leaders to implement and evaluate evidenced based practice.
- Create an environment that enhances the use of translational research to solve practice problems and improve health outcomes.
- Ensure excellence in the dissemination of findings from evidence-based practice at the national and international levels.
- Promote critical analyses of health policy and related issues from the perspective of the consumer, nursing, and key stakeholders.
- Ensure advanced levels of clinical judgment, systems thinking, and accountability in the implementation and evaluation of evidenced based care to diverse individuals and populations.
- Develop leaders to integrate and institutionalize evidenced based clinical prevention and population health services.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools; Commission on Collegiate Nursing Education

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

- MS in Nursing from a regionally accredited program
- GRE
- Minimum 3.00 GPA at the graduate level
- Licensure as an Advanced Practice Nurse Three letters of recommendation
- Curriculum Vitae
- Written Statement of Professional Goals
- A grade of B or higher is required in master’s level health assessment, pathophysiology, pharmacology, theory, and research.
DEGREE PROGRAM REQUIREMENTS

A minimum of 52 hours post-master’s is required. The program can be completed in two to three years by full-time students and five or more years for part-time students. Specific program requirements are determined on an individual basis by the student’s supervisory committee.

<table>
<thead>
<tr>
<th>Knowledge Building Core (Required)</th>
<th>37 credit hours</th>
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<tr>
<td>NGR6673 Epidemiology for Advanced Nursing</td>
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<tr>
<td>NGR7841 Statistical Methods Nursing Research I</td>
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<tr>
<td>or EDF6407 Statistical Analyses for Ed. Research</td>
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<tr>
<td>or PHC6050 Biostatistics</td>
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<tr>
<td>NGR7951 Scientific Writing-Publication</td>
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<tr>
<td>NGR7103 Evidence Based Practice</td>
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<tr>
<td>NGR7141 Pathophysiology for Advanced Practice II</td>
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<tr>
<td>NGR7776 Leadership &amp; System Analysis</td>
<td>(3)</td>
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<tr>
<td>NGR7881 Ethics in Research and Practice</td>
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<tr>
<td>NGR7892 Health Policy Issues in Nursing and Health Care</td>
<td>(3)</td>
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<tr>
<td>NGR7974 Evidence Based Project</td>
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<tr>
<td>NGR7945 DNP Residency</td>
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<table>
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<th>Advanced Practice Cognate</th>
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<tr>
<td>NGR7176 Pharmacotheutics</td>
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<tr>
<td>NGR7209 Diagnostic Reasoning</td>
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<tr>
<td>NGR7767 Practice Management</td>
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<tr>
<td>Electives</td>
<td>(6)</td>
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</tbody>
</table>

The residency and research project are done over a minimum of two semesters.

COURSES

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
NURSING SCIENCE PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
   Fall: February 1
Minimum Total Hours: 60-99
Program Level: Doctoral
CIP Code: 51.1608
Dept Code: NUR
Program (Major/College): NUS NR

PROGRAM INFORMATION

The Ph.D. prepares scholars to
• generate and disseminate knowledge through independent and/or collaborative efforts
• conduct intra/interdisciplinary research
• assume leadership roles in nursing education and practice
• influence the delivery of health care services, especially for high risk and medically underserved groups
• educate future generations of nurses for health care delivery in the 21st Century through the use of innovative intra/interdisciplinary educational approaches

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

B.S. (in Nursing) – Ph.D.
• B.S. in Nursing from a regionally accredited program
• GRE
• 3.00 GPA
• Licensure as a Registered Nurse if performing clinical work
• Three letters or recommendation
• Curriculum Vitae
• Written Statement of Professional Goals
• Demonstrated commitment to doctoral study and scholarly productivity
• Clear potential for research contributions
• Evidence of potential for leadership in nursing profession

M.S. (in Nursing) – Ph.D.
• M.S. in Nursing from a regionally accredited program
• GRE
• 3.00 GPA
• Licensure as a registered nurse if performing clinical work
• Three letters or recommendation

http://health.usf.edu/hocms/nursing/
• Curriculum Vitae
• Written Statement of Professional Goals
• Demonstrated commitment to doctoral study and scholarly productivity
• Clear potential for research contributions
• Evidence of potential for leadership in nursing profession

Applicants to the Ph.D. program who have completed a professional doctorate degree (DNP) may have professional degree credits transferred into the Ph.D. in Nursing Science. The transfer of credits is determined on an individual basis and will be at the discretion of the College’s doctoral committee.

Requirements for Transfer of Credits:
• GPA – Credits transferred in must have a grade of B or higher
• For internal institutional credits the grade of the transferred course:
  ▪ Will be calculated in the GPA at USF
  ▪ Will be noted on the transcript as the grade earned
• For external institution credits the grade of the transferred course:
  ▪ Will not be calculated in the GPA at USF
  ▪ Will be noted on the transcript by a T from a non-USF institution
  ▪ Will be noted on the transcript by a N/A if from a USF regionally accredited institution
• Credit Hours may not exceed 40% of the Ph.D. program requirements for total course hours. Credit hours from a professional doctorate may not count towards dissertation requirements.
• The doctoral committee will be responsible for evaluating, approving, and initiating the transfer as soon as possible following admission.

DEGREE PROGRAM REQUIREMENTS

There are two programs of study that lead to the Ph.D. in Nursing.

M.S. - Ph.D.
A minimum of 60 hours post-master’s is required. The program can be completed in three to four years by full-time students and five or more years for part-time students. Specific program requirements are determined on an individual basis by the student’s supervisory committee.

Knowledge Building Core (Required)                          33 credit hours

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<td>NGR7123</td>
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<td>NGR7124</td>
<td>Advances in Nursing Science</td>
<td>(3)</td>
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<tr>
<td>NGR7816</td>
<td>Research Designs and Methods in Nursing</td>
<td>(3)</td>
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<td>NGR7841</td>
<td>Statistical Methods in Nursing Research I</td>
<td>(3)</td>
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<tr>
<td>NGR7842</td>
<td>Statistical Methods in Nursing Research II</td>
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<tr>
<td>NGR7843</td>
<td>Statistical Methods in Nursing Research III</td>
<td>(3)</td>
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<tr>
<td>NGR7815</td>
<td>Qualitative Methods in Nursing Research</td>
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<td>Psychometrics and Measurement for Nursing Research</td>
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<td>NGR7881</td>
<td>Ethics in Research and Practice</td>
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<tr>
<td>NGR7892</td>
<td>Health Policy Issues in Nursing and Health Care</td>
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<tr>
<td>NGR7941</td>
<td>Nursing Research Pro Seminar</td>
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</tr>
<tr>
<td>NGR7981</td>
<td>Dissertation Proposal Writing</td>
<td>(2)</td>
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</table>

Satisfactory completion of the Knowledge Building Core required courses prepares students to successfully complete the dissertation research.
Cognate (12 Credits)
Students select a cognate area to further support the student’s area of expertise in nursing and the research problem that will be addressed by the dissertation research. Examples of appropriate areas of study for the cognate might be organizational administration, health policy, physiology, cognitive psychology, organizational psychology, gerontology, epidemiology, biostatistics, administration, applied anthropology, educational measurement or a nursing specialty.

Electives (3-6 Credits)
Students must complete 3-6 elective credits. Three credits must be in research methods. (suggested courses include: NGR 6824 Data Analysis for Health Sciences, NGR 7932 Current Topics in Quantitative Methods, and NGR 6713 Foundations of Nursing Education.

Qualifying Examinations:
The qualifying examination is to be completed as soon as the majority of core and minor coursework is completed. The purpose of the qualifying examination is to assess the student’s level of scholarship and research skills and to determine if the student possesses the critical and analytical skills necessary to undertake the dissertation research. The qualifying examination consists of two parts:

1. One qualification for admission to candidacy in the Ph.D. program at USF College of Nursing is the authorship of a scholarly manuscript, suitable for publication in a peer-reviewed journal. The student need not be the sole author but is to be the principal (lead) author on the manuscript. The student is responsible for submission and related correspondence with the target journal. Secondary authorship is appropriate for faculty who provide existing data for the student to analyze, assist in formulating the problem or hypothesis, structuring the study design, organizing or conducting the statistical analysis, and interpreting the results. Lesser contributions that do not warrant secondary authorship include such supportive functions as building/providing equipment, advising about statistical analyses, copy editing, collecting and entering data, recruiting participants, or conducting routine observations, assessments, and/or diagnoses.

2. Preparation and submission of a research grant application for funding to an appropriate agency.

The manuscript may be: an empirical paper reporting on the results of an original study conducted by the student under the supervision of his/her advisor(s), a systematic narrative (i.e. qualitative) review of the empirical literature relevant to the student’s dissertation topic, or a theoretical discussion paper addressing issues germane to the student’s dissertation topic. The manuscript should build upon what is known and so make an original contribution to the knowledge base in nursing and/or other health care disciplines.

The type and content of the manuscript, as well as the selection of the target journal(s) to be discussed and decided upon by the student and the members of the student’s dissertation committee. Target journals are to be strategically chosen based on the journal’s impact factor, target audience, and consideration of other characteristics likely to further the student’s career as a researcher. Manuscripts are to be prepared according to other target journals’ guidelines for authors.

This motion was approved by the doctoral committee on March 12, 2010 and the [College of Nursing] faculty council on March 19, 2010 and is pursuant to the Admission to Candidacy requirement which has been previously been a “sole-authored” manuscript.

Dissertation (12 Credits)
Students must complete and successfully defend a dissertation.
B.S. - Ph.D.
A minimum of 99 hours post-baccalaureate is required. The program is designed as a full-time four-year course of study.

### Knowledge Building Core (Required)  
48 credit hours

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<td>NGR6121</td>
<td>Theoretical Foundations</td>
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<td>NGR6737</td>
<td>Ethical/Legal/Policy Issues in Adv Nursing Practice*</td>
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<td>NGR6800</td>
<td>Nursing Research</td>
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<td>NGR7124</td>
<td>Advances in Nursing Science</td>
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<td>Dissertation Proposal Writing</td>
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*Not needed for Nursing Education track

### Advanced Practice (Required)  
12 credit hours

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<td>NGR6002C</td>
<td>Health Assessment for Advanced Practice</td>
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</tr>
<tr>
<td>NGR6172</td>
<td>Pharmacology for Advanced Nursing Practice</td>
<td>(4)</td>
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</table>

### Specialty Track  
18-25 credit hours

- Required to choose at least one:
  - Nursing Education
  - Oncology
  - Adult Health
  - Pediatric Health
  - Family Health

### Nursing Education  
18 credit hours

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<td>Teaching Strategies in Nursing Education</td>
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<td>NGR6713</td>
<td>Foundations of Nursing Education</td>
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<td>NGR6718</td>
<td>Evaluation Strategies in Nursing Education</td>
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<td>NGR6947</td>
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<td>*<em>Cognates</em></td>
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</table>

*Selected courses with Advisor permission from the College of Public Health, College of Education, and the College of Nursing, which may be chosen from:

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<th>Credits</th>
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<td>NGRXXXX</td>
<td>Advanced Practice Specialty (with Permission of advisor)</td>
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<tr>
<td></td>
<td>Selected College of Education Courses (i.e. EDF, EDH, EME)</td>
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</tr>
<tr>
<td></td>
<td>Selected Public Health Courses</td>
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<td></td>
<td>Research Project</td>
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### Oncology  
18 credit hours

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>NGR6221</td>
<td>Oncology Nursing Concepts</td>
<td>(3)</td>
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<tr>
<td>NGR6220</td>
<td>Pathobiology of Neoplasia</td>
<td>(3)</td>
</tr>
<tr>
<td>NGR6240</td>
<td>Adult Health for Nursing Specialties</td>
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</table>
NURSING SCIENCE (Ph.D.)

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>NGR6222L</td>
<td>Practicum I: Oncology Nursing</td>
<td>(3)</td>
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<tr>
<td>NGR6223L</td>
<td>Practicum II: Oncology Nursing</td>
<td>(3)</td>
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<tr>
<td>NGR6224L</td>
<td>Practicum III: Oncology Nursing</td>
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**Adult Nurse Practitioner**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>NGR6201</td>
<td>Primary Care of Adults I</td>
<td>(3)</td>
</tr>
<tr>
<td>NGR6202C</td>
<td>Primary Care of Adults II</td>
<td>(6)</td>
</tr>
<tr>
<td>NGR6343C</td>
<td>Primary Care of Women</td>
<td>(5)</td>
</tr>
<tr>
<td>NGR6301</td>
<td>Primary Care of Children &amp; Adolescents I</td>
<td>(3)</td>
</tr>
<tr>
<td>NGR6700C</td>
<td>Advanced Practice Nurse Transitions</td>
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**Pediatric Nurse Practitioner**

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<thead>
<tr>
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<tr>
<td>NGR6301</td>
<td>Primary Care of Children &amp; Adolescents I</td>
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<td>NGR6302C</td>
<td>Primary Care of Children &amp; Adolescents II</td>
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<td>NGR6343C</td>
<td>Primary Care of Women</td>
<td>(5)</td>
</tr>
<tr>
<td>NGR6700C</td>
<td>Advanced Practice Nurse Transitions</td>
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</table>

**Family Nurse Practitioner**

<table>
<thead>
<tr>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NGR6201</td>
<td>Primary Care of Adults I</td>
<td>(3)</td>
</tr>
<tr>
<td>NGR6202C</td>
<td>Primary Care of Adults II</td>
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<td>NGR6343C</td>
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<td>(5)</td>
</tr>
<tr>
<td>NGR6301C</td>
<td>Primary Care of Children &amp; Adolescents I</td>
<td>(3)</td>
</tr>
</tbody>
</table>

**Cognate**

Students select a cognate area of study to further support the student’s area of expertise in nursing and the research problem that will be addressed by the dissertation research. Examples of appropriate areas of study for the minor might be, but are not limited to public health, aging studies, psychology, business, and research tools.

**Qualifying Examinations:**

The qualifying examination is to be completed as soon as the majority of core and minor coursework is completed. The purpose of the qualifying examination is to assess the student’s level of scholarship and research skills and to determine if the student possesses the critical and analytical skills necessary to undertake the dissertation research. The qualifying examination consists of two parts:

- Completion and submission of a manuscript that is sole authored to a refereed journal for publication.
- Preparation and submission of a research grant application for funding to an appropriate agency.

**Dissertation**

Students complete and successfully defend a dissertation.

**NOTE:** Students are to meet with curriculum advisor for individual program plan.

**COURSES**

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
COLLEGE OF PUBLIC HEALTH
Changes to Note

The following curricular changes for the College of Public Health were approved by the USF-Tampa Graduate Council on the date noted.

**New Courses**
PHC 6766 Global Health Challenges 2/1/10

**Course Terminations**
PHC 6111 Global Primary Health Care Strategies 2/1/10

**Other Revisions (GC approval not needed)**
Minor Course edits throughout section (e.g. course numbers, title updates, etc.)
Added Department information to College Section
Added Dr.P.H. information to College Section
Added revised program information for the M.H.A.
Added Concentration – Global Disaster Management and Humanitarian Relief (GDM) – M.P.H. – approved fall 09, but inadvertently not listed
Added Concentration - Occupational Safety – M.S.P.H. – inadvertently deleted from list
Deleted reference to the Accelerated entry program – no longer available
University of South Florida  
College of Public Health  
13201 Bruce B. Downs Blvd MDC56  
Tampa, FL 33612

**Web address:** [http://www.publichealth.usf.edu](http://www.publichealth.usf.edu)  
**Email:** advisor@health.usf.edu  
**Phone:** 813-974-6665  
**Fax:** 813-974-8121  

**College Dean:** Donna Petersen  
**Interim Associate Dean:** Deanna Wathington

### DEPARTMENTS

**Community and Family Health**  
[http://publichealth.usf.edu/cfh/](http://publichealth.usf.edu/cfh/)  
Adolescent health risk taking behavior, Community-based prevention marketing, Reproductive and women’s health, Health literacy, Health issues of developing countries, Family violence, Injury control and prevention, Social determinants of health, Aging and public health, and Social Marketing.

**Environmental and Occupational Health**  
[http://publichealth.usf.edu/eoh/](http://publichealth.usf.edu/eoh/)  
Environmental and occupational toxicology and health risk assessment, Ergonomics and occupational heat stress, Occupational and environmental lung disease, inflammation and asthma, Environmental pollution assessment and modeling, bio-monitoring and management.

**Epidemiology and Biostatistics**  
[http://publichealth.usf.edu/epb/](http://publichealth.usf.edu/epb/)  
Epidemiology of dementia and Alzheimer’s disease, Aging and occupational epidemiology, Cardiovascular disease epidemiology, Social epidemiology and public health geography, Cross-cultural studies, Cancer epidemiology, Perinatal epidemiology, Sleep disorders, Injury epidemiology, Osteoporosis and falls in aging population, Infectious disease epidemiology, Prevention science and prevention methodology, including design and analysis of preventive field trials, Prevention of conduct disorder and aggression, depression, and suicide and drug use/abuse, Analysis of behavior observation data, Multi-level and mixture modeling, Environmental statistics, Health outcome evaluation and medical surveillance, Detection of bioterrorism, Small area estimation, Missing data methods, Growth curve modeling, Risk assessment, and Bayesian inference.

**Global Health**  
[http://publichealth.usf.edu/gh/](http://publichealth.usf.edu/gh/)  
Surveillance of intestinal parasitic infections; Realtime syndromic surveillance of bioterrorist event; Biosafety of bloodborne pathogens; Serology of arboviruses; pathophysiology of arboviral infections; Health promotion against violence; Health promotion and education in HIV/AIDS; Surveillance of waterborne infections; Development of solar latrines for helminth eradication; Ecodynamics and environmental impact on health.

**Health Policy and Management**  
[http://publichealth.usf.edu/hpm/](http://publichealth.usf.edu/hpm/)  
Health care financial management, Health economics, Quantitative methods in health services, Health insurance, Health law, Quality management, Performance improvement, Community health assessment, Organizational theory and behavior applied to health settings, Health information management, Health policy, and Strategic planning.

### Accreditation:

The Commission on Colleges of the Southern Association of College and Schools. The College is fully accredited by the Council on Education for Public Health and the MSPH in Industrial Hygiene is accredited by the Accreditation Commission of the Accreditation Board for Engineering and Technology.
Mission Statement:
The College of Public Health’s mission is to improve the public’s health through advancing discovery, learning, and service. Goals are related to building strong focused research programs that reward and encourage scholarship and creative activities, continual improvement of academic programs and student centered learning, a college culture that supports our mission, vision, and values, a strong sustainable infrastructure, and active service and meaningful community engagement.

The base of knowledge for public health comes from a variety of disciplines, ranging from social sciences to biological sciences and business, brought together by a commitment to improve the public’s health. Thus, the field is open to students from diverse academic disciplines including Health Sciences, Education, Business, Communication, Mathematics, Social and Natural Sciences. Graduates are prepared for interdisciplinary focused public health careers as administrators, managers, educators, researchers, and direct service providers.

The College’s five departments are Community and Family Health, Environmental and Occupational Health, Epidemiology and Biostatistics, Global Health, and Health Policy and Management. The program in Public Health Practice is College-wide.

Core content is directly related to addressing and meeting public health issues. Off campus or alternate calendar programs may reflect additional offerings to meet specific needs. The College accommodates the working professional as well as the full-time student by offering late afternoon and evening classes, online delivery of courses and graduate certificates, and an executive MPH for experienced health professionals.

The College hosts several College and Departmental based centers that augment the learning opportunities for students. A few examples include the Center for Biological Defense, Center for Leadership in Public Health Practice, Center for Positive Health, the Florida Health Information Center, The James and Jennifer Harrell Center for the Study of Family Violence, the Lawton and Rhea Chiles Center for Healthy Mothers and Babies, and the Florida Prevention Research Center.

Program (Major) and Concentrations

<table>
<thead>
<tr>
<th>Health Administration</th>
<th>Degree</th>
</tr>
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<tbody>
<tr>
<td>Public Health</td>
<td>Master of Health Administration (M.H.A.)</td>
</tr>
<tr>
<td></td>
<td>Master of Public Health (M.P.H.)</td>
</tr>
</tbody>
</table>

- Accelerated Health Education –is being terminated
- Behavioral Health
- Biostatistics
- Environmental Health
- Epidemiology
- Epidemiology and Biostatistics is being terminated
- Epidemiology and Biostatistics - dual concentration
- Epidemiology and Global Health - (EGH)-dual concentration
- Epidemiology and Maternal & Child Health
- Executive Program for Health Professionals
- Global Communicable Disease
- Global Disaster Management and Humanitarian Relief
- Global Health Informatics – is being terminated
- Global Health Practice (M.P.H., Dr.P.H.)

1 Master’s International Peace Corps Program available
• Health Care Organizations and Management (M.P.H.)
• Health Policies and Programs (M.P.H., M.S.P.H., Ph.D.)
• Maternal and Child Health (M.P.H., M.S.P.H., Ph.D.)
• Occupational Health (M.P.H.\(^2\), M.S.P.H.\(^3\))
• Occupational Medicine Residency (M.P.H., M.S.P.H.)
• Occupational Safety (M.P.H.)
• Public Health Administration (M.P.H.)
• Public Health Education (M.P.H.\(^4\), M.S.P.H., Ph.D.)
• Public Health Practice Program (M.P.H.\(^5,6\))
• Socio-Health Sciences (M.P.H., M.S.P.H., Ph.D.)
• Toxicology/Risk Assessment (M.P.H., M.S.P.H., Ph.D.)

**Master of Science in Public Health (M.S.P.H.) Degree**

Public Health Program

Concentrations of study offered in:

- Accelerated Health Education (M.S.P.H.) is being terminated
- Behavioral Health (M.P.H., M.S.P.H., Ph.D.)
- Bioinformatics (M.P.H., M.S.P.H., Ph.D.)
- Biostatistics (M.P.H., M.S.P.H., Ph.D.)
- Environmental Health (M.P.H., M.S.P.H., Ph.D.)
- Epidemiology (M.P.H., M.S.P.H., Ph.D.)
- Epidemiology and Global Health (EGH) dual concentration
- Global Communicable Disease (M.P.H., M.S.P.H., Ph.D.)
- Health Policy and Management (M.S.P.H., Ph.D.)
- Industrial Hygiene (M.S.P.H., Ph.D.)
- Maternal and Child Health (M.P.H., M.S.P.H., Ph.D.)
- Occupational Health (M.P.H.\(^7\), M.S.P.H.\(^8\))
- Occupational Medicine Residency (M.P.H., M.S.P.H.)
- Public Health Education (M.P.H., M.S.P.H., Ph.D.)
- Socio-Health Sciences (M.P.H., M.S.P.H., Ph.D.)
- Toxicology/Risk Assessment (M.P.H., M.S.P.H., Ph.D.)

**Doctor of Philosophy (Ph.D.) Degree**

Public Health Program

Concentrations of study are offered in:

- Behavioral Health (M.P.H., M.S.P.H., Ph.D.)
- Biostatistics (M.P.H., M.S.P.H., Ph.D.)
- Community and Family Health (Ph.D., Dr.P.H.)

(Focus Areas Include: Behavioral Health, Maternal and Child Health, Public Health Education, Socio-health Sciences)

- Environmental and Occupational Health (Ph.D.)
- Environmental Health (M.P.H., M.S.P.H., Ph.D.)
- Epidemiology (M.P.H., M.S.P.H., Ph.D.)

\(^2\) Only available to dual M.S. Adult Nursing students
\(^3\) Only for health professionals
\(^4\) Accelerated entry program available
\(^5\) Requires 3 years of health-related experience
\(^6\) Offered (1) executive program and (2) online
\(^7\) Only available to dual M.S. Adult Nursing students
\(^8\) Only for health professionals

http://health.usf.edu/publichealth/
Global Communicable Disease (M.P.H., M.S.P.H., Ph.D.)
Global Health Practice (M.P.H., Dr.P.H.)
Health Policy and Management (M.S.P.H., Ph.D.)
Industrial Hygiene (M.S.P.H., Ph.D.)
International Health Management (Ph.D.) is being terminated
Maternal and Child Health (M.P.H., M.S.P.H., Ph.D.)
Occupational Health for Health Professionals (Ph.D.)
Public Health Education (M.P.H., M.S.P.H., Ph.D.)
Socio-Health Sciences (M.P.H., M.S.P.H., Ph.D.)
Toxicology/Risk Assessment (M.P.H., M.S.P.H., Ph.D.)

Doctor of Public Health (Dr.P.H.) Degree
Public Health Program

**Dual Degrees Offered:**
- Public Health and Anthropology (M.P.H./M.A. or Ph.D.)
- Public Health and Law (M.P.H./J.D.)
- Public Health and Medicine (M.P.H./M.D.)
  - for already enrolled USF College of Medicine students.
- Public Health and Social Work (M.P.H./M.S.W.)
- Public Health (Occupational Health) and Nursing/Age (M.P.H./M.S.)
  - Adult Nurse Practitioner
- Public Health and Biochemistry/Molecular Biology (M.P.H./Ph.D.)
- Public Health and Physical Therapy (D.P.T./M.P.H.)

**Masters International Peace Corps (MIPC) Program**
Offered in All Departments
The Masters International Peace Corps (MIPC) program is a college-wide program open to all students (excluding international students) within the COPH. MIPC students begin studies on campus, and then serve abroad with the Peace Corps for 27 months before returning to campus to complete graduation requirements for a Master of Public Health (MPH) degree. As an incentive, the College provides tuition and fee waivers for nine credit hours: the required Field Experience - 6 credit hours and the Special Project- 3 credit hours. MIPC students gain significant international practical experience and knowledge working in resource-poor settings, thereby enhancing their marketability for employment upon graduation.

**Graduate Certificates Offered:**
For the most current list go to: [http://www.outreach.usf.edu/gradcerts/](http://www.outreach.usf.edu/gradcerts/)

- Biostatistics
- Epidemiology
- Disaster Management*
- Infection Control
- Health Management and Leadership
- Humanitarian Assistance*
- Maternal and Child Health
- Safety Management
- Social Marketing & Public Health
- Violence and Injury: Prevention and Intervention
- Interdisciplinary Women’s Health

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9 Master’s International Peace Corps Program available
10 Accelerated entry program available
Public Health Generalist*
Public Health Policy and Programs*
Diasporas and Health Disparities (shared with Africana Studies)
Environmental Health
Global Health in Latin America and Caribbean Studies

*fully on-line

COLLEGE REQUIREMENTS

Attendance Policy
It is the policy of the College of Public Health that a student will not be automatically dropped if they do not attend the first class of each semester for graduate classes only. However, it is the responsibility of the student to notify the course instructor if they cannot attend the first class.

Degree Requirements
A detailed description of each degree and its requirements can be found on the website listed.

**Master of Health Administration (M.H.A.):** [http://health.usf.edu/publichealth/hpmmha.html](http://health.usf.edu/publichealth/hpmmha.html)
All MHA students are required to successfully complete a total of 56 credits plus field experience:
- Health and Communities—15 credits
- Management and policy courses - 19 credits
- Finance, Economic and Quantitative Courses - 17 credits
- Health Plans – 3 credits
- Capstone Course - 2 (substitutes for comprehensive examination)
- Field Experience – 1-2 credits
- Special Projects - 3 credits

**Master of Public Health (M.P.H.):** [http://health.usf.edu/publichealth/degree_descriptions.html](http://health.usf.edu/publichealth/degree_descriptions.html)
All MPH students are required to successfully complete a minimum of 42 credits plus field experience:
- Five college core courses - 15 credits: Biostatistics I, Epidemiology, Principles of Health Policy and Management; Environmental and Occupational Health, and Social and Behavioral Sciences Applied to Health
- Concentration courses in specialty areas - 12 credit minimum, depending on department requirements
- Capstone Course
- Comprehensive Exam
- Field Experience - 1 - 12 credits
- Special Projects - 3 credits
- Electives (variable)

**Master of Science in Public Health (M.S.P.H.):** [http://publichealth.usf.edu/msph.html](http://publichealth.usf.edu/msph.html)
- All MSPH students are required to successfully complete 42+ credits depending on concentration requirements 9 credits of college core courses including Biostatics I and Epidemiology, plus one other core courses approved by the academic advisor
- Biostatistics II
- Courses in specialty areas as designated by advisory committee - 12 credits minimum
- Research Methods as determined by advisory committee
- Comprehensive Exam/Capstone Course
• Thesis for a minimum of 6 credits
• Electives (variable)

**Doctor of Philosophy (Ph.D.):** [http://health.usf.edu/publichealth/degree_descriptions.html](http://health.usf.edu/publichealth/degree_descriptions.html)

The Doctor of Philosophy (Ph.D.) is granted in recognition of high attainment in a specified field of knowledge. It is a research degree and is not conferred solely upon the earning of credit or the completion of courses. It is granted after the student has shown proficiency and distinctive achievement in the specific field, has demonstrated the ability to do original, independent investigation, and has presented these findings with a high degree of literacy skills in a dissertation. This degree requires a minimum of 90 credits beyond the baccalaureate degree. Doctoral programs leading to Ph.D. are offered in all five departments and the five core areas of public health. Students have an opportunity to specialize within their department.

Each department has written specific guidelines and there are college-wide PhD student competencies. Students and their major advisor jointly create a written plan to meet all competencies via plan of study, research experience, departmental and professional activities, and other appropriate methods.

**Ph.D. Course of Study:**
The student’s course of study will include the following:

**Prerequisites:**
A minimum of Biostatistics I, Epidemiology, and one other selected college core courses are required by all students who do not have a master's degree in public health. The doctoral committee or the department may require other prerequisites. These courses are not included in the minimum number of hours a student needs to complete the Ph.D. and are expected to be completed early in the course of study.

**Required Coursework:**
The courses and number of credit hours required are defined by the department and the doctoral committee and include coursework from another department or college. There must be minimum of 13 credits at the 7000 level. Generally, the doctoral degree requires a minimum of 90 credits beyond the bachelor's degree. Departments determine the number of credits accepted from previous master(s) degree. There is a mandatory doctoral student orientation that all new doctoral students must attend in the fall semester of their first academic year.

**Tools of Research:**
Departmental Guidelines will address whether tools of research are required for doctoral students within that department (consistency within the department required). The student must complete a minimum of two of the "Tools of Research" options designated by the department, and approved by the doctoral committee before the student is eligible to take the doctoral qualifying examination.

**Teaching:**
All doctoral students will demonstrate or document proficiency in teaching academic courses at the university level.

**Qualifying Exam:**
When all required coursework is satisfactorily completed (including tools of research and prerequisites), the student must pass a written comprehensive qualifying examination covering the subject matter in the major and related fields.

**Dissertation:**
All students must follow the University's "Guidelines for Dissertations and Theses."
Doctor of Public Health (Dr.P.H.)
The Doctor of Public Health (Dr.P.H.) is a professional, practice-oriented degree which is granted in recognition of the attainment of a broad set of practice, analytic and evaluative skills, including demonstrated public health leadership skills. Emphasis will be placed on proficiency in policy development and health policy strategies, public health leadership and management of health programs. Demonstration of applied research skills and strength in evaluation methods via practice-based specialized study will be expected. The Dr.P.H. will require 90 semester hours beyond the baccalaureate degree. Candidates will have an MPH or equivalent degree prior to admission, therefore the actual additional hours required for the Dr.P.H. beyond the Master’s level will average 45 to 50 semester hours, depending upon the program designed by the student and his or her committee. Per University guidelines, all requirements for the doctoral degree must be completed within eight calendar years from the student’s date of admission for doctoral study. Students have four years to complete all required coursework, pass the qualifying examination, and be admitted to doctoral candidacy. Students then have four years from the date of doctoral candidacy to complete degree requirements.

Mission
The mission of the Doctor of Public Health is to prepare practitioners for leadership and advocacy in public health practice through a scientific, interdisciplinary approach to understanding and solving public health problems in the public and private sectors, the United States, and worldwide. This mission relates directly to the University of South Florida mission which includes creating a community of learners together with significant and sustainable university-community partnerships and collaborations; and designing, strengthening and building sustainable healthy communities and improving quality of life.

Areas of Study
Community and Family Health
Global Health

OTHER INFORMATION

Comprehensive Examination (M.H.A., M.P.H., M.S.P.H.)
The Core Comprehensive Examination covering core courses is a requirement for all students seeking an M.P.H. or M.S.P.H. degree in the College of Public Health. (A capstone course substitutes for the comprehensive examination for the M.H.A. degree.)

The Department of Environmental and Occupational Health also requires a concentration comprehensive examination covering the concentration courses. Each department has detailed written guidelines which are listed on department websites. Additional information may be found at http://health.usf.edu/publichealth/academicaffairs/compexam.html.

Please consult individual departments for information.

Field Experience
The type and length of the field experience varies. All students in the MHA, MPH, and MSPH in Industrial Hygiene are required to complete a field experience. Each department has written guidelines and a field experience website is available to assist students in this portion of their program at http://publichealth.usf.edu/academicaffairs/fe/.

Special Project
The special project is an in-depth study of a selected issue in public health. A topic will be selected according to student’s needs and interests.
Thesis (M.S.P.H.)
MSPH students MUST complete a Thesis.

Graduate Assistantships
Graduate assistants may perform research, teaching functions, assist in the production of seminars and workshops, or other work related to their specific disciplines. Graduate assistants are paid a biweekly stipend and may qualify to receive in-state tuition waivers. Assistantships are awarded on a competitive basis. Students must have a GPA of 3.0 or better in their upper division coursework, must be degree-seeking and enrolled full time.

Additional information may be found at http://publichealth.usf.edu/financial.html
All positions are posted at http://publichealth.usf.edu/jobpostings.html

Scholarships and Aid
Sources of aid are limited to degree-seeking students only and include the following which are detailed at http://www.publichealth.usf.edu/FinAid.html: several named fellowships and scholarships, Florida Environmental Health Association Scholarships, Florida Public Health Association Scholarships, MCH Epidemiology Traineeships, among many others.
About the Catalog

The University of South Florida Graduate Catalog is organized with the degree programs offered listed in the section of the College that offers them. For example, the Master of Health Administration degree with a “program” (also known as major) in Health Administration is listed in the College of Public Health section. Some colleges offer areas of specialization, or “concentrations” within a degree program.

EXAMPLE OF PROGRAM PAGE

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Black denotes degree

HEALTH ADMINISTRATION PROGRAM

Master of Health Administration (MHA) Degree

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DEGREE INFORMATION
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EXAMPLE OF CONCENTRATION PAGE

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Black denotes degree

ADULT EDUCATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program With a concentration in Adult Education

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DEGREE INFORMATION
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The name of the program and/or concentration does not appear on the diploma – only the name of the degree (i.e., Master of Arts) is listed. The program and concentration information is listed on the official transcript. Other areas, such as application track, are not listed on the transcript.
HEALTH ADMINISTRATION PROGRAM

Master of Health Administration (M.H.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Public Health has rolling admissions and no set deadline. A minimum of six (6) weeks is necessary after a completed application is received in order for the application to be fully processed.

Minimum Total Hours: 56 plus field experience
Program Level: Masters
CIP Code: 51.0701
Dept Code: DEA
Program (Major/College): MHA PH

CONTACT INFORMATION

College: Public Health
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The M.H.A. program prepares students for private and public sector leadership positions. In addition to the five core areas of public health, the curriculum helps students develop skills and knowledge in basic business disciplines with application to health services; a clinical and community perspective and professional skills. Students develop an understanding of organizational models and management principles applied to health settings; health care financial management and economics; quality and performance improvement; health policy and policy analysis; strategic planning and marketing; and health law and ethics.

The Master of Health Administration has the following competencies in which the graduate will be able to:

Management Science and Technology
1. Explain and demonstrate an understanding of scientific operational definitions and their measurement, e.g., efficiency, effectiveness and quality.
2. Integrate operational planning and management tools for performance and quality improvement.
3. Demonstrate the use of information systems and application software in health services, e.g., electronic medical records, GIS, and use of software tools for management decision-making.
4. Explain and demonstrate the application of quantitative analysis, e.g., descriptive and inferential statistics, regression, forecasting.
5. Build analytical thinking acumen, e.g., the ability to understand any issue by delving into its relevant components and formulating solutions.

Leadership, Planning, and Communication
7. Shape operational and strategic plans and integrate with marketing initiatives.
8. Lead improvement upon organizational design and culture, e.g., formal and informal decision-making structures, and champion workforce diversity.
9. Clarify human resources management and staff development.
10. Demonstrate public health values and reinforce ethical decision-making.
11. Integrate and demonstrate effective written oral communication.

Public Policies and Community Engagement
12. Assess community needs and values and the role of external relations, e.g., demographic/population contexts for development and management of health services.
13. Comprehend and explain the legal and regulatory environment for health services.
14. Explain and identify the optimal quantity of health care services to provide, e.g., satisfying supply and demand constraints and resource limitations.
15. Analyze public policy context and choices.
16. Analyze the linkages between cultural competencies and diversity regarding health disparities.

**Concepts of Economic and Financial Management**
17. Comprehend and create budgets (e.g., variance analysis and standards development) and apply contribution margin analysis as used by clinical revenue-generating personnel and for product line management.
18. Explain the principles and applications of cost accounting, e.g., breakeven analysis, the costing process, measurement, and control.
19. Understand and construct financial statements, applying ratio analysis and pro forma statement generation.
20. Execute financial mathematics, e.g., time value of money calculations, capital budgeting, return on investment, and project risk analyses.
21. Perform differential reimbursement calculations by payers (e.g., Medicare/Medicaid, self-pay, managed care) and describe the major principles of health insurance.
22. Understand and explain economic evaluation, e.g. cost benefit/cost effectiveness analysis.

**Accreditation:**
Accredited by the Commission on Colleges of the Southern Association of College and Schools. The College is fully accredited by the Council on Education in Public Health.

**Major Research Areas:**
Health care financial management, Health economics, Quantitative methods in health services, Health insurance, Health law, Quality management, Performance improvement, Community health assessment, Organizational theory and behavior applied to health settings, Health information management, Health policy, and Strategic planning.

**ADMISSION INFORMATION**
Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

**Program Admission Requirements**
Meeting these criteria per se shall not be the only basis for admission.

- Public health course prerequisites:
  - Suggested/preferred undergraduate majors: Life sciences, social sciences, business, or health professions.
  - Prerequisite undergraduate courses: Micro-economics.
- Work experience: Preferred, but not required.
- Minimum undergrad GPA: 3.0 upper division (some exceptions made if GRE exceeds minimum subscores).
- Verbal GRE Score: 450 minimum
- Quantitative GRE Score: 550 minimum
- In lieu of the GRE, applicants may submit a minimum GMAT score of 500 for the MHA.

**DEGREE PROGRAM REQUIREMENTS**

<table>
<thead>
<tr>
<th>Plan of Study</th>
<th>Total minimum:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE REQUIREMENTS</td>
<td>(15)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHC 6102</td>
<td>Principles of Health Policy and Management</td>
<td>(3)</td>
</tr>
<tr>
<td>PHC 6000</td>
<td>Epidemiology</td>
<td>(3)</td>
</tr>
<tr>
<td>PHC 6050</td>
<td>Biostatistics I</td>
<td>(3)</td>
</tr>
</tbody>
</table>

56 hrs plus field experience

http://health.usf.edu/publichealth/
### Health Administration (M.H.A.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PHC 6357</td>
<td>Environmental and Occupational Health</td>
<td>(3)</td>
</tr>
<tr>
<td>PHC 6410</td>
<td>Social and Behavioral Sciences Applied to Health</td>
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**Management and Policy**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHC 6148</td>
<td>Strategic Planning and Healthcare Marketing</td>
<td>(3)</td>
</tr>
<tr>
<td>PHC 6147</td>
<td>Managing Quality in Health Care</td>
<td>(2)</td>
</tr>
<tr>
<td>PHC 6151</td>
<td>Health Policy and Politics</td>
<td>(3)</td>
</tr>
<tr>
<td>PHC 6114</td>
<td>Health Insurance and Managed Care</td>
<td>(2)</td>
</tr>
<tr>
<td>PHC 6180</td>
<td>Health Services Management</td>
<td>(3)</td>
</tr>
<tr>
<td>PHC 6181</td>
<td>Organizational Behavior in Health Services</td>
<td>(3)</td>
</tr>
<tr>
<td>PHC 6420</td>
<td>Health Care Law, Regulation and Ethics</td>
<td>(3)</td>
</tr>
</tbody>
</table>

**Finance, Economics and Quantitative**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ACG 6025</td>
<td>Financial Accounting for Managers</td>
<td>(2)</td>
</tr>
<tr>
<td>QMB 6305</td>
<td>Managerial Decision Making</td>
<td>(2)</td>
</tr>
<tr>
<td>PHC 6161</td>
<td>Managerial Health Care Finance and Costing</td>
<td>(4)</td>
</tr>
<tr>
<td>PHC 6191</td>
<td>Quantitative Analysis in Health Care Management</td>
<td>(3)</td>
</tr>
<tr>
<td>PHC 6196</td>
<td>Information Systems in Health Care Management</td>
<td>(3)</td>
</tr>
<tr>
<td>PHC 6430</td>
<td>Health Economics I</td>
<td>(3)</td>
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</tbody>
</table>

**Culminating Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PHC 6945</td>
<td>Supervised Field Experience</td>
<td>(1-2)</td>
</tr>
<tr>
<td></td>
<td>• Students with little or no professional experience: 2 hours minimum;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Students with substantial work experience can negotiate a reduced number of hours with their advisor (e.g., 1 or 2 hours) if the student has meaningful experience (involving decision-making) in a health care or related organization</td>
<td></td>
</tr>
<tr>
<td>PHC 6977</td>
<td>Special Project</td>
<td>(3)</td>
</tr>
<tr>
<td>PHC 6183</td>
<td>Advanced Seminar in Health Care Management</td>
<td>(2)</td>
</tr>
</tbody>
</table>

*Case-based capstone course that includes the final comprehensive exam*

Total credits: 56 plus field experience

**COURSES**

See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
PUBLIC HEALTH PROGRAM

Master of Public Health (M.P.H.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Public Health has rolling admissions and no set deadline. A minimum of six (6) weeks is necessary after a completed application is received in order for the application to be fully processed.

Minimum Total Hours: 42
Program Level: Masters
CIP Code: 51.2201
Dept Code: DEA
Program (Major/College): MPH PH

Concentrations in:
See list below. Detailed descriptions are available at:
http://publichealth.usf.edu/programs_offered.html

CONTACT INFORMATION

College: Public Health
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Concentrations:
- Accelerated Health Education (AHE) – no longer offered
- Behavioral Health (BHH)
- Biostatistics (BST)
- Environmental Health (EVH)
- Epidemiology (EPY)
- Epidemiology and Biostatistics (PEB)
- Epidemiology and Global Communicable Diseases
- Epidemiology and Global Health (EGH)
- Epidemiology and Maternal and Child Health (EMC)
- Executive Program for Health Professionals (EPH)
- Executive Program for MBA Physicians (EPP) (this is being terminated)
- Global Communicable Diseases (TCD)
- Global Disaster Management and Humanitarian Relief
- Global Health Practice (GLO)
- Global Health Informatics (GHI) (this is being terminated)
- Health Care Organizations and Management (HCO)
- Health Policies and Programs (HPP)
- Maternal and Child Health (PMC)
- Occupational Health (OCC)11
- Occupational Medicine Residency (OMR)-Occupational Safety (SFM)
- Public Health Administration (PHA)
- Public Health Education (PHN)
- Public Health Practice (PHO, PHP)12,13

11 Only available to dual M.S. Adult Nursing Students
12 Requires 3 years of health-related experience
13 Offered (1) executive program and (2) online

http://health.usf.edu/publichealth/
Socio-Health Sciences (SHS)
Toxicology and Risk Assessment (TXY)

**Dual Degrees Offered:**
Public Health and Anthropology (M.P.H. with M.A. or Ph.D.) offered in the following concentrations:
- Environmental Health
- Epidemiology
- Global Communicable Disease
- Global Disaster Management and Humanitarian Relief
- Global Health
- Health Care Organizations and Management
- Health Policies and Programs
- Maternal and Child Health
- Public Health Education
- Socio-Health Sciences

Public Health and Law (M.P.H./J.D.)—offered collegewide with Stetson Law School

Public Health and Medicine (M.P.H. / M.D.) for already enrolled USF College of Medicine Students

Public Health and Physical Therapy (D.P.T./M.P.H.)
- Designated for students in the DPT program in the School of Physical Therapy-MPH availability collegewide

Public Health and Social Work (M.P.H. / M.S.W.)
- Behavioral Health
- Maternal and Child Health

Public Health (Occupational Health) and Nursing / Adult Nurse Practitioner (M.P.H. / M.S.)

Public Health and Biochemistry / Molecular Biology (M.P.H. / Ph.D.) offered in the following concentrations:
- Epidemiology
- Environmental Health
- Toxicology and Risk Assessment
- Global Communicable Disease

**Masters International Peace Corps (MIPC) Program** Offered in All Departments
The Masters International Peace Corps (MIPC) program is a college-wide program open to all students (excluding international students) within the COPH. MIPC students begin studies on campus, and then serve abroad with the Peace Corps for 27 months before returning to campus to complete graduation requirements for a Master of Public Health (MPH) degree. As an incentive, the College provides tuition and fee waivers for nine credit hours: the required Field Experience - 6 credit hours and the Special Project- 3 credit hours. MIPC students gain significant international practical experience and knowledge working in resource-poor settings, thereby enhancing their marketability for employment upon graduation

**PROGRAM INFORMATION**

The base of knowledge for public health comes from a variety of disciplines, ranging from social sciences to biological sciences and business, brought together by a commitment to improve the public’s health. Thus, the field of public health is broad and is open to students from diverse academic disciplines including Health Sciences, Education, Engineering, Business, Communications, Mathematics, Social Sciences and Natural Sciences. Graduates are prepared for interdisciplinary focused public health professional careers as administrators, managers, educators, researchers, and direct service providers.

http://health.usf.edu/publichealth/
The College’s five departments are: Community and Family Health, Environmental and Occupational Health, Epidemiology and Biostatistics, Global Health, and Health Policy and Management. In addition, Public Health Practice is a college-wide program. Core content is directly related to addressing and meeting public health issues.

The College accommodates the working professional as well as the full-time student by offering late afternoon and evening classes, online course delivery, partnerships with international schools to expand options, a variety of graduate certificates, and a professional MPH for experienced health care professionals.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools. The College is fully accredited by the Council on Education in Public Health and the Accreditation Board for Engineering and Technology.

DEPARTMENTS

Community and Family Health http://publichealth.usf.edu/cfh/
Adolescent health risk taking behavior, Community-based prevention marketing, Reproductive and women’s health, Health literacy, Health issues of developing countries, Family violence, Injury control and prevention, Social determinants of health, Aging and public health, and Social Marketing.

Environmental and Occupational Health http://publichealth.usf.edu/eoh/
Environmental and occupational toxicology and health risk assessment, Ergonomics and occupational heat stress, Occupational and environmental lung disease, inflammation and asthma, Environmental pollution assessment and modeling, bio-monitoring and management.

Epidemiology and Biostatistics http://publichealth.usf.edu/epb/
Epidemiology of dementia and Alzheimer’s disease, Aging and occupational epidemiology, Cardiovascular disease epidemiology, Social epidemiology and public health geography, Cross-cultural studies, Cancer epidemiology, Perinatal epidemiology, Sleep disorders, Injury epidemiology, Osteoporosis and falls in aging population, Infectious disease epidemiology, Prevention science and prevention methodology, including design and analysis of preventive field trials, Prevention of conduct disorder and aggression, depression, and suicide and drug use/abuse, Analysis of behavior observation data, Multi-level and mixture modeling, Environmental statistics, Health outcome evaluation and medical surveillance, Detection of bioterrorism, Small area estimation, Missing data methods, Growth curve modeling, Risk assessment, and Bayesian inference.

Global Health http://publichealth.usf.edu/gh/
Surveillance of intestinal parasitic infections; Realtime syndromic surveillance of bioterrorist event; Biosafety of bloodborne pathogens; Serology of arboviruses; pathophysiology of arboviral infections; Health promotion against violence; Health promotion and education in HIV/AIDS; Surveillance of waterborne infections; Development of solar latrines for helminth eradication; Ecodynamics and environmental impact on health.

Health Policy and Management http://publichealth.usf.edu/hpm/
Health care financial management, Health economics, Quantitative methods in health services, Health insurance, Health law, Quality management, Performance improvement, Community health assessment, Organizational theory and behavior applied to health settings, Health information management, Health policy, and Strategic planning.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
All Applicants must take the Graduate Record Exam (except as noted below) or an equivalent taken within five years preceding application unless noted as exceptions and must meet the following criteria:
• shall have earned an undergraduate degree from an accredited institution;

• shall have earned a "B" average (3.0 on a 4 point scale) or better in all work attempted while registered as an upper division student working toward a baccalaureate degree; OR

• shall have a minimum Verbal Graduate Record Exam (GRE) General test score of 450 and a minimum Quantitative Graduate Record Exam (GRE) test score of 550**

• In lieu of the GRE, only applicants to the Department of Health Policy and Management may submit a minimum GMAT score of 500 for the MPH.

• An MCAT score may be submitted in lieu of the GRE. A mean of 8 is required. The Department of Epidemiology and Biostatistics does not permit the substitution of the MCAT for the GRE.

Meeting of these criteria per se shall not be the only basis for admission.

**NOTE: Some concentration areas require higher GRE subscores.

DEGREE PROGRAM REQUIREMENTS

All MPH students are required to successfully complete a minimum of 42 credits plus field experience:

Five college core courses 15 credits
    Biostatistics I,
    Epidemiology,
    Principles of Health Policy and Management;
    Environmental and Occupational Health, and
    Social and Behavioral Sciences Applied to Health

Concentration courses in specialty areas 12 credit minimum
    -depending on department requirements

Capstone Course 3 credits
Comprehensive Exam
Field Experience 1 - 12 credits
Special Projects 3 credits
Electives (variable)

For information on program requirements, refer to the college website: www.publichealth.usf.edu

OTHER INFORMATION

Certificate Programs:
(for information click on the graduate certificates at http://www.outreach.usf.edu/gradcerts/)

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
PUBLIC HEALTH / LAW DUAL DEGREE PROGRAM

Master of Public Health (M.P.H.) Degree
Doctorate of Jurisprudence (J.D.) Degree with Stetson University

DEGREE INFORMATION

Program Admission Deadlines:
Public Health has rolling admissions and no set deadline. A minimum of 6 weeks is necessary after a completed application is received in order for the application to be fully processed.

Minimum Total Hours: 42
Program Level: Masters
CIP Code: 51.2201
Dept Code: DEA
Program (Major/College): MPH PH

Concentrations:
See list below. Detailed descriptions are available at:
http://publichealth.usf.edu/programs_offered.html

CONTACT INFORMATION

Colleges: Public Health
Stetson Law School

Contact Information: www.grad.usf.edu

Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

The core functions of public health include assessment, policy development, and assurance. Public health professionals can better perform these functions through not only obtaining the prerequisite knowledge but also through partnering with well-trained professionals in other fields such as law to develop and implement society’s responses to public health needs. However, lawyers’ effectiveness is often limited by their inadequate knowledge of public health and its scientific disciplines. The joint degree program is intended to supply this knowledge by giving public health and Stetson Law School graduates a sound education in both law and public health. A related goal is to increase the opportunities for inter-disciplinary research, teaching, and advocacy for the faculties at the College of Public Health and Stetson University College of Law.

Concentrations:
- Accelerated Health Education (AHE) – this is being terminated
- Behavioral Health (BHH)
- Biostatistics (BST)
- Environmental Health (EHV)
- Epidemiology (EPY)
- Epidemiology and Biostatistics (PEB)
- Epidemiology and Global Communicable Diseases
- Epidemiology and Global Health (EGH)
- Epidemiology and Maternal and Child Health (EMC)
- Executive Program for Health Professionals (EPH)
- Executive Program for MBA Physicians (EPP) this is being terminated
- Global Communicable Diseases (TCD)
- Global Disaster Management and Humanitarian Relief (GDM)
- Global Health Practice (GLO)
- Global Health Informatics (GHI) this is being terminated
- Health Care Organizations and Management (HCO)
- Health Policies and Programs (HPP)
- Maternal and Child Health (PMC)
The College’s five departments are: Community and Family Health, Environmental and Occupational Health, Epidemiology and Biostatistics, Global Health, and Health Policy and Management. In addition, Public Health Practice is a college-wide program.

Core content is directly related to addressing and meeting public health issues.

The College accommodates the working professional as well as the full-time student by offering late afternoon and evening classes, online course delivery, partnerships with international schools to expand options, a variety of graduate certificates, and a professional MPH for experienced health care professionals.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools. The College is fully accredited by the Council on Education in Public Health and the Accreditation Board for Engineering and Technology.

Major Research Areas:
Faculty major research areas are listed at:
http://publichealth.usf.edu/facultyaffairs/facultyprofile.html

DEPARTMENTS
Community and Family Health http://publichealth.usf.edu/cfh/
Adolescent health risk taking behavior, Community-based prevention marketing, Reproductive and women’s health, Health literacy, Health issues of developing countries, Family violence, Injury control and prevention, Social determinants of health, Aging and public health, and Social Marketing.

Environmental and Occupational Health http://publichealth.usf.edu/eoh/
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Epidemiology and Biostatistics http://publichealth.usf.edu/epb/
Epidemiology of dementia and Alzheimer’s disease, Aging and occupational epidemiology, Cardiovascular disease epidemiology, Social epidemiology and public health geography, Cross-cultural studies, Cancer epidemiology, Perinatal epidemiology, Sleep disorders, Injury epidemiology, Osteoporosis and falls in aging population, Infectious disease epidemiology, , Prevention science and prevention methodology, including design and analysis of preventive field trials, Prevention of conduct disorder and aggression, depression, and suicide and drug use/abuse, Analysis of behavior observation data, Multi-level and mixture modeling, Environmental statistics, Health outcome evaluation and medical surveillance, Detection of bioterrorism, Small area estimation, Missing data methods, Growth curve modeling, Risk assessment, and Bayesian inference.

14 Only available to dual MS Adult Nursing Students
15 Requires 3 years of health-related experience
16 Offered (1) executive program and (2) online
Global Health
Surveillance of intestinal parasitic infections; Realtime syndromic surveillance of bioterrorist event; Biosafety of bloodborne pathogens; Serology of arboviruses; pathophysiology of arboviral infections; Health promotion against violence; Health promotion and education in HIV/AIDS; Surveillance of waterborne infections; Development of solar latrines for helminth eradication; Ecodynamics and environmental impact on health.

Health Policy and Management
Health care financial management, Health economics, Quantitative methods in health services, Health insurance, Health law, Quality management, Performance improvement, Community health assessment, Organizational theory and behavior applied to health settings, Health information management, Health policy, and Strategic planning.

ADMISSION INFORMATION
Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Students will need to be accepted to both institutions and follow the admission standards of each setting. Students must complete the GRE and the LSAT for acceptance into this dual program. Refer to the MPH listing for specific USF admission requirements.

DEGREE PROGRAM REQUIREMENTS
College of Public Health Students:
Students in the College of Public Health will enroll in the JD/MPH program, complete the MPH degree, and meet the admission requirements of Stetson which includes taking the LSAT, and then enroll in the Stetson College of Law to complete the JD. Students in the dual degree program will be permitted to count nine hours of credit from the MPH program toward satisfaction of JD credit requirements, and up to nine hours of credit from the JD program toward satisfaction of MPH credit requirements. All students in the dual degree program must complete a field experience requirement. Students in Stetson Law must do mandatory pro bono work (20 hours). Some of these hours may qualify for the field experience however these must be done in a public health setting. This will be determined by the student’s public health advisor and department. Credit hours for the MPH may be more than 42 hours (i.e. 46 hours) depending on the concentration program.

Stetson Law Students:
Students already enrolled in Stetson College of Law will normally apply for the dual degree program in their first or second year. Students in the program will usually complete either one or two years of law school, after which they will spend a year completing the MPH program in the College of Public Health. Students will have the ability to choose whichever concentration within the College that best meets their interests and needs and which they are formally accepted to by the College and Department. After completing their MPH, students will return to Stetson to complete their JD and prepare for the bar exam. The virtue of this study plan is that students will commence Stetson with a sound foundation in law and legal process, and students will complete the elective portion of their legal study with a sound foundation in public health.

OTHER INFORMATION
Contact Public Health for a listing of curriculum requirements of both USF and Stetson Law.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
PUBLIC HEALTH PROGRAM

Master of Science in Public Health (M.S.P.H.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Public Health has rolling admissions and no set deadline. A minimum of 6 weeks is necessary after a completed application is received in order for the application to be fully processed.

Minimum Total Hours: 42
Program Level: Masters
CIP Code: 51.2299
Dept Code: DEA
Program (Major/College): MSP PH

Concentrations:
See list below. Detailed descriptions are available at: http://publichealth.usf.edu/programs_offered.html

Dual Degrees Offered: See list below.

CONTACT INFORMATION

College: Public Health
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you.usf.edu

PROGRAM INFORMATION

Concentrations:
- Behavioral Health (PBH)
- Bioinformatics (PBF)
- Biostatistics (PBC)
- Environmental Health (PEH)
- Epidemiology (PEY)
- Global Communicable Disease (PGD)
- Health Policy and Management
- Industrial Hygiene (PHI)
- Maternal and Child Health (PMH)
- Occupational Health for Health Professionals (POH)\(^\text{17}\)
- Occupational Medicine Residency (POM)
- Occupational Safety (POS)
- Public Health Education (PPD)
- Socio-Health Sciences (PSH)
- Toxicology and Risk Assessment (PTX)

Program Information
The base of knowledge for public health comes from a variety of disciplines, ranging from social sciences to biological sciences and business, brought together by a commitment to improve the public's health. Thus, the field of public health is broad and is open to students from diverse academic disciplines including Health Sciences, Education, Engineering, Business, Communications, Mathematics, Social Sciences and Natural Sciences. Graduates are prepared for interdisciplinary focused public health professional careers as administrators, managers, educators, researchers, and direct service providers.

\(^{17}\) Only for health professionals

http://health.usf.edu/publichealth/
The College’s five departments are: Community and Family Health, Environmental and Occupational Health, Epidemiology and Biostatistics, Global Health, and Health Policy and Management. Public Health Practice is a college-wide program.

Core content is directly related to addressing and meeting public health issues.

The College accommodates the working professional as well as the full-time student by offering late afternoon and evening classes, online course delivery, partnerships with international schools to expand options, a variety of graduate certificate programs, and a professional MPH for experienced Health Care professionals.

**Accreditation:**
Accredited by the Commission on Colleges of the Southern Association of College and Schools. The College is fully accredited by the Council on Education in Public Health and the Accreditation Board for Engineering and Technology.

**DEPARTMENTS**

**Community & Family Health**  
http://publichealth.usf.edu/cfh/  
Adolescent health risk taking behavior, Community-based prevention marketing, Reproductive and women’s health, Health literacy, Health issues of developing countries, Family violence, Injury control and prevention, Social determinants of health, Aging and public health, and Social Marketing.

**Environmental & Occupational Health**  
http://publichealth.usf.edu/eoh/  
Environmental and occupational toxicology and health risk assessment, Ergonomics and occupational heat stress, Occupational and environmental lung disease, inflammation and asthma, Environmental pollution assessment and modeling, bio-monitoring and management.

**Epidemiology & Biostatistics**  
http://publichealth.usf.edu/epb/  
Epidemiology of dementia and Alzheimer’s disease, Aging and occupational epidemiology, Cardiovascular disease epidemiology, Social epidemiology and public health geography, Cross-cultural studies, Cancer epidemiology, Perinatal epidemiology, Sleep disorders, Injury epidemiology, Osteoporosis and falls in aging population, Infectious disease epidemiology, Prevention Science and prevention methodology, including design and analysis of preventive field trials, Prevention of conduct disorder and aggression, depression, and suicide and drug use/abuse, Analysis of behavior observation data, Multi-level and mixture modeling, Environmental statistics, Health outcome evaluation and medical surveillance, Detection of bioterrorism, Small area estimation, Missing data methods, Growth curve modeling, Risk assessment, and Bayesian inference.

**Global Health**  
http://publichealth.usf.edu/gh/  
Surveillance of intestinal parasitic infections; Realtime syndromic surveillance of bioterrorist event; Biosafety of bloodborne pathogens; Serology of arboviruses; pathophysiology of arboviral infections; Health promotion against violence; Health promotion and education in HIV/AIDS; Surveillance of waterborne infections; Development of solar latrines for helminth eradication; Ecodynamics and environmental impact on health.

**Health Policy and Management**  
http://publichealth.usf.edu/hpm/  
Health care financial management, Health economics, Quantitative methods in health services, Health insurance, Health law, Quality management, Performance improvement, Community health assessment, Organizational theory and behavior applied to health settings, Health information management, Health policy, and Strategic planning.
ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
All Applicants must take the Graduate Record Exam (except as noted below) or an equivalent taken within five years preceding application unless noted as exceptions and must meet the following criteria:

- shall have earned an undergraduate degree from an accredited institution;
- shall have earned a “B” average (3.0 on a 4 point scale) or better in all work attempted while registered as an upper division student working toward a baccalaureate degree; AND
- shall have a minimum Verbal Graduate Record Exam (GRE) test score of 450 and a minimum Quantitative Graduate Record Exam (GRE) test score of 550;**
- In lieu of the GRE, only applicants to the Department of Health Policy and Management may submit a minimum GMAT score of 500 for the MSPH.
- An MCAT score may be submitted in lieu of the GRE. A mean of 8 is required. The Department of Epidemiology and Biostatistics and the Department of Health Policy and Management do not accept MCAT scores for M.S.P.H. degrees.

Meeting of these criteria per se shall not be the only basis for admission.

** NOTE: Some Department concentration require higher GRE subscores.

DEGREE PROGRAM REQUIREMENTS

All MSPH students are required to successfully complete 42+ credits depending on concentration requirements;
9 credits of college core courses including Biostatics I and Epidemiology, plus one other core courses approved by the academic advisor

- Biostatistics II
- Courses in specialty areas as designated by advisory committee - 12 credits minimum
- Research Methods as determined by advisory committee
- Comprehensive Exam/Capstone Course
- Thesis for a minimum of 6 credits
- Electives (variable)

OTHER INFORMATION

Certificate Programs:
(For information click on the graduate certificates at http://www.outreach.usf.edu/gradcerts/)

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
PUBLIC HEALTH PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: December 15 annually

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 51.2201
Dept Code: DEA
Program (Major/College): PPH PH

CONCENTRATIONS AVAILABLE IN:
See list below in Program Information. Detailed descriptions are available at:
http://publichealth.usf.edu/programs_offered.html

CONTACT INFORMATION

College: Public Health
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

Concentrations available in:
- Behavioral Health (BHH)
- Biostatistics (BST) (this is being terminated)
- Community and Family Health
- Environmental and Occupational Health (EOH)
- Epidemiology (EPY)
- Global Communicable Disease (TCD)
- Health Policy and Management (HPM)
- Industrial Hygiene (IHY)
- International Health Management (IHM) (this is being terminated)
- Maternal and Child Health (PMC)
- Occupational Health for Health Professionals (OHP)
- Public Health Education (HED)
- Socio-Health Sciences (SHS)
- Toxicology and Risk Assessment (TXY)

Program Information
The base of knowledge for public health comes from a variety of disciplines, ranging from social sciences to biological sciences and business, brought together by a commitment to improve the public’s health. Thus, the field of public health is broad and is open to students from diverse academic disciplines including Health Sciences, Education, Engineering, Business, Communications, Mathematics, Social and Natural Sciences. Graduates are prepared for interdisciplinary focused public health professional careers as administrators, managers, educators, researchers, and direct service providers.

The College’s five departments are: Community and Family Health, Environmental and Occupational Health, Epidemiology and Biostatistics, Global Health, and Health Policy and Management. Core content is directly related to addressing and meeting public health issues.

The College accommodates the working professional as well as the full-time student by offering late afternoon and evening classes, online course delivery, partnerships with international schools to expand options, a variety of graduate certificate programs, and a professional MPH for experienced Health Care professionals.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools. The College is fully accredited by the Council on Education in Public Health.

http://health.usf.edu/publichealth/
Major Research Areas:
Faculty major research areas are listed at: http://publichealth.usf.edu/facultyaffairs/facultyprofile.html

DEPARTMENTS

Community and Family Health http://publichealth.usf.edu/cfh/
Adolescent health risk taking behavior, Community-based prevention marketing, Reproductive and women’s health, Health literacy, Health issues of developing countries, Family violence, Injury control and prevention, Social determinants of health, Aging and public health, and Social Marketing.

Environmental and Occupational Health http://publichealth.usf.edu/eoh/
Environmental and occupational toxicology and health risk assessment, Ergonomics and occupational heat stress, Occupational and environmental lung disease, inflammation and asthma, Environmental pollution assessment and modeling, bio-monitoring and management.

Epidemiology and Biostatistics http://publichealth.usf.edu/epb/
Epidemiology of dementia and Alzheimer's disease, Aging and occupational epidemiology, Cardiovascular disease epidemiology, Social epidemiology and public health geography, Cross-cultural studies, Cancer epidemiology, Perinatal epidemiology, Sleep disorders, Injury epidemiology, Osteoporosis and falls in aging population, Infectious disease epidemiology, Prevention science and prevention methodology, including design and analysis of preventive field trials, Prevention of conduct disorder and aggression, depression, and suicide and drug use/abuse, Analysis of behavior observation data, Multi-level and mixture modeling, Environmental statistics, Health outcome evaluation and medical surveillance, Detection of Bioterrorism, Small area estimation, Missing data methods, Growth curve modeling, Risk assessment, and Bayesian inference.

Global Health http://publichealth.usf.edu/gh/
Surveillance of intestinal parasitic infections; Realtime syndromic surveillance of bioterrorist event; Biosafety of bloodborne pathogens; Serology of arboviruses; pathophysiology of arboviral infections; Health promotion against violence; Health promotion and education in HIV/AIDS; Surveillance of waterborne infections; Development of solar latrines for helmint eradication; Ecodynamics and environmental impact on health.

Health Policy and Management http://publichealth.usf.edu/hpm/
Health care financial management, Health economics, Quantitative methods in health services, Health insurance, Health law, Quality management, Performance improvement, Community health assessment, Organizational theory and behavior applied to health settings, Health information management, Health policy, and Strategic planning.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Applicants to the doctoral program in Public Health must meet the following minimum criteria in order to be considered for admission. However, the meeting of these criteria per se, shall not be the only basis for admission.

- A minimum Verbal Graduate Record Examination (GRE) test score of 480 and a minimum Quantitative Graduate Record Examination (GRE) score of 620 taken within 5 years preceding the application and a grade point average of 3.0 are needed to be considered.

- A score of 600 or higher on the GMAT for applicants to only the Health Policy and Management Department will be considered.

- Each applicant must submit evidence of written/analytical skills to the College of Public Health which will take two-forms:
  - A graduate level term paper, thesis, or research paper of which the student is the sole author, publication on which the student is the first author; and
• A detailed personal statement of less than five pages that describes why the applicant wishes to obtain a Ph.D. degree in Public Health.

• Applicants seeking consideration to the doctoral program must possess the MPH, M.S.P.H., or equivalent. Those who hold other graduate degrees will be considered, but as a prerequisite, they must complete the Epidemiology and Biostatistics core courses, one additional core course, and other courses as required and approved by their advisory committee.

• Each applicant must submit at least two formal Letters of Recommendation. The Department of Community and Family Health requires three Letters of Recommendation.

• In order to be considered for admission to the Ph.D. Program in Public Health, applicants must be fully prepared to register as full-time students for at least one full academic year (consecutive Fall and Spring semesters).

DEGREE PROGRAM REQUIREMENTS

Prerequisites:
A minimum of Biostatistics I, Epidemiology, and one other selected college core courses are required by all students who do not have a master's degree in public health. The doctoral committee or the department may require other prerequisites. These courses are not included in the minimum number of hours a student needs to complete the Ph.D. and are expected to be completed early in the course of study.

Required Coursework:
The courses and number of credit hours required are defined by the department and the doctoral committee and include coursework from another department or college. There must be minimum of 13 credits at the 7000 level. Generally, the doctoral degree requires a minimum of 90 credits beyond the bachelor's degree. Departments determine the number of credits accepted from previous master(s) degree. There is a mandatory doctoral student orientation that all new doctoral students must attend in the fall semester of their first academic year.

Tools of Research:
Departmental Guidelines will address whether tools of research are required for doctoral students within that department (consistency within the department required). The student must complete a minimum of two of the "Tools of Research" options designated by the department, and approved by the doctoral committee before the student is eligible to take the doctoral qualifying examination.

Teaching:
All doctoral students will demonstrate or document proficiency in teaching academic courses at the university level.

Qualifying Exam:
When all required coursework is satisfactorily completed (including tools of research and prerequisites), the student must pass a written comprehensive qualifying examination covering the subject matter in the major and related fields.

Dissertation:
All students must follow the University's "Guidelines for Dissertations and Theses." In addition, the Concentration in Biostatistics and the Concentration in Epidemiology have additional format requirements. Consult the Department for information on the format options and requirements for these two concentrations.

OTHER INFORMATION
Certificate Programs: (for information click on the graduate certificates at http://www.outreach.usf.edu/gradcerts/)

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm

http://health.usf.edu/publichealth/
PUBLIC HEALTH PROGRAM

Doctor of Public Health (Dr.P.H.) Degree

DEGREE INFORMATION

<table>
<thead>
<tr>
<th>Program Admission Deadlines:</th>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall: December 15 annually</td>
<td>College: Public Health</td>
</tr>
</tbody>
</table>

Minimum Total Hours: 90
Program Level: Doctoral
CIP Code: 51.2201
Dept Code: DEA
Program (Major/College): DPH PH

PROGRAM INFORMATION

The Dr.P.H. is an advanced professional degree that prepares practitioners for leadership and advocacy in public health practice through a scientific and interdisciplinary approach to understanding and solving problems in public and private sectors in Florida and the global community. The Dr.P.H. curriculum differs from the Ph.D. in that the Dr.P.H. requires all five public health core courses, whereas the Ph.D. requires only three. Dr.PH. students would be required to develop both quantitative and qualitative applied research skills, whereas PhD students may choose to develop either quantitative or qualitative research skills. Dr.P.H. students are required to complete 12 credit hours of policy, leadership and management courses, which is not required in most Ph.D. concentrations. Another difference from the Ph.D. is the culminating requirement of the Dr.P.H., a dissertation, must be practice based in addition to a requirement of 9 hours of field experience. Data and other information gathered through the field experience can be incorporated into the dissertation.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools. The College is fully accredited by the Council on Education in Public Health.

Major Research Areas:
Faculty major research areas are listed at: [http://publichealth.usf.edu/facultyaffairs/facultyprofile.html](http://publichealth.usf.edu/facultyaffairs/facultyprofile.html)

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
Applicants must have an M.P.H., M.H.A. or equivalent degree from an accredited university, and a minimum of two years work experience in public health, a closely related field or as a health professional. Eligibility requirements regarding GPA and standardized test scores will be identical to the college’s Ph.D. program which is 3.0 GPA AND at least 480 on the verbal section of the GRE and 620 on the quantitative section.

Applicants must identify a discipline-specific interest area and have a faculty sponsor from the discipline who agrees to serve as the major professor. The admissions decision is made by the faculty sponsor’s department.

http://health.usf.edu/publichealth/
DEGREE PROGRAM REQUIREMENTS

Core Requirements

Public Health Core (15 credit hours)
- PHC 6000 Epidemiology
- PHC 6050 Biostatistics I
- PHC 6102 Principles of Health Policy and Management
- PHC 6357 Environmental and Occupational Health
- PHC 6410 Social and Behavioral Sciences Applied to Health

7000 Level (12 credit hours)
- Must include Interdisciplinary Doctoral Seminar (3)

Applied Research (15 credit hours)
- PHC 6051 Biostatistics 2
- Evaluation course*

Quantitative Research Methods*
*Two mixed methods courses may substitute for the Quantitative and Qualitative research methods courses

Choose one:
- PHC 6010 Epidemiology Methods I
- PHC 6011 Epidemiology Methods II
- PHC 7001 Practical Issues in Epidemiology

Policy, Leadership and Management (12 credit hours)
- Policy course*
- Planning course*
- Management/Leadership course*

Electives (18 credit hours)
*Each department (or doctoral committee if department guidelines do not exist)

Should choose the appropriate policy, leadership, and management courses for the student’s plan of study.
Discipline-Specific courses should pertain to focal discipline and interest area. Hours can be transferred from Master’s degree.

Culminating Requirements (18 credit hours)

Tools of Research:
Departmental Guidelines will address whether tools of research are required for doctoral students within that department (consistency within the department required). The student must complete a minimum of two of the “Tools of Research” options designated by the department, and approved by the doctoral committee before the student is eligible to take the doctoral qualifying examination.

Written qualifying exam and Practice-Based Dissertation
(Requires 9 credit hours of PHC 7908 Specialized Study, which encompasses a field placement, and 9 credit hours of PHC 7980 Dissertation).

Teaching:
All doctoral students will demonstrate or document proficiency in teaching academic courses at the university level.

Qualifying Exam:
When all required coursework is satisfactorily completed (including tools of research and prerequisites), the student must pass a written comprehensive qualifying examination covering the subject matter in the major and related fields.

Dissertation:
All students must follow the University’s "Guidelines for Dissertations and Theses."
Total Hours = 90
At least 12 hours have to be at the 7000 level

**Doctoral Committee**
A student’s doctoral committee must have a minimum of four members, which includes at least two faculty members from the sponsoring department and a public health professional or practitioner.

**Graduation Requirements**
Students must be in good academic standing to graduate (minimum of an overall 3.0 GPA) and have completed all required and elective coursework, including successful defense of their doctoral dissertation and completion of the teaching requirement.

**COURSES**
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
COLLEGE OF THE ARTS
Changes to Note

The follow curricular changes for the College of The Arts were approved by the USF-Tampa Graduate Council on the date noted.

Course Changes

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Change Hours From</th>
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<tr>
<td>ARC 6367</td>
<td>Advanced Design D</td>
<td>6 to 5</td>
<td>7/6/10</td>
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<tr>
<td>ARC 6976</td>
<td>Master's Project</td>
<td>6 to 5</td>
<td>7/6/10</td>
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</table>
University of South Florida
College of The Arts
4202 E. Fowler Ave FAH110
Tampa, FL 33620

Web address:  http://www.arts.usf.edu/
Email: n/a
Phone: 813-974-2301
Fax: 813-974-2091

College Dean: Ron Jones
Associate Dean: Barton Lee
Graduate Coordinator: Barton Lee

Accreditation:
The Commission on Colleges of the Southern Association of Colleges.

Mission Statement:
The mission of the USF College of The Arts is to conduct scholarly and creative research and to challenge and inspire students to make significant contributions in the arts. The College provides a learning environment that is engaged locally and nationally in contemporary issues and initiatives. The College offers graduate degree programs in art, art history, music, and music education, as well as graduate certificates and advanced graduate certificates.

Major Research Areas:
Contact College for information.

Types of Degrees Offered:
Master of Architecture (M.Arch.)
Master of Arts (M.A.)
Master of Fine Arts (M.F.A.)
Master of Music (M.M.)
Master of Urban and Community Design (M.U.C.D.)
Doctor of Philosophy (Ph.D.)

Name of Programs Offered:

Master of Architecture (M.Arch.)
Architecture (ARC)

Master of Arts (M.A.)
Art History (ATH)
Music Education (MUE)

Master of Fine Arts (M.F.A.)
Art (MFA)
Dramatic Writing (Theatre) (DRW)

Master of Music (M.M.)
Music (MUS)
**Master of Urban and Community Design (M.U.C.D.)**  
Urban and Community Design (UCD)

**Doctor of Philosophy (Ph.D.)**  
Music (DMS)

**Concentrations:**  
- Chamber Music (MCL)  
- Composition (MMC)  
- Conducting (Choral and Instrumental) (MMD)  
- Electro-Acoustic Music (MEM)  
- Jazz Composition (MJC)  
- Jazz Performance (MJP)  
- Music Education (MDE)  
- Performance (MMP)  
- Piano Pedagogy (MPP)  
- Theory (MMT)

**Graduate Certificates Offered:**  
See Graduate Certificates

**COLLEGE REQUIREMENTS**

**College Activities and Events**  
The College of Visual and Performing Arts arranges a full schedule of concerts, plays, lectures, exhibitions, and workshops featuring students, faculty, and visiting artists/scholars. Events are open to the general public and are presented both during the day and in the evening. Special ticket privileges are available to USF students. For more information, contact the CVPA Events Office. Refer to the College website for more information.
The University of South Florida Graduate Catalog is organized with the degree programs offered listed in the section of the college that offers them. For example, the Master of Science degree with a “program” (also known as major) in Biology is listed in the College of Arts and Sciences section. Some colleges offer areas of specialization, or “concentrations” within a degree program.

**EXAMPLE OF PROGRAM PAGE**

![Diagram of ART PROGRAM]

Black denotes degree

Green denotes Program (or Major)

Master of Fine Arts (M.F.A.) Degree

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**EXAMPLE OF CONCENTRATION PAGE**

![Diagram of ADULT EDUCATION CONCENTRATION]

Black denotes degree

Green denotes Program (or Major)

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program With a concentration in Adult Education

Blue denotes Concentration (or area of specialization)

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The name of the program and/or concentration does not appear on the diploma – only the name of the degree (i.e., Master of Arts) is listed. The program and concentration information is listed on the official transcript. Other areas, such as application track, are not listed on the transcript.
ARCHITECTURE PROGRAM

Master of Architecture (M.Arch.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
Fall Deadline: February 1
Fall admissions only.

Minimum Total Hours: 105
Program Level: Masters
CIP Code: 4.0201
Department Code: DEA
Program (Major/Coll) Code: ARC AR
Approved: 1995

CONTACT INFORMATION

College: The Arts
Dept: School of Architecture and Community Design
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

School of Architecture and Community Design Mission Statement:
Our mission is to provide graduate level education that:
- Provides a holistic design curriculum and instruction through a variety of pedagogical approaches.
- Encourages individual and collaborative discoveries.
- Emphasizes continuity between design and construction.
- Builds technical and professional proficiency.
- Offers wide ranging global learning experiences.
- Provides opportunities for engagement with diverse communities.

and for students and faculty to conduct scholarly research and creative activity that:
- Is innovative, disciplinary, and interdisciplinary.
- Advances the understanding of the built environment as it relates to society and culture.
- Contributes to theory and practice in the disciplines of architecture and urbanism.
- Is relevant to local communities.
- Advances the contemporary state of critical practice.
- Provokes (stimulates/instigates) critical discourse on architecture and urbanism.
- Explores (embraces) emerging technologies.

Our aim is to graduate professionals who will be recognized for their design excellence in enhancing the quality of the built environment.

Program Information

The program leading to the accredited Master of Architecture degree is intended for students who have completed baccalaureate degrees in non-architectural majors or with a pre-professional undergraduate major in one of the design professions. The comprehensive and rigorous curriculum prepares graduates for a full range of professional activities. The course of study emphasizes urban architecture and related topics to take advantage of its diverse metropolitan setting in Florida’s Tampa Bay.

The School of Architecture and Community Design (SACD) is home to the Florida Center for Community Design and Research, a non-profit public service institute of the School of Architecture and Community Design. It was founded in 1986 to assist the citizens of Florida in the creation of more livable and sustainable communities through applied community design, multi-disciplinary research, and public education. The diverse staff includes architecture faculty and students, research scientists, and programmer analysts. In addition, the Center has affiliated faculty or graduate students from the Department of Anthropology, Biology, Fine Arts, Geography, and Social Work.
Accreditation and Licensure:
Applicants for architectural licensure in Florida, and most jurisdictions in the United States, normally must have:

- earned a professional degree from a School accredited by the National Architectural Accrediting Board (NAAB)
- completed the Intern Development Program (IDP)
- passed the Architect Registration Examination (ARE)

According to the 2004 edition of the of the NAAB Conditions and Procedures: “In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit US professional degree programs in architecture, recognized two types of degrees: the Bachelor of Architecture and the Master of Architecture. A program may be granted a six-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established educational standards. Masters degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.”

Major Research Areas:
Architecture and Community Design

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

In order to enroll in the M.Arch. Program, students must be accepted by the Graduate School and the School of Architecture and Community Design. These are separate admission processes that involve different application forms, supportive materials, and deadlines. For more detailed information, students should see Graduate Admissions online and visit the SACD website.

Program Admission Requirements
The Master of Architecture (M.Arch.) requires
- a 3.00 undergraduate GPA
- GRE Test Score;
- Portfolio of creative work;
- Completed 3 prerequisite courses: Physics, Calculus, and AutoCAD;
- Written Statement of Intent
- Three letters of recommendation

DEGREE PROGRAM REQUIREMENTS

Minimum Hours Required: 105 hours

The M.Arch. Degree normally requires 105 credit hours of coursework for students with baccalaureate degrees in non-architectural subjects. In order to complete the program in a timely manner, students must complete 15-17 credit hours per semester. Students with undergraduate degrees in architecture or related fields may receive waivers for some required courses for which a grade of B or better was earned.

51 hrs* – Students with four-year pre-professional degrees must complete a minimum of 51 credit hours in the Master of Architecture program.
*The total required credit hours and courses are determined on an individual basis and are dependent upon the school’s review of the student’s individual portfolio and undergraduate transcript upon application for admission.
30 hours** - Students with five or six year professional degrees from a NAAB/CAAB accredited program (U.S. and Canada) must complete a minimum of 30 credit hours in the program.

**the total required credit hours and courses are determined on an individual basis and dependent upon the school's review of the student's individual portfolio and accredited program professional degree upon application for admission.

For more detailed information, interested students should contact the School directly or visit its website.

Course Requirements:
Students who are required to take the minimum of 105 hours must take all of the following:

Prerequisites:
College level:
Physics*
Calculus*
Computer-aided Design
Competence in design/graphics (portfolio)

Design/Graphics
ARC 5361 – Core Design I (9)*
ARC 5362 – Core Design II (9)*
ARC 5363 – Core Design III (6)*
ARC 5364 – Advanced Design A (6)*
ARC 5365 – Advanced Design B (6)
ARC 5366– Advanced Design C (6)
ARC 6367 – Advanced Design D (5)
ARC 5256 – Design Theory (3)*
ARC 5731 – Architectural History I (3)*
ARC 5732 – Architectural History II (3)*
ARC 6398 – Introduction to Community and Urban Design (3)

Technology
ARC 5470 – Intro to Technology (3)*
ARC 5467– Materials and Methods of Construction (3)*
ARC 5587 – Structures I (3)*
ARC 5588 – Structures II (3)*
ARC 5689 – Environmental Technology (3)*
ARC 6481– Design Development (3)

Professional Practice
ARC 6287 – Professional Practice I (3)
ARC 6288 – Professional Practice II (3)

Research/Thesis
ARC 6936 – Research Methods in Architecture (2)
ARC 6976 – Master’s Project (5)

Electives
ARC ___ - Elective 1 (3)
ARC ___ - Elective 2 (3)
ARC ___ - Elective 3 (3)
ARC ___ - Elective 4 (Design) (3)
ARC ___ - Elective 5 (Tech) (3)

*Courses marked by asterisk (*) may be completed in undergraduate pre-professional or similar programs with a grade of B or above and with approval of faculty advisor.
OTHER REQUIREMENTS

Computers
The School of Architecture and Community Design requires each student enrolled in the Advanced Design Studios level, or higher, to possess (through purchase or lease) a NOTEBOOK COMPUTER system.

The notebook computer requirement allows students to conduct the majority of digital work, which is an integral aspect of advanced architectural design education and professional practice, in the design studio. The studio is the primary place for the exchange of design ideas, critique, and synthesis, and the Architecture faculty believes that the student’s regular presence in the studio is critical for maximizing her or his architectural design learning.

The notebook system is required in lieu of a desktop in order to address the limited design studio space available to each student. The mobility of the notebook allows the student to easily and quickly transform a relatively small desk space into a variety of configurations suitable for physical model-making, hand-drawing, hand-drafting, design research, and design writing as well as digital drawing, modeling, and graphic design. The battery-powered notebook allows for maximum computer use within environments with limited electrical power outlets.

The School will continue to maintain high-powered computer systems in the laboratory for intensive computing required for manipulating large digital models, renderings, etc. Students may begin their digital work on their laptops and, if needed, use removable storage and network connections to transfer files to the lab systems for final development. The School provides black and white printers, color and black and white plotters, and scanners in the computer laboratory.

Because the notebook computer system is an educational requirement of the School, the cost of a new computer purchase can be factored in determining a student’s financial need. The student must contact the USF Office of Financial Aid (813-974-4700) to request additional information and a “Budget Adjustment for Computer Purchase” form prior to ordering a computer. The decision regarding a student’s budget adjustment may take 6-8 weeks, so students are strongly encouraged to plan ahead. Only one financial aid budget adjustment up to $2,500 for a new computer can be issued during a three year period.

Portfolios
The faculty requires the submission of portfolios of academic work by each student at two formal portfolio reviews. Students must pass these portfolio reviews in order to advance in the program. The portfolio policy can be found on the School’s website. Students are advised to prepare their design work for inclusion in their portfolios at the end of each design semester, instead of waiting until just before the portfolio due dates. Some expense, varying widely according to reproduction technique and/or ambition, should be anticipated.

Field Trips
Each year students in the fall term beginning students in take a field trip to Savannah, GA. Transportation, lodging and meals ($200-300) are paid by the students. Students in design studios take field trips to such cities as New York, Boston and Chicago in the spring. The cost of these trips may be $200-600 per student.

Student Work
Student work, submitted to the School in satisfaction of course or degree requirements, becomes the physical property of the School. This work may include papers, drawings, models, and other materials in either physical or electronic form. The School assumes no responsibility for safeguarding such materials. At its discretion, this School may retain, return, or discard such materials. The School will not normally discard the materials of currently enrolled students without giving the student a chance to reclaim them.

GPA of 3.00 in Design
In addition to the state-wide requirement that students maintain an overall grade point average(GPA) of 3.00 or better, the Architecture faculty also requires that students maintain a GPA of 3.00 or better in all design courses.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
ART PROGRAM

Master of Fine Arts (M.F.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: January 15
  Fall admission only

Minimum Total Hours: 60

Program Level: Masters

CIP Code: 50.0702

Dept Code: ART

Program (Major/College): MFA FA

Approved: 1967

CONTACT INFORMATION

College: The Arts
Department: School of Art and Art History

Contact Information: [www.grad.usf.edu](http://www.grad.usf.edu)

Other Resources: [www.usf4you](http://www.usf4you)

PROGRAM INFORMATION

The nationally ranked MFA Program in Studio Art has been carefully designed as a course of study that will maximize the student’s potential for in depth investigation of his or her chosen artistic ideas, themes and/or media. Students are encouraged to acquire technical and conceptual skills in more than one medium or studio discipline and to work toward developing techniques that best communicate the content of their artistic pursuits.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools; National Association of Schools of Art and Design.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- A Bachelor’s degree or equivalent from a regionally accredited university or art school
- Meet at least one of the following criteria
  - Earned a “B” (3.0 on a 4.0 scale) average or better in all upper division studies as an undergraduate student.
  - Earned a graduate degree from a regionally accredited institution.
- Approved portfolios are required for admission into the M.F.A. Studio Art Program (see program website).

DEGREE PROGRAM REQUIREMENTS

Specific program requirements include the following:

Total Minimum Hours: 60

**CORE REQUIREMENTS**

<table>
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<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ARH 6798</td>
<td>Contemporary Thought</td>
<td>4</td>
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<tr>
<td></td>
<td>(20th Century Art History or its equivalent is a prerequisite to ARH 6798 Contemporary Thought.)</td>
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<tr>
<td>ART 6890</td>
<td>Graduate Seminar I</td>
<td>3</td>
</tr>
</tbody>
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http://www.arts.usf.edu/
ELECTIVE REQUIREMENTS

ART 5000 and 6000 Studio and Discretionary Electives 41 credits
(3 hours of electives must be taken from a program other than the School of Art and Art History – 4000 level coursework may be used to satisfy this requirement)

ART 6937 Graduate Instructor Methods 2
(This course is an elective option for students who have not worked as a Teaching Assistant.

M.F.A. RESEARCH PROJECT:
Exhibition/Orals/Written Document

OTHER REQUIREMENTS
A course in 20th Century Art History should have been successfully completed at the undergraduate level prior to entering the M.F.A. program. If not, new students must enroll in the USF course during the first year of graduate study. However, financial aid awards will not cover the cost of the course and it cannot be used to satisfy the 60 credits required for the M.F.A. degree.

The School of Art and Art History highly recommends that all students seeking an advanced degree in Art take a minimum of one course in Electronic Media.

The remainder of the program is discretionary and can be planned with the advice of the Graduate Art Advisor in its initial stages. After faculty acceptance of the student’s M.F.A. Proposed Research Project, a Graduate Supervisory Committee selected by the student will serve in an advisory capacity to the student for planning the rest of his/her program.

DIRECTED STUDIES
As part of the student’s studio and discretionary electives, he/she may register with a faculty member under a Directed Study Contract.

The descriptions for Directed Study are as follows:

ART 6940, Selected Topics in Art, Grading option Regular (For a grade), 1-4 credits
Suitable for coursework by contract in an area in which the student has prior skill.

ART 5910, Research, Grading option Regular, 1-4 credits
Suitable for coursework by contract in an area in which the student has little or no prior skill.

ART 6940 and ART 5910 are the only variable credit contracts that M.F.A. students should use until they have formed their Supervisory Committees, as they are the only variable credit contracts with the regular grading option. All M.F.A. students are required to take coursework for a grade until they have formed their Supervisory Committees.

Suitable for graduate level coursework in any area for which the student does not wish a letter grade, or which justifies more than 4 hours of credit. May be used only after the student’s Supervisory Committee is formed. (See S/U Grades)

ART 6911, Directed Research, Grading option S/U, 1-19 credits.
Suitable for graduate level coursework in any area for which the student does not wish a letter grade, or which justifies more than 4 hours of credit. May be used only after the student’s Supervisory Committee is formed. (See S/U Grades)
In practice, ART 6907 and ART 6911 are used interchangeably. As noted, they are not for use by M.F.A. students who have not yet established their Supervisory Committees. The other, media specific, course numbers such as Sculpture or Painting are not often used as they are fixed at 4 credit hours. When they are used it is the policy of the School that they be taken by contract.

**Transfer Credits** Requests for use of transfer credits or credits earned under “special” (aka non-degree seeking) student status should be made when the student applies to the graduate program. The faculty will decide at the time of admission whether or not transfer credits and credits earned as a special student will be used toward the requirements for the M.F.A. degree. Transfer credit and credit earned as a special student to be used toward the students’ M.F.A. degree is limited to 8 semester hours.

**S-U Grades**
A student may not take any course work for a grade of “S/U” until they have elected a supervisory committee, usually by the fourth semester. All course work taken during the first three semesters must be taken in course work assigning letter grades that designate quality points. Appropriate contract numbers would include graduate level studios such as Sculpture or Painting, and ART 5910 for an area in which a graduate student did not have prior skill, or ART 6940 for studies in an area where prior skill exists but the student requires variable credit or the research does not conform to clear categorization by discipline. ART 6907 Independent Study and ART 6911 Directed Research offer only the S/U grading option and are not to be used until after the student has elected a supervisory committee.

**Faculty Evaluations at the End of First, Second and Third Semesters**
At the end of the first, second, and third semesters, students will receive a written evaluation from a faculty committee regarding their progress in the program based on a presentation of their work. A student receiving “unsatisfactory” grades for the first year and third semester evaluations will be dropped from the program.

**M.F.A. Research Project Proposals**
During the fourth semester students will present a proposal for their MFA Research Project. The student must present a body of work and written paper supporting the student’s proposed direction.

If a student’s proposal is satisfactory, he/she will select a graduate Supervisory Committee to oversee the realization of the research project. If a student’s project proposal is not satisfactory, another proposal can be presented before the end of the fourth semester. If the student’s proposal and re-proposal are voted unsatisfactory the student will be dismissed from the program.

**Graduate Supervisory Committees**
The Graduate Supervisory Committee consists of a chair and two members from the Studio Art faculty. The Supervisory Committee must be approved by the MFA Program Director.

**M.F.A. Research Project**
**Exhibition/orals/written document**

The exhibition, written document and the orals conclude the student’s graduate program and take place after all course work is completed. The exhibition is usually during the term the student plans to graduate, typically the second semester of the third year. M.F.A. Research Project exhibitions cannot be scheduled for the summer term.

**Courses**
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
ART HISTORY PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
  Fall: January 15
  Fall admission only.

Minimum Total Hours: 38
Program Level: Masters
CIP Code: 50.0703
Dept Code: ART
Program (Major/College): ATH FA
Approved: 1985

CONTACT INFORMATION

College: The Arts
Department: School of Art and Art History
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

The School of Art and Art History offers high quality M.A. studies in art history from the Middle Ages to the present. The focus of all art history courses and programs is on the intellectual and cultural history of art. Course work is supplemented by practical internships in galleries and museums as well as study-abroad programs. Proficiency in a foreign language relevant to the student's area of specialization is required. Students consult with their advisors to determine the foreign language most appropriate to their scholarly interests.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools; National Association of Schools of Art and Design.

Major Research Areas:
M.A. Art History students are guided by the art history faculty in selecting their area of research after completing a year of graduate study. Because the focus of the Art History M.A. Program is on the cultural and intellectual history of art, graduate thesis work is expected to address an area of art from a contemporary perspective that is complimentary. This program features an endowed chair in modern and contemporary art history.

ADMISSION INFORMATION

Admission is competitive. Student must at least meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Departmental Requirements plus a research paper dealing directly with Art History or a related discipline (literature, political history, psychology, philosophy or classical studies).
- Three letters of recommendation from people who can professionally assess the applicant’s ability to do scholarly and academic work.
- A short essay of one to two pages explaining the applicant’s research interests and goals for graduate study in art history.
- A personal interview by the Art History faculty may be requested.

http://www.arts.usf.edu/
Undergraduate Deficiencies in Art History
- Students pursuing graduate studies in Art History, who do not have an undergraduate degree in Art History will be expected to complete four undergraduate Art History survey courses plus two courses in critical studies.
- Exceptions can be granted only with consent of the Art History faculty.

Language Requirements
Reading knowledge of the foreign language most relevant for study and research in the student’s area of specialization must be acquired before the end of the second semester of enrollment in the program. Please see the Academic Advisor for exceptions to this rule.

The student may take appropriate courses in the Division of Language or Classics Program. Whenever the courses are available, the student should be encouraged to take one of the special one semester foreign language courses designed for graduate students.

When these courses are not available, the student may take two semesters of a beginning foreign language course. These courses may not be taken pass/fail or audit. In order to fulfill the foreign language requirement, the student must receive a letter grade of “B” or better in both courses. Courses taken to fulfill the foreign language requirement will not count toward hours necessary for graduation and the grades in these courses will not be computed in the student’s graduate GPA.

Students may elect to take the GSFLT (Graduate School Foreign Language Test). The student must achieve a score of 450 or above on the test in order to fulfill the foreign language requirement.

Students may take a proficiency exam in which they translate, from a foreign language into English, materials relevant to their particular disciplines. The form of these proficiency exams should be devised by the appropriate language professors from either of these two units.

DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours 38

Qualifying Paper Option Course Requirements:
Eight critical studies seminars in art history 32
Electives 8
Writing the Qualifying Paper 2
Total Credit Hours 42

Thesis Option Course requirements:
Six critical studies seminars in art history 24
Electives 8
Thesis Writing 6
Total Credit Hours 38

To learn about a range of art-historical methods, graduate students are required to take the critical studies seminars in a variety of historical periods and taught by different faculty. A student should, if possible, have at least one graduate class in these three areas:
1) Ancient/Medieval
2) Early Modern (15th - 18th centuries)
3) Modern (19-21st centuries).

Museum experience is encouraged for all students, but course credit for museum internships is limited to those seeking a Certificate in Museum Studies.
Thesis and Qualifying paper options
Students either write a qualifying paper or thesis to complete the requirements of the M.A. program. Students should consult with the Director of the Graduate Program and the faculty to determine which option is the best for them; the final decision rests with the faculty. For either option, a B+ average or above is required in courses taken to fulfill Program graduate credits, for students to move on to this final phase of their graduate studies.

The M.A. in Art History is a two-year program for students who attend full time, but the thesis option often takes longer to complete.

Qualifying paper option
Requires 8 seminars in art history (32 hours), with 8 additional hours of electives, plus 2 hours for preparing the qualifying paper (in the fourth and final semester).

The qualifying paper should demonstrate the student’s ability to do significant art-historical research, to persuade by effective use of evidence and argument, and to write fluently and clearly. The qualifying paper will usually be a substantially revised seminar paper and should be about 15-20 typed pages in length, excluding endnotes, bibliography, illustrations or other materials. Students choosing this option should form a qualifying paper committee by the end of the second semester of their first year. The Committee is composed of a major professor and a second faculty member. Members of the Committee are faculty in the School of Art and Art History, of which one must be tenured or tenure-earning. The major professor will usually be the professor who oversaw the writing of the original seminar paper. Students pursuing this option download the relevant form at http://www.arts.usf.edu/absolutenm/articlefiles/20-GradComApptFrm.pdf. Students are responsible for collecting committee members’ signatures. The M.A. Program Director must authorize all committee assignments with his/her signature.

When submitting drafts of the qualifying paper to committee members, students must allow faculty members two weeks to read any given version. Remember that first drafts usually have to be extensively revised, often several times, before the qualifying paper is accepted. Faculty are not normally available during the summer to read qualifying paper drafts.

The qualifying paper committee must approve the qualifying paper before the student can graduate. Qualifying papers must be submitted two weeks before the last day of classes of the semester in which the student wishes to graduate. The major professor, in consultation with the other faculty member, notifies the Academic Advisor of the School of Art and Art History of approval of the paper before the end of the semester. If a paper is not approved, the student may revise and resubmit it a second time. It is the student’s responsibility to stay abreast of Graduate School deadlines and registration requirements in the final semester, which are available online at http://www.grad.usf.edu.

Thesis option
Requires six seminars in art history (24 hours), with 8 additional hours of electives, plus 6 hours of thesis writing (4 hours in the third semester and 2 hours in the fourth and final semester). Students writing the thesis should work with faculty during the second semester to begin developing potential topics. By the end of the first year, students who wish to write the thesis should decide on a thesis topic with a major professor from the art history faculty. The topic is usually related to research done in a seminar. During the following summer students prepare the thesis proposal. The proposal should define a significant research problem and explain how the topic has the potential to contribute to scholarship in the field; it must include a research plan and a critical review of the scholarly literature on the subject area. Thesis proposals will be presented to faculty and fellow graduate students in a public forum at the beginning of the third semester. Each presentation is followed by discussion, which provides an opportunity for students to receive suggestions and recommendations from faculty and peers. If the proposal is declined, the student will be eligible to pursue a Qualifying Paper.

If the art history faculty approves the thesis topic, the student should form a thesis committee by the end of the semester in which they have successfully proposed a thesis topic, and have thereby achieved thesis candidacy.

The committee is composed of at least two members and the major professor. The major professor and at least one other committee member must be chosen from tenured or tenure-earning art history faculty, or otherwise as approved by the Director of the M.A. program. Students forming the thesis committee download the relevant form at http://www.arts.usf.edu/absolutenm/articlefiles/20-GradComApptFrm.pdf. Students are responsible for collecting
committee members’ signatures. The M.A. Program Director must authorize all committee assignments with his/her signature.

While moderate in length and considerably more limited in scope than a doctoral dissertation, the M.A. thesis must demonstrate the student’s ability to do original, independent research of publishable quality. The thesis should be approximately 35-40 typed pages of text – the usual length of a journal article -- excluding notes, bibliography, illustrations or other materials. When submitting drafts of the thesis to committee members, students must allow faculty members two weeks to read any given version. Remember that first drafts will have to be extensively revised several times before the thesis is accepted. Faculty are not normally available during the summer to read thesis drafts. The thesis committee must approve the final thesis before the student may schedule a date for the M.A. thesis defense. The examining committee will consist of the thesis committee and at least two additional questioners who are chosen by the student in consultation with the thesis committee. Students should keep in mind that the questioners must also be allowed two weeks to read the draft of the thesis after it is accepted for the defense by the thesis committee. The oral defense is open to the public. No defenses are scheduled during the summer. Immediately after the orals, the examining committee meets to determine whether the student has passed the oral examination and whether the thesis is acceptable in its current form.

NOTE: It is usually necessary to make some changes in the thesis after the oral defense. Allow at least one week between the oral exam and the Graduate School deadline so that you will be able to make the changes.

Ideally, the student will complete the thesis and submit it in the fourth semester. It is the student’s responsibility to stay abreast of Graduate School deadlines and registration requirements in the final semester. Check with the USF Graduate School for specific deadlines and requirements for the M.A. thesis and graduation. These are available online at http://www.grad.usf.edu/newsite/thesis.asp. All theses must be submitted electronically.

Transfer of Credit
There is no automatic transfer of special student credit or graduate credit earned at other institutions or from other graduate program in the university towards M.A. degree requirements. The School of Art and Art History has designated a six hour limit on all credit taken as special student status. Any transfer of credit or special student hours to be used toward M.A. degree requirements are only granted after a faculty review at the time the student has been accepted into the M.A. program.

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
DRAMATIC WRITING PROGRAM

Master of Fine Arts (M.F.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines: Closed for new admissions
Minimum Total Hours: n/a
Program Level: Masters
CIP Code: 50.0504
Dept Code: TAR
Program (Major/College): DRW FA
Approved: 2002

CONTACT INFORMATION

College: The Arts
Department: School of Theatre and Dance
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Currently, students are not being admitted into this program.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

DEGREE PROGRAM REQUIREMENTS

Contact program for information

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
MUSCIC EDUCATION PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:

U.S. Students:
- Fall: February 15
- Spring: October 15
- Summer: February 1

International Students:
- Fall: February 15
- Spring: October 1
- Summer: February 1

Minimum Total Hours: 32
Program Level: Masters
CIP Code: 13.1312
Dept Code: MUS
Program (Major/College): MUE FA
Approved: 1962

CONTACT INFORMATION

College: The Arts
Department: School of Music
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Music Faculty, Alumni, and Students
Perhaps the most compelling reason to study music at the University of South Florida is the opportunity to work with our superb music faculty. These gifted, dedicated artists/scholars are among the preeminent leaders in their fields and have been carefully chosen for their professional training, excellence in musical performance and research, and pedagogical expertise. They are featured on many professional recordings and appear in prestigious concert venues around the world. Their compositions are premiered globally. Their scholarship is published in the leading research journals, books, and monographs in their disciplines. The School of Music also invites guest composers, conductors, and performing musicians to enhance its performances and to provide master classes, symposia, and clinics for students and the public. Many USF music alumni are currently performers in a variety of concert settings and successful teachers in public schools, colleges, and universities around the country in a variety of concert settings. The School of Music at USF offers the student the opportunity to study with distinguished faculty and to be in the company of other superior music students for an exciting and exacting period of study.

Master of Arts Program Description
Graduate education in music education at the University of South Florida is focused on research. The Master of Arts degree in music education empowers students to become thoughtful consumers of research in music education. This program captures a balanced array of courses in music education, research techniques, music theory/history/literature, and electives in music. It concludes with a comprehensive examination. Variability of the program depends on individual interests and needs. Many of the offerings for the Master of Arts degree in music education are offered via the internet in a distance learning format. It is possible to complete the entire degree through distance learning. Details on distance learning coursework are available at:
http://musiceducation.arts.usf.edu

Accreditation:
Commission on Colleges of the Southern Association of Colleges and Schools (S.A.C.S.); National Association of Schools of Music (N.A.S.M.). National Council for Accreditation of Teacher Education (N.C.A.T.E.)
Major Research Areas:
Alternate Methods, Community Collaboration, Contemporary Changes, Early Childhood, General Music, International Perspectives, Multicultural Issues, Technology, Teacher Behaviors, Philosophy, Psychology, Sociology.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
• Diagnostic Tests in music history/literature and theory must be taken prior to the first semester of study. Based upon the scores, the music faculty may require remediation in one or both areas of study. Graduate review courses are offered online each Fall semester.

• The Graduate Record Examination (GRE) is not required.

• An official Transcript for a completed undergraduate degree in music (from an accredited program) is required with the application.

• The overall Grade Point Average (GPA) for upper division credit hours must be at least 3.0, and the GPA for all music, music education, and education courses included in the undergraduate degree must be at least 3.0.

• A Résumé

• A minimum of three (3) current Letters of Recommendation from people qualified to speak on behalf of the applicant’s professional capabilities must accompany the application.

• At least two years of K-12 music teaching experience, or the equivalent, are required.

• However, final approval for admission must be granted by the music education faculty.

• International students must include copies of graduation Certificates and/or Diplomas (in addition to official transcripts) with their applications. If English is not their primary language, they must have at least a score of 550 (or 213 for the computer version) on the Test of English as a Foreign Language (TOEFL), or they must have completed English Language Institute (ELI) Level 4 or Level 5 and have passed the ELI Exit Assessment.

• Credit hours earned in Certificate programs at USF may be applied toward a master’s degree. M.A. students must successfully complete a Comprehensive Examination at the end of the program of study. Details regarding this examination may be obtained from the Director of Graduate Studies in Music.

It is important to enroll in the term of admission. If postponement is necessary, you should request that your application be updated for the term when you will register for classes.

DEGREE PROGRAM REQUIREMENTS

Sequence of Events and Protocols
Admission (see above)
Completion of Courses (see below)
Application For Graduation (due by beginning of final semester)
Comprehensive Examination
• Selection of Committee, including major professor (chair) and two other professors with whom they have studied. The student and the committee must sign a contract available from the Director of Graduate Studies in Music at the beginning of the final term.
- Written Examination
  - Collection of examination questions by chair from committee members
  - Presentation of questions to candidate with deadline of one week for completion
  - Candidate submits questions and answers to chair one week before oral examination
- Oral Examination (meeting for candidate and committee members scheduled by chair)
- Thesis submission and thesis defense (only for those who elect to write a thesis)
- Final recommendation with signatures presented to Program Director of Graduate Studies in Music

**Total Minimum Hours** 30

**CORE REQUIREMENTS**
- MUS 6793  Techniques of Research in Music and Music Education  3
- Two MUL, MUT and/or MUH 6000 courses  6
  
  *Passing scores on appropriate diagnostic exams required*

**Required Courses**
- EDF 6432  Foundations of Measurement  3
- MUE 6080  Foundations and Principles of Music Education  3
- MUS 6910  Directed Research  6
  
  *(PR: MUS 6793, EDF 6432, MUE 6080)*

A research project, such as an action research project in curriculum development, with the guidance of a music education faculty member. The final presentation must involve a written report of the project and a multimedia presentation. This project may be completed over two semesters if necessary (including summer)

**ELECTIVE REQUIREMENTS**
9

*(Must include at least one MUE course/special topics)*

The responsibility for seeing that all graduation requirements are met rests with the student.

**COURSES**
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
MUSIC PROGRAM

Master of Music (M.M.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
U.S. Students:
Fall: February 15
Spring: October 15
Summer: February 15

International Students:
Fall: February 15
Spring: October 1
Summer: February 1

Minimum Total Hours: 30
Program Level: Masters
CIP Code: 50.0903
Dept Code: MUS
Program (Major/College): MUS FA
Approved: 1984

Concentrations:
- Chamber Music (MCL) (Piano and Strings only)
- Composition (MMC)
- Conducting (MMD) (Choral or Instrumental)
- Electro-Acoustic Music (MEM)
- Jazz Composition (MJC)
- Jazz Performance (MJP)
- Performance (MMP)
- Piano Pedagogy (MMP)
- Theory (MMT)

CONTACT INFORMATION

College: The Arts
Department: School of Music
Contact Information: www.grad.usf.edu
Other Resources: www.usf4you

PROGRAM INFORMATION

Music Faculty, Alumni, and Students
Perhaps the most compelling reason to study music at the University of South Florida is the opportunity to work with our superb music faculty. These gifted, dedicated artists/scholars are among the preeminent leaders in their fields and have been carefully chosen for their professional training, excellence in musical performance and research, and pedagogical expertise. They are featured on many professional recordings and appear in prestigious concert venues around the world. Their compositions are premiered globally. Their scholarship is published in the leading research journals, books, and monographs in their disciplines. The School of Music also invites guest composers, conductors, and performing musicians to enhance its performances and to provide master classes, symposia, and clinics for students and the public. Many USF music alumni are currently performers in a variety of concert settings and successful teachers in public schools, colleges, and universities around the country in a variety of concert settings. The School of Music at USF offers the student the opportunity to study with distinguished faculty and to be in the company of other superior music students for an exciting and exacting period of study.

The Master of Music degree provides students with an opportunity to pursue intense, focused study in their music specialty, coupled with a vigorous, balanced curriculum in music theory, music literature, and electives. Students in this program are mentored expertly by senior faculty and exhibit mastery of their specialty at the end of the course of study by way of appropriate capstone experiences, including recitals or theses and comprehensive examinations. The
provisions and balance of these experiences comport precisely with the curriculum guidelines required by the national Association of Schools of Music.

Accreditation:
Commission on Colleges of the Southern Association of College and Schools (SACS); full member, National Association of Schools of Music (NASM)

Major Research Areas:
Chamber Music, Composition, Conducting, Jazz Studies, Music Performance, Music Theory, Pedagogy, Electronic Music.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Successful auditions and/or interviews are required for admission into chamber music, conducting, electro-acoustic music, performance, pedagogy, and theory programs. Approved portfolios are required for admission into composition (jazz or traditional).

- Diagnostic tests in music theory and history must be taken before classes begin in the first semester. Based upon the scores, the music faculty may require remediation in one or both areas of study in order to qualify the student for permission to enroll in certain courses. Graduate review courses are offered each fall semester.

- The Graduate Record Examination (GRE) is not required for the M.M. Degree program.

- Students who do not enroll in the semester for which they applied and were admitted must receive permission from the Director of Graduate Studies in music to enroll in courses in the following semester(s). This procedure is to determine the availability of applied and academic courses in music.

- An official undergraduate Transcript for a completed undergraduate degree in music (from an accredited program) is required with the application.

- The overall Grade Point Average (GPA) for upper division credit hours must be at least 3.0 and the GPA for all music courses included in the undergraduate degree must be at least 3.0. International students must include copies of graduation Certificates and/or Diplomas (in addition to official transcripts) with their applications.

- International students must have at least a score of 550 (or 213 for the computer version) on the Test of English as a Foreign Language (TOEFL), or they must have completed English Language Institute (ELI) Level 4 or Level 5 and have passed the ELI Exit Assessment.

- Credit hours earned in Music Certificate Programs at USF may be applied toward a master’s degree.

- M.M. students must successfully complete a Comprehensive Examination at the end of the program of study. Details regarding this examination may be obtained from the Director of Graduate Studies in Music.
DEGREE PROGRAM REQUIREMENTS

ADMISSION
- Admission to USF Graduate Studies with acceptable transcript(s)
- Admission to School of Music through successful audition and/or interview (chamber music, conducting, electro-acoustic music, jazz performance, performance, pedagogy, and theory), or approved portfolio (classical and jazz composition)
- Diagnostic Music Tests taken prior to classes in first term. Students may be required to enroll in a remedial history and/or theory course as a consequence of their scores.

COMPLETION OF COURSES
(required for degree program): Common Core, Major Area, Electives (specifics follow)

APPLICATION FOR GRADUATION
(due by beginning of final semester)

FINAL PROJECT (according to major area)
- Composition(s) as required by composition faculty, or
- Recital (includes recital approval hearing one to two weeks in advance of recital), or
- Thesis (includes Oral Defense)

COMPREHENSIVE EXAMINATION
Selection of Committee, including major professor (committee chair) and two other professors from varying concentrations in music with whom they have studied. One member must be from the academic area. The student and the committee must sign a contract available from the Director of Graduate Studies in Music at the beginning of the final term.
- Written Examination
  1) Collection of examination questions by chair from committee members
  2) Presentation of questions to candidate with deadline of one week for completion (theory majors take a two-hour written examination.)
  3) Candidate submits questions and answers to chair one week before oral examination
- Oral Examination (meeting for candidate and committee members scheduled by chair)
- Final Recommendation with signatures presented to the Program Director of Graduate Studies in Music

The course outlines below are mandatory for the respective fields of study. Secondary applied music courses may be taken in conjunction with MUS 6976, Graduate Recital, if two semesters of four-credit hour major study have already been completed.

Master of Music Degree (M.M.)
Program requires a minimum of 30 credit hours.

CORE REQUIREMENTS
MUS 6793 (3) Techniques of Research in Music and Music Education

In addition, students in all concentrations must choose 2 of the following 7 courses.
One must be a 20th/21st century course, as indicated by the asterisks.
- MUT 6545 Analysis of 18th and 19th Century Music (3)
- MUT 6626* Analysis of 20th Century Music (3)
- MUL 6375* Twentieth Century Music Literature (3)
- MUL 6505 Symphonic Literature (3)
- MUT 6586 Critical Analysis/History (2)
- MUS 5905* Intercultural Composers (3)
- MUT 6665 Jazz Styles and Analysis (2)
NOTE: Music Theory majors must take both MUT 6545 & 6626. MUT 6665 is required for Jazz Composition and Jazz Performance majors.

SPECIFIC CONCENTRATION REQUIREMENTS (beyond the requirements above)

<table>
<thead>
<tr>
<th>CHAMBER MUSIC (MCL)</th>
<th>30 credit hours</th>
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<tbody>
<tr>
<td>MVK or MVS 6XXX - Applied Studio (for piano and string students, only)</td>
<td>8 (4 credits; taken two terms)</td>
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<tr>
<td>MUS 6906 - Chamber Music Ensemble</td>
<td>6</td>
</tr>
<tr>
<td>MUS 6976 - Recital (Chamber Music, only)</td>
<td>2</td>
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<td>Must Include:</td>
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<tr>
<td>1) Major standard sonata</td>
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<td>2) Major standard work for 3 or more instruments</td>
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<tr>
<td>3) Major contemporary chamber work for 2 or more instruments</td>
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<tr>
<td>Scholarship Requirement for Piano: STUDIO ACCOMPANYING</td>
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<tr>
<th>CHORAL CONDUCTING (MMD)</th>
<th>34 credit hours</th>
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<tbody>
<tr>
<td>MUG 6205 Advanced Choral Conducting</td>
<td>8 (2 credits; taken four terms; variable content)</td>
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<tr>
<td>MUG 6930 - Advanced Choral Techniques</td>
<td>3</td>
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<tr>
<td>MUL 6655 - Choral Literature 1500-1800</td>
<td>3</td>
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<tr>
<td>MUL 6656 - Choral Literature 1800-Present</td>
<td>3</td>
</tr>
<tr>
<td>MUN 6XXX - Ensemble</td>
<td>2 (1 credit; taken two terms)</td>
</tr>
<tr>
<td>MUS 6976 - Recital</td>
<td>2</td>
</tr>
<tr>
<td>Electives – (minimum 4 hours)</td>
<td>to complete 30 total hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INSTRUMENTAL CONDUCTING (MMD)</th>
<th>30 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUG 6307 - Band/Wind Ensemble Conducting</td>
<td>6 (3 credits; taken two terms)</td>
</tr>
<tr>
<td>MUL 6555 - Band/Wind Ensemble Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUN 6XXX – Ensemble</td>
<td>2 (1 credit; taken two terms)</td>
</tr>
<tr>
<td>MUS 6976 - Recital</td>
<td>2</td>
</tr>
<tr>
<td>Electives – (minimum 8 hours)</td>
<td>to complete 30 total hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JAZZ COMPOSITION (MJC)</th>
<th>30 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUC 6626 - Jazz Composition</td>
<td>8 (4 credits; taken two terms)</td>
</tr>
<tr>
<td>MUC 6625 - Seminar: Jazz Compositional Styles</td>
<td>4 (2 credits; taken two terms)</td>
</tr>
<tr>
<td>MUN 6XXX – Ensemble</td>
<td>2 (1 credit; taken two terms)</td>
</tr>
<tr>
<td>MUS 6976 – Recital</td>
<td>2</td>
</tr>
<tr>
<td>Electives – (minimum 5 hours)</td>
<td>to complete 30 total hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JAZZ PERFORMANCE (MJP)</th>
<th>30 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MVJ 6XXX - Applied Jazz</td>
<td>8 (4 credits; taken two terms)</td>
</tr>
<tr>
<td>MUT 6665 - Jazz Styles and Analysis</td>
<td>4 (2 credits; taken two terms)</td>
</tr>
<tr>
<td>MUN 6XXX – Ensemble</td>
<td>2 (1 credit; taken two terms)</td>
</tr>
<tr>
<td>MUS 6976 - Recital</td>
<td>2</td>
</tr>
<tr>
<td>Electives – (minimum 5 hours)</td>
<td>to complete 30 total hours</td>
</tr>
</tbody>
</table>
### MUSIC COMPOSITION (MMC)  
- MUC 6251 – Composition  
- MUS 6976 - Recital  
  (or MUS 6971, Thesis w/oral defense)  
- Electives – (minimum 11 hours)  

### MUSIC PERFORMANCE (MMP)  
- MV? 6XXX - Applied Studio  
- MUN 6XXX – Ensemble  
- MUS 6976 – Recital  
- Electives – (minimum 9 hours)  
  Piano Majors must include:  
  - MUL 6410 Keyboard Repertory I  
  - MUL 6411 Keyboard Repertory II  

### MUSIC THEORY (MMT)  
- MUT 6545 - Analysis of 18th and 19th C. Music  
- MUT 6586 - Critical Analysis: History  
- MUT 6626 - Analysis of 20th C. Music  
- MUT 6627 - Schenkerian Analysis  
- MUT 6751 - Teaching of Music Theory  
- MUT 6760 - History of Music Theory  
- MUS 6971 - Thesis (Oral Defense required)  
- Electives – (minimum 6 hours)  
  *MUT 6545 and MUT 6626 included in Core Requirements*

### PIANO PEDAGOGY (MPP)  
- MVK 5XXX - Applied Studio  
- MUL 6410 Keyboard Repertory 1 (Fall)  
- MUL 6411 Keyboard Repertory 2 (Spring)  
- MVK 6650 Graduate Piano Pedagogy 1  
- MVK 6651 Graduate Piano Pedagogy 2  
- MUN 6XXX – Ensemble  
- MUS 6976 – Recital  
- Electives –(minimum 5 hours)  

### ELECTRO-ACOUSTIC MUSIC (MEM)  
- MUC 6444 Electronic Music: Analog/Digital Systems Research I  
- MUC 6445 Electronic Music: Analog/Digital Systems Research II  
- MUS 5905 Computer Music Research  
- MUS 6976 - Recital  
  (or MUS 6971, Thesis w/oral defense)  
- Electives – (minimum 7 hours)

---

Courses are subject to change. Summer and online courses may be offered. All inquiries should be directed to the Director of Graduate Studies in Music.

The responsibility for seeing that all graduation requirements are met rests with the student.

### COURSES  
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
MUSIC PROGRAM

Doctor of Philosophy (Ph.D.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
U.S. Students:
  Fall: February 15
  Spring: October 15
  Summer: February 15

International Students:
  Fall: February 15
  Spring: October 1
  Summer: February 1

Minimum Total Hours: 60
Program Level: Doctoral
CIP Code: 50.0901
Dept Code: MUS
Program (Major/College): DMS FA
Approved: 2003

Concentrations:
  Music Education (MDE)

Doctoral applicants are encouraged to contact Dr. C. Victor Fung, Director of the Doctoral Music Education Program, as early as possible at fung@usf.edu

CONTACT INFORMATION

College: The Arts
Department: School of Music
Contact Information: www.grad.usf.edu
Financial Aid Deadlines: Fall Admissions Only

<table>
<thead>
<tr>
<th>Graduate Assistantships</th>
<th>Residency Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One academic year of full-time study. Successive summers may be considered.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fellowship</th>
<th>$13,000 to $22,000 per year plus Tuition Waiver</th>
<th>Application form:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><a href="http://music.arts.usf.edu/content/templat">http://music.arts.usf.edu/content/templat</a> es?z=154</td>
</tr>
</tbody>
</table>

| Fellowship | Feb1 | No application. By faculty recommendation only. |

PROGRAM INFORMATION

Music Faculty, Alumni, and Students
Perhaps the most compelling reason to study music at the University of South Florida is the opportunity to work with our superb music faculty. These gifted, dedicated artists/scholars are among the preeminent leaders in their fields and have been carefully chosen for their professional training, excellence in musical performance and research, and pedagogical expertise. They are featured on many professional recordings and appear in prestigious concert venues around the world. Their compositions are premiered globally. Their scholarship is published in the leading research journals, books, and monographs in their disciplines. The School of Music also invites guest composers, conductors, and performing musicians to enhance its performances and to provide master classes, symposia, and clinics for students and the public. Many USF music alumni are currently performers in a variety of concert settings and successful teachers in public schools, colleges, and universities around the country in a variety of concert settings. The School of Music at USF offers the student the opportunity to study with distinguished faculty and to be in the company of other superior music students for an exciting and exciting period of study.

Ph.D. in Music Education Program Description
The Doctor of Philosophy in Music Education is the terminal degree in our field. At the University of South Florida, this program is intended for the aspiring pinnacle leader in music education research, teaching, and administration. The curriculum prepares the student to engage in original research in music education and related fields (arts education, music technology, music psychology, etc.). In coordination with faculty mentors, the student has great flexibility in designing a program that fits his/her interests and strengths. Admission requirements include an interview with the music education faculty and the submission of writing samples and GRE scores. A limited number of fellowships and assistantships are available to outstanding students.
Accreditation:
Commission on Colleges of the Southern Association of Colleges and Schools (S.A.C.S.); National Association of Schools of Music (N.A.S.M.); National Council for Accreditation of Teacher Education (N.C.A.T.E.);

Major Research Areas:
Alternative Methods, Community Collaboration, Contemporary Changes, Early Childhood, General Music, International Perspectives, Multicultural Issues, Philosophy, Psychology, Sociology, Teacher Behaviors, Technology

Music Education Concentration in the Ph.D. in Music Program Description
The Ph.D. program varies, depending on individual interests and needs. All applicants are expected to have two or more years of teaching experience in a public or private school (or its equivalent). A dissertation and dissertation defense are required. The Ph.D. degree empowers students to become scholarly producers of research in music education.

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements

- Official Application to the USF Graduate School for the Ph.D. Program in Music (code DMS) with a concentration in Music Education (code MDE) in Music (code MUS) in COTA (code FA).

- Master’s degree from an accredited institution. Official undergraduate and graduate transcripts must be received at the same time as the application for admission. Credits to be considered for transfer to this degree program, which are reflected on other transcripts besides the degree-bearing transcripts, must also be sent for consideration by the faculty.

- Minimum GPA of 3.0 for upper division of undergraduate degree (all credits beyond the first 60), and minimum GPA of 3.5 for master’s degree.

- The GRE General Test (after October 1, 2002) must be taken and results must be delivered to Graduate Studies in the School of Music as part of the admission application process.

- Minimum of two years of teaching experience in elementary and/or secondary school(s), or the equivalent.

- Successful interview with the music education faculty, either in person or by other arrangement. Prior to the interview, the following must be reviewed by the music education faculty:
  - At least three letters of recommendation from people qualified to speak on behalf of the applicant’s academic and professional capabilities.
  - Sample of the applicant’s best academic writing.
  - Curriculum vita.
  - 15-20 minute video recording of the applicant teaching music.
  - Personal goal statement.

- International students must include copies of graduation Certificates and Diplomas (in addition to official transcripts) with their applications. If English is not their primary language, they must have at least a score of 550 (or 213 for the computer version) on the Test of English as a Foreign Language (TOEFL), or they must have completed English Language Institute (ELI) Level 4 or Level 5 and have passed the ELI Exit Assessment.
DEGREE PROGRAM REQUIREMENTS

COMPLETION OF COURSES
- Appointment of Doctoral Committee
- Comprehensive Qualifying Examination
- Admission to Candidacy

SUBMISSION OF DISSERTATION
APPLICATION FOR GRADUATION (due by beginning of final semester)
DISSERTATION PROPOSAL
DISSERTATION DEFENSE
Final Oral Examination
Final recommendation with signatures presented to Program Director of Graduate Studies in Music

CORE REQUIREMENTS

<table>
<thead>
<tr>
<th>Specialization</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUE 7815 Psychology of Music</td>
<td>3</td>
</tr>
<tr>
<td>MUE 7835 Philosophical and Historical Issues in Music Education</td>
<td>3</td>
</tr>
<tr>
<td>MUE 7939 Center for Music Education Research (four semesters 1+1+1+2 hrs) Seminar</td>
<td>5</td>
</tr>
</tbody>
</table>

Choose 5 of 6:
- MUE 7746 Measurement and Evaluation in Music: 2
- MUE 7786 Qualitative Methods in Music Education: 2
- MUE 7816 Music Cognition: 2
- MUE 7855 International Perspectives in Music Education: 2
- MUE 7937 Special Topics in Music Education: 2-3
- MUE 7990 Seminar on Music in Higher Education: 2

Cognate
Choice of graduate courses in music from the following:
- Jazz Studies, Music Composition, Music Conducting, Music History, Music Literature, Music Performance, Music Theory, (Or an education-related field)

<table>
<thead>
<tr>
<th>Statistics and Measurement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF 6407 Statistical Analysis for Educational Research I</td>
<td>4</td>
</tr>
<tr>
<td>EDF 7408 Statistical Analysis for Educational Research II</td>
<td>4</td>
</tr>
<tr>
<td>EDF 7410 Design of Systematic Studies in Education</td>
<td>4</td>
</tr>
</tbody>
</table>

Dissertation
Prerequisite: Comprehensive Qualifying Examination
MUE 7980 Dissertation: 18

Total Beyond the Master’s Degree: 60 hours

The responsibility for seeing that all graduation requirements are met rests with the student.

COURSES
See [http://www.ugs.usf.edu/sab/sabs.cfm](http://www.ugs.usf.edu/sab/sabs.cfm)
URBAN AND COMMUNITY DESIGN PROGRAM

Master of Urban and Community Design (M.U.C.D.) Degree

**DEGREE INFORMATION**

<table>
<thead>
<tr>
<th>Program Admission Deadlines:</th>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall: February 15</td>
<td>College: The Arts</td>
</tr>
<tr>
<td>Spring: October 15</td>
<td>Department: School of Architecture</td>
</tr>
<tr>
<td>Summer: February 1</td>
<td>Contact Information: <a href="http://www.grad.usf.edu">www.grad.usf.edu</a></td>
</tr>
</tbody>
</table>

Minimum Total Hours: 39

Program Level: Masters

CIP Code: 04.0401

Dept Code: ARC

Program (Major/College): UCD FA

Approved: 2008

**PROGRAM INFORMATION**

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools

**ADMISSION INFORMATION**

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

**DEGREE PROGRAM REQUIREMENTS**

<table>
<thead>
<tr>
<th>Total Minimum Hours</th>
<th>39</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE REQUIREMENTS:</td>
<td></td>
</tr>
<tr>
<td>Reading and Representing the City</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HISTORY and THEORY</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban and Community Design</td>
<td>3</td>
</tr>
<tr>
<td>Current Issues in Urbanism</td>
<td>2</td>
</tr>
<tr>
<td>And any ONE from below</td>
<td>3</td>
</tr>
<tr>
<td>The City*</td>
<td>3</td>
</tr>
<tr>
<td>Urban Design Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Designing to Build Community</td>
<td>3</td>
</tr>
<tr>
<td>Urban Form</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENVIRONMENT and BEHAVIOR</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any ONE from below</td>
<td></td>
</tr>
<tr>
<td>Life between Buildings - Public Space in the City*</td>
<td>3</td>
</tr>
<tr>
<td>Social and Behavioral Factors in Urban Design</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DESIGN POLICY &amp; REGULATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Any ONE from below</td>
<td>3</td>
</tr>
<tr>
<td>Urban Design Policy</td>
<td>3</td>
</tr>
<tr>
<td>Tools of Urban Design – land-use, zoning, PUD, overlays</td>
<td>4</td>
</tr>
</tbody>
</table>

http://www.arts.usf.edu/
PROCESS
Any ONE from below 3
  Real Estate Development and Financing 3
  Historic Districts, Downtown and Main Street Revitalization Strategies 3

PRACTICE 12
  Urban Design Studio* 6
  Community Design Studio 6

THESIS REQUIREMENTS
THESIS 6971 6

COURSES
See http://www.ugs.usf.edu/sab/sabs.cfm
GRADUATE SCHOOL
ADMINISTERED
PROGRAMS

http://www.grad.usf.edu/
Changes to Note

There were no curricular changes to the College of Graduate Studies programs for the 2011-2012 Graduate Catalog.
University of South Florida
Graduate School (College of Graduate Studies)
4202 E. Fowler Ave BEH 304
Tampa, FL 33620

Web address: http://www.grad.usf.edu/
Email: n/a
Phone: 813-974-2846
Fax: 813-974-5762

College Dean: Karen Liller, Ph.D.
Associate Dean: Rick Pollenz, Ph.D.

Accreditation:
The Commission on Colleges of the Southern Association of Colleges.

Mission Statement:
The University of South Florida Graduate School serves as the university hub of leadership for graduate education producing present day and future global leaders, one student at a time.

College Information:
The College of Graduate Studies is housed in the Graduate School and serves as the College for the following degree program.

Degrees Offered:
MASTER OF ARTS (M.A.)

Name of Programs Offered:
MAJOR OF ARTS (M.A.)
Global Sustainability
The University of South Florida Graduate Catalog is organized with the degree programs offered listed in the section of the college that offers them. For example, the Master of Science degree with a “program” (also known as major) in Biology is listed in the College of Arts and Sciences section. Some colleges offer areas of specialization, or “concentrations” within a degree program.

EXAMPLE OF PROGRAM PAGE

GLOBAL SUSTAINABILITY PROGRAM

Master of Arts (M.A.) Degree

EXAMPLE OF CONCENTRATION PAGE

ADULT EDUCATION CONCENTRATION

Doctor of Philosophy (Ph.D.) Degree in the Curriculum and Instruction Program

With a concentration in Adult Education

The name of the program and/or concentration does not appear on the diploma – only the name of the degree (i.e., Master of Arts) is listed. The program and concentration information is listed on the official transcript. Other areas, such as application track, are not listed on the transcript.
GLOBAL SUSTAINABILITY PROGRAM

Master of Arts (M.A.) Degree

DEGREE INFORMATION

Program Admission Deadlines:
- Fall: U.S. - February 15, International - January 2
Minimum Total Hours: 33
Program Level: Masters
CIP Code: 30.3301
Dept Code: GRS
Program (Major/College): GBS / GS

CONTACT INFORMATION

College: Graduate Studies – Interdisciplinary
Department: School of Sustainability
Contact Information: www.grad.usf.edu

PROGRAM INFORMATION

This innovative 33 credit hour Master of Arts Program will prepare students for careers in global sustainability that require teamwork and program planning skills to solve sustainability issues in developing and developed nations. The delivery method includes in-class and several online offerings. Students will be admitted as cohorts of 20-25 students and will interact with one another through various mechanisms, including residency requirements, Elluminate and a Blackboard Organization site.

Accreditation:
Accredited by the Commission on Colleges of the Southern Association of College and Schools.

Major Research Areas: sustainability, global, program planning, green communities

ADMISSION INFORMATION

Must meet University requirements (see Graduate Admissions) as well as requirements listed below.

Program Admission Requirements
- GRE is not required
- GPA of at least 3.0 or greater;
- 250-500 word essay that includes the student’s academic and professional background, reasons for pursuing this degree, and their professional goals in terms of contributing to global sustainability.
- Portfolio – the applicant may provide a portfolio demonstrating prior work that focuses on sustainability populations
- Applicants whose native language is not English or who have not earned a degree in the United States must also submit TOEFL scores earned within two (2) years of the desired term of entry. A minimum total score of 79 on the internet-based test or 550 on the paper-based test are required. Applications submitted with TOEFL scores that do not meet the minimum requirements will be denied. The TOEFL requirement may be waived if the applicant meets one of the following conditions:
  - The applicant’s native language is English, or
  - Has scored 500 or higher on the GRE Verbal Test, or
  - Has earned a college degree at a U.S. institution of higher learning, or
  - Has earned a college degree from an institution whose language of instruction is English (must be noted on the transcript), or
  - Has scored 6.5 on International English Language Testing System (IELTS) http://www.ielts.org/.

http://www.grad.usf.edu/
DEGREE PROGRAM REQUIREMENTS

Total Minimum Hours Required: 33 hours

Core Requirements 15 hours

- IDS 6215 Interdisciplinary Seminar in Global Sustainability (3)
- PHC 6934* Public Health Topics in Global Sustainability (3)
- GEB 6930 Special Topics in Management and Sustainability (3)
- IDS 6946 Internship (6)

Required Internship at a domestic setting or an International Partnering Institution done within the last few semesters of the program.

Focus Area** 15 hours

- ANG 6469 Foundations of Medical Anthropology (3)
- CGN 6933 Green Infrastructure for Sustainable Communities (3)
- ENV 6666 Aquatic Chemistry (3)
- EVR 6216 Advances in Water Quality Policy and Management (3)
- GEO 6286 Advances in Water Resources (3)

**Other courses in global sustainability may be substituted for the proposed focus courses as approved by the program director.

Project 3 hours

- IDS 6951 Project (3)

COURSES

See http://www.ugs.usf.edu/sab/sabs.cfm
Section 23

Graduate Course Information

To view the Course Listing with Course Descriptions, see next section or check the Search-a-Bull Database online at: http://www.ugs.usf.edu/sab/sabs.cfm. SCNS website: http://scns.fldoe.org/scns/public/pb_inst_dtl.jsp

Courses offered for credit by the University of South Florida are listed with the program or college that offers them. The first line of each description includes the State Common Course prefix and number (see below), title of the course, and number of credits.

Florida’s Statewide Course Numbering System

Courses in this catalog are identified by prefixes and numbers were assigned by Florida’s Statewide Course Numbering System. This common numbering system is used by all public postsecondary institutions in Florida and by participating non-public institutions. The major purpose of this system is to facilitate the transfer of courses between participating institutions. Each participating institution controls the title, credit, and content of its own courses and recommends the first digit of the course number to indicate the level at which students normally take the course. Course prefixes and the last three digits of the course numbers are assigned by members of faculty discipline committees appointed for that purpose by the Florida Department of Education in Tallahassee. Individuals nominated to serve on these committees are selected to maintain a representative balance as to type of institution and discipline field or specialization.

The course prefix and each digit in the course number have a meaning in the Statewide Course Numbering System (SCNS). The list of course prefixes and numbers, along with their generic titles, is referred to as the “SCNS taxonomy.” Descriptions of the content of courses are referred to as “statewide course details.”

Courses are created using the State Course wide Numbering System (SCNS). The following information is from the SCNS Handbook. For more information visit their website at: http://scns.fldoe.org/scns/public/pb_index.jsp#

The SCNS uses a course designation which consists of a three-letter prefix and a four digit number and, when necessary, a one-letter laboratory (L) or lecture/laboratory (C) suffix.

Example:

<table>
<thead>
<tr>
<th>SCNS COURSE ID</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AML</td>
<td>6</td>
</tr>
<tr>
<td>Prefix</td>
<td>Level</td>
</tr>
<tr>
<td>017</td>
<td>Denotes</td>
</tr>
<tr>
<td>-</td>
<td>Laboratory</td>
</tr>
<tr>
<td></td>
<td>Content</td>
</tr>
<tr>
<td></td>
<td>Suffix</td>
</tr>
</tbody>
</table>

Explanation: AML 6017, Studies in American Literature to 1860

American Studies course taught at the graduate level (no lab).

A level code, which roughly corresponds to the year in college the course is normally taken (i.e., masters, doctoral, etc.), is placed between the course prefix and the course number. The level is recommended by the institution according to its own policies and the policies of the State of Florida, and approved by the faculty committee. The level digit does not affect course equivalency — course equivalency is determined by the prefix and the last three digits. The following are the level definitions:

- 0 PSAV, college prep, vocational prep
- 1-2 Lower-level undergraduate
- 3-4 Upper-level undergraduate
5-9 Graduate and Professional (see definitions on the next page)

Courses are numbered based on content, rather than by department or program. This means that a single program may have courses in several different disciplines and may consist of courses having several different prefixes.

Glossary of Course Description Terms
Credits separated by a colon indicate concurrent lecture and laboratory courses taught as a unit:

PHY 3040, 3040L PHYSICS AND LAB (3:1)

Credits separated by a comma indicate unified courses offered in different semesters:

AMH 2010, 2020 AMERICAN HISTORY I, II (4, 4)

Credits separated by a hyphen indicate variable credit:

MAT 7912 DIRECTED RESEARCH Var.

The following abbreviations are used in various course descriptions:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>Graduate</td>
</tr>
<tr>
<td>PR</td>
<td>Prerequisite</td>
</tr>
<tr>
<td>CI</td>
<td>With the consent of the instructor</td>
</tr>
<tr>
<td>CC</td>
<td>With the consent of the chairperson of the department or program</td>
</tr>
<tr>
<td>CR</td>
<td>Co-requisite</td>
</tr>
<tr>
<td>Lec</td>
<td>Lecture</td>
</tr>
<tr>
<td>Lab</td>
<td>Laboratory</td>
</tr>
<tr>
<td>Dem</td>
<td>Demonstration</td>
</tr>
<tr>
<td>Pro</td>
<td>Problem</td>
</tr>
<tr>
<td>Dis</td>
<td>Discussion</td>
</tr>
<tr>
<td>ML</td>
<td>Master’s Level</td>
</tr>
<tr>
<td>GS</td>
<td>Graduate Standing</td>
</tr>
<tr>
<td>Rpt</td>
<td>May be repeated</td>
</tr>
<tr>
<td>UL</td>
<td>Upper level</td>
</tr>
<tr>
<td>S/U</td>
<td>No grade, Satisfactory/Unsatisfactory Only</td>
</tr>
</tbody>
</table>

Graduate Course Level Variance Definitions
It is expected that the 5000-6000-7000 courses will have distinct syllabi demonstrating different depth and breadth of the subject matter as reflected in the course requirements. The courses presuppose different audiences, and the intention is to offer them at distinct levels.

5000-5999 Typically Introductory Graduate Level Courses
6000-6999 Typically Master’s level Courses
7000-7999 Typically Doctoral level Courses

The University reserves the right to substitute, not offer, and add courses and programs that are listed in this catalog.

Example of Course Identifier

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Level Code (first digit)</th>
<th>Century Digit (second digit)</th>
<th>Decade Digit (third digit)</th>
<th>Unit Digit (fourth digit)</th>
<th>Lab Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYG</td>
<td>1</td>
<td>0</td>
<td>1</td>
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<td></td>
</tr>
</tbody>
</table>
The following courses are exceptions to the general rule for course equivalencies and may not transfer. Transferability is at the discretion of the receiving institution:

- Courses in the 900-999 series (e.g., HUM 2905)
- Internships, practica, clinical experiences, and study abroad courses
- Performance or studio courses in Art, Dance, Theater, and Music
- Skills courses in Criminal Justice
- Graduate courses
- Courses not offered by the receiving institution
- College preparatory and vocational preparatory course may not be used to meet degree requirements and are not transferable.
Questions about the Statewide Course Numbering System and appeals regarding course credit transfer decisions should be directed to Undergraduate Studies (for questions pertaining to graduate and undergraduate courses) or the Florida Department of Education, Office of Articulation, 1401 Turlington Building, Tallahassee, Florida 32399-0400. Special reports and technical information may be requested by calling telephone number (850) 245-0427 or SunCom 205-0427.
## Section 24

### Graduate Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Degree Level</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG 5205</td>
<td>Advanced Financial Accounting</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: ACG 3113</td>
<td>Accounting for business combinations, preparation of consolidated financial statements, home office/branch relationships, foreign operations and transactions, partnerships.</td>
</tr>
<tr>
<td>ACG 5505</td>
<td>Governmental/Not-For-Profit Accounting</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: ACG 3113, CR: ACG 4632.</td>
<td>Application of financial and managerial accounting, and auditing, principles and theory to both governmental and not-for-profit entities.</td>
</tr>
<tr>
<td>ACG 5675</td>
<td>Internal and Operational Auditing</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: ACG 3113 and ACG 3401, CR: ACG 4632.</td>
<td>The objective of Internal and Operational Auditing is to provide students with an opportunity to learn about the theory and practice of internal and operational auditing and to apply relevant audit principles and techniques to selected audit problems.</td>
</tr>
<tr>
<td>ACG 6025</td>
<td>Financial Accounting for Managers</td>
<td>2</td>
<td>BU MBA</td>
<td>Not available for credit for graduate students in the Master of Accountancy program.</td>
<td>Study of (1) accounting concepts and standards applicable to presentation of financial information to interested users, (2) structure and interpretation of financial statements, especially issues of income determination and assessment measurement.</td>
</tr>
<tr>
<td>ACG 6028</td>
<td>Measuring Organizational Effectiveness</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: ACG 6025.</td>
<td>This course provides a graduate level introduction to financial and non-financial performance measures. The course considers how stakeholders of private and public sector organizations use financial and non-financial measures to access how well, and at what cost, these organizations are able to achieve strategic/operating goals and objectives.</td>
</tr>
<tr>
<td>ACG 6075</td>
<td>Management Accounting and Control</td>
<td>2</td>
<td>BU MBA</td>
<td>PR: ACG 6025, Not available for credit for graduate students in the Master of Accountancy program.</td>
<td>Deals with management accounting systems for different types of entities, cost behavior patterns, cost-volume-profit analysis, relevant information for decision making, and budgets and standard costs for planning and control.</td>
</tr>
<tr>
<td>ACG 6346</td>
<td>Contemporary Issues in Managerial Accounting</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: ACG 3341 or equivalent and admission to the MAcc program.</td>
<td>The evolution of cost accounting systems, and the impact of new managerial accounting philosophies in the modern international manufacturing environment, including a discussion of current issues and controversies involving managerial accounting.</td>
</tr>
<tr>
<td>ACG 6405</td>
<td>Advanced Accounting Information Systems</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: Admission to MAcc and ACG 6453.</td>
<td>This course focuses on business process modeling techniques for creating advanced enterprise-wide accounting systems. The course also focuses on information systems risks, controls and auditing, and enterprise information systems.</td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
<td>Credits</td>
<td>Required Prerequisites</td>
<td>Description</td>
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<tr>
<td>ACG 6457</td>
<td>Accounting Systems Audit, Control, and Security</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: ACG 3401, ACG 6405 or equivalent. An in-depth study of contemporary systems control security from an audit perspective. Course topics will include: IS audit standards, contemporary AIS technologies, and the development and maintenance of AIS integrity.</td>
<td></td>
</tr>
<tr>
<td>ACG 6476</td>
<td>Contemporary Issues in Accounting Information Systems</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: ACG 6405 or equivalent. An in-depth study of current accounting information systems issues confronting the accounting profession. Graduate students research and study contemporary and emerging topics in the field.</td>
<td></td>
</tr>
<tr>
<td>ACG 6366</td>
<td>Contemporary Issues in Auditing</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: ACG 4632. This course explores contemporary auditing issues and advanced topics concerning the changing role of the audit assurance function and changing audit processes. Topics include audit reporting, auditing in advanced computerized environments, audit judgment, quality control, and regulation of the profession.</td>
<td></td>
</tr>
<tr>
<td>ACG 6637</td>
<td>Contemporary Issues in Accounting Information Systems</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: ACG 6405 or equivalent. An in-depth study of current accounting information systems issues confronting the accounting profession. Graduate students research and study contemporary and emerging topics in the field.</td>
<td></td>
</tr>
<tr>
<td>ACG 6835</td>
<td>Accounting Skills, Values, and Information Technology</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: Admission into MA Accountancy Program. This course is designed to introduce Master of Accountancy students to the basic skills, competencies, and technologies of accounting.</td>
<td></td>
</tr>
<tr>
<td>ACG 6905</td>
<td>Independent Study</td>
<td>1-1</td>
<td>BU ACC</td>
<td>PR: CC. S/U. Independent Study. Student must have a contract with an instructor.</td>
<td></td>
</tr>
<tr>
<td>ACG 6915</td>
<td>Directed Research</td>
<td>1-1</td>
<td>BU ACC</td>
<td>PR: GR. M.I. CC. S/U.</td>
<td></td>
</tr>
<tr>
<td>ACG 6932</td>
<td>Integrative Accounting Seminar</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: Enrolled in final semester of program. Use of case studies to explore the interaction of accounting and business topics that have been previously emphasized in separate courses.</td>
<td></td>
</tr>
<tr>
<td>ACG 6936</td>
<td>Selected Topics in Accounting</td>
<td>1-4</td>
<td>BU ACC</td>
<td>PR: CC. The course content will depend on student demand and instructor’s interest.</td>
<td></td>
</tr>
<tr>
<td>ACG 7156</td>
<td>Seminar in Financial Accounting</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: ACG 6875 or CI. This course investigates advanced research and methodological issues in financial accounting. It focuses primarily on research which uses financial information in contexts external to the firm.</td>
<td></td>
</tr>
<tr>
<td>ACG 7356</td>
<td>Seminar in Management Accounting</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: ACG 6346 or CI. Review and critical analysis of management accounting foundation with emphasis on the current</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Department(s)</td>
<td>Grade(s)</td>
<td>Description</td>
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<tr>
<td>ACG 7415</td>
<td>Seminar In Accounting Information Systems</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: ACG 6405 or Cl.</td>
<td>Review and critical analysis of major topics and research methods in accounting information systems.</td>
</tr>
<tr>
<td>ACG 7646</td>
<td>Seminar in Auditing</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: ACG 6636 or equiv. or Cl.</td>
<td>This course involves a study of state-of-the-art research techniques as applied to major auditing issues and a critical analysis of the reported research findings.</td>
</tr>
<tr>
<td>ACG 7936</td>
<td>Seminar On Special Topics In Accounting</td>
<td>1-4</td>
<td>BU ACC</td>
<td>PR: Cl.</td>
<td>Coverage of particular topics of interest to doctoral faculty and students during any given semester.</td>
</tr>
<tr>
<td>ACG 7980</td>
<td>Dissertation in Accounting</td>
<td>2-2</td>
<td>BU ACC</td>
<td>PR: Completion of comprehensive exams and Cl.</td>
<td>Research and writing of a dissertation on an accounting topic.</td>
</tr>
<tr>
<td>ADE 6070</td>
<td>International Adult Education</td>
<td>3</td>
<td>ED EDV</td>
<td></td>
<td>Provides a survey of the field of international adult education. Current practices and historical efforts internationally will be explored.</td>
</tr>
<tr>
<td>ADE 6080</td>
<td>Adult Education in the United States</td>
<td>4</td>
<td>ED EDV</td>
<td></td>
<td>A study of the adult education movement in the United States from its beginnings to the present lifelong learning enterprise it has become. Economic and cultural factors of the past are examined with a view toward implications for the future.</td>
</tr>
<tr>
<td>ADE 6160</td>
<td>Program Management in Adult Education</td>
<td>3</td>
<td>ED EDV</td>
<td></td>
<td>An examination of the methods for establishing a productive adult education program, and the principles and procedures involved in designing, organizing, operating, and evaluating comprehensive adult education programs.</td>
</tr>
<tr>
<td>ADE 6161</td>
<td>Curriculum Construction in Adult Education</td>
<td>4</td>
<td>ED EDV</td>
<td></td>
<td>Curriculum scope, the process of planning and organizing instructional programs with emphasis on task analysis and process evaluation. Concentrates on basic principles affecting the planning of Adult Education activities, including an overview of the human forces that both impinge on and motivate human behavior in an adult learning environment.</td>
</tr>
<tr>
<td>ADE 6197</td>
<td>Adult Basic Education</td>
<td>4</td>
<td>ED EDV</td>
<td></td>
<td>An overview of adult basic education with an emphasis on current issues and problems of curriculum and instruction in program development and on culturally different adults.</td>
</tr>
<tr>
<td>ADE 6198</td>
<td>Effective Continuing Education for Professionals</td>
<td>3</td>
<td>ED EDV</td>
<td>PR: ADE 6385 and ADE 6080 or Permission from Instructor.</td>
<td>This course will provide a description, explanation and critique of the goals, processes, outcomes, and issues related to the continuing education of professionals. The design, development and administration of these programs will be explored.</td>
</tr>
<tr>
<td>ADE 6280</td>
<td>Administration in Local Adult Education Programs</td>
<td>4</td>
<td>ED EDV</td>
<td></td>
<td>A study of the organization, selection of personnel, assignment of duties and responsibilities, and establishment of policies and procedures to accomplish the objectives of the local program within federal, state, and local requirements.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Requirements</td>
<td>Course Description</td>
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<tr>
<td>ADE 6287</td>
<td>Supervision of Local Adult Education Programs</td>
<td>4</td>
<td>ED EDV</td>
<td>A study of the factors involved in the supervision of instruction including plans for teacher education, improvement of instruction, coordination of activities, and personnel relations.</td>
<td></td>
</tr>
<tr>
<td>ADE 6360</td>
<td>Methods of Teaching Adult Education</td>
<td>3</td>
<td>ED EDV</td>
<td>An exploration of different methods, techniques, and materials available to help adults learn. Concentration on the process of designing effective learning experiences for adults and developing the competencies of self-directed learning.</td>
<td></td>
</tr>
<tr>
<td>ADE 6370</td>
<td>Human Resource Development</td>
<td>3</td>
<td>ED EDV</td>
<td>A study of learning, training, and education as it is practiced in the public, private and the non-profit sectors. Course covers HRD history, key competencies, and relevant theory.</td>
<td></td>
</tr>
<tr>
<td>ADE 6385</td>
<td>The Adult Learner</td>
<td>3</td>
<td>ED EDV</td>
<td>An investigation of the physiological and psychological changes in the adult life span and the implications these have for adult learning capabilities. Concentration on the identification of principles of adult learning, differences between adults and youth as learners, and a review of research on adult learning.</td>
<td></td>
</tr>
<tr>
<td>ADE 6389</td>
<td>Adult Learning and Cognitive Styles</td>
<td>3</td>
<td>ED EDV</td>
<td>The course focuses on a foundational knowledge of brain-based learning and its impact on adult learners, including critique and assessment of learning styles.</td>
<td></td>
</tr>
<tr>
<td>ADE 6906</td>
<td>Independent Study</td>
<td>1-9</td>
<td>ED EDV</td>
<td>Independent Study in which students must have a contract with an instructor.</td>
<td></td>
</tr>
<tr>
<td>ADE 6931</td>
<td>Selected Topics in ADE and HRD</td>
<td>1-5</td>
<td>ED EDV</td>
<td>Each topic is a course under the supervision of a faculty member. The title and content will vary according to the topic.</td>
<td></td>
</tr>
<tr>
<td>ADE 6946</td>
<td>Practicum in Adult Education</td>
<td>2-6</td>
<td>ED EDV</td>
<td>A problem-centered field study in the local community, school, government, office, social agency, business, or industry setting.</td>
<td></td>
</tr>
<tr>
<td>ADE 6966</td>
<td>Final Master’s Seminar</td>
<td>4</td>
<td>ED EDV</td>
<td>PR: Students should be in the last few seminars of their master’s degree program. This course is designed to provide in-depth review of various areas of adult education. It is designed to prepare individuals for the comprehensive exams. Emphasis also will be on developing familiarity with formal research literature.</td>
<td></td>
</tr>
<tr>
<td>ADE 7076</td>
<td>Continuing Education in Higher Education</td>
<td>3</td>
<td>ED EDV</td>
<td>PR: ADE 6385 and ADE 6080 or Permission from instructor. This course will explore the history, relevant research and the current practices in community college and higher education continuing education program and administrative units.</td>
<td></td>
</tr>
</tbody>
</table>
| ADE 7169   | Instructional Development Using Adult Education       | 3       | ED EDV       | This course is designed to develop competencies in a systematic approach to instructional improvement including the knowledge and application of...
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Units</th>
<th>Grade</th>
<th>Offerings</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADE 7268</td>
<td>Leadership in Adult Continuing Education and HRD</td>
<td>3 ED</td>
<td>EDV</td>
<td></td>
<td>AFA</td>
<td>This course is a study of leadership theory, public policy analysis, best practices and related leadership research in adult continuing education and human resource development.</td>
</tr>
<tr>
<td>ADE 7269</td>
<td>Organization and Administration of ACE and HRD</td>
<td>3 ED</td>
<td>EDV</td>
<td></td>
<td>AFA</td>
<td>This course provides knowledge and examples of the organization of ACE and HRD and also examines management principles and practices applied to ACE and HRD units including the tasks, responsibilities and guidelines used to manage these units effectively.</td>
</tr>
<tr>
<td>ADE 7388</td>
<td>Adult Development and Learning</td>
<td>3 ED</td>
<td>EDV</td>
<td>PR: ADE 6385 or equiv.</td>
<td>This is an advanced, in-depth study of the distinctive characteristics of adult life and learning.</td>
<td></td>
</tr>
<tr>
<td>ADE 7676</td>
<td>Human Resource Development Policy Seminar</td>
<td>3 ED</td>
<td>EDV</td>
<td>PR: ADE 6370 orPermission of Instructor.</td>
<td>This course emphasizes complex skills, concepts and strategies related to the adult teaching/learning component and policy formation of human resource development in business, industry, government, education, and voluntary organizations.</td>
<td></td>
</tr>
<tr>
<td>ADE 7910</td>
<td>Directed Research In Adult Education</td>
<td>1-4 ED</td>
<td>EDV</td>
<td>PR: Advanced graduate level.</td>
<td>Directed research on topics related to adult education.</td>
<td></td>
</tr>
<tr>
<td>ADE 7930</td>
<td>Seminar in Adult Education</td>
<td>4 ED</td>
<td>EDV</td>
<td>PR: ADE 6385 and ADE 6080 or Permission from Instructor.</td>
<td>This is an intensive induction into doctoral studies in adult education stressing scholarly inquiry, professionalism, collegiality, and the doctoral degree process.</td>
<td></td>
</tr>
<tr>
<td>ADE 7937</td>
<td>Seminar In Adult Education</td>
<td>1-4 ED</td>
<td>EDV</td>
<td>PR: Advanced graduate level.</td>
<td>Seminar in advanced topics in Adult Education.</td>
<td></td>
</tr>
<tr>
<td>ADE 7947</td>
<td>Advanced Internship: Adult Education</td>
<td>2-4 ED</td>
<td>EDV</td>
<td>PR: Advanced graduate level only. S/U.</td>
<td>Dissertation hours.</td>
<td></td>
</tr>
<tr>
<td>ADE 7980</td>
<td>Dissertation</td>
<td>2-3 ED</td>
<td>EDV</td>
<td>PR: Admitted to Candidacy.</td>
<td>Variable topics course focusing on the history, culture, and lived experiences of Africans, African American, and/or other peoples of African descent worldwide. Rpt. Up to 12 hours as topics vary.</td>
<td></td>
</tr>
<tr>
<td>AFA 5935</td>
<td>Issues in Africana Studies</td>
<td>1-4 AS</td>
<td>AFA</td>
<td></td>
<td>AFA</td>
<td>Examinations of the social construction of race, racism, racial identities and cross-racial relationships in the US from the colonial period to present.</td>
</tr>
<tr>
<td>AFA 6108</td>
<td>Social Construction of Race and Racism</td>
<td>3 AS</td>
<td>AFA</td>
<td></td>
<td>AFA</td>
<td>Course examines the nature of social theory as an analytical tool and its relevance for understanding social thought and the historical and contemporary experiences of peoples of African descent in Africa and the Diaspora.</td>
</tr>
<tr>
<td>AFA 6207</td>
<td>African American Historiography</td>
<td>3 AS</td>
<td>AFA</td>
<td></td>
<td>AFA</td>
<td>This course introduces graduate students to some of the major topics and texts in African American history. Readings will include both classic studies and recent innovative works in the field. The course is open to</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>General Education</td>
<td>Department</td>
<td>Course Description</td>
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<tr>
<td>AFA 6318</td>
<td>Black English</td>
<td>3</td>
<td>AS</td>
<td>AFA</td>
<td>Black English focuses on linguistic patterns among African Americans in the US, South Central America and the Caribbean. It examines language in relation to issues of domination, education, economics, social stratification, and political empowerment. It is open to majors and non-majors and is cross-listed with ISS.</td>
<td></td>
</tr>
<tr>
<td>AFA 6338</td>
<td>Black Women Writers</td>
<td>3</td>
<td>AS</td>
<td>AFA</td>
<td>Black Women Writers focuses on the literature of women of Africa and the African Diaspora. It examines the social, historical, artistic, political, economic, and spiritual lives of Africana women in context of a global community. The course is open to majors and non-majors and is cross-listed with Women's Studies, English and ISS.</td>
<td></td>
</tr>
<tr>
<td>AFA 6355</td>
<td>African American Community Research: Ethnography</td>
<td>3</td>
<td>AS</td>
<td>AFA</td>
<td>This course is designed to assist students in understanding the dynamics of African American communities and community research in urban settings.</td>
<td></td>
</tr>
<tr>
<td>AFA 6387</td>
<td>Seminar on Genocide and Human Rights</td>
<td>3</td>
<td>AS</td>
<td>AFA</td>
<td>Examines “genocide” and “human rights” as concepts and crimes; the debates that have developed around them and the circumstances in which perpetrators of these crimes deprive particular groups of people of their “right to life.”</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
<td>Credits</td>
<td>Type</td>
<td>Department</td>
<td>Notes</td>
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<tr>
<td>AFA</td>
<td>6945 Internship</td>
<td>1-3</td>
<td>AS</td>
<td>AFA</td>
<td>PR: CI, Approval of Thesis Committee. This course involves working with a local agency (gov’t., NGO, private, etc.) on a topic related to the theme of the MA degree, researching and documenting the process and preparing the data for writing the masters thesis.</td>
<td></td>
</tr>
<tr>
<td>AFA</td>
<td>6971 Thesis</td>
<td>2-1</td>
<td>AS</td>
<td>AFA</td>
<td>PR: Department, Major professor and thesis committee approval. Thesis.</td>
<td></td>
</tr>
<tr>
<td>AML</td>
<td>6017 Studies in American Literature to 1860</td>
<td>3</td>
<td>AS</td>
<td>ENG</td>
<td>Selected focused studies in American literature before 1860: the Puritans, Franklin, Cooper, Irving, Poe, Emerson, Hawthorne, Melville, and others.</td>
<td></td>
</tr>
<tr>
<td>AML</td>
<td>6018 Studies in American Literature 1860 to 1920</td>
<td>3</td>
<td>AS</td>
<td>ENG</td>
<td>Selected focused studies in American literature: Dickinson, Whitman, Twain, Howells, James, Jewett, Chopin, Crane, Dreiser, and others.</td>
<td></td>
</tr>
<tr>
<td>AML</td>
<td>6027 Studies in Modern American Literature</td>
<td>3</td>
<td>AS</td>
<td>ENG</td>
<td>Modern American drama, poetry, fiction, and literary criticism; authors include Faulkner, Hemingway, Fitzgerald, O'Neill, Miller, Anderson, Wolfe, Cummings, Frost, Pound, and Eliot.</td>
<td></td>
</tr>
<tr>
<td>AML</td>
<td>6608 Studies in African American Literature</td>
<td>3</td>
<td>AS</td>
<td>ENG</td>
<td>Focuses on varied topics in African American literature such as African American Fiction and the Harlem Renaissance. Topics will supply greatly needed coverage of increasingly important areas of American and African American literature, history, and culture.</td>
<td></td>
</tr>
<tr>
<td>AMS</td>
<td>6002 American Lives</td>
<td>3</td>
<td>AS</td>
<td>AMS</td>
<td>PR: GS, CI. Open to non-majors. An interdisciplinary approach to the study of autobiography. Examines the relationship between identity and community in classic American autobiographies. Utilizes autobiography as a resource of social and cultural history which provides insights regarding the complex interaction between life, a mind, and a text.</td>
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<tr>
<td>AMS</td>
<td>6156 Theories and Methods of Cultural Studies</td>
<td>3</td>
<td>AS</td>
<td>AMS</td>
<td>PR: GS. This course examines the relationship between the arts and society by introducing various approaches to the study of literature, art, and culture that are of contemporary relevance to graduate students in the liberal arts and American Studies.</td>
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<tr>
<td>AMS</td>
<td>6254 Cultural Era</td>
<td>3</td>
<td>AS</td>
<td>AMS</td>
<td>Open to non-majors. Interdisciplinary analysis of American life during a specific cultural era.</td>
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<tr>
<td>AMS</td>
<td>6375 The American South</td>
<td>3</td>
<td>AS</td>
<td>AMS</td>
<td>Open to non-majors. Examines the region since Reconstruction through architecture, art, literature, photography, music, history and interdisciplinary perspectives.</td>
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<tr>
<td>AMS</td>
<td>6805 Major Ideas in American Civilization</td>
<td>3</td>
<td>AS</td>
<td>AMS</td>
<td>Open to non-majors. Investigates the role of one or more influential ideas in American culture, e.g., community, domesticity, democracy, slavery, progressivism, radical reform.</td>
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</tr>
<tr>
<td>AMS</td>
<td>6901 Directed Readings in American Civilization</td>
<td>1-9</td>
<td>AS</td>
<td>AMS</td>
<td>PR: CI, CC. S/U. Open to non-majors. A supervised</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit Hours</td>
<td>Degree</td>
<td>Required Prerequisites</td>
<td>Description</td>
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<tr>
<td>AMS 6934</td>
<td>Selected Topics</td>
<td>1-3</td>
<td>AS</td>
<td>AMS</td>
<td>Open to non-majors. Variable topics such as American Autobiography, Film in American Culture, and Photography in American Culture.</td>
<td></td>
</tr>
<tr>
<td>AMS 6938</td>
<td>Seminar in American Studies</td>
<td>3</td>
<td>AS</td>
<td>AMS</td>
<td>Open to non-majors. Advanced interdisciplinary research. Topics include Popular Culture, Material Culture, Native American Culture.</td>
<td></td>
</tr>
<tr>
<td>AMS 6940</td>
<td>Internship in American Studies</td>
<td>1-3</td>
<td>AS</td>
<td>AMS PR: Majors only. S/U.</td>
<td>A structured, out-of-class learning experience providing first hand, practical training in American Studies-related professional careers.</td>
<td></td>
</tr>
<tr>
<td>AMS 6971</td>
<td>Thesis: Master's</td>
<td>2-1 9</td>
<td>AS</td>
<td>AMS Z/U.</td>
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<tr>
<td>ANG 5395</td>
<td>Visual Anthropology</td>
<td>3</td>
<td>AS</td>
<td>ANT PR: Graduate standing.</td>
<td>This class will examine the major dimensions of visual anthropology with an emphasis on the visual means of presenting anthropology to the discipline and general public. The course will focus on visual documentation and study of visual images.</td>
<td></td>
</tr>
<tr>
<td>ANG 5486</td>
<td>Quantitative Methods in Anthropology</td>
<td>3</td>
<td>AS</td>
<td>ANT PR: Graduate Standing.</td>
<td>This course is an introduction to quantitative methods for the anthropologist covering both classical statistical approaches and exploratory data analysis, using computers with statistical software.</td>
<td></td>
</tr>
<tr>
<td>ANG 5910</td>
<td>Individual Research</td>
<td>2-4</td>
<td>AS</td>
<td>ANT PR: DPR. Contract required prior to registration. S/U.</td>
<td>Individual guidance in selected research project.</td>
<td></td>
</tr>
<tr>
<td>ANG 5937</td>
<td>Seminar In Anthropology</td>
<td>2-4</td>
<td>AS</td>
<td>ANT PR: Senior or GS.</td>
<td>Topics to be chosen by students and instructor.</td>
<td></td>
</tr>
<tr>
<td>ANG 6081</td>
<td>Museum Methods</td>
<td>4</td>
<td>AS</td>
<td>ANT PR: Graduate Standing or DPR.</td>
<td>The class introduces students to contemporary issues in exhibit practice in anthropology museums, and offers practical, hands-on experience in the design and fabrication of a museum exhibit based on anthropological concepts.</td>
<td></td>
</tr>
<tr>
<td>ANG 6100</td>
<td>Topics in Archaeological Science</td>
<td>3</td>
<td>AS</td>
<td>ANT PR: Graduate Standing.</td>
<td>This course focuses on the application of scientific methods of analysis to archaeological materials, including bone, stone, pottery, and metal. Repeatable for up to 6 hours.</td>
<td></td>
</tr>
<tr>
<td>ANG 6110</td>
<td>Archaeology Theory and Current Issues</td>
<td>3</td>
<td>AS</td>
<td>ANT PR: GS in Anthropology.</td>
<td>Methodology and theory in archaeology, analysis, interpretation of data.</td>
<td></td>
</tr>
<tr>
<td>ANG 6115</td>
<td>Seminar In Archaeology</td>
<td>3</td>
<td>AS</td>
<td>ANT PR: Graduate Standing or DPR.</td>
<td>An advanced critical survey of archaeology emphasizing contributions to applied anthropology.</td>
<td></td>
</tr>
<tr>
<td>ANG 6153</td>
<td>Topics in North American Archaeology</td>
<td>3</td>
<td>AS</td>
<td>ANT PR: Graduate Standing.</td>
<td>Comprehensive understanding of the prehistoric development of American Indian cultures in the main geographical regions, with emphasis.</td>
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<tr>
<td>Code</td>
<td>Title</td>
<td>Credits</td>
<td>Area</td>
<td>Consent</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>ANG 6155</td>
<td>Southeastern U.S. Archaeology</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: ANT 3101, Graduate standing or DPR.</td>
<td>The course examines the culture history and processes of change or continuity throughout the region of the Southeast, as well as the often differing record for various local areas, from prehistoric through historic times.</td>
</tr>
<tr>
<td>ANG 6163</td>
<td>Topics in Mesoamerican Archaeology</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: Graduate Standing.</td>
<td>This course explores the distinctive features of the evolving cultural traditions of Mesoamerica. This course identifies the major issues and methodological approaches of Mesoamerican archaeology. Repeatable for up to 6 hours.</td>
</tr>
<tr>
<td>ANG 6165</td>
<td>Topics in South American Archaeology</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: Graduate Standing.</td>
<td>This course introduces the prehistoric and early historic cultural chronology of the South American continent, with an emphasis on current research and controversies and perspectives from cultural ecology. Repeatable for up to 6 hours.</td>
</tr>
<tr>
<td>ANG 6175</td>
<td>Topics in Mediterranean Archaeology</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: Graduate Standing.</td>
<td>A graduate seminar in Mediterranean archaeology, spanning prehistory and the early historical period, and will examine subsistence adaptations, island settlement, trade, technology, religion, rise of complex societies and early states. Repeatable to 6 hr.</td>
</tr>
<tr>
<td>ANG 6197</td>
<td>Public Archaeology</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: GS or DPR.</td>
<td>This graduate-level course surveys archaeological practice as part of applied anthropology, in the public and private sector, from local to international.</td>
</tr>
<tr>
<td>ANG 6198</td>
<td>Regional Problems in Methods of Public Archaeology</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: GS.</td>
<td>Contemporary problems in Public Archaeology in the context of a specific region. Open to non-majors.</td>
</tr>
<tr>
<td>ANG 6270</td>
<td>Chiefdoms</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: Graduate standing, instructor consent.</td>
<td>This course examines theory and data on the emergence of chiefly forms of social organization using case studies from both ethnography and prehistory, and focusing on classic works of cultural evolution and recent critiques of the chiefdom concept.</td>
</tr>
<tr>
<td>ANG 6302</td>
<td>Gender in Cross-Cultural Perspective</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: Graduate Standing or DPR.</td>
<td>Examines roles of women, men, other genders and social, economic, and political aspects of sex and gender, from a biocultural, 4-field anthropological perspective, emphasizing non-Western societies and cross-cultural comparison in past and present.</td>
</tr>
<tr>
<td>ANG 6393</td>
<td>Anthropology, Contemporary Culture and the Media</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: GS or CI.</td>
<td>Course entails the anthropological study of the role of media in contemporary culture. Selected issues include the cultural impact of images and gender/ethnic stereotypes. Special attention will be paid to ethnographic studies of media audiences, and a central theme will be the role of media in a global, multi-cultural context.</td>
</tr>
<tr>
<td>ANG 6436</td>
<td>Issues in Heritage</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: Graduate Standing</td>
<td>The purpose of this course is to</td>
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<td>Code</td>
<td>Title</td>
<td>Credit</td>
<td>Type</td>
<td>Prerequisite</td>
<td>Course Description</td>
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<tr>
<td>ANG 6447</td>
<td>Selected Topics in Urban Anthropology</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: GS. Current topical issues in Urban Anthropology. Open to non-majors.</td>
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<tr>
<td>ANG 6448</td>
<td>Regional Problems in Urban Anthropology</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: GS. Contemporary problems in Urban Anthropology in the context of a specific region. Open to non-majors.</td>
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</tr>
<tr>
<td>ANG 6463</td>
<td>Social Epidemiology Applied Anthropology</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: GS or CI. An advanced medical anthropology course on the application of methods and concepts from social epidemiology as relevant to cultural analysis.</td>
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<tr>
<td>ANG 6465</td>
<td>Regional Problems in Medical Anthropology</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: GS. Contemporary problems in Medical Anthropology in the context of a specific region. Open to non-majors.</td>
<td></td>
</tr>
<tr>
<td>ANG 6469</td>
<td>Selected Topics in Medical Anthropology</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: GS. Current topical issues in Medical Anthropology. Open to non-majors.</td>
<td></td>
</tr>
<tr>
<td>ANG 6495</td>
<td>Oral History and Life History: Approaches to Qualitative Research</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: GS or CI. A in-depth survey of the methods, concepts, and practical applications of narrative-based qualitative research, featuring critical readings in case studies, and individual and group projects.</td>
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<tr>
<td>ANG 6497</td>
<td>Qualitative Research Methods in Anthropology</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: Graduate Standing or DPR. This course is designed to acquaint students with the philosophical foundations of qualitative research, and to provide the opportunity for students to develop skills in the variety of data collection methods and analysis typical of qualitative research.</td>
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<tr>
<td>ANG 6511</td>
<td>Seminar in Physical Anthropology</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: Graduate Standing or DPR. A critical advanced survey of Physical Anthropology emphasizing contributions to Applied Anthropology.</td>
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<tr>
<td>ANG 6705</td>
<td>Foundations of Applied Anthropology I</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: Graduate standing in anthropology. MA Foundations of Applied Anthropology I provides graduate students with an introduction to the philosophical basis of contemporary anthropology.</td>
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<tr>
<td>ANG 6706</td>
<td>Foundations of Applied Anthropology II</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td>PR: Graduate standing, ANG 6705. This course is the second part of a two-course sequence required of all MA students in the anthropology department. This course provides students with foundational understandings of the epistemologies underlying contemporary applied</td>
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<tr>
<td>Code</td>
<td>Title</td>
<td>Credits</td>
<td>Distribution</td>
<td>Prerequisite</td>
<td>Notes</td>
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<tr>
<td>ANG</td>
<td>6730 Socio Cultural Aspects of HIV/AIDS</td>
<td>3</td>
<td>AS ANT</td>
<td>PR: Graduate Standing.</td>
<td>This course is designed to provide an overview of the different social, economic, cultural, political, and ethical issues surrounding the spread of HIV/AIDS around the world.</td>
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<tr>
<td>ANG</td>
<td>6731 Health and Disasters</td>
<td>3</td>
<td>AS ANT</td>
<td>PR: Graduate Standing or DPR.</td>
<td>Disasters like Katrina and complex emergencies like Bosnia exacerbate social divisions and impact the health status of individuals, communities, and nations. This course considers mitigation policies and humanitarian responses.</td>
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<tr>
<td>ANG</td>
<td>6739 Applied Anthropology and International Health</td>
<td>3</td>
<td>AS ANT</td>
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<td>An advanced international anthropology course on the health issues, organization, people, policies and limitations of the arena of international health.</td>
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<tr>
<td>ANG</td>
<td>6766 Research Methods in Applied Anthropology</td>
<td>3</td>
<td>AS ANT</td>
<td>PR: GS.</td>
<td>Research design, data collection, and data analysis for Applied Anthropologists with urban and medical interests. Emphasis will be on non-quantitative research methods. Open to non-majors.</td>
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<tr>
<td>ANG</td>
<td>6905 Independent Study</td>
<td>1-1</td>
<td>AS ANT</td>
<td>Departmental approval required. S/U only.</td>
<td>Independent study in which students must have a contract with an instructor.</td>
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<tr>
<td>ANG</td>
<td>6915 Directed Research Internship</td>
<td>1-1</td>
<td>AS ANT</td>
<td>PR: GR. ML. S/U. DPR.</td>
<td></td>
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<tr>
<td>ANG</td>
<td>6971 Thesis: Master’s</td>
<td>2-1</td>
<td>AS ANT</td>
<td>Departmental approval required. S/U only.</td>
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<tr>
<td>ANG</td>
<td>7487 Research Methods in Applied Anthropology</td>
<td>3</td>
<td>AS ANT</td>
<td>PR: GS.</td>
<td>Critical review of specific approaches to the development, management, and analysis of sociocultural data. Emphasis on qualitative and quantitative applications of field oriented research designs. Open to non-majors.</td>
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<tr>
<td>ANG</td>
<td>7487 Advanced Quantitative Research Methods Applied Anthropology</td>
<td>3</td>
<td>AS ANT</td>
<td>PR: GS or DPR.</td>
<td>Critical review of quantitative approaches to the development, management, and analysis of sociocultural data. Open to non-majors.</td>
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<tr>
<td>ANG</td>
<td>7703 History and Theory of Applied Anthropology</td>
<td>3</td>
<td>AS ANT</td>
<td>PR: 6D in Anthropology.</td>
<td>The history and theoretical development of Applied Anthropology, including cultural resources management are discussed in the context of the overall development of Anthropology as a discipline and profession.</td>
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<tr>
<td>ANG</td>
<td>7704 Legal and Ethical Aspects of Applied Anthropology</td>
<td>3</td>
<td>AS ANT</td>
<td>PR: 6D in Anthropology.</td>
<td>Development and nature of professional ethics in Applied Anthropology, including legal and quasi-legal regulations pertaining to human subjects research, cultural resources management, historic preservation, privacy, and freedom of information. Open to non-majors.</td>
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<tr>
<td>ANG</td>
<td>7708 Selected Topics in Applied Anthropology</td>
<td>3</td>
<td>AS ANT</td>
<td>PR: Advanced Graduate Standing.</td>
<td>An overview of Applied Anthropology in its relation to a major mode of public/private activity, e.g., planning, clinical practice, policy process, or advocacy. Open to non-majors.</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>Department</td>
<td>S/U</td>
<td>Prerequisites</td>
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<tr>
<td>ANG 7709</td>
<td>Applied Anthropology and Human Problems</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td></td>
<td>PR: Advanced Graduate Standing. Examination of specific problem areas of social significance and policy relevance. Typical offerings include: substance abuse, disease, mental health, international development, urban design, and education. Open to non-majors.</td>
</tr>
<tr>
<td>ANG 7905</td>
<td>Directed Individual Study</td>
<td>1-5</td>
<td>AS</td>
<td>ANT</td>
<td></td>
<td>PR: DPR. S/U. An advanced reading program of selected topics in Applied Anthropology under the supervision of an anthropology faculty member. A written contract describing requirements must be signed by the student and faculty member prior to registration.</td>
</tr>
<tr>
<td>ANG 7910</td>
<td>Directed Research</td>
<td>1-5</td>
<td>AS</td>
<td>ANT</td>
<td></td>
<td>PR: DPR. S/U. A written contract describing requirements must be signed by the student and the instructor. An advanced directed research program in a selected topic of Applied Anthropology under the supervision of an anthropology faculty member.</td>
</tr>
<tr>
<td>ANG 7934</td>
<td>The Clientele of Applied Anthropology</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td></td>
<td>PR: Advanced Graduate Standing. Review of the literature and practice of Applied Anthropology focusing on a specific segment or interest group within contemporary society. Typical offerings include: ethnic minorities, age categories, communities, the poor, migrants, public/private organizations, and industry. Open to non-majors.</td>
</tr>
<tr>
<td>ANG 7938</td>
<td>Doctoral Proseminar in Applied Anthropology</td>
<td>3</td>
<td>AS</td>
<td>ANT</td>
<td></td>
<td>Emphasizing the process of doing &quot;four-field&quot; anthropology (biological, archeological, linguistic, and cultural), conceptualizing research questions, identifying, gathering and analyzing data. How application and theory are integrated and how this integration is vital to the conduct of good anthropology with a variety of anthropological ideas.</td>
</tr>
<tr>
<td>ANG 7940</td>
<td>Doctoral Internship in Applied Anthropology</td>
<td>1-5</td>
<td>AS</td>
<td>ANT</td>
<td></td>
<td>PR: Admission to Doctoral Candidacy, CI. S/U. Supervised training in practicing Anthropology in a non-academic setting, focusing on the applications of Anthropology. A written contract describing requirements must be signed by the student, the faculty advisor, and the agency supervisor prior to registration.</td>
</tr>
<tr>
<td>ANG 7980</td>
<td>Dissertation: Doctoral</td>
<td>2-5</td>
<td>AS</td>
<td>ANT</td>
<td></td>
<td>PR: Admission to Candidacy.</td>
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<tr>
<td>ARC 5175</td>
<td>Computer Technology</td>
<td>3</td>
<td>TA</td>
<td>ARC</td>
<td></td>
<td>PR: CC. Introduction to the application of computer technology in current architectural practice. The exploration of available software, programs, and computer services for word processing, information handling, specification writing, feasibility analysis, cost estimating, economic performance and life cycle cost analysis, project management (network programming and analysis), computer graphics, computer aided design and drafting.</td>
</tr>
<tr>
<td>ARC 5216</td>
<td>The Building Arts</td>
<td>3</td>
<td>TA</td>
<td>ARC</td>
<td></td>
<td>PR: CC. Introduction to the man-made environment. The study and...</td>
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</table>
The various facets of the process of shaping the built environment as it manifests itself in the different roles and specialization of the experts involved the process, and in the various academic courses that prepare the architect for practice.

**ARC 5256 Design Theory**
3 TA ARC PR: DPR.
Survey of major schools of thought in design theory, methods of design and problem-solving, and design research. The nature of the design activity and its recurring difficulties. The nature and different types of problems. Traditional approaches to problem-solving and design in architecture; recent systematic as well as intuitive approaches to problem-solving based on developments in other fields. Scientific method; the systems approach and design.

**ARC 5361 Core Design I**
9 TA ARC PR: CC.
First of two semester Design Fundamentals/Design Graphics sequence focusing on design abstractions and analysis of the factors influencing conceptual design. Emphasis is placed on ordering principles, pattern recognition and utilization, and figure-ground relationships. Development of craftsmanship, drawing as a means to design, and perceptual acuity are stressed.

**ARC 5362 Core Design II**
9 TA ARC PR: ARC 5361, CC.
Second of a two semester Design Fundamentals/Design Graphics sequence focusing on synthesis of design concepts and application of ordering principles in architectural design. Emphasis is placed on developing an understanding and awareness of architectural elements and compositions. Students examine the work of significant architects and use it as a basis for design exploration. Graphic documentation, diagramming, and model studies are stressed.

**ARC 5363 Core Design III**
6 TA ARC PR: ARC 5362, ARC 5467, ARC 5587, ARC 5731. CO: ARC 5689.
Study of the various phases of the building delivery and design process, and of different approaches to ordering that process in a systematic fashion. The student will use one such systematic approach in the investigation and development of design solutions for a project of moderate scale and complexity. Studies of built form ordering principles, mass/void relationships, scale and proportion, color, texture, contextual relationships, meaning/imagery, and building technology (awareness of structural organization, services networks, construction processes and materials). Aspects of human behavior as design determinants.
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Delivery</th>
<th>Department</th>
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<tbody>
<tr>
<td>ARC 5364</td>
<td>Advanced Design A</td>
<td>6</td>
<td>TA</td>
<td>ARC</td>
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<tr>
<td></td>
<td>PR: ARC 5363. CP: ARC 5588, ARC 5467</td>
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<tr>
<td></td>
<td>Application of orderly design processes to building projects of moderate complexity and scale. Continued investigation of the relationship between human behavior and the environment. Analysis and integration of site relationships into the development of design solutions. Legal aspects of zoning, building codes, and regulations regarding access for accessibility, fire escape, etc.</td>
<td></td>
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<tr>
<td>ARC 5365</td>
<td>Advanced Design B</td>
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<td></td>
<td>Investigation of the interaction between user requirements, environmental determinants, site and urban context conditions, technological factors, and design intentions in the development of design solutions for projects of medium scale and complexity. The analysis, design, and coordination of the various resulting systems, including structural, circulation, service networks, space zoning and use, environmental control systems at the interface between interior and exterior of a building. Representation of these relationships and systems in diagrams and models, and their manifestation in design and construction details.</td>
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<td>ARC 5366</td>
<td>Advanced Design C</td>
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<td>PR: ARC 5363. CP: ARC 5588, ARC 5467</td>
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<tr>
<td></td>
<td>Design of multi-purpose buildings of medium to large scale and complexity. Issues of community and neighborhood design as they relate to the design of buildings. Restoration and adaptive re-use of existing historic buildings. Focus on thinking through as well as documenting the complete building system and process.</td>
<td></td>
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<tr>
<td>ARC 5467</td>
<td>Materials and Methods of Construction</td>
<td>3</td>
<td>TA</td>
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<tr>
<td></td>
<td>PR: ARC 5470, CC.</td>
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<tr>
<td></td>
<td>Overview of properties of primary construction materials and systems that make up building structures and enclosures. Emphasis on elements and assemblies relative to various climates, technologies, costs, building codes, and craftsmanship.</td>
<td></td>
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<tr>
<td>ARC 5470</td>
<td>Introduction to Technology</td>
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<td>PR: ARC 5470, CC.</td>
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<tr>
<td></td>
<td>Introduction to architectural technology, including structures, materials and methods of construction, and environmental controls. Overview of building systems and components and their integration into architectural design projects.</td>
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<tr>
<td>ARC 5587</td>
<td>Structures I</td>
<td>3</td>
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<tr>
<td></td>
<td>PR: Calculus, Physics, and ARC 5470, CC.</td>
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<tr>
<td></td>
<td>Review of static and mechanical principles of materials. Analysis and evaluation for appropriate selection of structural systems and elements. Analysis and design of timber and steel structures, based on moment, shear, and deflection. Fundamentals of wind and seismic design as they apply to wood and steel construction.</td>
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<td>ARC 5588</td>
<td>Structures II</td>
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<td>ARC 5689</td>
<td>Environmental Technology</td>
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<td>ARC 5731</td>
<td>Architectural History I</td>
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<td>ARC 5732</td>
<td>Architectural History II</td>
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<tr>
<td>ARC 5789</td>
<td>Modern Architecture History</td>
<td>3</td>
<td>TA</td>
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<tr>
<td>ARC 5793</td>
<td>History Abroad</td>
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<td>ARC 5794</td>
<td>Florida Architectural History</td>
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<td>ARC</td>
<td>5920</td>
<td>Architectural Design Studio Abroad</td>
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<td>ARC</td>
<td>5931</td>
<td>Special Studies in Architecture</td>
<td>1-5</td>
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<tr>
<td>ARC</td>
<td>6176</td>
<td>Advanced Computer Technology</td>
<td>3</td>
<td>TA</td>
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<tr>
<td>ARC</td>
<td>6287</td>
<td>Professional Practice I</td>
<td>3</td>
<td>TA</td>
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<td>ARC</td>
<td>6288</td>
<td>Professional Practice II</td>
<td>3</td>
<td>TA</td>
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<td>ARC</td>
<td>6367</td>
<td>Advanced Design D</td>
<td>6</td>
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<td>ARC</td>
<td>6397</td>
<td>Introduction to Urban Design Theory, Methods &amp; Processes</td>
<td>3</td>
<td>TA</td>
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<td>ARC</td>
<td>6398</td>
<td>Introduction to Community and Urban Design</td>
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<td>TA</td>
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<tr>
<td>ARC</td>
<td>6471</td>
<td>Advanced Topics in Materials and Methods</td>
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### Course Descriptions

<table>
<thead>
<tr>
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<th>Type</th>
<th>PR</th>
<th>Description</th>
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<tr>
<td>ARC 6481</td>
<td>Design Development</td>
<td>3</td>
<td>TA</td>
<td>ARC 5689 and ARC 5364.</td>
<td>The summary course of the building technology sequence in which construction, structural and environmental technologies are integrated within an architectural design project. Emphasis is placed on poetic and technical aspects of building systems.</td>
</tr>
<tr>
<td>ARC 6692</td>
<td>Advanced Topics in Environmental Technology</td>
<td>3</td>
<td>TA</td>
<td>ARC 5175, ARC 5689, CC.</td>
<td>Analysis and preliminary design of advanced environmental control systems; specific focus on architectural applications; integration with structural and construction systems. Research of special aspects of ET systems, computer simulation and analysis techniques.</td>
</tr>
<tr>
<td>ARC 6936</td>
<td>Research Methods in Architecture</td>
<td>2</td>
<td>TA</td>
<td>ARC 6311, ARC 5365, and ARC 6481.</td>
<td>A seminar course with the primary purpose of providing tools to conduct the independent research necessary for the two-semester, independent Master’s Thesis requirement.</td>
</tr>
<tr>
<td>ARC 6971</td>
<td>Master’s Thesis</td>
<td>5</td>
<td>TA</td>
<td>ARC 5364, ARC 5365, ARC 5366, ARC 6481, and ARC 6936.</td>
<td>This represents the most significant project and provides for a demonstration of the ability to synthesize learned skills into a convincing independent work of professional quality. 10 credit hours of ARC 6971 is required. See also the USF Graduate Catalog.</td>
</tr>
<tr>
<td>ARC 6974</td>
<td>Master’s Project Planning</td>
<td>3</td>
<td>TA</td>
<td>Two of ARC 5364, 5365, 5366</td>
<td>The Master’s Project (ARC 6971) will call for the student's independent selection, organization, programming and design of a complex project. This course aims at preparing students for these tasks by exploring potential topics for master’s projects and theses, introducing the concepts of architectural facility programming, methods of gathering, organization, analysis and evaluation of information needed for the project, and by studying the process of writing proposals for the master’s project that clearly communicate the problem or task, goals and objectives, the proposed approach and procedure, the expected outcome, as well as the work plan and schedule for such a project and the time and resources required. At the end of the course, students will have prepared an acceptable master’s project proposal which will allow them to proceed with the master’s project during the following term.</td>
</tr>
<tr>
<td>ARC 6976</td>
<td>Terminal Master’s Project</td>
<td>6</td>
<td>TA</td>
<td>ARC 6970</td>
<td>Students will independently investigate an architectural topic of personal interest. The requirements the submission of a research and design document and the preparation of juryed presentation of the work.</td>
</tr>
<tr>
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<td>ARE 6262</td>
<td>Management Design for Art Institutions</td>
<td>3</td>
<td>TA</td>
<td>ART</td>
<td>Principles of administration and supervision of art programs in the school and art institutions.</td>
</tr>
<tr>
<td>ARE 6358</td>
<td>Art for the Elementary School Teacher</td>
<td>3</td>
<td>TA</td>
<td>ART</td>
<td>Exploration of various materials and techniques in relationship to current theories about art and the intellectual, creative, emotional, and aesthetic growth of children.</td>
</tr>
<tr>
<td>ARE 6746</td>
<td>Basis of Inquiry Into Artistic Mind</td>
<td>3</td>
<td>TA</td>
<td>ART</td>
<td>An in-depth study of the contemporary basis of inquiry into artistic mind including a multi-disciplined review of literature and research in art education. Includes a visual inquiry project.</td>
</tr>
<tr>
<td>ARE 6844</td>
<td>Experiential and Theoretical Basis of Artistic Mind</td>
<td>3</td>
<td>TA</td>
<td>ART</td>
<td>Experiential and theoretical explorations into past and contemporary philosophies and practices in art and art education.</td>
</tr>
<tr>
<td>ARE 6944</td>
<td>Field Work in Art Education</td>
<td>1-4</td>
<td>TA</td>
<td>EDA</td>
<td>For student with degree-seeking status. Supervised participation in activities related to art education in community centers, nonschool arts program, planned workshop and research.</td>
</tr>
<tr>
<td>ARH 5451</td>
<td>Cultural and Intellectual History of Modern Art</td>
<td>4</td>
<td>TA</td>
<td>ART</td>
<td>PR: CL.                                                                 A course in which theories of modern artists and of critics and historians of Modernism are treated as a part of general cultural and intellectual history.</td>
</tr>
<tr>
<td>ARH 5813</td>
<td>Methods of Art History</td>
<td>4</td>
<td>TA</td>
<td>ART</td>
<td>Must be taken during the student's first two semesters in the M.A. program This course introduces students to various methods which art historians have used to analyze the form and content of individual works of art, and to various modes of historical explanation.</td>
</tr>
<tr>
<td>ARH 5836</td>
<td>Collection and Exhibition Management</td>
<td>3</td>
<td>TA</td>
<td>ART</td>
<td>PR: Art Advisor’s Approval This class will introduce students to the basic principles of collections care and management and to the intellectual and practical tasks of preparing an exhibition. Sessions will include art handling, registration and condition reporting, preparing works of art for transit, environmental standards for collections storage and exhibition, and the professional responsibilities of the curator.</td>
</tr>
<tr>
<td>ARH 6055</td>
<td>Art History</td>
<td>4</td>
<td>TA</td>
<td>ART</td>
<td>PR: CL. Registration by contract only. A contract for research in any elective area of Art History.</td>
</tr>
<tr>
<td>ARH 6798</td>
<td>Seminar In Art History</td>
<td>4</td>
<td>TA</td>
<td>ART</td>
<td>Var. Specialized topics in art history.</td>
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<tr>
<td>ARH 6865</td>
<td>Current Historiography: Renaissance</td>
<td>4</td>
<td>TA</td>
<td>ART</td>
<td>This course explores current perspectives on problems of Renaissance historiography.</td>
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<tr>
<td>ARH 6866</td>
<td>Current Historiography: Baroque-Rococo</td>
<td>4</td>
<td>TA</td>
<td>ART</td>
<td>This course explores current perspectives on problems of Baroque and Rococo historiography.</td>
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<tr>
<td>ARH 6867</td>
<td>Current Historiography: 19th Century</td>
<td>4</td>
<td>TA</td>
<td>ART</td>
<td>This course explores current perspectives on problems in the historiography of 19th Century Art.</td>
</tr>
<tr>
<td>ARH 6868</td>
<td>Current Historiography: 20th Century</td>
<td>4</td>
<td>TA</td>
<td>ART</td>
<td>Cultural and intellectual history of modern art</td>
</tr>
<tr>
<td>ARH 6891</td>
<td>Paris Art History</td>
<td>4</td>
<td>TA</td>
<td>ART</td>
<td>PR: At least 8 hours art history at the undergraduate level This course will explore issues central to the history and criticism of art through the rich and visual culture that Paris offers. The goal of this course is to provide students with an</td>
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<tr>
<td>ART</td>
<td>5422C</td>
<td>Lithography</td>
<td>4</td>
<td>TA</td>
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<td>ART</td>
<td>5448C</td>
<td>Intaglio</td>
<td>4</td>
<td>TA</td>
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<td>5580C</td>
<td>Painting</td>
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<td>ART</td>
<td>5790C</td>
<td>Ceramics</td>
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<td>Research</td>
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<td>ART</td>
<td>5936</td>
<td>Studio Techniques: Selected Projects</td>
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<td>6391C</td>
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<td>Paris Art Studio</td>
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<td>ART</td>
<td>6816</td>
<td>MFA Professional Practices</td>
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<td>ART</td>
<td>6895</td>
<td>Graduate Seminar I</td>
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<td>6896</td>
<td>Graduate Seminar II</td>
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<td>ART</td>
<td>6940</td>
<td>Selected Topics In Art</td>
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<td>AST</td>
<td>5506</td>
<td>Introduction to Celestial Mechanics</td>
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<td>Prerequisites</td>
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<td>AST</td>
<td>5932 Selected Topics in Astronomy</td>
<td>1-5</td>
<td>AS</td>
<td>AST</td>
<td>PR: Senior or advanced junior standing or Cl.</td>
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<td>BCC</td>
<td>7114 Emergent and Urgent Care Clerkship</td>
<td>var</td>
<td>ME</td>
<td>MSG</td>
<td>Students participate in patients with emergent and urgent medical presentations and assist in the development of a differential diagnosis and preliminary diagnostic and therapeutic plans.</td>
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<tr>
<td>BCC</td>
<td>7134 Maternal and Newborn Health</td>
<td>var</td>
<td>ME</td>
<td>MSG</td>
<td>Students participate in maternal care and newborn care.</td>
</tr>
<tr>
<td>BCC</td>
<td>7144 Integrated Internal Medicine - Pediatrics</td>
<td>var</td>
<td>ME</td>
<td>MSG</td>
<td>This clerkship introduces students to basic principles and practices of hospital-based internal medicine and pediatrics. When possible, it integrates interdisciplinary principles of internal medicine and pediatric disease management.</td>
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<tr>
<td>BCC</td>
<td>7154 Neuropsychiatry Clerkship</td>
<td>var</td>
<td>ME</td>
<td>MSG</td>
<td>The Neuropsychiatry Clerkship is 4 weeks consultation liaison service, 4 weeks inpatient psychiatry, and 2 weeks outpatient neurology.</td>
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<tr>
<td>BCC</td>
<td>7164 Surgical Care Clerkship</td>
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<td>ME</td>
<td>MSG</td>
<td>The Surgical Care clerkship focuses on the development of the fundamental principles in the surgical care of patients.</td>
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<tr>
<td>BCC</td>
<td>7184 Primary Care and Special Care Populations Clerkship</td>
<td>var</td>
<td>ME</td>
<td>MSG</td>
<td>The Primary Care and Special Care Populations Clerkship introduces students to the principles of primary care medicine (Internal Medicine, Family Medicine, and Pediatrics) in the ambulatory setting.</td>
</tr>
<tr>
<td>BCC</td>
<td>8116 Skin and Bones Medicine Clerkship</td>
<td>var</td>
<td>ME</td>
<td>MSG</td>
<td>The Skin and Bones Medicine clerkship is 4 weeks in duration dealing with the content areas of musculoskeletal and dermatology.</td>
</tr>
<tr>
<td>BCC</td>
<td>8117 Interdisciplinary Oncology</td>
<td>var</td>
<td>ME</td>
<td>MSG</td>
<td>This is a four-week block in which all students will be expected to learn the fundamental principles of oncology and the multidisciplinary approach to the prevention, diagnosis, treatment, and rehabilitation of cancer patients.</td>
</tr>
<tr>
<td>BCH</td>
<td>5045 Biochemistry Core Course</td>
<td>3</td>
<td>AS</td>
<td>CHM</td>
<td>PR: Either CHM 2211, CHM 2211L, and CHM 3400 or CHM 4410 or graduate standing.</td>
</tr>
<tr>
<td>BCH</td>
<td>5105 Biochemistry Laboratory Rotations</td>
<td>1-3</td>
<td>AS</td>
<td>CHM</td>
<td>A course in which first year graduate students rotate through selected professor’s laboratories to learn techniques, become familiar with ongoing research in the Department and facilitate the selection of a mentor.</td>
</tr>
<tr>
<td>BCH</td>
<td>6135C Methods in Molecular Biology</td>
<td>4</td>
<td>ME</td>
<td>MSG</td>
<td>An introduction to modern molecular biological techniques and instrumentation. Lec. Lab.</td>
</tr>
<tr>
<td>BCH</td>
<td>6411 Biomedical Genomics and Genetics</td>
<td>4</td>
<td>ME</td>
<td>MSG</td>
<td>PR: GMS 6001 or GMS 6200C or CC or CI.</td>
</tr>
<tr>
<td>BCH</td>
<td>6506 Advances in</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
<td>A discussion of the theory and</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Units</td>
<td>Prerequisite</td>
<td>Description</td>
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</tr>
<tr>
<td>BCH 6627</td>
<td>Metabolic and Genetic Basis of Human Diseases</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
<td>The course will deal with the genetic, molecular, and biochemical basis of human diseases. Offered every other year.</td>
</tr>
<tr>
<td>BCH 6746</td>
<td>Proteomics and Structural Biology</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
<td>The theory and application of modern physical biochemical techniques.</td>
</tr>
<tr>
<td>BCH 6806</td>
<td>Biochemical Endocrinology</td>
<td>2</td>
<td>ME</td>
<td>MSG</td>
<td>A study of the biochemical mechanisms of polypeptide, thyroid, and steroid hormones, including sites of action. Offered every other year.</td>
</tr>
<tr>
<td>BCH 6888</td>
<td>Bioinformatics</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
<td>An introduction to computer software applications for research in Biochemistry and Molecular Biology. Emphasis on database searching and submission, data analysis and graphical presentation, DNA and protein sequence analysis and molecular modeling. Lec./Pro.</td>
</tr>
<tr>
<td>BCH 6889</td>
<td>Bioinformatics II</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
<td>Bioinformatics II focuses on four aspects: genome analysis; software suites; homology modeling and DNA micro arrays; all of which have become essential tools in modern day analyses of both genome organization and protein structure-function relationships. PR: BCH 6888.</td>
</tr>
<tr>
<td>BCH 6935</td>
<td>Scientific Writing and Ethics</td>
<td>2</td>
<td>AS</td>
<td>CHM</td>
<td>This course focuses on applications of bioinformatics and computational biology principles in a practical environment necessary for an &quot;in-depth&quot; understanding of how the methodologies of bioinformatics can be applied to solve bioscience problems.</td>
</tr>
<tr>
<td>BCH 6942</td>
<td>Bioinformatics Internship I</td>
<td>2</td>
<td>ME</td>
<td>MSG</td>
<td>This course focuses on applications of bioinformatics and computational biology principles in a practical environment necessary for an &quot;in-depth&quot; understanding of how the methodologies of bioinformatics can be applied to solve bioscience problems. PR: BCH 6888.</td>
</tr>
<tr>
<td>BCH 6943</td>
<td>Bioinformatics Internship II</td>
<td>2</td>
<td>ME</td>
<td>MSG</td>
<td>This course focuses on applications of bioinformatics and computational biology principles in a practical environment necessary for an &quot;in-depth&quot; understanding of how the methodologies of bioinformatics can be applied to solve bioscience problems. PR: BCH 6888.</td>
</tr>
<tr>
<td>BME 5040</td>
<td>Pharmaceutical Engineering</td>
<td>2</td>
<td>EN</td>
<td>ECH</td>
<td>Introduction to pharmaceutical engineering, including dosage forms (tablets, capsules, powders, liquids, topical forms, and aerosols), excipients, regulatory issues, clinical studies, and good manufacturing practices. PR: Senior or graduate standing in engineering or CI.</td>
</tr>
<tr>
<td>BME 5320</td>
<td>Theory and Design of Bioprocesses</td>
<td>3</td>
<td>EN</td>
<td>ECH</td>
<td>Introduction to biotechnology, including applied microbiology, enzyme technology, biomass production, bioreactor design, and transport processes in biosystems. PR: Senior standing in engineering or CI. Open to majors and non-majors with CI.</td>
</tr>
<tr>
<td>BME 5748</td>
<td>Selected Topics in Biomedical Engineering</td>
<td>1-3</td>
<td>EN</td>
<td>ECH</td>
<td>Selected topics in biomedical engineering, including biomedical engineering, biomedical materials, biodynamics of circulation, separation processes in biomedical systems, and artificial organ systems.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Days</td>
<td>Time</td>
<td>Prerequisites</td>
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<tr>
<td>BME 5910</td>
<td>Directed Research in Bioengineering</td>
<td>1-3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Cl.</td>
</tr>
<tr>
<td>BME 5937</td>
<td>Selected Topics in Biomedical Engineering</td>
<td>1-3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Senior or GS standing in Engineering or Cl.</td>
</tr>
<tr>
<td>BME 6000</td>
<td>Biomedical Engineering</td>
<td>3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Graduate standing in engineering or Cl.</td>
</tr>
<tr>
<td>BME 6107</td>
<td>Biomaterials I: Material Properties</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
<td></td>
</tr>
<tr>
<td>BME 6108</td>
<td>Biomaterials II Biocompatibility</td>
<td>3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Graduate standing in engineering or Cl.</td>
</tr>
<tr>
<td>BME 6235</td>
<td>Tissue Biomechanics</td>
<td>3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Graduate standing in engineering or Cl.</td>
</tr>
<tr>
<td>BME 6420</td>
<td>Human Sensory Processes</td>
<td>3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Graduate standing in engineering or Cl.</td>
</tr>
<tr>
<td>BME 6430</td>
<td>Cardiovascular Systems for Engineers</td>
<td>3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Graduate standing in engineering or Cl.</td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
<td>Units</td>
<td>Type</td>
<td>Grade</td>
<td>Description</td>
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<tr>
<td>BME</td>
<td>6634 Biotransport Phenomena</td>
<td>3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Graduate standing in engineering or CI. Analysis and applications of biofluids, including non-newtonian and particulate systems, bioheat transfer, including energy balances, and biomass transport, including mass balances and membrane processes. Open to non-majors with CI.</td>
</tr>
<tr>
<td>BME</td>
<td>6911 Research Methods in Biomechanics</td>
<td>1-3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Graduate standing in engineering or CI. Research methods in biomechanics, including materials testing, gait analysis, modeling techniques, and related issues. Open to majors and non-majors. May be repeated for credit as the subject varies up to six total credits.</td>
</tr>
<tr>
<td>BME</td>
<td>6920 Seminar in Biomedical Engineering</td>
<td>1</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Graduate standing in biomedical engineering or CI. Seminar in biomedical engineering. Speakers will address current research topics in biomedical engineering, including biomechanics, cardiovascular engineering, sensors, tissue engineering, and drug delivery. Can be repeated up to 3 total credits.</td>
</tr>
<tr>
<td>BME</td>
<td>6931 Selected Topics in Biomedical Engineering</td>
<td>1-3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Graduate standing in engineering or CI. Selected topics in biomedical engineering, including focused topics in biomechanics, biomedical imaging, biomaterials, biomedical instrumentation and sensors, tissue and cellular engineering, and clinical engineering &amp; health systems.</td>
</tr>
<tr>
<td>BMS</td>
<td>5005 Professions of Medicine: Foundations of Doctoring</td>
<td>1-1 9</td>
<td>ME</td>
<td>MSG</td>
<td>This three-week course placed at the beginning of the medical school curriculum will introduce the students to principles that will be used through the entire medical school education and beyond. Basic scientists and clinicians present information in an integrated approach. Topical areas include: use of information resources (library/computer), the medical article, intro to evidence based medicine, effective study techniques, intro to the physical exam, cultural diversity, ethics and professionalism, and state of the art presentation. The course will use both large and small group learning techniques and students will demonstrate achievement of knowledge.</td>
</tr>
<tr>
<td>BMS</td>
<td>5015 Clinical Diagnosis and Reasoning</td>
<td>var.</td>
<td>ME</td>
<td>MSG</td>
<td>This course aims to provide the student with the opportunity to “think like a physician.” It will provide the venue to integrate clinical diagnosis/reasoning strategies with complementary aspects of clinical problem solving/physician diagnosis/evidence based medicine.</td>
</tr>
</tbody>
</table>
| BMS  | 5190 Anatomy by Diagnostic Testing             | 1-2   | ME   | MSG   | Describing normal human anatomy in three dimensions (frontal, coronal, and axial), using contrast medical and imaging modalities available for diagnostic radiologists. Course will be oriented to organ systems describing anatomy of the organ and its vasculature and topographic anatomy. It will include didactic
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Lecture</th>
<th>Lab</th>
<th>Clinical Experience</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 6100C</td>
<td>Gross Anatomy</td>
<td>S-1</td>
<td>ME</td>
<td>MSG</td>
<td>PR: Anatomy Students only.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMS 6110</td>
<td>Microscopic Anatomy</td>
<td>S-1</td>
<td>ME</td>
<td>MSG</td>
<td>PR: Anatomy Students only.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMS 6206</td>
<td>Molecular Medicine</td>
<td>1-2</td>
<td>ME</td>
<td>MSG</td>
<td>Emphasis of biochemistry, cell biology, and genetic that have immediate relevance for clinical medicine while also providing a fundamental foundation of understanding that will permit life-long learning. The pathogenesis of disease will be understood based on a practical understanding gained from the students address in this course.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMS 6300</td>
<td>Principles of Immunology and Infectious Diseases</td>
<td>Var</td>
<td>ME</td>
<td>MSG</td>
<td>This course consists of lectures, laboratory, and small-group conferences. Principles of infectious disease are presented with emphasis on both the characteristics of the causative agent and the host response to colonization activities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMS 6825</td>
<td>On Doctoring</td>
<td>Var</td>
<td>ME</td>
<td>MSG</td>
<td>On Doctoring is a course that presents topics that make relevant connections between the Med 1 core curriculum courses and faculty clinical practice experiences as well as relevant insights from ethics and humanities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMS 6835</td>
<td>Evidence Based Clinical Practice</td>
<td>Var</td>
<td>ME</td>
<td>MSG</td>
<td>This course allows students to use an evidence-based approach as they develop the H&amp;P exam skills to formulate a differential diagnosis &amp; develop a diagnostic process to make a diagnosis &amp; formulate a treatment plan for the patient.</td>
<td></td>
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</tr>
<tr>
<td>BMS 7303</td>
<td>Clinical Microbiology and Immunology</td>
<td>Var</td>
<td>ME</td>
<td>MSG</td>
<td>This course will focus on an experiential approach to issues in clinical microbiology and immunology of relevance to the practicing physician.</td>
<td></td>
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</tr>
<tr>
<td>BMS 7304</td>
<td>Review of Immune and Infectious Diseases</td>
<td>Var</td>
<td>ME</td>
<td>MSG</td>
<td>This course will focus on a review of the major immune and infectious diseases that may be encountered by the general physician.</td>
<td></td>
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</tr>
<tr>
<td>BOT 5185C</td>
<td>Marine Botany</td>
<td>4</td>
<td>AS</td>
<td>BIN</td>
<td>PR: BOT 3373C, PCB 3043 and CHM 2210 and MAC 1105 or higher-level MAC course or STA 2023 and Cl. CP: CHM 2211.</td>
<td></td>
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</tr>
<tr>
<td>BOT 5725C</td>
<td>Evolution of Flowering Plants</td>
<td>3</td>
<td>AS</td>
<td>BIN</td>
<td>PR: BOT 3373C and BOT 4152C or Cl.</td>
<td></td>
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</tbody>
</table>

A study of the evolution and phylogeny of the Angiosperms; the origin and nature of early angiosperms, "primitive" angiosperms.
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
<th>Hours</th>
<th>Co-Req.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSC</td>
<td>Genetic Engineering and Recombinant DNA Technology</td>
<td>3</td>
<td>AS BCM</td>
<td>PCB3023, PCB3063, either PCB3023L or PCB3063L</td>
<td>This lecture-based course will use a problem solving approach, provide fundamental knowledge of scientific concepts and principles that form the basis of experimental methodologies in genetic engineering and recombinant DNA technology. For majors/nonmajors.</td>
</tr>
<tr>
<td>BSC</td>
<td>Genomics</td>
<td>4</td>
<td>AS BIN</td>
<td>PR: BSC 2011, CM 2006, PCB 3063.</td>
<td>We will be using genomic data available from multiple bioinformatics databases to answer an open-ended question fundamental to organismal evolution. The emphasis is to hone scientific inquiry skills in fledgling researchers.</td>
</tr>
<tr>
<td>BSC</td>
<td>Selected Topics in Biology</td>
<td>1-4</td>
<td>AS BIO</td>
<td>PR: Cl.</td>
<td>The course focuses on biotechnology, the integration of biology and technology and its applications in genomics, forensics, agriculture, engineering and medicine that have resulted in new products and services and solved biological/biomedical problems.</td>
</tr>
<tr>
<td>BSC</td>
<td>Introduction to Biotechnology</td>
<td>3</td>
<td>ME MSG</td>
<td>PR: BS in Biochemistry, Biology or Chemistry of Cl.</td>
<td>Provides students a basic understanding of what biotechnology is and how it is employed throughout the world. Students are to learn the ethical and legal issues facing this technology, and how biotechnology is regulated. Course is not repeatable.</td>
</tr>
<tr>
<td>BSC</td>
<td>Biotechnology and Bioethics</td>
<td>3</td>
<td>ME MSG</td>
<td></td>
<td>Provides students a basic understanding of what biotechnology is and how it is employed throughout the world. Students are to learn the ethical and legal issues facing this technology, and how biotechnology is regulated. Course is not repeatable.</td>
</tr>
<tr>
<td>BSC</td>
<td>Modern Basic Tools of Research</td>
<td>4</td>
<td>AS BCM</td>
<td>PR: Cl or CC.</td>
<td>An introduction to modern core research facilities and methodologies used in cancer research. Lec., Lab., Dem. Department Approval Required.</td>
</tr>
<tr>
<td>BSC</td>
<td>Independent Study</td>
<td>1-4</td>
<td>AS BIO</td>
<td>PR: Cl. S/U.</td>
<td>Independent study in which student must have a contract with an instructor.</td>
</tr>
<tr>
<td>BSC</td>
<td>Directed Research</td>
<td>1-1</td>
<td>AS BIO</td>
<td>PR: Cl. S/U.</td>
<td>This Biology lecture series includes a diversity of contemporary topics including: molecular regulatory mechanisms, evolutionary genetics, organismal physiology and community ecology.</td>
</tr>
<tr>
<td>BSC</td>
<td>Lectures in Contemporary Biology</td>
<td>1</td>
<td>AS BIN</td>
<td>PR: CC. S/U only.</td>
<td>A critical examination and discussion of current literature of physiology and development of living organism, including cells.</td>
</tr>
<tr>
<td>BSC</td>
<td>Development and Physiology Seminar</td>
<td>1</td>
<td>AS BIO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSC</td>
<td>Selected Topics in Biology</td>
<td>1-4</td>
<td>AS BIO</td>
<td>PR: Cl.</td>
<td></td>
</tr>
<tr>
<td>BSC</td>
<td>Graduate Seminar in Biology</td>
<td>1</td>
<td>AS BIO</td>
<td>PR: Cl. S/U.</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Credits</td>
<td>Offered At</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>BSC 6936</td>
<td>Scientific Grant Writing</td>
<td>3</td>
<td>BIO</td>
<td>AS</td>
<td>Course provides instruction on becoming a successful grant writer as well as understanding the grant proposal writing and review process. Responsibilities of the principle investigator for compliance, fiscal matters, and scientific management of the funded grant will also be covered with guest lecturers from the Division of Sponsored Research.</td>
</tr>
<tr>
<td>BSC 6939</td>
<td>Selected Topics in Cancer Biology</td>
<td>1-4</td>
<td>BIO</td>
<td>AS</td>
<td>Provides in-depth study of a single aspect of cancer biology. Topics offered vary by semester.</td>
</tr>
<tr>
<td>BSC 6945</td>
<td>Graduate Instruction Methods</td>
<td>1-3</td>
<td>BIN</td>
<td>AS</td>
<td>Special course to be used primarily for the training of teaching assistants.</td>
</tr>
<tr>
<td>BSC 6971</td>
<td>Thesis: Master's</td>
<td>2-1</td>
<td>BIO</td>
<td>AS</td>
<td>Thesis: Master’s</td>
</tr>
<tr>
<td>BSC 7910</td>
<td>Directed Research</td>
<td>1-1</td>
<td>BIO</td>
<td>AS</td>
<td>Student research will be performed under the guidance of Ph.D. prior to formation of dissertation committee.</td>
</tr>
<tr>
<td>BSC 7911</td>
<td>Directed Research in Cancer Biology</td>
<td>1-1</td>
<td>BCM</td>
<td>AS</td>
<td>Graduating Ph.D. students will present a formal seminar based upon their dissertation to the Department of Biology and the public. Restricted to majors.</td>
</tr>
<tr>
<td>BSC 7936</td>
<td>Doctoral Seminar</td>
<td>1</td>
<td>BIO</td>
<td>AS</td>
<td>Graduating Ph.D. students will present a formal seminar based upon their dissertation to the Department of Biology and the public. Restricted to majors.</td>
</tr>
<tr>
<td>BSC 7980</td>
<td>Dissertation: Doctoral</td>
<td>2-1</td>
<td>BIO</td>
<td>AS</td>
<td>Student research will be performed under the guidance of Ph.D. prior to formation of dissertation committee.</td>
</tr>
<tr>
<td>BTE 5171</td>
<td>Curriculum Construction: Business Education</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>Curriculum scope, the process of planning and organizing instructional programs with emphasis on task analysis and process evaluation.</td>
</tr>
<tr>
<td>BTE 6944</td>
<td>Practicum: Business Education</td>
<td>3-6</td>
<td>ED</td>
<td>EDV</td>
<td>A problem-centered field study in the local community, school, government, office, social agency, business, or industry.</td>
</tr>
<tr>
<td>BUL 5332</td>
<td>Law and the Accountant</td>
<td>3</td>
<td>BU</td>
<td>GBA</td>
<td>A comprehensive study of commercial law as it affects the practice of accounting.</td>
</tr>
<tr>
<td>CAP 5400</td>
<td>Digital Image Processing</td>
<td>3</td>
<td>EN</td>
<td>ESB</td>
<td>Image formation, sources of image degradation, image enhancement techniques, edge detection operators and threshold selection, low-level processing algorithms for vision, image data compression.</td>
</tr>
<tr>
<td>CAP 5625</td>
<td>Introduction to Artificial Intelligence</td>
<td>3</td>
<td>EN</td>
<td>ESB</td>
<td>Basic concepts, tools, and techniques used to produce and study intelligent behavior. Organizing knowledge, exploiting constraints, searching spaces, understanding natural languages, and problem solving strategies.</td>
</tr>
<tr>
<td>CAP 5682</td>
<td>Expert And Intelligent Systems</td>
<td>3</td>
<td>EN</td>
<td>ESB</td>
<td>Basic concepts, techniques and tools for the design and implementation of expert and intelligent systems. Knowledge representation, inference methods, knowledge acquisition methods, and some advanced concepts. Tools to facilitate construction of expert and intelligent systems.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Requirements</td>
<td>Description</td>
<td></td>
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</tr>
<tr>
<td>CAP 5771</td>
<td>Data Mining</td>
<td>3</td>
<td>EN ESB</td>
<td>PR: Undergraduate Statistics.</td>
<td>An introductory course to mining information from data. Scalable supervised and unsupervised machine learning methods are discussed. Methods to visualize and extract heuristic rules from large databases with minimal supervision is discussed.</td>
</tr>
<tr>
<td>CAP 6100</td>
<td>Human Computer Interface</td>
<td>3</td>
<td>EN ESB</td>
<td>PR: CI.</td>
<td>Introduction to the design and evaluation of the interface between a computer based application and a human user.</td>
</tr>
<tr>
<td>CAP 6415</td>
<td>Computer Vision</td>
<td>3</td>
<td>EN ESB</td>
<td>PR: CAP 5400.</td>
<td>Techniques for description and recognition of objects, use of stereo, texture, and motion information for scene segmentation and description, consistent labeling and matching, use of knowledge and planning in computer vision.</td>
</tr>
<tr>
<td>CAP 6455</td>
<td>Advanced Robotic Systems</td>
<td>3</td>
<td>EN ESB</td>
<td>PR: Control Systems, Intro to Robotics, MatLab</td>
<td>Unmanned ground, aerial and underwater robots. Modeling, kinematics dynamics and control; navigation and collision avoidance; sensor fusion; vision-based navigation; sensor fault detection and isolation; system architectures and robot swarms.</td>
</tr>
<tr>
<td>CAP 6615</td>
<td>Neural Networks</td>
<td>3</td>
<td>EN ESB</td>
<td>PR: CAP 5600.</td>
<td>Defines models of artificial neural networks, compares these models, and investigates the relationship of neural network learning to other symbolic learning methods.</td>
</tr>
<tr>
<td>CAP 6672</td>
<td>Robot Intelligence and Computer Vision</td>
<td>3</td>
<td>EN ESB</td>
<td>PR: COP 2400 or equiv.</td>
<td>An introduction to robotic systems with emphasis on the computational aspects of robot control. Topics for discussion: overview of the robotics field, analysis of robot arm kinematics and coordinate transformation, real-time computer control of robot arms, and computer vision. Practical experience in programming robotic systems will be included.</td>
</tr>
<tr>
<td>CAP 6736</td>
<td>Geometric Modeling</td>
<td>3</td>
<td>EN ESB</td>
<td>PR: Data Structures, Programming in a higher level language.</td>
<td>The course deals with the representation, design, analysis, processing and visualization of shape information used in a variety of fields of science and engineering.</td>
</tr>
<tr>
<td>CCE 5035</td>
<td>Construction Management &amp; Planning</td>
<td>3</td>
<td>EN EGX</td>
<td>PR: EGN 3613C.</td>
<td>Fundamentals of construction management. Topics include: general definitions, organizational roles, types of contracts, analysis of labor and equipment, cost estimating, contractor cash flow analysis, planning and scheduling, project control, construction administration, quality and safety management, and use of computer software in construction management.</td>
</tr>
<tr>
<td>CCJ 6050</td>
<td>Pro Seminar in Criminology</td>
<td>1</td>
<td>BC CJP</td>
<td>PR: CI. Should be taken during the first semester.</td>
<td>Provides a forum for presentation and discussion of research ideas by faculty, students, and guests, with a view toward the development of thesis topics.</td>
</tr>
<tr>
<td>CCJ 6285</td>
<td>Law, Crime and Justice</td>
<td>4</td>
<td>BC CJP</td>
<td>PR: CI.</td>
<td>An exposition of historical and contemporary legal principles, procedures, and issues as reflected in</td>
</tr>
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<td>Course</td>
<td>Title</td>
<td>Credits</td>
<td>Units</td>
<td>Department</td>
<td>Prerequisites</td>
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<tr>
<td>CCJ 6406</td>
<td>Theory, Practice, and Research in Law Enforcement</td>
<td>3</td>
<td>BC</td>
<td>CJP</td>
<td>PR: CI</td>
</tr>
<tr>
<td>CCJ 6605</td>
<td>Theoretical Approaches to Criminal Behavior</td>
<td>4</td>
<td>BC</td>
<td>CJP</td>
<td>PR: CI.</td>
</tr>
<tr>
<td>CCJ 6705</td>
<td>Research Methods in Criminology</td>
<td>4</td>
<td>BC</td>
<td>CJP</td>
<td>PR: CCJ 6920, CI</td>
</tr>
<tr>
<td>CCJ 6706</td>
<td>Quantitative Analysis in Criminology I</td>
<td>4</td>
<td>BC</td>
<td>CJP</td>
<td>PR: CCJ 6705, CI.</td>
</tr>
<tr>
<td>CCJ 6707</td>
<td>Quantitative Analysis in Criminology II</td>
<td>4</td>
<td>BC</td>
<td>CJP</td>
<td>PR: CCJ 6706, CI.</td>
</tr>
<tr>
<td>CCJ 6708</td>
<td>Quantitative Analysis in Criminology III</td>
<td>3</td>
<td>BC</td>
<td>CJP</td>
<td>PR: CCJ 6707 or equivalent.</td>
</tr>
<tr>
<td>CCJ 6709</td>
<td>Qualitative Methods in Criminology</td>
<td>3</td>
<td>BC</td>
<td>CJP</td>
<td>PR: CCJ 6705.</td>
</tr>
<tr>
<td>CCJ 6716</td>
<td>Evaluation Research in Criminology</td>
<td>3</td>
<td>BC</td>
<td>CJP</td>
<td>PR: CCJ 6705.</td>
</tr>
<tr>
<td>CCJ 6905</td>
<td>Directed Independent Study</td>
<td>1-2</td>
<td>BC</td>
<td>CJP</td>
<td>Majors only.</td>
</tr>
<tr>
<td>CCJ 6910</td>
<td>Directed Research</td>
<td>1-9</td>
<td>BC</td>
<td>CJP</td>
<td>PR: CI. S/U.</td>
</tr>
<tr>
<td>CCJ 6930</td>
<td>Current Issues in Corrections</td>
<td>3</td>
<td>BC</td>
<td>CJP</td>
<td>PR: CI. Repeatable with different subject matter.</td>
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<tr>
<td>Course</td>
<td>Title</td>
<td>Credits</td>
<td>Requirements</td>
<td>Description</td>
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<tr>
<td>CCJ 6931</td>
<td>Seminar in Criminological Theory</td>
<td>3</td>
<td>BC, CJP</td>
<td>PR: CCJ 6605. Repeatable with different subject matter. This course is designed to provide an in-depth analysis of specific theoretical issues in criminology.</td>
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</tr>
<tr>
<td>CCJ 6935</td>
<td>Topics in Criminology and Criminal Justice</td>
<td>3</td>
<td>BC, CJP</td>
<td>PR: C. Analysis and discussion of topics of major concern in criminology and criminal justice that are not covered in regular courses.</td>
<td></td>
</tr>
<tr>
<td>CCJ 6936</td>
<td>Current Issues in Law Enforcement</td>
<td>3</td>
<td>BC, CJP</td>
<td>This course will focus on some of the most significant issues facing law enforcement agencies today. Some topics included will be: police use of deadly force; review of police conduct; police unionization; police corruption; media relations; civil liability; and community/problem-oriented policing.</td>
<td></td>
</tr>
<tr>
<td>CCJ 6971</td>
<td>Thesis: Master's</td>
<td>2-10</td>
<td>BC, CJP</td>
<td>PR: C.</td>
<td></td>
</tr>
<tr>
<td>CCJ 6974</td>
<td>Area Project</td>
<td>1-2</td>
<td>BC, CJP</td>
<td>PR: GS in the Department and C. Required of students not using the thesis option. Maximum of 3 hours toward the Master's degree. S/U.</td>
<td></td>
</tr>
<tr>
<td>CCJ 7057</td>
<td>Ethics in Criminology</td>
<td>4</td>
<td>BC, CJP</td>
<td>This course is designed to review and analyze the various ethical issues and dilemmas that confront the criminal justice system and the discipline of criminology. Because of the unique characteristics of the people and problems dealt with in criminology, the ethical issues in the area often are novel when compared to those in other fields.</td>
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</tr>
<tr>
<td>CCJ 7910</td>
<td>Advanced Research</td>
<td>1-2</td>
<td>BC, CJP</td>
<td>Doctoral Students only. Course is designed to give students an opportunity to conduct independent research under the supervision of a faculty member. May be repeated.</td>
<td></td>
</tr>
<tr>
<td>CCJ 7980</td>
<td>Doctoral Dissertation</td>
<td>2-1</td>
<td>BC, CJP</td>
<td></td>
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<tr>
<td>CDA 5416</td>
<td>Introduction to Computer-Aided Verification</td>
<td>3</td>
<td>EN, ESB</td>
<td>PR: CDA 3201, COT 3100, COT 4400, EEL 4851C. This course introduces basic concepts of formal verification. Topics include formal specification, algorithms, and methodologies for scalable verification. It is only for CSE majors or non-majors with permission from the instructor, not repeatable.</td>
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<tr>
<td>CEG 5115</td>
<td>Foundation Engineering</td>
<td>3</td>
<td>EN, EGX</td>
<td>PR: CEG 4011 or C. Design of shallow foundations, cantilevered and anchored retaining walls, piling, drilled piers and special foundations. Computer applications to geotechnical engineering are covered.</td>
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<tr>
<td>CEG 5205</td>
<td>Laboratory Testing for Geotechnical Engineers</td>
<td>3</td>
<td>EN, EGX</td>
<td>PR: CEG 4011 or C. Both routine and advanced forms of soil testing are covered. Emphasis is placed on procedures and application</td>
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<td>Code</td>
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<td>CR/PR</td>
<td>Description</td>
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<tr>
<td>CEG 6015</td>
<td>Advanced Geotechnical Topics</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
<td>PR: CEG 4011, CEG 4011L, CEG 5205. Advanced concepts of shear strength and consolidation of soils; slope stability, nonlinear and secondary consolidation, numerical methods.</td>
</tr>
<tr>
<td>CEG 6065</td>
<td>Soil Dynamics</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
<td>PR: CEG 4011, CEG 4011L, CEG 4012. Fundamentals of vibrations, wave propagation, design of foundations, retaining walls and slopes to resist vibrations, liquefaction of soils.</td>
</tr>
<tr>
<td>CEG 6415</td>
<td>Seepage and Subsurface Drainage</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
<td>CR: CEG 4011 or CI. Design of underdrains, wells, soil filters, fabric filters, and dewatering systems with special emphasis on case studies.</td>
</tr>
<tr>
<td>CES 5209</td>
<td>Structural Dynamics</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
<td>PR: CES 3102, EGN 3321. Behavior of structural components and systems when subjected to periodic dynamic loads.</td>
</tr>
<tr>
<td>CES 5715C</td>
<td>Prestressed Concrete</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
<td>PR: CI, majors only. Fundamental principles of prestressing; calculation of losses; stress analysis and design of simple beams for flexure and shear. Examples of pressures applications.</td>
</tr>
<tr>
<td>CES 6103</td>
<td>Experimental Stress Analysis</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
<td>PR: EGN 3331, EGN 3373. This course will provide the tools of research necessary to design experiments and/or instrumentation schemes for directed studies. It is intended for structural and geotechnical engineering graduates conducting master's or doctoral research.</td>
</tr>
<tr>
<td>CES 6107C</td>
<td>Advanced Mechanics Of Materials II</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
<td>PR: CES 5105C. Structural stability of beam-columns and frames, calculus of variations and energy methods, introduction to viscoelasticity and plasticity.</td>
</tr>
<tr>
<td>CES 6326</td>
<td>Design of Concrete Bridges</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
<td>PR: CEG 4702, CES 5715C. Bridge Classification, AASHTO loads and load combinations, load distribution, design of typical superstructures and substructures for concrete and prestressed bridges.</td>
</tr>
<tr>
<td>CES 6586</td>
<td>Design of Structures to</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
<td>Study of natural hazards (wind, ...</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Credits</td>
<td>Distribution</td>
<td>Prerequisites</td>
<td>Course Description</td>
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<tr>
<td>6609</td>
<td>Resist Natural Hazards</td>
<td>3</td>
<td>EN EGX</td>
<td>PR: CES 4605.</td>
<td>Advanced topics in steel design. Topics covered include connection design, torsion of wide range sections, and optimum structural design.</td>
</tr>
<tr>
<td>6706</td>
<td>Advanced Concrete Design</td>
<td>3</td>
<td>EN EGX</td>
<td>PR: CES 4702, majors only.</td>
<td>Advanced topics in concrete designs. Topics include torsion two way floor systems, composite construction, slabs on grade, and deep beams.</td>
</tr>
<tr>
<td>6716</td>
<td>Design of Continuous Post-Tensioned Structures</td>
<td>3</td>
<td>EN EGX</td>
<td>PR: CES 4702.</td>
<td>Methods of analysis and design of post-tensioned statically indeterminate structures. Emphasis will be on the design of two-way slabs for floor systems using the equivalent frame method and load balancing.</td>
</tr>
<tr>
<td>6835</td>
<td>Design of Masonry Structures</td>
<td>3</td>
<td>EN EGX</td>
<td>PR: CES 4702.</td>
<td>This course provides an overview of the design of masonry structures using concrete masonry units. It covers both working stress and strength design of typical elements such as walls and lintels and simple structures.</td>
</tr>
<tr>
<td>6841</td>
<td>Infrastructure I: Repair/Rehab of Structures</td>
<td>3</td>
<td>EN EGX</td>
<td>PR: CES 4702. CR: CES 5715C.</td>
<td>This course focuses on the repair of structures using fiber reinforced polymers.</td>
</tr>
<tr>
<td>5933</td>
<td>Special Topics in Civil Engineering and Mechanics</td>
<td>1-5</td>
<td>EN EGX</td>
<td>PR: Cl.</td>
<td>New technical topics of interest to civil engineering students.</td>
</tr>
<tr>
<td>6720</td>
<td>Electrochemical Diagnostic Techniques</td>
<td>3</td>
<td>EN EGX</td>
<td>PR: EGN 3365 or equivalent basic Materials Science course.</td>
<td>Fundamentals and applications of electrochemical diagnostic techniques. Focus on electrochemical impedance spectroscopy to evaluate reaction rates in corrosion and interfacial phenomena of materials. Includes research project.</td>
</tr>
<tr>
<td>6906</td>
<td>Independent Study</td>
<td>1-9</td>
<td>EN EGX</td>
<td>PR: Cl. S/U.</td>
<td>Independent study in which students must have a contract with an instructor.</td>
</tr>
<tr>
<td>6915</td>
<td>Directed Research</td>
<td>1-9</td>
<td>EN EGX</td>
<td>PR: GS, Cl. S/U.</td>
<td>Course consists of directed research on topics selected by student and professor. The topics vary. The course allows students to develop research skills and independent work disciplines.</td>
</tr>
<tr>
<td>6933</td>
<td>Special Topics in Civil and Environmental Engineering</td>
<td>1-4</td>
<td>EN EGX</td>
<td>PR: CI</td>
<td>Topics to be chosen by students and instructor permitting newly developing subdisciplinary special interests to be explored.</td>
</tr>
<tr>
<td>6941</td>
<td>Graduate Instruction Methods</td>
<td>1-5</td>
<td>EN EGX</td>
<td>PR: GS, CC. Majors only. S/U.</td>
<td>Special course to be used primarily for the training of graduate teaching assistants.</td>
</tr>
<tr>
<td>6971</td>
<td>Thesis: Master’s</td>
<td>2-1</td>
<td>EN EGX</td>
<td>PR: GS, Cl. Majors only.</td>
<td>Thesis/Specialist project hours.</td>
</tr>
<tr>
<td>7915</td>
<td>Directed Research</td>
<td>1-9</td>
<td>EN EGX</td>
<td>PR: GS, Cl. Ph.D. level. S/U.</td>
<td>Course consists of directed research on topics selected by student and professor. The topics vary. The course allows students to develop research skills and independent work.</td>
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<tr>
<td>Section 24 Course Descriptions</td>
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<tr>
<td><strong>CGN 7980</strong></td>
<td>Dissertation Doctoral</td>
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<tr>
<td>2-19</td>
<td>EN EGX</td>
<td>PR: GS, CI, Admission to Candidacy, majors only. S/U.</td>
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<tr>
<td><strong>CHM 5225</strong></td>
<td>Intermediate Organic Chemistry I</td>
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<tr>
<td>3</td>
<td>AS CHM</td>
<td>PR: CHM 2211, CHM 2211L, or equivalent or CI or GS. This course will extend organic chemistry beyond the undergraduate level and will emphasize concepts of stereochemistry and reaction mechanisms.</td>
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<tr>
<td><strong>CHM 5226</strong></td>
<td>Intermediate Organic Chemistry II</td>
<td></td>
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<tr>
<td>3</td>
<td>AS CHM</td>
<td>PR: CHM 5225 or CI. An introduction to synthetic organic chemistry for graduate students and advanced undergraduates. Semester II.</td>
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<tr>
<td><strong>CHM 5425</strong></td>
<td>Applications in Physical Chemistry</td>
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<tr>
<td>3</td>
<td>AS CHM</td>
<td>PR: CHM 4412 and CHM 4410 or CI or GS. Applications of chemical theory to chemical systems.</td>
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<tr>
<td><strong>CHM 5452</strong></td>
<td>Polymer Chemistry</td>
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<tr>
<td>3</td>
<td>AS CHM</td>
<td>PR: Either CHM 2211, CHM 2211L, and CHM 3400 or CHM 4410 or graduate standing. Fundamentals of polymer synthesis, structure, properties, and characterization.</td>
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<tr>
<td><strong>CHM 5621</strong></td>
<td>Principles of Inorganic Chemistry</td>
<td></td>
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<tr>
<td>3</td>
<td>AS CHM</td>
<td>PR: CHM 4411, CHM 4610 or CI or GS. Chemical forces, reactivity, periodicity, and literature in organic chemistry; basic core course.</td>
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<tr>
<td><strong>CHM 5931</strong></td>
<td>Selected Topics in Chemistry</td>
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<tr>
<td>1-3</td>
<td>AS CHM</td>
<td>PR: CI. The following courses are representative of those that are taught under this title: Natural Products, Stereochemistry, Reactive Intermediates, Photochemistry, Instrumental Electronics, Advanced Lab Techniques, Heterocyclic Chemistry, etc.</td>
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<tr>
<td><strong>CHM 6150</strong></td>
<td>Advanced Analytical Chemistry</td>
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<td>3</td>
<td>AS CHM</td>
<td>PR: CI. A study of complete analytical process, including sample handling, separations, the analysis step, and statistical interpretation of data. Emphasis placed on separations and statistics. Lec.</td>
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<tr>
<td><strong>CHM 6250</strong></td>
<td>Advanced Organic Chemistry I: Synthesis</td>
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<tr>
<td>3</td>
<td>AS CHM</td>
<td>PR: CHM 5225 or CI. Detailed consideration of modern synthetic methods. Lec.</td>
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<tr>
<td><strong>CHM 6263</strong></td>
<td>Advanced Organic Chemistry II: Physical-Organic</td>
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<tr>
<td>3</td>
<td>AS CHM</td>
<td>PR: CHM 5225 or CI. Organic reaction mechanisms emphasizing the interpretation of experimental data. Lec.</td>
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<tr>
<td><strong>CHM 6280</strong></td>
<td>Advanced Organic Chemistry III: Natural Products</td>
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<tr>
<td>3</td>
<td>AS CHM</td>
<td>PR: CHM 5225 or CI. A study of any of several of the following topics: terpenes, steroids, vitamins, alkaloids, porphyrins, purine, and antibiotics.</td>
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<tr>
<td><strong>CHM 6460</strong></td>
<td>Statistical Thermodynamics</td>
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<tr>
<td>3</td>
<td>AS CHM</td>
<td>PR: CI. Application of statistical mechanics to the thermodynamics; relation of molecular structure to thermodynamic properties. Lec.</td>
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<tr>
<td><strong>CHM 6480</strong></td>
<td>Quantum Chemistry</td>
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<tr>
<td>3</td>
<td>AS CHM</td>
<td>PR: CI. Introduction to elementary quantum mechanism. Atomic structure and</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Lec.</td>
<td>AS</td>
<td>PR</td>
<td>Description</td>
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<tr>
<td>CHM 6650</td>
<td>Structural Inorganic Chemistry</td>
<td>3</td>
<td>AS</td>
<td>CHM</td>
<td>Modern theories of bonding and structure of inorganic compounds, including coordination theory, stereochemistry, solution equilibria, kinetics, mechanisms of reactions, and use of physical and chemical methods. Lec.</td>
</tr>
<tr>
<td>CHM 6907</td>
<td>Independent Study</td>
<td>1-1</td>
<td>AS</td>
<td>CHM</td>
<td>S/U. Independent study in which students must have a contract with an instructor.</td>
</tr>
<tr>
<td>CHM 6935</td>
<td>Graduate Seminars in Chemistry</td>
<td>1</td>
<td>AS</td>
<td>CHM</td>
<td>PR: Admission to graduate program in Chemistry. S/U. Required every semester (when offered) for all students enrolled in Chemistry graduate program. Requires participation in and attendance at the weekly departmental seminar.</td>
</tr>
<tr>
<td>CHM 6936</td>
<td>Chemistry Colloquium</td>
<td>1</td>
<td>AS</td>
<td>CHM</td>
<td>PR: Admission to graduate program in Chemistry. S/U. Frequent (usually weekly) small-group analysis of current developments.</td>
</tr>
<tr>
<td>CHM 6938</td>
<td>Selected Topics in Chemistry</td>
<td>1-3</td>
<td>AS</td>
<td>CHM</td>
<td>PR: CI. Representative titles taught include: Symmetry and Group Theory, Photochemical Kinetics, Quantum Mechanical Calculations, Advanced Chemical Thermodynamics, Reaction Mechanisms, Advanced Instrumentation, Separations and Characterizations, Spectroscopy, etc.</td>
</tr>
<tr>
<td>CHM 6946</td>
<td>Graduate Instruction Methods</td>
<td>1-4</td>
<td>AS</td>
<td>CHM</td>
<td>S/U. Special course for the training of teaching assistants.</td>
</tr>
<tr>
<td>CHM 6973</td>
<td>Directed Research</td>
<td>1-1</td>
<td>AS</td>
<td>CHM</td>
<td>PR: GR. M.L. S/U.</td>
</tr>
<tr>
<td>CHM 7820</td>
<td>Directed Research</td>
<td>1-1</td>
<td>AS</td>
<td>CHM</td>
<td>PR: GR. Ph.D. level. S/U.</td>
</tr>
<tr>
<td>CHM 7980</td>
<td>Dissertation: Doctoral</td>
<td>2-1</td>
<td>AS</td>
<td>CHM</td>
<td>PR: Admission to Candidacy. S/U.</td>
</tr>
<tr>
<td>CIS 6900</td>
<td>Independent Study</td>
<td>1-1</td>
<td>EN</td>
<td>ESB</td>
<td>PR: GS, majors only. S/U. Independent study in which students must have a contract with an instructor. Requires completed contract prior to enrollment.</td>
</tr>
<tr>
<td>CIS 6910</td>
<td>Computer Science Graduate Project</td>
<td>3</td>
<td>EN</td>
<td>ESB</td>
<td>PR: CI, majors only. S/U. Computer science engineering project that may be taken by graduate students in place of Master's thesis. Requires completed contract prior to enrollment.</td>
</tr>
<tr>
<td>CIS 6930</td>
<td>Special Topics</td>
<td>1-5</td>
<td>EN</td>
<td>ESB</td>
<td>PR: CI.</td>
</tr>
<tr>
<td>CIS 6940</td>
<td>Graduate Instruction Methods</td>
<td>1-4</td>
<td>EN</td>
<td>ESB</td>
<td>S/U. Majors only. S/U. Special course to train graduate teaching assistants.</td>
</tr>
<tr>
<td>CIS 6971</td>
<td>Thesis: Master's</td>
<td>2-1</td>
<td>EN</td>
<td>ESB</td>
<td>PR: GS, majors only. S/U.</td>
</tr>
<tr>
<td>CIS 7910</td>
<td>Directed Research</td>
<td>1-1</td>
<td>EN</td>
<td>ESB</td>
<td>PR: GR. Ph.D. level, majors only. S/U. Requires completed contract prior to enrollment.</td>
</tr>
<tr>
<td>CIS 7980</td>
<td>Dissertation: Doctoral</td>
<td>2-1</td>
<td>EN</td>
<td>ESB</td>
<td>PR: Admission to Doctoral Candidacy.</td>
</tr>
<tr>
<td>CJC 6020</td>
<td>Theory, Practice, and</td>
<td>3</td>
<td>BC</td>
<td>CJP</td>
<td>PR: CI Examination of the interrelationships.</td>
</tr>
<tr>
<td>Department</td>
<td>Course Code</td>
<td>Title</td>
<td>Units</td>
<td>Type</td>
<td>Prerequisite</td>
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<tr>
<td>CLP</td>
<td>6166</td>
<td>Research in Corrections</td>
<td>3</td>
<td>AS</td>
<td>PSY</td>
</tr>
<tr>
<td>CLP</td>
<td>6438</td>
<td>Psychopathology</td>
<td>1-4</td>
<td>AS</td>
<td>PSY</td>
</tr>
<tr>
<td>CLP</td>
<td>6937</td>
<td>Psychological Assessment: Theory and Research</td>
<td>1-3</td>
<td>AS</td>
<td>PSY</td>
</tr>
<tr>
<td>CLP</td>
<td>7188</td>
<td>Clinical Psychology Interventions</td>
<td>1-4</td>
<td>AS</td>
<td>PSY</td>
</tr>
<tr>
<td>CLP</td>
<td>7379</td>
<td>Graduate Seminar in Clinical-Community Psychology</td>
<td>1-3</td>
<td>AS</td>
<td>PSY</td>
</tr>
<tr>
<td>CNT</td>
<td>6215</td>
<td>Computer Networks</td>
<td>3</td>
<td>EN</td>
<td>ESB</td>
</tr>
<tr>
<td>COM</td>
<td>5930</td>
<td>Topics in Communication Studies</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
</tr>
<tr>
<td>COM</td>
<td>6001</td>
<td>Theories and Histories of Communication</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
</tr>
<tr>
<td>COM</td>
<td>6017</td>
<td>Gender in the Workplace</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
</tr>
<tr>
<td>COM</td>
<td>6025</td>
<td>Health Communication</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
</tr>
<tr>
<td>COM</td>
<td>6045</td>
<td>Communicating Leadership</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>Practicality</td>
<td>Description</td>
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<tr>
<td>COM 6121</td>
<td>Organizational Communication</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>A study of communication theory and behavior within organizational settings: role of communication, communication climates, communication networks, leadership.</td>
</tr>
<tr>
<td>COM 6248</td>
<td>Historical Perspectives on Communication</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>Explores prominent figures and theoretical movements in area of Communication (Interpersonal or Organizational Communication, Cultural Studies, Rhetorical Studies, or Performance Studies). [Repeatable for credit as topics vary.]</td>
</tr>
<tr>
<td>COM 6306</td>
<td>Action Research</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>Action research is rooted in engagement, involving collaboration with community or organizational partners who will be affected by the research. Through hands-on projects we learn principles of action research and explore communication and ethical issues.</td>
</tr>
<tr>
<td>COM 6313</td>
<td>Interpreting Communication Research</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>This course is designed to give students tools to help them interpret the mainstream research literature in communication and to judge research on a quality continuum. No assumptions are made about student understanding of quantitative research methods.</td>
</tr>
<tr>
<td>COM 6345</td>
<td>Contemporary Cultural Studies</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>Examines theoretical issues and interpretive approaches for exploring questions of knowledge, identity, experience, meaning and value in modern culture through the study of communication.</td>
</tr>
<tr>
<td>COM 6400</td>
<td>Communication Theory</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>An examination of communication theory through selected reading in the works of major theorists past and present.</td>
</tr>
<tr>
<td>COM 6418</td>
<td>Communication and Systems Practice</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>Systems theories offer possibilities for understanding interconnections and emergence, identities and environments, and stability and change, with communication processes being central. We explore social systems principles by linking theory and praxis.</td>
</tr>
<tr>
<td>COM 6605</td>
<td>Media Studies</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>Study of the impact of mass and mediated forms of communication on individuals, groups, societies, and cultures. Several theoretical and critical perspectives are considered.</td>
</tr>
<tr>
<td>COM 6724</td>
<td>Communication Training in Organizations</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>Provides holistic understanding of how communication training is developed and conducted in organizations. Students learn to assess communication training needs, design/deliver effective communication training programs, and evaluate their effectiveness.</td>
</tr>
<tr>
<td>COM 7325</td>
<td>Seminar in Communication Research Methods</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>Required of all Ph.D. students. Also required of all M.A. students wishing to pursue the thesis option. Examines the research practices and methodologies of communication as a discipline, including bibliographical resources, research designs, research techniques, and forms of scholarly presentation.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Description</td>
<td></td>
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</tr>
<tr>
<td>COM 7933</td>
<td>Seminar in Communication Studies</td>
<td>3</td>
<td>AS SPE</td>
<td>PR: GS. Variable topics course.</td>
<td></td>
</tr>
<tr>
<td>COP 6611</td>
<td>Operating Systems</td>
<td>3</td>
<td>EN ESB</td>
<td>PR: CC, majors only Operating systems functions and design, resource management, protection systems, process communication, and deadlocks.</td>
<td></td>
</tr>
<tr>
<td>COP 6621</td>
<td>Programming Languages and Translation</td>
<td>3</td>
<td>EN ESB</td>
<td>PR: CI, majors only Grammars and languages, symbols, strings, syntax, parsing, the design of a compiler, storage organization and symbol tables, translator writing systems.</td>
<td></td>
</tr>
<tr>
<td>COT 6405</td>
<td>Introduction to the Theory of Algorithms</td>
<td>3</td>
<td>EN ESB</td>
<td>PR: COT 3100, COT 4400, or equiv. GS or CI. Analysis techniques for algorithms. Characterizing algorithms in terms of recurrence relations, solutions of recurrence relations, upper and lower bounds. Graph problems, parallel, algorithms, NP completeness and approximation algorithms, with relationship to practical problems.</td>
<td></td>
</tr>
<tr>
<td>CPO 5934</td>
<td>Selected Topics in Comparative Politics</td>
<td>3</td>
<td>AS POL</td>
<td>Sr./GS. Studies specific substantive areas in Comparative Politics, such as political economy or the politics of specific countries or regions.</td>
<td></td>
</tr>
<tr>
<td>CPO 6036</td>
<td>Politics of Developing Areas</td>
<td>3</td>
<td>AS POL</td>
<td>Sr./GS Advanced study of ideologies, politics, political institutions, and the socio-economic conditions that influence them in developing nations.</td>
<td></td>
</tr>
<tr>
<td>CPO 6091</td>
<td>Seminar in Comparative Politics</td>
<td>3</td>
<td>AS POL</td>
<td>GS. Extensive examination of the major theories and approaches used in the study of Comparative Politics. Seminar format.</td>
<td></td>
</tr>
<tr>
<td>CRW 6025</td>
<td>Special Topics in Creative Writing</td>
<td>3</td>
<td>AS ENG</td>
<td>This course will offer coverage of current topics in creative writing based on student demand and instructor interest. Topics offered may include memoir, novel writing, screenwriting, and editing and publishing.</td>
<td></td>
</tr>
<tr>
<td>CRW 6130</td>
<td>Fiction Writing</td>
<td>3</td>
<td>AS ENG</td>
<td>A study of the process of fiction writing and the artistic demands associated with its forms, from microfiction to the novel.</td>
<td></td>
</tr>
<tr>
<td>CRW 6164</td>
<td>The Craft of Fiction</td>
<td>3</td>
<td>AS ENG</td>
<td>PR: Dept. Approval Required. A study in the forms and technique of fiction writing. Students will examine how novels and stories are constructed, analyze craft (plotting, characterization, point of view) and the relationship of form and craft, and study the variety of approaches to storytelling (realism, magic realism, minimalism, and metafiction).</td>
<td></td>
</tr>
<tr>
<td>CRW 6236</td>
<td>Nonfiction Writing</td>
<td>3</td>
<td>AS ENG</td>
<td>An exploration of the different types of nonfiction writing, such as memoir, travel, nature, commentary, book review, essay, and biography.</td>
<td></td>
</tr>
<tr>
<td>CRW 6331</td>
<td>Poetry Writing</td>
<td>3</td>
<td>AS ENG</td>
<td>A study of the process of poetry writing and the demands associated with its form, both free verse and metrical.</td>
<td></td>
</tr>
<tr>
<td>CRW</td>
<td>6352</td>
<td>The Craft of Poetry</td>
<td>3</td>
<td>AS</td>
<td>ENG</td>
</tr>
<tr>
<td>CST</td>
<td>6934</td>
<td>Special Topics in Graduate School: Research Practicum</td>
<td>3</td>
<td>AS</td>
<td>IDS</td>
</tr>
<tr>
<td>CST</td>
<td>6935</td>
<td>Special Topics in Graduate School: Professional Development</td>
<td>3</td>
<td>AS</td>
<td>IDS</td>
</tr>
<tr>
<td>CWR</td>
<td>6235</td>
<td>Free Surface Flow</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
</tr>
<tr>
<td>CWR</td>
<td>6239</td>
<td>Waves and Beach Protection</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
</tr>
<tr>
<td>CWR</td>
<td>6305</td>
<td>Urban Hydrology</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
</tr>
<tr>
<td>CWR</td>
<td>6533</td>
<td>Water Quality Modeling</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
</tr>
<tr>
<td>CWR</td>
<td>6534</td>
<td>Coastal and Estuary Modeling</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
</tr>
<tr>
<td>CWR</td>
<td>6535</td>
<td>Hydrologic Models</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
</tr>
<tr>
<td>CWR</td>
<td>6538</td>
<td>Advanced Hydrologic Models</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
</tr>
<tr>
<td>CWR</td>
<td>6820</td>
<td>Coastal Waves And Structures</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
</tr>
<tr>
<td>DEP</td>
<td>6058</td>
<td>Developmental Psychology</td>
<td>3</td>
<td>AS</td>
<td>PSY</td>
</tr>
<tr>
<td>DEP</td>
<td>6136</td>
<td>Language Development</td>
<td>3</td>
<td>AS</td>
<td>PSY</td>
</tr>
<tr>
<td>Course Code</td>
<td>Description</td>
<td>Credits</td>
<td>Days</td>
<td>Start/End Time</td>
<td>Prerequisites/Cautions</td>
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</tr>
<tr>
<td>EBD 6215</td>
<td>Advanced Theories and Practices in Behavior Disorders</td>
<td>3</td>
<td>ED</td>
<td>EDS</td>
<td>Introductory course in special education. In-depth study of specific behavioral disorders of children and youth, with an emphasis on educational implications and interventions.</td>
</tr>
<tr>
<td>EBD 6216</td>
<td>Educational Strategies for Students With Behavior Disorders</td>
<td>3</td>
<td>ED</td>
<td>EDS</td>
<td>Advanced methods and materials for planning, implementing, and evaluating educational interventions with students with behavior disorders. For certification.</td>
</tr>
<tr>
<td>EBD 6246</td>
<td>Educating Students with Autism</td>
<td>3</td>
<td>ED</td>
<td>EDS</td>
<td>PR: GS.</td>
</tr>
<tr>
<td>EBD 6943</td>
<td>Supervised Practicum in Behavior Disorders</td>
<td>1-1</td>
<td>ED</td>
<td>EDS</td>
<td>PR: Cl. S/U.</td>
</tr>
<tr>
<td>ECH 5320</td>
<td>Chemical Process Engineering I</td>
<td>4</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Bachelors degree in science, math, or engineering.</td>
</tr>
<tr>
<td>ECH 5321</td>
<td>Chemical Process Engineering II</td>
<td>4</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Bachelors degree in science, math, or engineering.</td>
</tr>
<tr>
<td>ECH 5322</td>
<td>Chemical Process Engineering III</td>
<td>4</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Bachelors degree in science, math, or engineering.</td>
</tr>
<tr>
<td>ECH 5324</td>
<td>Automatic Process Control II</td>
<td>3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: ECH 4323C or CI, majors only / 2 hrs lec., 3 hrs. lab/week.</td>
</tr>
<tr>
<td>ECH 5327</td>
<td>Chemical Process Control</td>
<td>4</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Bachelors degree in science, math, or engineering.</td>
</tr>
<tr>
<td>ECH 5740</td>
<td>Theory and Design of</td>
<td>3</td>
<td>EN</td>
<td>ECH</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Department</td>
<td>Prerequisites</td>
<td>Description</td>
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</tr>
<tr>
<td>ECH 5747C</td>
<td>Selected Topics in Chemical Engineering Biotechnology</td>
<td>1-3</td>
<td>EN ECH</td>
<td>PR: Senior or GS standing in engineering or CI. Open to majors and non-majors with CI.</td>
<td>Selected topics in engineering in biotechnology, including cell separation technology, immobilized enzymes and cells, food engineering, biohazardous waste, and bioseparations.</td>
</tr>
<tr>
<td>ECH 5748</td>
<td>Selected Topics in Biomedical Engineering</td>
<td>1-3</td>
<td>EN ECH</td>
<td></td>
<td>Selected topics in biomedical engineering, including biomedical engineering, biomedical materials, biodynamics of circulation, separation processes in biomedical systems, and artificial organ systems.</td>
</tr>
<tr>
<td>ECH 5785</td>
<td>Sustaining the Earth: An Engineering Approach</td>
<td>3</td>
<td>EN ECH</td>
<td>PR: CI.</td>
<td>An approach of global perspective on ecological principles revealing how all the world’s life is connected and sustained within the biosphere and how engineering provides the tools to design solutions engaging materials science &amp; environmental ethics.</td>
</tr>
<tr>
<td>ECH 5786</td>
<td>Green Engineering</td>
<td>3</td>
<td>EN ECH</td>
<td>PR: Senior or Graduate Standing in Engineering, Public Health, Science</td>
<td>Synthesis and design of green chemical, biological and energy conversion processes and products. Environmental impact analysis; green chemistry and materials; life cycle analysis; industrial ecology; systematic methods and real-life examples.</td>
</tr>
<tr>
<td>ECH 5820</td>
<td>Product Development</td>
<td>2</td>
<td>EN ECH</td>
<td>PR: Senior or GS in Engineering or CI.</td>
<td>Introduction to the development of consumer products, including the history of innovation, creativity development, the product development environment, and a detailed examination of several product areas.</td>
</tr>
<tr>
<td>ECH 5930</td>
<td>Special Topics III</td>
<td>1-4</td>
<td>EN ECH</td>
<td>PR: CI.</td>
<td></td>
</tr>
<tr>
<td>ECH 5931</td>
<td>Special Topics IV</td>
<td>1-4</td>
<td>EN ECH</td>
<td>PR: CI.</td>
<td></td>
</tr>
<tr>
<td>ECH 6105</td>
<td>Advanced Thermodynamics I</td>
<td>3</td>
<td>EN ECH</td>
<td>PR: CC, Majors only.</td>
<td>Selected topics in classical and irreversible thermodynamics.</td>
</tr>
<tr>
<td>ECH 6107</td>
<td>Selected Topics in Advanced Thermodynamics</td>
<td>3</td>
<td>EN ECH</td>
<td>PR: GS or CI.</td>
<td>Advanced selected topics in Ch.E. Thermodynamics such as: molecular and statistical thermo, adv. phase and chemical equilibria, etc.</td>
</tr>
<tr>
<td>ECH 6230</td>
<td>Advanced Mass Transfer</td>
<td>3</td>
<td>EN ECH</td>
<td>PR: ECH 5285 or equiv.</td>
<td>Advanced topics in mass transfer, including the mathematical description and solution of homogeneous and heterogeneous reacting systems, unsteady state, simultaneous heat and/or fluid transfer, particulate processes, and interfacial transport.</td>
</tr>
<tr>
<td>ECH 6285</td>
<td>Advanced Transport Phenomena</td>
<td>3</td>
<td>EN ECH</td>
<td></td>
<td>Formulation of flux equations for fluid, heat &amp; mass transport. Development &amp; resolution of unsteady state and multidiemensional models in various co-ordinate systems. Analytical &amp; numerical techniques to solve the resulting equations will be presented.</td>
</tr>
<tr>
<td>ECH 6412</td>
<td>Processes Analysis and</td>
<td>3</td>
<td>EN ECH</td>
<td>PR: CI.</td>
<td>Computer-controlled data acquisition</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Department Code</td>
<td>Department</td>
<td>Prerequisites</td>
</tr>
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</tr>
<tr>
<td>ECH 6417</td>
<td>Bioseparations</td>
<td>3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Graduate standing in engineering or CI.</td>
</tr>
<tr>
<td>ECH 6515</td>
<td>Reacting Systems</td>
<td>3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: ECH 441SC or CI.</td>
</tr>
<tr>
<td>ECH 6616</td>
<td>Computer-Aided Process Engineering I</td>
<td>3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: ECH 4615.</td>
</tr>
<tr>
<td>ECH 6749</td>
<td>Biomaterials and Biocompatibility</td>
<td>3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: Ci</td>
</tr>
<tr>
<td>ECH 6906</td>
<td>Directed Research</td>
<td>1-1</td>
<td>EN</td>
<td>ECH</td>
<td>PR: GR. ML. S/U.</td>
</tr>
<tr>
<td>ECH 6930</td>
<td>Special Problems I</td>
<td>1-3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: CC.</td>
</tr>
<tr>
<td>ECH 6931</td>
<td>Special Problems II</td>
<td>1-3</td>
<td>EN</td>
<td>ECH</td>
<td>PR: CC.</td>
</tr>
<tr>
<td>ECH 6939</td>
<td>Graduate Research Methods</td>
<td>1-4</td>
<td>EN</td>
<td>ECH</td>
<td>PR: CC. S/U.</td>
</tr>
<tr>
<td>ECH 6971</td>
<td>Thesis: Master’s</td>
<td>2-1</td>
<td>EN</td>
<td>ECH</td>
<td>PR: CC.</td>
</tr>
<tr>
<td>ECH 7980</td>
<td>Dissertation: Doctoral</td>
<td>2-1</td>
<td>EN</td>
<td>PR: Admission to Candidacy</td>
<td>Conditions for efficient resource allocation in a market economy; how inefficiency arises in markets and government; ways to reestablish efficiency; social welfare and equity. Introduction to benefit-cost analysis.</td>
</tr>
</tbody>
</table>
# Section 24 Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Degree</th>
<th>Prerequisite(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 6206</td>
<td>Aggregate Economics</td>
<td>3</td>
<td>BU</td>
<td>ECO 3203 or ECO 6204</td>
<td>Advanced macroeconomic analysis of income, employment, prices, interest rates and economic growth rates.</td>
</tr>
<tr>
<td>ECO 6305</td>
<td>History of Economic Thought</td>
<td>3</td>
<td>BU</td>
<td>ECO 3101 or ECO 6114 or CI</td>
<td>Currents of modern economic thought in the last hundred years.</td>
</tr>
<tr>
<td>ECO 6405</td>
<td>Mathematical Economics I</td>
<td>3</td>
<td>BU</td>
<td>ECO 3101, ECO 3203, ECO 6702, ECO 6708</td>
<td>This course provides the basic mathematical background necessary to undertake graduate-level work in economics. Several topics from calculus and linear algebra are covered.</td>
</tr>
<tr>
<td>ECO 6424</td>
<td>Econometrics I</td>
<td>3</td>
<td>BU</td>
<td>ECO 3203 or ECO 6204, QMB 3200, QMB 6305, or CI.</td>
<td>Theory and use of multiple regression to estimate relations in causal models, use of standard software packages.</td>
</tr>
<tr>
<td>ECO 6425</td>
<td>Econometrics II</td>
<td>3</td>
<td>BU</td>
<td>ECO 6424</td>
<td>Advanced econometric techniques; model building, estimation and forecasting; design and execution of research projects.</td>
</tr>
<tr>
<td>ECO 6505</td>
<td>Public Finance</td>
<td>3</td>
<td>BU</td>
<td>ECO 3101 or ECO 6114</td>
<td>Effects of tax and expenditure policies on resource allocation and income distribution.</td>
</tr>
<tr>
<td>ECO 6525</td>
<td>Public Sector Economics</td>
<td>3</td>
<td>BU</td>
<td>ECO 3101 or ECO 6114</td>
<td>The economic role of government in the allocation of resources in the presence of market failure.</td>
</tr>
<tr>
<td>ECO 6705</td>
<td>International Economic Issues</td>
<td>3</td>
<td>BU</td>
<td>ECO 6114 and ECO 6204 or equivalent.</td>
<td>Analysis of international economic relations and institutions. Analysis of the effects of changing economic conditions and policy on the climate for international business and investment.</td>
</tr>
<tr>
<td>ECO 6706</td>
<td>International Trade: Theory and Policy</td>
<td>3</td>
<td>BU</td>
<td>ECO 3101 or ECO 6114</td>
<td>Causes of international trade, international trade policy, economic integration, trade problems of developing countries, role of multinational corporations in world trade.</td>
</tr>
<tr>
<td>ECO 6708</td>
<td>Global Economic Environment of Business</td>
<td>2</td>
<td>BU</td>
<td>MBA</td>
<td>Determination of prices, employment, and output in domestic and international settings.</td>
</tr>
<tr>
<td>ECO 6716</td>
<td>International Monetary Economics</td>
<td>3</td>
<td>BU</td>
<td>ECO 3203 or ECO 6204</td>
<td>International macroeconomic relationships, foreign exchange market, the international monetary system, balance of payments adjustments, macroeconomic policy in the open economy.</td>
</tr>
<tr>
<td>ECO 6906</td>
<td>Independent Study</td>
<td>1-1</td>
<td>BU</td>
<td>ECO 3203 or ECO 6204</td>
<td>Independent study. Student must have a contract with an instructor.</td>
</tr>
<tr>
<td>ECO 6917</td>
<td>Directed Research</td>
<td>1-1</td>
<td>BU</td>
<td>GR, ML, CC. S/U.</td>
<td>The course content will depend on student demand and instructor's interest.</td>
</tr>
<tr>
<td>ECO 6936</td>
<td>Selected Topics in Economics</td>
<td>1-4</td>
<td>BU</td>
<td>GS and Cl.</td>
<td>Topics in advanced microeconomic theory, including general equilibrium, welfare economics, intertemporal choice, uncertainty, information, and game theory.</td>
</tr>
<tr>
<td>ECO 7116</td>
<td>Microeconomics II</td>
<td>3</td>
<td>BU</td>
<td>ECO 6115.</td>
<td>This course provides a continuation of ECO 6405, Mathematical Economics I. Students will become familiar with certain economic theories.</td>
</tr>
<tr>
<td>ECO 7406</td>
<td>Mathematical Economics II</td>
<td>3</td>
<td>BU</td>
<td>ECO 6115, ECO 6405</td>
<td>1. This course provides a continuation of ECO 6405, Mathematical Economics I. Students will become familiar with certain economic theories.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Department</td>
<td>Prerequisites</td>
<td>Course Description</td>
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</tr>
<tr>
<td>ECO 7426</td>
<td>Econometrics III</td>
<td>3</td>
<td>BU ECN</td>
<td>PR: ECO 6425, ECO 6405 or CC.</td>
<td>The aim of this course is to provide students several important advanced econometrics techniques and how they can be used in empirical research and practical applications. Emphasis will be on cross-sectional and panel data models.</td>
</tr>
<tr>
<td>ECO 7427</td>
<td>Econometrics IV</td>
<td>3</td>
<td>BU ECN</td>
<td>PR: ECO 7426 or CC.</td>
<td>Advanced econometric techniques with emphasis on applying the proper method to actual data and to situations where various techniques are appropriate.</td>
</tr>
<tr>
<td>ECO 7980</td>
<td>Dissertation</td>
<td>2-1</td>
<td>BU ECN</td>
<td>PR: Advancement to Candidacy</td>
<td>Dissertation Research</td>
</tr>
<tr>
<td>ECP 6205</td>
<td>Labor Economics I</td>
<td>3</td>
<td>BU ECN</td>
<td>PR: ECO 3101, ECO 6114, or ECO 6115</td>
<td>Labor demand and supply, unemployment, discrimination in labor markets, labor force statistics.</td>
</tr>
<tr>
<td>ECP 6305</td>
<td>Environmental Economics and Policy</td>
<td>3</td>
<td>BU ECN</td>
<td>PR: ECO 2023 or ECO 6114</td>
<td>An economic analysis of business’s and the government’s approach to managing environmental issues. The focus of the course is on the analysis of case studies of specific environmental issues using fundamental efficiency analysis.</td>
</tr>
<tr>
<td>ECP 6405</td>
<td>Industrial Organization</td>
<td>3</td>
<td>BU ECN</td>
<td>PR: ECO 6115</td>
<td>Structure of industry and its effect on economic efficiency.</td>
</tr>
<tr>
<td>ECP 6406</td>
<td>Seminar in Industrial Organization</td>
<td>3</td>
<td>BU ECN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECP 6415</td>
<td>Issues in Regulation and Antitrust</td>
<td>3</td>
<td>BU ECN</td>
<td>PR: ECO 3101 or ECO 3703 or GEB 6114.</td>
<td>Issues concerning rationale, structure and performance of government regulation and antitrust policy.</td>
</tr>
<tr>
<td>ECP 6456</td>
<td>Law and Economics</td>
<td>3</td>
<td>BU ECN</td>
<td>PR: ECO 3101 or ECO 6114</td>
<td>Impact of Tort, Criminal, Property, and Contract Law on the allocation of resources.</td>
</tr>
<tr>
<td>ECP 6536</td>
<td>Economics of Health Care I</td>
<td>3</td>
<td>BU ECN</td>
<td>PR: ECO 3101 or ECO 6114.</td>
<td>Analysis of the supply and demand for health care, health insurance and the pharmaceutical industry.</td>
</tr>
<tr>
<td>ECP 6614</td>
<td>Urban Economics</td>
<td>3</td>
<td>BU ECN</td>
<td>PR: ECO 3101 or ECO 6114.</td>
<td>Economics of growth and development of urban areas, interurban location patterns.</td>
</tr>
<tr>
<td>ECP 6624</td>
<td>Regional Economics</td>
<td>3</td>
<td>BU ECN</td>
<td>PR: ECO 3101 or ECO 6114</td>
<td>Geographical allocation of resources within and among regions, location of households and firms, interregional migration of labor and capital, regional growth and development, regional policy.</td>
</tr>
<tr>
<td>ECP 6702</td>
<td>Managerial Economics</td>
<td>2</td>
<td>BU MBA</td>
<td></td>
<td>This course presents the microeconomic theory of price determination in an exchange economy with special emphasis on the behavior of firms in various market structures.</td>
</tr>
<tr>
<td>ECP 7207</td>
<td>Labor Economics II</td>
<td>3</td>
<td>BU ECN</td>
<td>PR: ECO 6205.</td>
<td>Advanced study of labor economics including analysis of the wage structure, labor unions, labor mobility, and unemployment.</td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
<td>Credits</td>
<td>Days</td>
<td>Prerequisites</td>
<td>Description</td>
</tr>
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<tr>
<td>ECP</td>
<td>Industrial Organization II</td>
<td>3</td>
<td>BU</td>
<td>ECO 6115, ECO 6424, ECP 6405</td>
<td>This course will introduce students to advanced topics in empirical industrial organization. Particular emphasis will be placed on techniques to estimate the behavior of firms, market equilibrium, and the impact of economic policy on markets.</td>
</tr>
<tr>
<td>ECP</td>
<td>Economics of Health Care II</td>
<td>3</td>
<td>BU</td>
<td>ECO 6536 or CC.</td>
<td>Advanced analysis of health economics with emphasis on recent empirical studies of health care.</td>
</tr>
<tr>
<td>ECT</td>
<td>Preparation and Development for Teaching</td>
<td>4</td>
<td>ED</td>
<td>EDV</td>
<td>The development of selected instructional materials, use of new educational media, performance evaluation instruments, and counseling techniques.</td>
</tr>
<tr>
<td>ECT</td>
<td>Enhancing Career and Technical Education Curriculum</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>Enhancing career &amp; technical education curriculum including broadening mission, goals &amp; outcomes, integration with academics, work-based learning, contextual learning, appropriate technology &amp; certifying student mastery. Open to majors &amp; non-majors.</td>
</tr>
<tr>
<td>ECT</td>
<td>Trends and Issues in Career and Technical Education</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>Historical influences and current trends and issues in career and technical education. Emphasis on forces significantly shaping the course of CTE and its relationship with workforce development and academic education. Open to majors and non-majors.</td>
</tr>
<tr>
<td>ECT</td>
<td>Emerging Workplace Competencies</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>An interactive exploration of emerging workplace competencies through research, analysis, and work-based experiences for the purpose of professional development and program improvement.</td>
</tr>
<tr>
<td>ECT</td>
<td>Staff Development</td>
<td>1-5</td>
<td>ED</td>
<td>EDV</td>
<td>Implementation of new procedures addressed to discrete developmental needs of the staff as identified by an educational agency.</td>
</tr>
<tr>
<td>ECT</td>
<td>Seminar</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>Focuses on special topics, interaction with visiting scholars, recent research and major initiatives within the profession.</td>
</tr>
<tr>
<td>ECT</td>
<td>Practicum: Industrial-Technical Education</td>
<td>3-6</td>
<td>ED</td>
<td>EDV</td>
<td>A problem-centered field study in the local community, school, government, office, social agency, business, or industry.</td>
</tr>
<tr>
<td>ECT</td>
<td>Instructional Development For Vocational, Technical, And Adult Education</td>
<td>4</td>
<td>ED</td>
<td>EDV</td>
<td>The systematic approach to vocational, technical, and adult education curriculum improvement and instructional development. Students will apply an instructional systems approach to the development of practical solutions to critical teaching and learning problems.</td>
</tr>
<tr>
<td>ECT</td>
<td>Directed Research in Vocational Education</td>
<td>1-9</td>
<td>ED</td>
<td>PR: Cl.</td>
<td>This course permits a doctoral student to conduct advanced research and to pursue specific areas of interest with a faculty member as supervisor. A contract is required.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>Prerequisite</td>
<td>Description</td>
</tr>
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<td>-------------</td>
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</tr>
<tr>
<td>ECT 7980</td>
<td>Dissertation</td>
<td>2-3</td>
<td>ED</td>
<td>EDV</td>
<td>PR: Admitted to Candidacy.</td>
</tr>
<tr>
<td>ECW 5315</td>
<td>Program Management: Diversified Cooperative Training</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>Organization, coordination, and budgeting of adult, cooperative, and special programs.</td>
</tr>
<tr>
<td>ECW 6205</td>
<td>Administration Of Local Programs: Vocational</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>Organization, personnel selection and assignment, and establishment of policies and procedures for local vocational programs within federal, state and local requirements.</td>
</tr>
<tr>
<td>ECW 6206</td>
<td>Supervision Of Local Programs: Vocational Education</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>A study of the factors involved in the supervision of instruction including plans for teacher education, improvement of instruction, coordination of activities, and personnel relations.</td>
</tr>
<tr>
<td>ECW 6695</td>
<td>School Community Relations</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>Maintaining positive relations between career and technical education programs and stakeholders, enhancing CTE image, interacting positively with customers, positive relations with businesses and marketing the program. Open to majors and non-majors.</td>
</tr>
<tr>
<td>ECW 6696</td>
<td>Equity and Access in the New Economy</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>Examine workplace/workforce education regarding equity and access issues of gender, race, class and age through reflective practice, research, dialogue, field experience, product development with implications for education, training, personal and systems change.</td>
</tr>
<tr>
<td>ECW 7066</td>
<td>Foundations And Philosophy Of Vocational, Technical And Adult Education</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>PR: Preliminary admission to the advanced graduate program and/or CI. Historical development and contemporary philosophies, cultural bases and practices of Vocational, Technical, and Adult Education.</td>
</tr>
<tr>
<td>ECW 7105</td>
<td>Vocational And Adult Education Program Planning And Implementation</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>Knowledge and skills necessary to participate in the initial determination, planning, organization, and implementation of new or expanded adult, vocational and technical education institutions or programs.</td>
</tr>
<tr>
<td>EDA 6061</td>
<td>Principles of Educational Administration</td>
<td>3</td>
<td>ED</td>
<td>EDB</td>
<td>Educational administration as a profession. Consideration of organization, control, and support of the educational system.</td>
</tr>
<tr>
<td>EDA 6106</td>
<td>Administrative Analysis and Change</td>
<td>3</td>
<td>ED</td>
<td>EDB</td>
<td>PR: EDA 6061. Change and change strategies in formal and informal organizations are foci. Students will develop change strategies and will apply them to selected situations.</td>
</tr>
<tr>
<td>EDA 6192</td>
<td>Educational Leadership</td>
<td>3</td>
<td>ED</td>
<td>EDB</td>
<td>PR: EDA 6061. Administration course that addresses change, influences, and planning systems. Also examines personnel functions for administrators.</td>
</tr>
<tr>
<td>EDA 6194</td>
<td>Educational Leadership II: Building Capacity</td>
<td>3</td>
<td>ED</td>
<td>EDB</td>
<td>PR: EDA 6192. Three major themes to improve schools within a clear/compelling moral purpose: 1) communities of differences; 2) teacher development through professional community building; and 3) learners and learning through capacity building at the</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Offered</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>EDA 6195</td>
<td>Policy Development</td>
<td>3</td>
<td>ED</td>
<td>EDB</td>
<td>PR: EDA 6061. Contemporary research on diffusion of innovations, political power in policy decision making. Role of establishing educational policies.</td>
</tr>
<tr>
<td>EDA 6242</td>
<td>School Finance</td>
<td>3</td>
<td>ED</td>
<td>EDB</td>
<td>PR: GS, EDA 6061, or Cl. Financial support of education by local, state, federal sources, with emphasis on Florida; introduction to educational budgeting.</td>
</tr>
<tr>
<td>EDA 6262</td>
<td>Planning Educational Facilities</td>
<td>3</td>
<td>ED</td>
<td>EDB</td>
<td>PR: GS, EDA 6061, or Cl. Problems in the planning, construction, and use of educational facilities. Visitation and/or evaluation of selected schools.</td>
</tr>
<tr>
<td>EDA 6503</td>
<td>The Principalship</td>
<td>3</td>
<td>ED</td>
<td>EDB</td>
<td>PR: EDA 6061. Organization and administration of the school. Emphasis on the competencies necessary for leadership and management by the principal as the administrator and instructional leader.</td>
</tr>
<tr>
<td>EDA 6931</td>
<td>Case Studies in School Administration</td>
<td>3</td>
<td>ED</td>
<td>EDB</td>
<td>PR: GS, EDA 6061 or Cl. Field experiences in school systems for identifying and analyzing educational problems and their solutions. Application of concepts developed in the student’s program.</td>
</tr>
<tr>
<td>EDA 6945</td>
<td>Administration Practicum</td>
<td>3-8</td>
<td>ED</td>
<td>EDB</td>
<td>PR: GS, EDA 6061 and completion of a significant amount of the student’s program.</td>
</tr>
<tr>
<td>EDA 6971</td>
<td>Thesis: Masters/Educational Specialist</td>
<td>2-1.9</td>
<td>ED</td>
<td>EDB</td>
<td>S/U. The purpose of this course is to read about, examine, discuss, and critique competing theories of ethics and educational leadership. Students will construct critical cases &amp; statements of responsibility in terms of ethics applied to leadership.</td>
</tr>
<tr>
<td>EDA 7069</td>
<td>Ethics and Educational Leadership</td>
<td>3</td>
<td>ED</td>
<td>EDB</td>
<td>Administrative of school personnel policies and practices relating to professional staff, supporting staff, and students.</td>
</tr>
<tr>
<td>EDA 7222</td>
<td>Administration Of School Personnel Policies And Practices</td>
<td>3</td>
<td>ED</td>
<td>EDB</td>
<td>PR: GS, EDA 6061 or Cl. Administrative of school personnel policies and practices relating to professional staff, supporting staff, and students.</td>
</tr>
<tr>
<td>EDA 7233</td>
<td>Legal Dimensions Of School Administration</td>
<td>3</td>
<td>ED</td>
<td>EDB</td>
<td>PR: GS, EDA 6232, Cl. Historical perspective in law and education with in-depth reviews of case law showing the evolution of courts as educational policy makers.</td>
</tr>
<tr>
<td>EDA 7980</td>
<td>Dissertation</td>
<td>2-3</td>
<td>ED</td>
<td>EDB</td>
<td>PR: Admitted to Candidacy.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Hours</td>
<td>Description</td>
<td></td>
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<tr>
<td>EDE 6225</td>
<td>Problems in Curriculum and Instruction: Elementary</td>
<td>1-3</td>
<td>ED</td>
<td>EDC</td>
<td>PR: EDG 4620, EDG 6627. For teachers, supervisors, and administrators. Curricular and instructional problems of the elementary school. Common problems or problems of special interest to the participants. Normally, for certification requirements only.</td>
</tr>
<tr>
<td>EDE 6326</td>
<td>Planning and Organizing for Instruction in the Elementary School</td>
<td>3</td>
<td>ED</td>
<td>EDE</td>
<td>Introduction to the theories and practices that support children’s learning. Includes accessing resources that support teaching, developing lessons, designing appropriate assessments, and the elements that influence instructional decision-making.</td>
</tr>
<tr>
<td>EDE 6458</td>
<td>Reflecting on Instructional Decision Making</td>
<td>1-3</td>
<td>ED</td>
<td>EDE</td>
<td>CR: For first hour: EDE 6946. For second hour EDG 6947. Develops the students’ abilities to reflect upon teaching practice and evaluate instructional decisions on K-6 student learning. The first hour is taken with the practicum. The second hour is to be taken in conjunction with final internship.</td>
</tr>
<tr>
<td>EDE 6506</td>
<td>Classroom Management, School Safety, Ethics and Law</td>
<td>3</td>
<td>ED</td>
<td>EDE</td>
<td>Examines the legal issues affecting classroom/school management, school safety and professional ethics. Explores research and knowledge of best practices and a variety of teaching and management strategies for a diverse elementary classroom setting.</td>
</tr>
<tr>
<td>EDE 6906</td>
<td>Independent Study: Elementary/Early Childhood Education</td>
<td>1-6</td>
<td>ED</td>
<td>EDE</td>
<td>S/U. Independent study in which students must have a contract.</td>
</tr>
<tr>
<td>EDE 6946</td>
<td>Practicum in the Elementary School</td>
<td>3</td>
<td>ED</td>
<td>EDE</td>
<td>CR: EDE 6458-1. This intensive practicum experience is designed to complement foundational MAT course work and is completed during the second block of the MAT program. This course is restricted to majors and is not repeatable. S/U only..</td>
</tr>
<tr>
<td>EDE 6971</td>
<td>Thesis: Masters/Educational Specialist</td>
<td>2-1</td>
<td>ED</td>
<td>EDE</td>
<td>S/U, MA/EdS Candidates only.</td>
</tr>
<tr>
<td>EDE 7910</td>
<td>Directed Research in Elementary Education</td>
<td>1-1</td>
<td>ED</td>
<td>EDE</td>
<td>PR: Advanced graduate standing. Independent student-faculty research course.</td>
</tr>
<tr>
<td>EDE 7980</td>
<td>Dissertation</td>
<td>2-3</td>
<td>ED</td>
<td>EDE</td>
<td>PR: Admitted to Candidacy.</td>
</tr>
<tr>
<td>EDF 6120</td>
<td>Child Development</td>
<td>4</td>
<td>ED</td>
<td>EDF</td>
<td>PR: EDF 6211 or DPR. Educational, emotional, hereditary, intellectual, social, and physical factors influencing child growth and development.</td>
</tr>
<tr>
<td>EDF 6165</td>
<td>Group Processes for</td>
<td>1-3</td>
<td>ED</td>
<td>EDF</td>
<td>Application of group process research.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Corequisites</td>
<td>Pre-requisites</td>
<td>Course Description</td>
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<tr>
<td>EDF 6166</td>
<td>Consulting Skills for Staff Development</td>
<td>1-3</td>
<td>ED EDF</td>
<td>PR: DPR.</td>
<td>Knowledge and skill training for consulting with organizational clients to solve educational problems and design learning environments or programs.</td>
</tr>
<tr>
<td>EDF 6211</td>
<td>Psychological Foundations of Education</td>
<td>3</td>
<td>ED EDF</td>
<td></td>
<td>Selected topics in psychology of human development and learning, related to schools and educational settings.</td>
</tr>
<tr>
<td>EDF 6213</td>
<td>Biological Bases for Learning Behavior</td>
<td>3</td>
<td>ED EDF</td>
<td>PR: One course in Educational Psychology.</td>
<td>Human biological development and its influence upon learning and behavior.</td>
</tr>
<tr>
<td>EDF 6215</td>
<td>Learning Principles Applied to Instruction</td>
<td>4</td>
<td>ED EDF</td>
<td>PR: CI.</td>
<td>Learning principles and their application to classroom instruction.</td>
</tr>
<tr>
<td>EDF 6217</td>
<td>Behavior Theory and Classroom Learning</td>
<td>4</td>
<td>ED EDF</td>
<td>PR: EDF 6215 or DPR.</td>
<td>Theory and practical applications of behavior modification; introduction to experimental methods for behavior modification; operant methods in behavior and development; analysis and field work.</td>
</tr>
<tr>
<td>EDF 6281</td>
<td>Workshop and Conference Design</td>
<td>3</td>
<td>ED EDF</td>
<td></td>
<td>Knowledge and skills to design, conduct and/or administer, and evaluate both workshops and conferences.</td>
</tr>
<tr>
<td>EDF 6284</td>
<td>Problems in Instructional Design for Computers</td>
<td>3</td>
<td>ED EDK</td>
<td>PR: Computer literacy.</td>
<td>This course focuses on the systematic design of instructional courseware, including analysis, media selection, and evaluation. Topics include instructional strategies, screen design, response analysis, feedback and interactivity.</td>
</tr>
<tr>
<td>EDF 6288</td>
<td>Instructional Design I</td>
<td>3</td>
<td>ED EDF</td>
<td>PR: EDF 6215 or DPR.</td>
<td>Instructional design models/theories and their systematic application to instructional goals.</td>
</tr>
<tr>
<td>EDF 6354</td>
<td>Human Development and Personality Theories</td>
<td>4</td>
<td>ED EDF</td>
<td></td>
<td>A study of psycho-social and cognitive development throughout a person’s life span with an analysis of the major personality theories.</td>
</tr>
<tr>
<td>EDF 6432</td>
<td>Foundations Of Measurement</td>
<td>3</td>
<td>ED EDQ</td>
<td></td>
<td>Basic measurement concepts, role of measurement in education, construction of teacher-made tests and other classroom assessments, interpretation of standardized tests, and fundamental descriptive statistics for use in test interpretation.</td>
</tr>
<tr>
<td>EDF 6446</td>
<td>Development and Validation of Tests in Education</td>
<td>3</td>
<td>ED EDQ</td>
<td>PR: EDF 6432, EDF 6407. DPR.</td>
<td>Design, construction, and validation of state-wide tests. Special emphasis on domain sampling, item response theory, item scaling, item fit, and constructing, maintaining, and updating item banks.</td>
</tr>
<tr>
<td>EDF 6481</td>
<td>Foundations of Educational Research</td>
<td>3</td>
<td>ED EDQ</td>
<td>PR: EDF 6432, or DPR.</td>
<td>Analysis of major types of educational research designs, including experimental, correlational, ex post facto and case studies.</td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Description</td>
<td></td>
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</tr>
<tr>
<td>EDF 6492</td>
<td>Applied Educational Program Evaluation</td>
<td>3</td>
<td>ED EDF</td>
<td>PR: EDF 6432, EDF 6446. DPR. Design, development, implementation, interpretation, and communication of both formative and summative educational program evaluation studies.</td>
<td></td>
</tr>
<tr>
<td>EDF 6517</td>
<td>Historical Foundations of American Education</td>
<td>4</td>
<td>ED EDF</td>
<td>History of the origins and development of American education, events, and movements that have shaped school policies and practices, and their relationship to contemporary developments.</td>
<td></td>
</tr>
<tr>
<td>EDF 6531</td>
<td>History of Childhood, Disability, and Deviance</td>
<td>3</td>
<td>ED EDF</td>
<td>PR: Department approval required. Historical development of the idea and experience of modern childhood. Social construction of age categories and age related institutions such as schools. Issues of diversity including concepts of deviance, ability and disability in historical perspective. Social policies and inequality by social class, race/ethnicity/culture and gender.</td>
<td></td>
</tr>
<tr>
<td>EDF 6544</td>
<td>Philosophical Foundations of American Education</td>
<td>3</td>
<td>ED EDF</td>
<td>Major philosophies of education relevant to an understanding of contemporary educational issues.</td>
<td></td>
</tr>
<tr>
<td>EDF 6606</td>
<td>Socio-Economic Foundations of American Education</td>
<td>4</td>
<td>ED EDF</td>
<td>Socio-economic factors as they relate to the work of professional educators and the role of public education in American society.</td>
<td></td>
</tr>
<tr>
<td>EDF 6705</td>
<td>Gender and the Educational Process</td>
<td>3</td>
<td>ED EDF</td>
<td>Course is designed to enable public school personnel, teachers, counselors, administrators, and other professionals to identify those aspects of public education that perpetuate sex role stereotyping. Emphasis will be placed on how the law and formal and informal affirmative action activities can be employed to correct sexism in schools.</td>
<td></td>
</tr>
<tr>
<td>EDF 6736</td>
<td>Education, Communication, and Change</td>
<td>3</td>
<td>ED EDF</td>
<td>PR: CI. Developments in communication as a process of social change as it affects students, teachers, and traditional school arrangements.</td>
<td></td>
</tr>
<tr>
<td>EDF 6765</td>
<td>Schools and the Future</td>
<td>4</td>
<td>ED EDF</td>
<td>Estimates of future demands upon schools; critique of current paradigms, techniques, and literature.</td>
<td></td>
</tr>
<tr>
<td>EDF 6810</td>
<td>Comparative Education</td>
<td>3</td>
<td>ED EDF</td>
<td>Comparison of contemporary educational systems of selected countries with that of the United States.</td>
<td></td>
</tr>
<tr>
<td>EDF 6812</td>
<td>Seminar in Comparative Education</td>
<td>4</td>
<td>ED EDF</td>
<td>Policies and practices in education in selected countries.</td>
<td></td>
</tr>
<tr>
<td>EDF 6883</td>
<td>Issues in Multicultural Education</td>
<td>4</td>
<td>ED EDF</td>
<td>PR: DPR. Lecture/discussion course, open to both majors and non-majors; address both fundamental concepts and timely issues in multicultural education and working with culturally diverse students.</td>
<td></td>
</tr>
<tr>
<td>EDF 6885</td>
<td>Internship in Community Agency Counseling</td>
<td>6 or 3</td>
<td>ED EDG</td>
<td>PR: All required MHS courses. Field experience involving one semester of full-time participation or two semesters of part-time participation in the counseling and related activities of a public or private agency providing mental health services to the community.</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Credits</td>
<td>Type</td>
<td>Type</td>
<td>Type</td>
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<tr>
<td>EDF 6906</td>
<td>Independent Study: Educational Foundations</td>
<td>1-6</td>
<td>ED</td>
<td>EDF</td>
<td>S/U.</td>
</tr>
<tr>
<td>EDF 6935</td>
<td>Wellness Programming Seminar</td>
<td>2</td>
<td>ED</td>
<td>EDF</td>
<td>PR: CI.</td>
</tr>
<tr>
<td>EDF 6938</td>
<td>Selected Topics</td>
<td>1-4</td>
<td>ED</td>
<td>EDF</td>
<td>PR: CC</td>
</tr>
<tr>
<td>EDF 6941</td>
<td>Practicum in Measurement, Evaluation, and Research</td>
<td>1-4</td>
<td>ED</td>
<td>EDQ</td>
<td>PR: Pursuing the M. Ed. Program in Measurement And Evaluation or Graduate Certificate in Research Methods and CI. Practicum provides individuals in the M.Ed.in Measurement and Evaluation opportunities to apply research and evaluation skills in applied settings (e.g., local school districts, Centers within the University). May be repeated up to 8 hours.</td>
</tr>
<tr>
<td>EDF 6944</td>
<td>Field Experience</td>
<td>1-4</td>
<td>ED</td>
<td>EDF</td>
<td>PR: CI.</td>
</tr>
<tr>
<td>EDF 6971</td>
<td>Thesis: Masters/Educational Specialist</td>
<td>2-1</td>
<td>ED</td>
<td>EDQ</td>
<td>S/U.</td>
</tr>
<tr>
<td>EDF 7143</td>
<td>Measurement of Cognitive Functioning in Childhood and Adolescence</td>
<td>4</td>
<td>ED</td>
<td>EDF</td>
<td>PR: A course in measurement.</td>
</tr>
<tr>
<td>EDF 7145</td>
<td>Cognitive Issues in Instruction</td>
<td>4</td>
<td>ED</td>
<td>EDF</td>
<td>PR: Admission to doctoral program and EDF 6215.</td>
</tr>
<tr>
<td>EDF 7167</td>
<td>Experiential Learning: Theory and Methods</td>
<td>3</td>
<td>ED</td>
<td>EDF</td>
<td></td>
</tr>
<tr>
<td>EDF 7227</td>
<td>Topics in Behavior Analysis and Automated Instruction</td>
<td>1-2</td>
<td>ED</td>
<td>EDF</td>
<td>PR: EDF 6215 or EDF 6217 or Advanced Graduate Standing, CI</td>
</tr>
<tr>
<td>EDF 7239</td>
<td>Supervised Experience in College Teaching</td>
<td>2</td>
<td>ED</td>
<td>EDF</td>
<td></td>
</tr>
<tr>
<td>EDF 7265</td>
<td>Psychology of Oral and Written Language</td>
<td>4</td>
<td>ED</td>
<td>EDF</td>
<td>PR: Doctoral Student.</td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
<td>Credits</td>
<td>Type</td>
<td>Specific</td>
<td>Prerequisites</td>
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</tr>
<tr>
<td>EDF</td>
<td>Statistical Analysis For Educational Research II</td>
<td>4</td>
<td>ED</td>
<td>EDQ</td>
<td>PR: EDF 6407 or equiv. or DPR.</td>
</tr>
<tr>
<td>EDF</td>
<td>Design Of Systematic Studies In Education</td>
<td>4</td>
<td>ED</td>
<td>EDQ</td>
<td>PR: EDF 6407, EDF 7408 or equiv. or DPR.</td>
</tr>
<tr>
<td>EDF</td>
<td>Application of Structural Equation Modeling in Education</td>
<td>3</td>
<td>ED</td>
<td>EDQ</td>
<td>PR: EDF 7408 or equivalent.</td>
</tr>
<tr>
<td>EDF</td>
<td>Advanced Educational Measurement I</td>
<td>3</td>
<td>ED</td>
<td>EDQ</td>
<td>PR: EDF 6432 or equiv.; EDF 6407 or equiv.</td>
</tr>
<tr>
<td>EDF</td>
<td>Advanced Educational Measurement II</td>
<td>4</td>
<td>ED</td>
<td>EDQ</td>
<td>PR: EDF 7437 or DPR.</td>
</tr>
<tr>
<td>EDF</td>
<td>Foundations of Item Response Theory</td>
<td>3</td>
<td>ED</td>
<td>EDQ</td>
<td>PR: EDF 6432.</td>
</tr>
<tr>
<td>EDF</td>
<td>Introduction to Computer-Based Testing</td>
<td>3</td>
<td>ED</td>
<td>EDQ</td>
<td>PR: EDF 6432.</td>
</tr>
<tr>
<td>EDF</td>
<td>Qualitative Research in Education Part I</td>
<td>4</td>
<td>ED</td>
<td>EDQ</td>
<td>PR: Advanced GS or DPR.</td>
</tr>
<tr>
<td>EDF</td>
<td>Qualitative Research in Education Part II</td>
<td>4</td>
<td>ED</td>
<td>EDQ</td>
<td>PR: Advanced GS and EDF 7477.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Type</td>
<td>Co-requisites</td>
<td>Description</td>
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</tr>
<tr>
<td>EDF 7484</td>
<td>Statistical Analysis For Educational Research III</td>
<td>4</td>
<td>ED</td>
<td>EDQ</td>
<td>Theory and application of selected multivariate statistical procedures, including Canonical Correlation, Discriminate Analysis, Multivariate Analysis of Variance, Factor Analysis, and Path Analysis.</td>
</tr>
<tr>
<td>EDF 7485</td>
<td>Theory and Practice of Education Evaluation</td>
<td>3</td>
<td>ED</td>
<td>EDQ</td>
<td>Comparative analysis of contemporary evaluation approaches; theory and scientific basis of evaluation; social and political impact of evaluation on educational decision making; and the design, implementation and reporting of evaluation studies.</td>
</tr>
<tr>
<td>EDF 7488</td>
<td>Problems in Educational Data Analysis</td>
<td>2</td>
<td>ED</td>
<td>EDQ</td>
<td>Strategies and techniques for data processing and quantitative analysis using statistical software, including data screening, transformation, diagnostic indices, and interpretation.</td>
</tr>
<tr>
<td>EDF 7530</td>
<td>History of Higher Education in the United States</td>
<td>3</td>
<td>ED</td>
<td>EDF</td>
<td>Historical overview of American higher education from Colonial period to present. History of undergraduate curriculum, changing purpose of higher ed, and growth in hierarchical categorization of higher ed as college became more accessible to students.</td>
</tr>
<tr>
<td>EDF 7555</td>
<td>Moral Development and Education</td>
<td>3-4</td>
<td>ED</td>
<td>EDF</td>
<td>This course will examine the dynamics of moral development. We will study the psychological foundations of moral education through examining the empirical research and philosophical work underlying social scientists’ conceptions of morality.</td>
</tr>
<tr>
<td>EDF 7586</td>
<td>Classics in Educational Research</td>
<td>4</td>
<td>ED</td>
<td>EDF</td>
<td>Examination of the context, methods, and significance of selected research studies in education.</td>
</tr>
<tr>
<td>EDF 7649</td>
<td>Analysis of Educational Issues</td>
<td>3</td>
<td>ED</td>
<td>EDF</td>
<td>Socio-cultural, historical, and axiological examination of selected issues in public education.</td>
</tr>
<tr>
<td>EDF 7655</td>
<td>Organization Development in Educational Institutions</td>
<td>4</td>
<td>ED</td>
<td>EDF</td>
<td>Application of social and behavioral science theory to the organizational and developmental problems of schools and school systems.</td>
</tr>
<tr>
<td>EDF 7682</td>
<td>Education in Metropolitan Areas</td>
<td>4</td>
<td>ED</td>
<td>EDF</td>
<td>Modern public education and its relationship to national development.</td>
</tr>
<tr>
<td>EDF 7910</td>
<td>Directed Research in Measurement and Evaluation</td>
<td>1-9</td>
<td>ED</td>
<td>EDQ</td>
<td>Independent student-faculty research course.</td>
</tr>
<tr>
<td>EDF 7934</td>
<td>Seminar in Social Foundations of Education</td>
<td>4</td>
<td>ED</td>
<td>EDF</td>
<td>Significant research on socio-cultural issues in Education.</td>
</tr>
<tr>
<td>EDF 7940</td>
<td>Practicum in Educational Planning, Evaluation, And Development</td>
<td>1-8</td>
<td>ED</td>
<td>EDQ</td>
<td>Supervised practicum in which the student assumes major responsibility for significant planning, evaluation, research, or development activity.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Title</td>
<td>Units</td>
<td>Types</td>
<td>Credits</td>
<td>Prerequisites</td>
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</tr>
<tr>
<td>EDF 7980</td>
<td>Dissertation</td>
<td>2-3</td>
<td>ED</td>
<td>EDQ</td>
<td>PR: Admission to Candidacy.</td>
</tr>
<tr>
<td>EDG 6285</td>
<td>School Curriculum Improvement</td>
<td>3</td>
<td>ED</td>
<td>EDC</td>
<td>PR: Workshop for the improvement of the curriculum of an elementary or secondary school, CC. Open only to teachers in service.</td>
</tr>
<tr>
<td>EDG 6329</td>
<td>Creative Drama in a Developmental Context</td>
<td>3</td>
<td>TA</td>
<td>EDD</td>
<td></td>
</tr>
<tr>
<td>EDG 6344</td>
<td>Project T.E.A.C.H. (Teacher Effectiveness and Classroom Handling)</td>
<td>3</td>
<td>ED</td>
<td>EDR</td>
<td>PR: CC.</td>
</tr>
<tr>
<td>EDG 6415</td>
<td>Project P.R.I.D.E. (Professional Refinements In Developing Effectiveness)</td>
<td>3</td>
<td>ED</td>
<td>EDE</td>
<td></td>
</tr>
<tr>
<td>EDG 6417</td>
<td>Teaching Through Learning Channels</td>
<td>3</td>
<td>ED</td>
<td>EDE</td>
<td></td>
</tr>
<tr>
<td>EDG 6627</td>
<td>Foundations Of Curriculum And Instruction</td>
<td>3</td>
<td>ED</td>
<td>EDC</td>
<td>PR: EDG 4620.</td>
</tr>
<tr>
<td>EDG 6906</td>
<td>Independent Study</td>
<td>1-19</td>
<td>ED</td>
<td>EDV</td>
<td>S/U.</td>
</tr>
<tr>
<td>EDG 6931</td>
<td>Selected Topics in Education</td>
<td>1-4</td>
<td>ED</td>
<td>EDC</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>EDG 6935</td>
<td>Seminar in Curriculum Research</td>
<td>1-3</td>
<td>ED</td>
<td>EDE</td>
<td></td>
</tr>
<tr>
<td>EDG 6947</td>
<td>Internship</td>
<td>1-3</td>
<td>ED</td>
<td>EDC</td>
<td>PR: DPR. S/U only.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Credits</td>
<td>Requirements</td>
<td>Description</td>
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<tr>
<td>EDG 6971</td>
<td>Thesis: Masters/Education Specialist</td>
<td>9</td>
<td>ED</td>
<td>S/U. Master’s students only. Interdisciplinary Studies only.</td>
<td>Only. Supervised teaching at the secondary or junior college level as appropriate.</td>
</tr>
<tr>
<td>EDG 7357</td>
<td>Mentoring Theory and Leadership Practice</td>
<td>3</td>
<td>ED</td>
<td>EDH</td>
<td>This cross-disciplinary doctoral course is for students interested in the topic and process of mentoring in education. Students from inside and outside the College of Education are eligible.</td>
</tr>
<tr>
<td>EDG 7667</td>
<td>Analysis of Curriculum and Instruction</td>
<td>3</td>
<td>ED</td>
<td>EDC</td>
<td>Various theoretical frameworks for analyzing curriculum and instruction. Emphasis on rational models of curriculum inquiry.</td>
</tr>
<tr>
<td>EDG 7692</td>
<td>Issues in Curriculum and Instruction</td>
<td>3</td>
<td>ED</td>
<td>EDC</td>
<td>Identification and analysis of major problems and issues in curriculum and instruction. Critical examination of efforts to deal with these issues.</td>
</tr>
<tr>
<td>EDG 7910</td>
<td>Directed Research</td>
<td>1-1</td>
<td>ED</td>
<td>EDC</td>
<td>S/U only.</td>
</tr>
<tr>
<td>EDG 7931</td>
<td>Selected Topics</td>
<td>1-4</td>
<td>ED</td>
<td>EDC</td>
<td>Selected topics in advanced Education.</td>
</tr>
<tr>
<td>EDG 7937</td>
<td>Graduate Seminar</td>
<td>1-4</td>
<td>ED</td>
<td>EDC</td>
<td>Seminar in advanced Education.</td>
</tr>
<tr>
<td>EDG 7980</td>
<td>Dissertation</td>
<td>2-1</td>
<td>ED</td>
<td>EDC</td>
<td>PR: Admitted to Candidacy. S/U. Interdisciplinary Studies only.</td>
</tr>
<tr>
<td>EDH 6051</td>
<td>Higher Education in America</td>
<td>3</td>
<td>ED</td>
<td>EDH</td>
<td>For current and prospective faculty, administrators, policy analysts, and staff seeking to learn about American higher education. The topics addressed include the history, recent developments, and projections for the future of various aspects of higher education, including its missions, purposes, students, faculty and staff, administration, finance, organization, governance, and role in American society.</td>
</tr>
<tr>
<td>EDH 6081</td>
<td>Junior College in American Higher Education</td>
<td>3</td>
<td>ED</td>
<td>EDH</td>
<td>Philosophical and cultural bases for definition of its role and contemporary issues, such as control, financing, and curricular patterns. Emphasis on the place and problems of the community junior college.</td>
</tr>
<tr>
<td>EDH 6406</td>
<td>Ethics and Higher Education</td>
<td>3</td>
<td>ED</td>
<td>EDH</td>
<td>The purpose of this course is to assist students in developing a detailed ethical framework that will guide their actions and decision-making as they serve in leadership and teaching positions in higher education. Areas of emphasis include (a) learning selected philosophies of ethics; (b) exploring student, faculty, and classroom ethical issues; (c) discussing administrator/board ethical issues; (d) examining the college or university as an ethical organization.</td>
</tr>
<tr>
<td>EDH 6906</td>
<td>Independent Study</td>
<td>1-1</td>
<td>ED</td>
<td>EDH</td>
<td>Independent study in which students must have a contract with an</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Credits</td>
<td>Instructor</td>
<td>Description</td>
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<tr>
<td>EDH 6938</td>
<td>Seminar in College Teaching</td>
<td>3</td>
<td>ED EDH</td>
<td>Implications of learning theory and student characteristics for teaching at the college level. Types of teaching procedures, innovation, evaluation, student freedom, and responsibility for learning.</td>
<td></td>
</tr>
<tr>
<td>EDH 6947</td>
<td>Internship in Higher Education</td>
<td>1-6</td>
<td>ED EDH</td>
<td>This course provides higher education program graduate students with an extensive, semester-long, field experience in a two- or four-year college, under the dual guidance of a campus-based supervisor and a USF higher education program faculty member. The internship experience must relate to the student’s goals in the doctoral program. Students should be at or near the end of their graduate program.</td>
<td></td>
</tr>
<tr>
<td>EDH 7225</td>
<td>Curriculum Development In Higher Education</td>
<td>3</td>
<td>ED EDH</td>
<td>PR: GS or CI. Emphasis on curriculum perspectives, procedures, and practices in higher education; principles of curriculum and instruction in higher education; theory and practices in goal setting, curriculum planning, instructional improvement, and curriculum design.</td>
<td></td>
</tr>
<tr>
<td>EDH 7405</td>
<td>Policy and Legal Dimensions in Higher Education</td>
<td>3</td>
<td>ED EDH</td>
<td>This course is a doctoral level course with primary focus on the interface of policy and law as they address the nature, process and product of community college and higher education in the United States and Florida. Constitutional, statutory and contract law is also discussed, as are critical legal and policy issues in higher education, including governance, academic freedom, student rights, discrimination, tort liability, contracts and collective bargaining.</td>
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</tr>
<tr>
<td>EDH 7505</td>
<td>Higher Education Finance</td>
<td>3</td>
<td>ED EDH</td>
<td>PR: GS or CI. Emphasis on financial policies, planning, and budgeting; allocation; financial analysis and management, patterns of expenditure, sources of income. Relationships between educational objectives and resource allocations.</td>
<td></td>
</tr>
<tr>
<td>EDH 7632</td>
<td>Leadership in Higher Education</td>
<td>3</td>
<td>ED EDH</td>
<td>PR: Previous graduate work at the Master's level. This cross-disciplinary doctoral course is for students interested in the topic and process of mentoring in education. Students from inside and outside the College of Education are eligible.</td>
<td></td>
</tr>
<tr>
<td>EDH 7633</td>
<td>Governing Colleges and Universities</td>
<td>3</td>
<td>ED EDH</td>
<td>Students in this course will examine and compare existing models of state and local college and university governance structures Demographic, social, legal, financial, and planning issues and forces that effect how colleges and universities are governed will also be explored. Policy analysis and research will be explored as it relates to governance in higher education.</td>
<td></td>
</tr>
<tr>
<td>EDH 7635</td>
<td>Organization And</td>
<td>3</td>
<td>ED EDH</td>
<td>PR: GS or CI. Examines the concepts about higher education.</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Pre-Requisites</td>
<td>Description</td>
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<tr>
<td>EDH 7636</td>
<td>Administration Of Higher Education</td>
<td>3</td>
<td>ED, EDH</td>
<td>Explores theories and models of education organizations and administration, the behaviors of those organizations and administrators, and the relationships between concept and practice.</td>
<td></td>
</tr>
<tr>
<td>EDH 7910</td>
<td>Directed Research</td>
<td>1-9</td>
<td>ED, EDH</td>
<td>This course provides higher education program graduate students with an opportunity for directed research, under the supervision of a higher education program faculty member.</td>
<td></td>
</tr>
<tr>
<td>EDH 7930</td>
<td>Higher Education Seminar</td>
<td>1</td>
<td>ED, EDH</td>
<td>Topics of general and special concern in higher education, restricted to advanced graduate students.</td>
<td></td>
</tr>
<tr>
<td>EDH 7935</td>
<td>Higher Education Capstone Seminar</td>
<td>3</td>
<td>ED, EDH</td>
<td>The course is designed to encourage students’ integration and synthesis of theories, concepts and themes in previous coursework; to critique research in the field; and to provide some in-depth study of selected areas in higher education. Advanced Graduate Standing. Instructor approval required – majors only.</td>
<td></td>
</tr>
<tr>
<td>EDH 7980</td>
<td>Dissertation</td>
<td>2-3</td>
<td>ED, EDH</td>
<td>PR: Admitted to Candidacy.</td>
<td></td>
</tr>
<tr>
<td>EDM 6235</td>
<td>School Curriculum: Middle</td>
<td>3</td>
<td>ED, EDC</td>
<td>Open to all education graduate students. Examines the organization, curriculum, and instruction of the middle school with special emphasis on the nature of the students served.</td>
<td></td>
</tr>
<tr>
<td>EDM 6256</td>
<td>Problems In Curriculum And Instruction: Middle School</td>
<td>1-3</td>
<td>ED, EDC</td>
<td>PR: EDG 4620, EDG 6627. For teachers, supervisors, and administrators. Curricular and instructional problems of the middle school. Common problems or problems of special interest to the participants. Normally, for certification requirements only.</td>
<td></td>
</tr>
<tr>
<td>EDM 6622</td>
<td>Client Centered Middle Schools</td>
<td>3</td>
<td>ED, EDM</td>
<td>Majors Only.</td>
<td></td>
</tr>
<tr>
<td>EDM 6623</td>
<td>Responsive Middle School Programs</td>
<td>3</td>
<td>ED, EDM</td>
<td>PR: EDM 6622. Combination lecture/discussion/individual study course that examines in depth the current research on needs/characteristics of the early adolescent and its implications for both organization of the middle grade school and its delivery of curriculum and instruction.</td>
<td></td>
</tr>
<tr>
<td>EDM 6624</td>
<td>Effective Instruction for</td>
<td>3</td>
<td>ED, EDM</td>
<td>PR: EDM 6622 and EDM Combination</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Title</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>EDM 6935</td>
<td>Middle School Issues Seminar</td>
<td>1-3</td>
<td>EDM 6955</td>
<td>lecture/discussion/individual study course that examines in depth the current research on both alternative instructional strategies and assessment practices that are successful with middle level students. Combines discussion/individual study seminar modeling the advisory concept in a university setting and examining the current research on a variety of important trends/issues affecting middle level education.</td>
<td></td>
</tr>
<tr>
<td>EDS 6131</td>
<td>Clinical Supervision</td>
<td>3</td>
<td>EDB 6130</td>
<td>Trains administrators, supervisors, and peer teachers in observing and diagnosing teacher classroom performance, writing remedial plans, conducting post observation conferences, and evaluating performance.</td>
<td></td>
</tr>
<tr>
<td>EDS 6239</td>
<td>Problems In Supervision</td>
<td>3</td>
<td>EDB 6230</td>
<td>Analysis of instructional problems in schools. Emphasis on supervisory tasks, case studies, and the application of problem solving techniques and strategies.</td>
<td></td>
</tr>
<tr>
<td>EDS 7130</td>
<td>Teacher Evaluation: Process and Instruments</td>
<td>3</td>
<td>EDB 7130</td>
<td>Examines procedures for establishing content validity, reliability, norms, and predictive validity of teacher evaluation systems. Examines the psychometric qualities of selected instruments.</td>
<td></td>
</tr>
<tr>
<td>EEC 6055</td>
<td>Advocacy and Leadership in Early Childhood Education</td>
<td>3</td>
<td>EDA 6055, EDF 6052</td>
<td>This course focuses on developing leadership skills and knowledge necessary to help individuals build coalitions and design effective public policy/advocacy initiatives. This course is open to graduate non-majors and is repeatable for 3 hours credit.</td>
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</tr>
<tr>
<td>EEC 6205</td>
<td>E.C.: Curriculum and Authentic Assessment</td>
<td>3</td>
<td>EDA 6205</td>
<td>This course focuses issues, strategies and research associated with curriculum and authentic assessment. This course is open to graduate non-majors and is repeatable for three hours credit.</td>
<td></td>
</tr>
<tr>
<td>EEC 6261</td>
<td>Advanced Programs In Early Childhood Education</td>
<td>3</td>
<td>EDA 6261</td>
<td>Innovative curriculum designs in Early Childhood Education, with emphasis given to related research.</td>
<td></td>
</tr>
<tr>
<td>EEC 6265</td>
<td>Early Childhood Programs and Advanced Curriculum</td>
<td>3</td>
<td>EDA 6265</td>
<td>Historical traditions and contemporary programs and curriculum models analyzed with an emphasis on dominant practices, methodologies, and current research that influences curriculum development in programs serving young children. Open non-majors/RTHC.</td>
<td></td>
</tr>
<tr>
<td>EEC 6405</td>
<td>Home - School - Community Interaction In Early Childhood Education</td>
<td>3</td>
<td>EDA 6405</td>
<td>Roles of parents, teacher aides, and community agencies involved in the education of the young child.</td>
<td></td>
</tr>
<tr>
<td>EEC 6406</td>
<td>Social Growth In Childhood</td>
<td>3</td>
<td>EDA 6406</td>
<td>Principal factors that influence the social development of young children with particular emphasis upon those cultural influences that affect both child development and the...</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credits</td>
<td>Required</td>
<td>Program</td>
<td>Description</td>
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<tr>
<td>EEC 6415</td>
<td>EC: Diversity in Home and School</td>
<td>3</td>
<td>ED</td>
<td>EDU</td>
<td>Focuses on issues of diversity that affect classroom practices with emphasis on analyzing and synthesizing pertinent literature and research. This course is open to graduate non-majors and is repeatable for three credit hours.</td>
</tr>
<tr>
<td>EEC 6517</td>
<td>Social Justice in Early Childhood Education</td>
<td>3</td>
<td>ED</td>
<td>EDU</td>
<td>This course uses a social justice lens to examine the impact of diversities on social functioning and development of young children. Research skill development includes analysis of social policies. Course is open to non-maj and is rpt for 3 credit hours.</td>
</tr>
<tr>
<td>EEC 6525</td>
<td>Early Childhood Program Development and Administration</td>
<td>3</td>
<td>ED</td>
<td>EDU</td>
<td>An analysis of current educational programs for young children with emphasis on designing, developing, and administering a program commensurate with the needs of young children. This course is open for non-majors and is repeatable for 3 credit hours.</td>
</tr>
<tr>
<td>EEC 6626</td>
<td>EC: Play and Learning</td>
<td>3</td>
<td>ED</td>
<td>EDU</td>
<td>This course includes an analysis of play theories, the role of play in the total development of young children, and the role of play as a curricular tool and implications for program planning and evaluation. Open non-majors/RTHC.</td>
</tr>
<tr>
<td>EEC 6678</td>
<td>Research Seminar: Issues and Trends in Early Childhood Education</td>
<td>3</td>
<td>ED</td>
<td>EDU</td>
<td>This course is designed to create an awareness of developing trends and issues facing the field of early childhood education. Relevant research is reviewed and possible avenues for advocacy are explored. Course open to non-majors, repeatable for 3 credit hours.</td>
</tr>
<tr>
<td>EEC 6705</td>
<td>Intellectual Growth in Childhood</td>
<td>3</td>
<td>ED</td>
<td>EDU</td>
<td>Intellectual development of the normal child with particular emphasis on the studies of Jean Piaget and how they relate to curriculum for children, ages 0-8. Child study through observation required.</td>
</tr>
<tr>
<td>EEC 6926</td>
<td>Workshop in Early Childhood Education</td>
<td>3</td>
<td>ED</td>
<td>EDU</td>
<td>Individual problems and innovations related to methods and materials of instruction in early childhood.</td>
</tr>
<tr>
<td>EEC 6971</td>
<td>Thesis: Masters/Educational Specialist</td>
<td>2-1</td>
<td>ED</td>
<td>EDU</td>
<td>This course focuses on developing leadership and advocacy knowledge and skills necessary for designing public policy/advocacy initiatives directly affecting children and families. Open to all adv. grad stud &amp; may not be repeated for credit.</td>
</tr>
<tr>
<td>EEC 7056</td>
<td>Leadership and Advocacy: Issues Affecting Young Children</td>
<td>3</td>
<td>ED</td>
<td>EDU</td>
<td>An exploration of how philosophical ideas of education impact today’s practice in early childhood education. Open to all adv. grad stud &amp; may not be repeated for credit.</td>
</tr>
<tr>
<td>EEC 7057</td>
<td>Critical Perspectives in Early Childhood Education</td>
<td>3</td>
<td>ED</td>
<td>EDU</td>
<td>Policies and research focusing on</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Units</td>
<td>Co-requisites</td>
<td>Description</td>
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<tr>
<td>EEC 7416</td>
<td>ecological approaches to work with children, family, community</td>
<td>3</td>
<td>ED</td>
<td>EDU</td>
<td>teaching and learning in Early Childhood Education with an naturalistic inquiry / action research component. Course is open to all adv. grad students and may not be repeated for credit.</td>
</tr>
<tr>
<td>EEC 7613</td>
<td>Assessment in Early Childhood Education</td>
<td>3</td>
<td>ED</td>
<td>EDU</td>
<td>Focuses on issues relevant to young children within the context of their families and communities. Foundational and current research is examined in light of social policies. Open to all adv. grad stud &amp; may not be repeated for credit.</td>
</tr>
<tr>
<td>EEC 7615</td>
<td>Trends and Issues in Early Childhood Education</td>
<td>3</td>
<td>ED</td>
<td>EDU</td>
<td>This course will focus on current issues and trends in the field of Early Childhood Education, which serves young children from birth to age 8. Open to all adv. grad stud &amp; may not be repeated for credit.</td>
</tr>
<tr>
<td>EEC 7910</td>
<td>Directed Research in Early Childhood Education</td>
<td>1-1</td>
<td>ED</td>
<td>EDU</td>
<td>PR: Advanced graduate standing.</td>
</tr>
<tr>
<td>EEC 7980</td>
<td>Dissertation</td>
<td>2-3</td>
<td>ED</td>
<td>EDU</td>
<td>PR: Admission to Candidacy</td>
</tr>
<tr>
<td>EEE 5344C</td>
<td>Digital CMOS/VLSI Design</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td>PR: EEL 4705 or GS. Design, layout, simulation, and test of custom digital CMOS/VLSI chips, using a CMOS cell library and state-of-the-art CAD tools. Digital CMOS static and dynamic gates, flip flops, CMOS array structures commonly used in digital systems. Top down design example of a bit slice processor.</td>
</tr>
<tr>
<td>EEE 5356</td>
<td>Integrated Circuit Technology</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td>PR: EEL 4351 or GS. Physics and Chemistry of integrated circuit and discrete device fabrication, materials limitations, processing schemes, failure and yield analysis. A laboratory is integral to the course.</td>
</tr>
<tr>
<td>EEE 5382</td>
<td>Physical Basis Of Microelectronics</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td>PR: EEL 4471 or GS. Quantum mechanics with emphasis on electronic properties in atoms, molecules, and crystals; quantum statistics; energy band theory; crystal structures; defect chemistry; semiconductor properties.</td>
</tr>
<tr>
<td>EEE 6273</td>
<td>Chemical/Biological Sensors and Microfabrication</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td>This course discusses general concepts of MEMS, microfabrication and chem/bio sensors. The course concentrates on basics of MEMS, different processes involved and principles of sensing and understanding systems approaches to problems that require Sensors/MEMS.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>EEE 6318</td>
<td>Characterization of Semiconductors</td>
<td>3</td>
<td>EN EGE</td>
<td>Electrical, optical, chemical, and physical methods used to characterize semiconductor materials and devices; includes surface and near surface spectroscopics. Available to non-majors.</td>
<td></td>
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<tr>
<td>EEE 6353</td>
<td>Semiconductor Device Theory I</td>
<td>3</td>
<td>EN EGE</td>
<td>Theory of operation and application of circuits and devices.</td>
<td></td>
</tr>
<tr>
<td>EEE 6355</td>
<td>Compound Semiconductor Technology</td>
<td>3</td>
<td>EN EGE</td>
<td>Bulk crystal and epitaxial growth technologies of III-V and II-VI compound semiconductors. The properties, characterization, and device applications of these compounds will be emphasized.</td>
<td></td>
</tr>
<tr>
<td>EEE 6358</td>
<td>Semiconductor Device Theory II</td>
<td>3</td>
<td>EN EGE</td>
<td>Theory of operation and application of circuits and devices.</td>
<td></td>
</tr>
<tr>
<td>EEE 6425</td>
<td>Introduction to Nanotechnology</td>
<td>3</td>
<td>EN EGE</td>
<td>Basic nanotechnology fabrication and characterization techniques. Nanomaterials, Top-down and bottom-up assembly processes. Applications of nanotechnology.</td>
<td></td>
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<tr>
<td>EEL 5250</td>
<td>Power System Analysis</td>
<td>3</td>
<td>EN EGE</td>
<td>PR: EGN 3375. Analysis and design technique for AC power systems.</td>
<td></td>
</tr>
<tr>
<td>EEL 5462</td>
<td>Antenna Theory</td>
<td>3</td>
<td>EN EGE</td>
<td>PR: EEL 4471 or GS. Antenna theory beginning with fundamental parameter definitions and continuing with mathematical concepts, elemental antennas and arrays.</td>
<td></td>
</tr>
<tr>
<td>EEL 5572C</td>
<td>Local and Metropolitan Area Networks</td>
<td>3</td>
<td>EN EGE</td>
<td>PR: EEL 4512C or GS. Basics of data communication exchange of digital information over communication media; Basics of LANs/MANs and its components: media topologies, access methods, etc.; LAN/MAN architectures and protocols-IEEE 802.xLAN Standards; High speed LANs such as FDDI, IEEE 802.6 MAN, etc., Internetworking; LAN/MAN Design and selections.</td>
<td></td>
</tr>
<tr>
<td>EEL 5594L</td>
<td>Wireless Circuits and Systems Laboratory</td>
<td>2</td>
<td>EN EGE</td>
<td>PR: EEL 4471. This class will provide introductory tutorial learning, plus hands-on experience in analysis, design and measurement in the field of wireless communications.</td>
<td></td>
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<tr>
<td>EEL 5631</td>
<td>Digital Control Systems</td>
<td>3</td>
<td>EN EGE</td>
<td>PR: EEL 4657 or GS. Sample data and digital control processes.</td>
<td></td>
</tr>
<tr>
<td>EEL 5754C</td>
<td>Microprocessor Based Digital Signal Processing</td>
<td>3</td>
<td>EN EGE</td>
<td>PR: EEL 4705 or CI. Arithmetic systems, processing structures, efficient algorithms. DSP hardware, TI, NEC and other DSP microprocessors; multiprocessing hardware and software. System development. Application to telecommunications and voice processing.</td>
<td></td>
</tr>
<tr>
<td>EEL 5771</td>
<td>Introduction to Computer Graphics I</td>
<td>3</td>
<td>EN ESB</td>
<td>PR: EEL 4851C. An introduction to the evolution of computer graphics including point-plotting, line drawing, two-dimensional transformations and</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>EEL 5935</td>
<td>Special Electrical Engineering Topics I</td>
<td>1-3</td>
<td>EN EGE</td>
<td>Network fundamentals; network characterization, frequency analysis; superposition integrals; signal-flow techniques, stability problems; real and imaginary relations.</td>
<td></td>
</tr>
<tr>
<td>EEL 5936</td>
<td>Special Electrical Engineering Topics II</td>
<td>1-3</td>
<td>EN EGE</td>
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<tr>
<td>EEL 5937</td>
<td>Special Electrical Engineering Topics III</td>
<td>1-3</td>
<td>EN EGE</td>
<td></td>
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<tr>
<td>EEL 6151</td>
<td>Advanced Circuit Theory II</td>
<td>3</td>
<td>EN EGE PR: EEL 6150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EEL 6226</td>
<td>Microsystems and MEMS Technology</td>
<td>3</td>
<td>EN EGE</td>
<td>This course provides an overview of the MEMS Technology, focusing on devices and systems that can be developed using standard processing approaches.</td>
<td></td>
</tr>
<tr>
<td>EEL 6391</td>
<td>Noise in Electrical Devices</td>
<td>3</td>
<td>EN EGE PR: EEL 6387</td>
<td>Characteristics, measurements and generation mechanisms of noise sources observed in electronic materials and devices. Materials and devices to be considered include thin and thick films, superconductors, semiconductors and semiconductor devices.</td>
<td></td>
</tr>
<tr>
<td>EEL 6425</td>
<td>RF &amp; Microwave Measurements</td>
<td>2</td>
<td>EN EGE Wireless Circuits Systems Lab.</td>
<td>Concentrates on the theory and applications of modern radio frequency and microwave measurements. Topics include network analyzer, spectrum analyzer, noise, power and non-linear distortion measurements.</td>
<td></td>
</tr>
<tr>
<td>EEL 6426</td>
<td>RF and Microwave Circuits I</td>
<td>3</td>
<td>EN EGE PR: EEL 4471 and ELR 4316L or Graduate Standing.</td>
<td>Provides an introduction to passive RF/microwave/wireless circuit design. Topics to be covered include distributed transmission line theory, lumped circuit and network analysis, impedance matching, and the design of various microwave components.</td>
<td></td>
</tr>
<tr>
<td>EEL 6427</td>
<td>RF and Microwave Circuits II</td>
<td>3</td>
<td>EN EGE PR: EEL 6426</td>
<td>This course presents the design theory and analysis of microwave transistor amplifiers and oscillators. Lectures, homework, and CAD projects develop an understanding of the design and performance issues for this class of circuits.</td>
<td></td>
</tr>
<tr>
<td>EEL 6434</td>
<td>Active Microwave Structures and Devices</td>
<td>3</td>
<td>EN EGE PR: EEL 5437</td>
<td>Theory and design of solid state low noise high power amplifiers, solid state oscillators and high power tubes for waveguide, coax and integrated circuit applications.</td>
<td></td>
</tr>
<tr>
<td>EEL 6447C</td>
<td>Optoelectronics</td>
<td>3</td>
<td>EN EGE</td>
<td>Basic principles and operations of lasers and analyses of power output and frequency pulling in laser oscillators.</td>
<td></td>
</tr>
<tr>
<td>EEL 6463</td>
<td>Advanced Antenna Theory</td>
<td>3</td>
<td>EN EGE PR: EEL 5462</td>
<td>Electromagnetic radiating systems studied by analytical and numerical methods.</td>
<td></td>
</tr>
<tr>
<td>EEL 6486C</td>
<td>Electromagnetic Field Theory</td>
<td>3</td>
<td>EN EGE</td>
<td>Time harmonic electromagnetic fields emphasizing problems in transmission.</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Title</td>
<td>Credits</td>
<td>Department</td>
<td>Prerequisites</td>
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<tr>
<td>EEL 6487C</td>
<td>Advanced Electromagnetic Field Theory</td>
<td>3 EN EGE</td>
<td>PR: EEL 6486C</td>
<td>Time harmonic fields emphasizing problems with exact solutions in the rectangular, cylindrical and spherical coordinate systems. Solutions by methods, Green's functions and vector methods.</td>
<td></td>
</tr>
<tr>
<td>EEL 6509</td>
<td>Satellite Communication</td>
<td>3 EN EGE</td>
<td>PR: EEL 6510</td>
<td>Satellite characteristics, link calculations, earth station, frequency management, large and small mobile earth terminals. Digital communication for satellites: modulation coding and multiple-access techniques. Examples including the INTELSAT series.</td>
<td></td>
</tr>
<tr>
<td>EEL 6563</td>
<td>Optical Fiber Communication</td>
<td>3 EN EGE</td>
<td>PR: EEL 6564</td>
<td>A study of fiber-optic technology as applied to communications systems.</td>
<td></td>
</tr>
<tr>
<td>EEL 6586</td>
<td>Speech Signal Processing</td>
<td>3 EN EGE</td>
<td>PR: EEL 6587</td>
<td>Speech models: acoustic tube, source-filter. Time and frequency domain properties. Linear prediction analysis of speech. Speech coding:</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Sections</td>
<td>Department</td>
<td>Prerequisites</td>
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<tr>
<td>EEL 6592</td>
<td>Digital Video and Multimedia</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td></td>
</tr>
<tr>
<td>EEL 6593</td>
<td>Mobile and Personal Communication</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td>PR: EEL 6534.</td>
</tr>
<tr>
<td>EEL 6613</td>
<td>Modern Control Theory</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td></td>
</tr>
<tr>
<td>EEL 6614</td>
<td>Systems and Control Theory I</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td></td>
</tr>
<tr>
<td>EEL 6615</td>
<td>Systems and Control Theory II</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td>PR: EEL 6614.</td>
</tr>
<tr>
<td>EEL 6620</td>
<td>Nonlinear Control Systems</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td></td>
</tr>
<tr>
<td>EEL 6640</td>
<td>Random Processes in Control Systems</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td>PR: COP 2400, CDA 4201 or CI, majors only.</td>
</tr>
<tr>
<td>EEL 6706</td>
<td>Testing And Fault Tolerance in Digital Systems</td>
<td>3</td>
<td>EN</td>
<td>ESB</td>
<td>PR: COP 2400, CDA 4201 or CI, majors only.</td>
</tr>
<tr>
<td>EEL 6707</td>
<td>Advanced Digital Systems</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td></td>
</tr>
<tr>
<td>EEL 6752</td>
<td>Digital Signal Processing II</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td>PR: EEL 6502.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Units</td>
<td>Type</td>
<td>Description</td>
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<tr>
<td>EEL 6753</td>
<td>Digital Signal Processing III</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td>PR: EEL 6502 or EEL 6752. Advanced topics in digital signal processing, e.g. a) Adaptive arrays, beam forming, and applications to radar and sonar, b) Multi-rate filtering, multi-resolution analysis, sub-band analysis, wavelet transforms, and applications to images and other large-scale measurements, c) Noise cancellation, and d) inverse problems, such as CT reconstruction.</td>
</tr>
<tr>
<td>EEL 6764</td>
<td>Principles Of Computer Architecture</td>
<td>3</td>
<td>EN</td>
<td>ESB</td>
<td>PR: CDA 4100 or CI. Arithmetic algorithms, CPU speedup techniques, memory hierarchies, virtual memory, input-output. Study of the number systems and the algorithms used for digital arithmetic computation with emphasis on their implementation, speed and reliability considerations.</td>
</tr>
<tr>
<td>EEL 6766</td>
<td>Advanced Computer Architecture</td>
<td>3</td>
<td>EN</td>
<td>ESB</td>
<td>PR: EEL 6764 or CI. Control unit and microprogramming, reduced instruction set computers RISC, object oriented systems, multiprocessor systems, supercomputers. The macrostructure of computers is considered in this course, ranging from the orthodox von Neumann design to multiprocessors, stack processors, pipeline systems, and associative computers.</td>
</tr>
<tr>
<td>EEL 6820</td>
<td>Image Processing</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td>Two-dimensional signals including random, convolution and system functions. Fourier transform and FFT in two dimensions. Digitization of two-dimensional signals, quantization and aliasing errors. Filtering, restoration, and low bit-rate coding of images. Application to video-conferencing.</td>
</tr>
<tr>
<td>EEL 6846</td>
<td>Coding Theory</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td>PR: EGN 5423. Error-correcting codes, algebraic block codes, linear codes and feedback shift registers; BCH codes; convolutional codes; burst error correcting codes; arithmetic codes; decoding methods.</td>
</tr>
<tr>
<td>EEL 6908</td>
<td>Independent Study</td>
<td>1-1</td>
<td>EN</td>
<td>EGE</td>
<td>S/U. Independent study in which students must have a contract with an instructor.</td>
</tr>
<tr>
<td>EEL 6932</td>
<td>Advanced Engineering Seminar</td>
<td>1-3</td>
<td>EN</td>
<td>EGE</td>
<td></td>
</tr>
<tr>
<td>EEL 6935</td>
<td>Selected Electrical Topics</td>
<td>1-3</td>
<td>EN</td>
<td>EGE</td>
<td></td>
</tr>
<tr>
<td>EEL 6936</td>
<td>Special Electrical Problems</td>
<td>1-3</td>
<td>EN</td>
<td>EGE</td>
<td></td>
</tr>
<tr>
<td>EEL 6971</td>
<td>Thesis: Master’s</td>
<td>2-1</td>
<td>EN</td>
<td>EGE</td>
<td>S/U.</td>
</tr>
<tr>
<td>EEL 7910</td>
<td>Directed Research</td>
<td>1-1</td>
<td>EN</td>
<td>EGE</td>
<td>PR: GR. Ph.D. level. S/U.</td>
</tr>
<tr>
<td>EEL 7931</td>
<td>ST in Communication</td>
<td>3</td>
<td>EN</td>
<td>EGE</td>
<td>PR: EEL 6535. Advanced topics in communications such as synchronization, spread-</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>EEL 7980</td>
<td>Dissertation: Doctoral</td>
<td>2-1</td>
<td>EN EGE</td>
<td>PR: Admission to Candidacy. S/U. spectrum communications, fading channels, large constellation signaling schemes, mobile radio, statistical multiplexing, performance measurement, etc.</td>
<td></td>
</tr>
<tr>
<td>EEX 5705</td>
<td>Seminar in Preschool Handicapped</td>
<td>2</td>
<td>ED EDS</td>
<td>PR: Introductory course in special education, GS. Intended to familiarize the education student with the wide range of needs and services of the preschool children with disabilities and their families and how they coordinate with educational services.</td>
<td></td>
</tr>
<tr>
<td>EEX 6025</td>
<td>Trends and Issues in Special Education</td>
<td>3</td>
<td>ED EDS</td>
<td>Fall Semester. DPR. Survey of all exceptionalities including current trends and issues related to the field of special education.</td>
<td></td>
</tr>
<tr>
<td>EEX 6051</td>
<td>Creating Positive Learning Environments for Students with Disabilities</td>
<td>6</td>
<td>ED EDS</td>
<td>PR: Admission to the MAT. This course presents an overview of assessment, behavior management, and instructional planning for students with disabilities. It also incorporates content about the historical and legal foundations of special education and theories and research that focus on defining, describing and intervening with students who have learning disabilities, behavior disorders, mild-moderate mental retardation, mild to moderate developmental disabilities, and physical disabilities.</td>
<td></td>
</tr>
<tr>
<td>EEX 6065</td>
<td>Collaborative Transition and Career Planning for Students with Low Incidence Disabilities</td>
<td>3</td>
<td>ED EDS</td>
<td>PR: Graduate Standing. This course offers an analysis of collaborative, interdisciplinary transition planning strategies and explores issues surrounding the development and use of functional, community-based curriculum for adolescents with severe or profound disabilities.</td>
<td></td>
</tr>
<tr>
<td>EEX 6224</td>
<td>Developing Individualized Educational Programs for Students with Disabilities</td>
<td>6</td>
<td>ED EDS</td>
<td>PR: EEX 6051 and admission to the MAT. This 6-hour course reinforces and extends competencies in assessment, behavior management, legal and ethical foundations of special education, instructional planning, working with families, collaboration, and characteristics of disabilities. Content emphasizes knowledge and skills needed by teachers who are working with students who have mild...</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>EEX 6234</td>
<td>Identification and Assessment of Individuals with Low Incidence Disabilities</td>
<td>3</td>
<td>ED EDS</td>
<td>PR: Graduate Standing. This course offers a critical analysis of the processes in place to identify students with low incidence disabilities. Subsequent influences on development, learning and curriculum assessment in a least restrictive environment is explored.</td>
<td></td>
</tr>
<tr>
<td>EEX 6245</td>
<td>Transitional Programming for the Adolescent and Young Adult Exceptional Student</td>
<td>3</td>
<td>ED EDS</td>
<td>PR: GS, introductory course in educating exceptional students. Procedures for implementing educational programs with exceptional adolescents. Includes educational programming, alternative programs, community resource coordination, career/occupational education, and advocacy.</td>
<td></td>
</tr>
<tr>
<td>EEX 6247</td>
<td>Implementing Programs for Students with Disabilities</td>
<td>6</td>
<td>ED EDS</td>
<td>PR: EEX 6224. Course emphasizes instructional approaches for implementing reading, math, language arts and social skills instruction in conjunction with classroom management for students with emotional, learning and/or cognitive disabilities. Majors only. Not repeatable.</td>
<td></td>
</tr>
<tr>
<td>EEX 6248</td>
<td>Instructional Approaches for Exceptional Populations</td>
<td>3</td>
<td>ED EDS</td>
<td>PR: Introductory course in special education, GS. In-depth study of instructional strategies that are effective when teaching students with emotional disturbance, mental retardation, and learning disabilities. Content includes techniques for curriculum adaptation, IEP development; direct, data-based and metacognitive strategy instruction; and micro-computer applications.</td>
<td></td>
</tr>
<tr>
<td>EEX 6476</td>
<td>Curriculum and Instruction for Students with Low Incidence Disabilities</td>
<td>3</td>
<td>ED EDS</td>
<td>PR: Graduate Standing. Analysis of current issues and best practices in assessment for teaching, curriculum content, and instruction for students with severe disabilities and the provision of educational services within inclusive general education settings and home communities.</td>
<td></td>
</tr>
<tr>
<td>EEX 6511</td>
<td>Administration of Exceptional Student Programs</td>
<td>3</td>
<td>ED EDS</td>
<td>Fall Semester. Procedures that local, state, and national administrators may use to implement services for exceptional students.</td>
<td></td>
</tr>
<tr>
<td>EEX 6526</td>
<td>Grantsmanship</td>
<td>3</td>
<td>ED EDS</td>
<td>PR: Advanced GS. Fundamental skills for obtaining external funding of training, service, and research projects in education and the social sciences. Includes locating and communicating with sponsors, developing proposals, and preparing budgets. Emphasis is on grantsmanship in an academic environment.</td>
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</tr>
<tr>
<td>EEX 6602</td>
<td>Observational Methods and Functional Assessment</td>
<td>3</td>
<td>ED EDS</td>
<td>PR: Advanced GS. Provide students with instruction in functional assessment procedures and direct observation methods to be used consistent with the principles of applied behavior analysis in mental health and education settings.</td>
<td></td>
</tr>
<tr>
<td>EEX 6612</td>
<td>Management and Motivation of Exceptional and At-Risk</td>
<td>3</td>
<td>ED EDS</td>
<td>PR: Introductory course in special education, GS. Available to non-majors. Focuses on approaches to classroom management and motivational approaches in special education.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Units</td>
<td>Session</td>
<td>Prerequisites</td>
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<tr>
<td>EEX 6619</td>
<td>Positive Behavior Support</td>
<td>3</td>
<td>ED</td>
<td>EDS</td>
<td>PR: GS.</td>
</tr>
<tr>
<td>EEX 6706</td>
<td>Education of the Preschool Handicapped Child</td>
<td>3</td>
<td>ED</td>
<td>EDS</td>
<td>Fall Semester.</td>
</tr>
<tr>
<td>EEX 6732</td>
<td>Consultation and Collaboration in Special Education</td>
<td>3</td>
<td>ED</td>
<td>EDS</td>
<td>PR: Introductory course in special education, GS.</td>
</tr>
<tr>
<td>EEX 6906</td>
<td>Independent Study: Special Education</td>
<td>1-6</td>
<td>ED</td>
<td>EDS</td>
<td>S/U.</td>
</tr>
<tr>
<td>EEX 6936</td>
<td>Seminar in Integrating Exceptional Students in Regular Educational Environments</td>
<td>3</td>
<td>ED</td>
<td>EDS</td>
<td></td>
</tr>
<tr>
<td>EEX 6939</td>
<td>Advanced Seminar: Paradigms, Practices, and Policies in Special Education</td>
<td>3</td>
<td>ED</td>
<td>EDS</td>
<td>PR: DPR. Students should be in the last semester of coursework for master's degree.</td>
</tr>
<tr>
<td>EEX 6943</td>
<td>Practicum in Exceptional Student Education</td>
<td>1-4</td>
<td>ED</td>
<td>EDS</td>
<td>PR: Admission to Master's Degree Program in Special Education and DPR. S/U.</td>
</tr>
<tr>
<td>EEX 6971</td>
<td>Thesis: Masters/Educational Specialist</td>
<td>2-1</td>
<td>ED</td>
<td>EDS</td>
<td>S/U.</td>
</tr>
<tr>
<td>EEX 7203</td>
<td>Educational Implications of Psychosocial Aspects of Exceptional Children</td>
<td>1-5</td>
<td>ED</td>
<td>EDS</td>
<td>DPR.</td>
</tr>
<tr>
<td>EEX 7301</td>
<td>Selected Topics in Special Education</td>
<td>1-8</td>
<td>ED</td>
<td>EDS</td>
<td>PR: EEX 7341 or DPR.</td>
</tr>
</tbody>
</table>
| EEX 7341    | Research Studies and Their Implications in the                              | 3       | ED    | EDS     | PR: EDF 6431, EDF 6481, or equiv., DPR. | This course will involve a study of current research and research
<table>
<thead>
<tr>
<th>EEX</th>
<th>7428</th>
<th>Teacher Education in Special Education: Conceptual</th>
<th>2</th>
<th>ED</th>
<th>EDS</th>
<th>PR: Admission to the Ph.D. program in Special Education.</th>
<th>This four-semester seminar focuses on teacher education in special education.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEX</td>
<td>7741</td>
<td>Philosophy and Theory in the Preparation of Special Education Specialists</td>
<td>3</td>
<td>ED</td>
<td>EDS</td>
<td>PR: Admission in the Program for Ed.S. or Ph.D. in Education. DPR.</td>
<td>In-depth exploration of the philosophy and theory in special education. A theoretical basis for the preparation of specialists in the field of exceptional child education.</td>
</tr>
<tr>
<td>EEX</td>
<td>7743</td>
<td>Philosophies of Inquiry</td>
<td>3</td>
<td>ED</td>
<td>EDS</td>
<td>PR: EDF 6481 or Equivalent, or permission of instructor</td>
<td>The purpose of this course is to introduce doctoral students to different approaches to educational research and to alternative frames for criticism, including postpositivism, constructivism, poststructuralism, pragmatism, critical theory, narrative, race and gender, ethics, and aesthetics.</td>
</tr>
<tr>
<td>EEX</td>
<td>7744</td>
<td>Curriculum and Instructional Issues in Urban Special Education</td>
<td>3</td>
<td>ED</td>
<td>EDS</td>
<td></td>
<td>The purpose of this course is to review and critically examine the theoretical and research literature on the interactions of race, culture, class, and disability on the schooling experiences of urban (ethnic minority and impoverished) children and their families. The course also takes into account that ethnic minority and poor children may or may not reside in urban areas and as a result of school and community desegregation movements, those learners may also attend suburban and rural schools, in addition to urban schools. The course will provide varied formats for graduate students to identify and address critical issues and trends in urban special education and related services areas that impact outcomes for minority learners across social classes and impoverished learners from majority cultural backgrounds.</td>
</tr>
<tr>
<td>EEX</td>
<td>7745</td>
<td>Historical, Ethical, and Disciplinary Foundations of Special Education</td>
<td>3</td>
<td>ED</td>
<td>EDS</td>
<td></td>
<td>Historical, Ethical, and Disciplinary Foundations of Special Education provides doctoral students a critical understanding of the social, political, ethical, and legal contexts that shaped the research, policies, and practices in the field of Special Education during the twentieth century.</td>
</tr>
<tr>
<td>EEX</td>
<td>7815</td>
<td>Research Seminar</td>
<td>2-3</td>
<td>ED</td>
<td>EDS</td>
<td>PR: Admission to Doctoral Program</td>
<td>This seminar, taken each semester of the first and second years of the doctoral program, will contribute to the development of the skills and values that lead to the creation of new knowledge and its application to the field of special education in order to improve outcomes for students who have disabilities and their</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Title</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEX 7868</td>
<td>1-5</td>
<td>Fieldwork With Exceptional Students</td>
<td>ED EDS DPR.</td>
<td>Practical field experience in curriculum development, classroom teaching, supervision, and/or administrative areas in special education.</td>
</tr>
<tr>
<td>EEX 7910</td>
<td>1-9</td>
<td>Directed Research</td>
<td>ED EDS</td>
<td>The specialized study enables advanced exploration of knowledge in an area of interest to the student in special education.</td>
</tr>
<tr>
<td>EEX 7911</td>
<td>1-8</td>
<td>Specialized Study In: Mental Retardation, Behavior Disorders, Specific Learning Disabilities, and Gifted Education</td>
<td>ED EDS DPR.</td>
<td></td>
</tr>
<tr>
<td>EEX 7980</td>
<td>2-30</td>
<td>Dissertation</td>
<td>ED EDS PR: Admission to Candidacy.</td>
<td></td>
</tr>
<tr>
<td>EGI 5051</td>
<td>3</td>
<td>Nature and Needs of the Gifted</td>
<td>ED EDS</td>
<td>This survey course examines the characteristics and educational needs of children and youth who are gifted, including those from special populations. Emphasis is on giftedness as defined historically, nationally and locally. The course also explores changing views of intelligence and talent development related to policy and practice in gifted education as well as the processes of identification and programming.</td>
</tr>
<tr>
<td>EGI 5307</td>
<td>3</td>
<td>Theory and Development of Creativity</td>
<td>ED EDS</td>
<td>Exploration of the concept of creativity, its factors, measurement, and application to education. Opportunities are given to work with children in a laboratory setting and to prepare materials to be used with small groups of children.</td>
</tr>
<tr>
<td>EGI 6232</td>
<td>3</td>
<td>Advanced Educational Strategies for the Gifted</td>
<td>ED EDS PR: EGI 5051.</td>
<td>Curriculum adjustments, methods and techniques, as well as classroom organizations necessary for teaching students who are gifted will be the focus of this course. Emphasis will also be on curriculum in gifted programs within the context of school reform and restructuring.</td>
</tr>
<tr>
<td>EGI 6415</td>
<td>3</td>
<td>Consultation, Counseling, and Guidance Skills for Gifted Students</td>
<td>ED EDS</td>
<td>Primary emphasis of this course will be to provide an awareness, knowledge, and understanding of the unique guidance and counseling needs of students who are gifted and talented or from special populations.</td>
</tr>
<tr>
<td>EGI 6936</td>
<td>3</td>
<td>Seminar in Education of the Gifted: Special Population</td>
<td>ED EDS</td>
<td>This seminar will provide a critical survey of the research, issues, policy, ethics, and practices related culturally diverse, economically disadvantaged, limited, English proficient, twice exceptional, highly gifted, or very young.</td>
</tr>
<tr>
<td>EGI 6943</td>
<td>1-2</td>
<td>Supervised Practicum in Gifted Education</td>
<td>ED EDS PR: CC. S/U.</td>
<td>Planned experiences working with students who are gifted, program development and administration, or an individualized inquiry of a specific issue related to gifted education.</td>
</tr>
<tr>
<td>EGM 6656</td>
<td>3</td>
<td>Theory of Elasticity</td>
<td>EN EGX PR: CES 6116</td>
<td>Classical and contemporary elasticity</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Department</td>
<td>Description</td>
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<tr>
<td>EGN 5421</td>
<td>Engineering Applications for Vector Analysis</td>
<td>3</td>
<td>EN EGB</td>
<td>Vector methods in electromagnetism and fluid mechanics. Vector operators, line and flux integrals, potential and transport theorems, applications.</td>
</tr>
<tr>
<td>EGN 5423</td>
<td>Neural Networks and Mathematics for Communication</td>
<td>3</td>
<td>EN EGB</td>
<td>Advanced matrix algorithms: LU and QR factorizations, least-squares, pseudoinverse. Techniques for optimization.</td>
</tr>
<tr>
<td>EGN 5424</td>
<td>Engineering Applications of Complex Analysis</td>
<td>3</td>
<td>EN EGB</td>
<td>Analytic functions, conformal mapping, residue theory, Laurent series, transforms. Applications to various problems in engineering and physics.</td>
</tr>
<tr>
<td>EGN 5425</td>
<td>Engineering Applications of Advanced Matrix Computations</td>
<td>3</td>
<td>EN EGB</td>
<td>Survey of theory and software for matrix computations: factorization methods, least squares and pseudoinverses, eigenvector algorithms. Special matrices and representations for control system and finite element applications.</td>
</tr>
<tr>
<td>EGN 6426</td>
<td>Engineering Analysis VI</td>
<td>3</td>
<td>EN EGB</td>
<td>Application of computational and mathematical techniques and principles to advanced engineering problems.</td>
</tr>
<tr>
<td>EIN 5174</td>
<td>Total Quality Management Concepts</td>
<td>3</td>
<td>EN EGS</td>
<td>This course will examine the methodology and procedures that companies use to improve quality and its operational benefits, including the management transformation (paradigm shift) that is evolving. Unrestricted. Nonrepeatable for credit.</td>
</tr>
<tr>
<td>EIN 5182</td>
<td>Principles of Engineering Management</td>
<td>3</td>
<td>EN EGS</td>
<td>Introduction to the fundamentals of planning, organizing and leadership as needed by engineers, scientists, and other professionals considering managerial positions.</td>
</tr>
<tr>
<td>EIN 5275</td>
<td>Work Physiology and Biomechanics</td>
<td>3</td>
<td>EN EGS</td>
<td>Human physiological limitations encountered in design, analysis and evaluation of man-machine systems.</td>
</tr>
<tr>
<td>EIN 5350</td>
<td>Technology and Finance</td>
<td>3</td>
<td>EN EGS</td>
<td>A course for technical managers that focuses on how financial and economic principles are utilized to make technical investments and manage technical enterprises.</td>
</tr>
<tr>
<td>EIN 5357</td>
<td>Engineering Value Analysis</td>
<td>3</td>
<td>EN EGS</td>
<td>Statistical models for analyzing engineering alternatives from an economic viewpoint. The use of advanced engineering economy concepts in solving industrial problems.</td>
</tr>
<tr>
<td>EIN 5510</td>
<td>Manufacturing Systems Analysis</td>
<td>3</td>
<td>EN EGS</td>
<td>The study of systems of manufacturing entities such as machine tools, robots, and materials.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
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<td>GE Area</td>
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<tr>
<td>EIN 6106</td>
<td>Technology and Law</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
</tr>
<tr>
<td>EIN 6107</td>
<td>Professional Behavior and the Engineer</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
</tr>
<tr>
<td>EIN 6108</td>
<td>Human Relations</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
</tr>
<tr>
<td>EIN 6112</td>
<td>Information Systems Design for Engineers</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
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<tr>
<td>EIN 6119</td>
<td>Decision Support Systems in Engineering Management</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
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<tr>
<td>EIN 6121</td>
<td>Technology and Markets</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
</tr>
<tr>
<td>EIN 6145</td>
<td>Project Management</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
</tr>
<tr>
<td>EIN 6154</td>
<td>Technical Entrepreneurship</td>
<td>3</td>
<td>EN</td>
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<tr>
<td>EIN 6178</td>
<td>ISO 9000/14000</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
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<tr>
<td>EIN 6179</td>
<td>Advanced Total Quality Management Methods</td>
<td>3</td>
<td>EN EGS</td>
<td>PR: EIN 5174.</td>
</tr>
<tr>
<td>EIN 6183</td>
<td>Engineering Management Policy And Strategy</td>
<td>3</td>
<td>EN EGS</td>
<td>Majors only.</td>
</tr>
<tr>
<td>EIN 6215</td>
<td>Engineering System Safety</td>
<td>3</td>
<td>EN EGS</td>
<td>PR: Statistics.</td>
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<tr>
<td>EIN 6216</td>
<td>Occupational Safety Engineering</td>
<td>3</td>
<td>EN EGS</td>
<td>PR: GS in Public Health or Engineering or CI.</td>
</tr>
<tr>
<td>EIN 6217</td>
<td>Construction Safety Engineering</td>
<td>3</td>
<td>EN EGS</td>
<td>PR: C1.</td>
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<tr>
<td>EIN 6225</td>
<td>Total Quality Management Seminar</td>
<td>3</td>
<td>EN EGS</td>
<td>PR: EIN 5174.</td>
</tr>
<tr>
<td>EIN 6247</td>
<td>Engineering Information Processing</td>
<td>3</td>
<td>EN EGS</td>
<td>Majors only.</td>
</tr>
<tr>
<td>EIN 6258</td>
<td>Human/Computer Interaction</td>
<td>3</td>
<td>EN EGS</td>
<td>PR: EIN 5275, majors only.</td>
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<td>EIN 6265</td>
<td>Industrial Mental Health</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
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<tr>
<td>EIN 6319</td>
<td>Work Design And Productivity Engineering</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
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<td>EIN 6336</td>
<td>Production Control Systems</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
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<tr>
<td>EIN 6386</td>
<td>Management of Technological Change</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
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<tr>
<td>EIN 6430</td>
<td>Overview of Regulated Industries</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
</tr>
<tr>
<td>EIN 6431</td>
<td>Regulated Quality Systems and Control</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
</tr>
<tr>
<td>EIN 6432</td>
<td>Regulated Product Approval Process</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
</tr>
<tr>
<td>EIN 6433</td>
<td>Human Factors Engineering in Medical Devices</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
</tr>
<tr>
<td>EIN 6434</td>
<td>Design Controls for Medical Devices</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>EIN 6435</td>
<td>International Regulations for Medical Devices</td>
<td>3</td>
<td>EN</td>
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<tr>
<td>EIN 6605</td>
<td>Robotics And Assembly Automation</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
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<tr>
<td>EIN 6934</td>
<td>Special Industrial Topics I</td>
<td>1-3</td>
<td>EN</td>
<td>EGS</td>
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<td>EIN 6935</td>
<td>Special Industrial Topics II</td>
<td>1-3</td>
<td>EN</td>
<td>EGS</td>
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<tr>
<td>EIN 6936</td>
<td>Special Industrial Topics III</td>
<td>1-3</td>
<td>EN</td>
<td>EGS</td>
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<td>EIN 6971</td>
<td>Thesis: Master's</td>
<td>2-19</td>
<td>EN</td>
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<tr>
<td>ELD 6015</td>
<td>Advanced Theories and Practices in Specific Learning Disabilities</td>
<td>3</td>
<td>ED</td>
<td>EDS</td>
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<tr>
<td>ELD 6147</td>
<td>Educational Strategies for Student With Specific Learning Disabilities</td>
<td>3</td>
<td>ED</td>
<td>EDS</td>
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<tr>
<td>ELD 6943</td>
<td>Practicum With Learning Disabilities</td>
<td>1-2</td>
<td>ED</td>
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<td>EMA 5326</td>
<td>Corrosion Control</td>
<td>3</td>
<td>EN</td>
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<td>EMA 6001</td>
<td>Advance Materials</td>
<td>3</td>
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<tr>
<td>EME 5403</td>
<td>Computers in Education</td>
<td>3</td>
<td>ED</td>
<td>EDK</td>
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<tr>
<td>EME 6613</td>
<td>Development of Technology-Based Instruction</td>
<td>3</td>
<td>ED</td>
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<tr>
<td>EME 6906</td>
<td>Independent Study in Instructional Technology</td>
<td>1-6</td>
<td>ED</td>
<td>EDI</td>
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<tr>
<td>EME 6930</td>
<td>Programming Languages for Education</td>
<td>3</td>
<td>ED</td>
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<tr>
<td>EME 6936</td>
<td>Applications of Computers as Educational Tools</td>
<td>3</td>
<td>ED</td>
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<tr>
<td>EME 6971</td>
<td>Thesis: Masters/Ed. Specialist</td>
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<tr>
<td>EME 7458</td>
<td>Research in Distance Learning</td>
<td>3</td>
<td>ED</td>
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<tr>
<td>EME 7631</td>
<td>Research in Technology Project Management</td>
<td>3</td>
<td>ED</td>
<td>EDI</td>
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<tr>
<td>EME 7910</td>
<td>Directed Research in Instructional Technology</td>
<td>1-9</td>
<td>ED</td>
<td>EDI</td>
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<tr>
<td>EME 7938</td>
<td>Computer-Augmented</td>
<td>3</td>
<td>ED</td>
<td>EDK</td>
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<td>Course Code</td>
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<td>Instructional Mode</td>
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<tr>
<td>EME 7939</td>
<td>Research in Technology-Based Education</td>
<td>3</td>
<td>ED EK</td>
<td>PR: Admission to program or DPR.</td>
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<td>EME 7980</td>
<td>Dissertation</td>
<td>2-3</td>
<td>ED EK</td>
<td>PR: Admission to Candidacy</td>
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<tr>
<td>EML 6105</td>
<td>Advanced Thermodynamics and Statistical Mechanics</td>
<td>3</td>
<td>EN EGR</td>
<td>PR: ECH 3023C or EML 4106C or CI</td>
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<tr>
<td>EML 6154</td>
<td>Advanced Conduction Analysis</td>
<td>3</td>
<td>EN EGR</td>
<td>PR: EML 4124, EML 3041, majors only</td>
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<tr>
<td>EML 6157</td>
<td>Radiation</td>
<td>3</td>
<td>EN EGR</td>
<td>PR: EML 4124, majors only</td>
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<tr>
<td>EML 6232</td>
<td>Composite Laminated Materials</td>
<td>3</td>
<td>EN EGR</td>
<td>PR: EML 3500, majors only.</td>
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<tr>
<td>EML 6273</td>
<td>Advanced Dynamics of Machinery</td>
<td>3</td>
<td>EN EGR</td>
<td>PR: EML 3624 or CI, majors only</td>
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<tr>
<td>EML 6375</td>
<td>Dir Dig Ctrl I</td>
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<tr>
<td>EML 6606</td>
<td>HVAC Systems Design</td>
<td>3</td>
<td>EN</td>
<td>EGR</td>
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<tr>
<td>EML 6653</td>
<td>Applied Elasticity</td>
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<td>EN</td>
<td>EGR</td>
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<tr>
<td>EML 6713</td>
<td>Advanced Fluid Mechanics</td>
<td>3</td>
<td>EN</td>
<td>EGR</td>
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<tr>
<td>EML 6801</td>
<td>Robotic Systems</td>
<td>3</td>
<td>EN</td>
<td>EGR</td>
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<tr>
<td>EML 6808</td>
<td>Mechanics and Control of Robotic Manipulators</td>
<td>3</td>
<td>EN</td>
<td>EGR</td>
</tr>
<tr>
<td>EML 6907</td>
<td>Independent Study</td>
<td>1-6</td>
<td>EN</td>
<td>EGR</td>
</tr>
<tr>
<td>EML 6930</td>
<td>Special Problems I</td>
<td>1-3</td>
<td>EN</td>
<td>EGR</td>
</tr>
<tr>
<td>EML 6931</td>
<td>Special Problems II</td>
<td>1-3</td>
<td>EN</td>
<td>EGR</td>
</tr>
<tr>
<td>EML 6971</td>
<td>Thesis: Master’s</td>
<td>2-6</td>
<td>EN</td>
<td>EGR</td>
</tr>
<tr>
<td>EML 7915</td>
<td>Directed Research</td>
<td>1-6</td>
<td>EN</td>
<td>EGR</td>
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<tr>
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<td>Dissertation: Doctoral</td>
<td>2-12</td>
<td>EN</td>
<td>EGR</td>
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<tr>
<td>EMR 6052</td>
<td>Advanced Theories and Practices in Mental Retardation</td>
<td>3</td>
<td>ED</td>
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<tr>
<td>EMR 6255</td>
<td>Educational Strategies for the Mentally Retarded</td>
<td>3</td>
<td>ED</td>
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<tr>
<td>EMR 6943</td>
<td>Graduate Supervised Practicum in Mental Retardation</td>
<td>1-12</td>
<td>ED</td>
<td>EDS</td>
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<tr>
<td>ENC 6319</td>
<td>Scholarly Writing for</td>
<td>3</td>
<td>AS</td>
<td>ENG</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
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<tr>
<td>ENC 6336</td>
<td>Studies in the History of Rhetoric</td>
<td>3</td>
<td>AS</td>
<td>Examines the evolving relationship between rhetoric and composition from antiquity to the present.</td>
</tr>
<tr>
<td>ENC 6421</td>
<td>Studies in Rhetoric and Technology</td>
<td>3</td>
<td>AS</td>
<td>Examines the intersection of Rhetoric and technology, with emphasis on contemporary critical issues in composition studies.</td>
</tr>
<tr>
<td>ENC 6700</td>
<td>Studies in Composition Theory</td>
<td>3</td>
<td>AS</td>
<td>Major theories and models of composing. Selected theorists include Rohman, Emig, Sommers, Flowers, and Hayes.</td>
</tr>
<tr>
<td>ENC 6720</td>
<td>Studies in Composition Research</td>
<td>3</td>
<td>AS</td>
<td>Examines and evaluates a broad range of important research studies conducted in composition and a variety of research techniques such as descriptive statistics, qualitative research design, and measurement and evaluation. Instruction in how to conduct composition research.</td>
</tr>
<tr>
<td>ENC 6740</td>
<td>Theory and Development of Writing Programs</td>
<td>3</td>
<td>AS</td>
<td>Operating theories of and administrative procedures for implementing writing programs on various levels; focuses on remedial, freshman, advanced, and technical writing programs as well as writing centers.</td>
</tr>
<tr>
<td>ENC 6745</td>
<td>Teaching Practicum</td>
<td>3</td>
<td>AS</td>
<td>To supplement and deepen theoretical and practical experiences during the first teaching semester. To combine and apply different theoretical approaches to teaching writing in actual classroom practice.</td>
</tr>
<tr>
<td>ENG 6005</td>
<td>Scholarly Research and Writing</td>
<td>3</td>
<td>AS</td>
<td>PhD students will improve their skills with advanced research methods in preparation for writing the prospectus and dissertation, work on conference papers and journal articles, and research the job market and the challenges that face new faculty.</td>
</tr>
<tr>
<td>ENG 6009</td>
<td>Introduction to Graduate Study</td>
<td>3</td>
<td>AS</td>
<td>New graduate students will read about the discipline, learn the methods of scholarly research and inquiry, and adjust their academic skills for graduate-level work. The course will also introduce them to some key research databases and resources.</td>
</tr>
<tr>
<td>ENG 6018</td>
<td>Studies in Criticism and Theory I</td>
<td>3</td>
<td>AS</td>
<td>This course examines selected controversies in literary criticism and scholarship from the classical period to 1800, including problems of imitation, the quarrel between Ancients and Moderns, the ethics of the imagination, and the roles of women critics.</td>
</tr>
<tr>
<td>ENG 6019</td>
<td>Studies in Criticism and Theory II</td>
<td>3</td>
<td>AS</td>
<td>This course focuses on important trends in contemporary literary criticism with the major theoretical texts that inform these trends.</td>
</tr>
<tr>
<td>Code</td>
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<tr>
<td>ENG 6067</td>
<td>History of the English Language</td>
<td>3</td>
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<td>ENG</td>
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<tr>
<td>ENG 6916</td>
<td>Directed Research</td>
<td>1-1</td>
<td>AS</td>
<td>ENG</td>
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<tr>
<td>ENG 6939</td>
<td>Graduate Seminar in English</td>
<td>3</td>
<td>AS</td>
<td>ENG</td>
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<tr>
<td>ENG 6971</td>
<td>Thesis: Master’s</td>
<td>2-1</td>
<td>AS</td>
<td>ENG</td>
</tr>
<tr>
<td>ENG 7916</td>
<td>Directed Research</td>
<td>1-1</td>
<td>AS</td>
<td>ENG</td>
</tr>
<tr>
<td>ENG 7939</td>
<td>Doctoral Seminar</td>
<td>1</td>
<td>AS</td>
<td>ENG</td>
</tr>
<tr>
<td>ENG 7980</td>
<td>Dissertation: Doctoral</td>
<td>2-1</td>
<td>AS</td>
<td>ENG</td>
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<tr>
<td>ENL 6206</td>
<td>Studies in Old English</td>
<td>3</td>
<td>AS</td>
<td>ENG</td>
</tr>
<tr>
<td>ENL 6216</td>
<td>Studies in Middle English</td>
<td>3</td>
<td>AS</td>
<td>ENG</td>
</tr>
<tr>
<td>ENL 6226</td>
<td>Studies in Sixteenth-Century British Literature</td>
<td>3</td>
<td>AS</td>
<td>ENG</td>
</tr>
<tr>
<td>ENL 6228</td>
<td>Studies in Seventeenth-Century British Literature</td>
<td>3</td>
<td>AS</td>
<td>ENG</td>
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<tr>
<td>ENL 6236</td>
<td>Studies in Restoration and Eighteenth-Century British Literature</td>
<td>3</td>
<td>AS</td>
<td>ENG</td>
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<tr>
<td>ENL 6246</td>
<td>Studies of the English Romantic Period</td>
<td>3</td>
<td>AS</td>
<td>ENG</td>
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<tr>
<td>ENL 6256</td>
<td>Studies in Victorian Literature</td>
<td>3</td>
<td>AS</td>
<td>ENG</td>
</tr>
<tr>
<td>ENL 6276</td>
<td>Studies in Modern British Literature</td>
<td>3</td>
<td>AS</td>
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<tr>
<td>ENT 6126</td>
<td>Strategies in Technology Entrepreneurship</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
</tr>
<tr>
<td>ENT 6186</td>
<td>Strategic Market Assessment</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
</tr>
<tr>
<td>Course Code</td>
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<tr>
<td>ENT 6415</td>
<td>Fundamentals of Venture Capital and Private Equity</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
</tr>
<tr>
<td>ENT 6606</td>
<td>New Product Development</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
</tr>
<tr>
<td>ENT 6947</td>
<td>Advanced Topics in Entrepreneurship</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
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<tr>
<td>ENV 5103</td>
<td>Air Pollution Control</td>
<td>3</td>
<td>EN</td>
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<td>ENV 5334</td>
<td>Hazardous Waste Management and Remedial Action</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
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<tr>
<td>ENV 5345</td>
<td>Solid Waste Control</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
</tr>
<tr>
<td>ENV 5504C</td>
<td>Environmental Engineering Processes</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
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<tr>
<td>ENV 6002</td>
<td>Physical and Chemical Principles in Environmental Engineering</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
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<td>ENV 6347</td>
<td>Materials Recovery Engineering</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
</tr>
<tr>
<td>ENV 6438</td>
<td>Natural &amp; Small Scale Treatment Systems</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
</tr>
<tr>
<td>ENV 6519</td>
<td>Advanced Physical/Chemical Processes</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
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<tr>
<td>ENV 6539</td>
<td>Sludge Treatment &amp; Disposal</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
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<tr>
<td>ENV 6558</td>
<td>Industrial and Hazardous Waste Treatment</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
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<tr>
<td>ENV 6614</td>
<td>Quantitative Environmental Risk Analysis</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
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<tr>
<td>ENV 6666</td>
<td>Aquatic Chemistry</td>
<td>3</td>
<td>EN</td>
<td>EGX</td>
</tr>
<tr>
<td>ENV 6667</td>
<td>Environmental Biotechnology</td>
<td>3</td>
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<td>EGX</td>
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<td>ENY 5505C</td>
<td>Aquatic Entomology</td>
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<tr>
<td>EPD 5051</td>
<td>Advanced Theories in Motor and Physical Disabilities</td>
<td>3</td>
<td>ED EDS</td>
<td>PR: EEX 4012 or DPR.</td>
</tr>
<tr>
<td>EPD 5321</td>
<td>Educational Strategies for Physically and Multi-handicapped Students</td>
<td>3</td>
<td>ED EDS</td>
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</tr>
<tr>
<td>EPD 6944</td>
<td>Supervised Practicum in Motor Disabilities</td>
<td>3-1</td>
<td>ED EDS</td>
<td>PR: EEX 4012 or CI. For students seeking certification only. S/U.</td>
</tr>
<tr>
<td>ESE 5342</td>
<td>Teaching the Adolescent Learner</td>
<td>3</td>
<td>ED EDI</td>
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<tr>
<td>ESE 5344</td>
<td>Classroom Management for a Diverse School and Society</td>
<td>3</td>
<td>ED EDI</td>
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<tr>
<td>ESE 6215</td>
<td>School Curriculum: Secondary</td>
<td>3</td>
<td>ED EDC</td>
<td>PR: EDG 4620, EDG 6627</td>
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<td>ESE 6256</td>
<td>Problems In Curriculum Instruction: Secondary</td>
<td>1-3</td>
<td>ED EDC</td>
<td>PR: EDG 4620, EDG 6627.</td>
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<tr>
<td>ESE 6906</td>
<td>Independent Study: Secondary Education</td>
<td>1-6</td>
<td>ED EDI</td>
<td>S/U.</td>
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<tr>
<td>ESE 7220</td>
<td>Curriculum Frameworks in Teacher Education</td>
<td>3</td>
<td>ED EDC</td>
<td>PR: Doctoral standing or permission of the instructor.</td>
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<td>Time</td>
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<td>Teaching and Learning in the Content Area</td>
<td>3</td>
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<td>EDI</td>
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<td>ED</td>
<td>EDI</td>
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<td>ESI</td>
<td>Statistical Methods For Engineering Managers</td>
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<td>EN</td>
<td>EGS</td>
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<td>ESI</td>
<td>Operations Research For Engineering Management</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
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<td>ESI</td>
<td>Stochastic Decision Models I</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
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<tr>
<td>ESI</td>
<td>Quality Assurance Plans</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
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<tr>
<td>ESI</td>
<td>Statistical Design Models</td>
<td>3</td>
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<td>EGS</td>
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<td>Special Topics in Statistics</td>
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<td>EGS</td>
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<tr>
<td>ESI</td>
<td>Engineering the Supply Chain</td>
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<td>EN</td>
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<tr>
<td>ESI</td>
<td>Integer Programming</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
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<tr>
<td>ESI</td>
<td>Linear Programming and Network Optimization</td>
<td>3</td>
<td>EN</td>
<td>EGS</td>
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<tr>
<td>ESI</td>
<td>6555C</td>
<td>Topics in Automation</td>
<td>3</td>
<td>EN</td>
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<tr>
<td>ESI</td>
<td>6605</td>
<td>Engineering Date Mining</td>
<td>3</td>
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<td>ESI</td>
<td>6906</td>
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<td>EN</td>
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<td>ESI</td>
<td>6911</td>
<td>Directed Research</td>
<td>1-1 9</td>
<td>EN</td>
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<tr>
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<td>1-1 9</td>
<td>EN</td>
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<td>ESI</td>
<td>7980</td>
<td>Dissertation: Doctoral</td>
<td>2-1 9</td>
<td>EN</td>
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<tr>
<td>EVR</td>
<td>6101</td>
<td>Geomorphology for Environmental Scientists</td>
<td>3</td>
<td>AS</td>
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<tr>
<td>EVR</td>
<td>6216</td>
<td>Advances in Water Quality Policy and Management</td>
<td>3</td>
<td>AS</td>
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<tr>
<td>EVR</td>
<td>6320</td>
<td>Environmental Management</td>
<td>3</td>
<td>AS</td>
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<tr>
<td>EVR</td>
<td>6408</td>
<td>Wildlife Ecology</td>
<td>3</td>
<td>AS</td>
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<tr>
<td>EVR</td>
<td>6921</td>
<td>Scholarly Presentation of Environmental Research</td>
<td>1-2</td>
<td>AS</td>
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</table>
| EVR | 6922 | ESP Capstone Seminar | 3 | AS | ESP | PR: Departmental approval required. A capstone graduate course that integrates issues related to science, policy and management in making
<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
<th>Type</th>
<th>Evaluation</th>
<th>Description</th>
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<tr>
<td>EVR 6930</td>
<td>Research Colloquium in Environmental Science and Policy</td>
<td>1</td>
<td>AS</td>
<td>ESP</td>
<td>Scholarly presentations by invited academic researchers and leading policy decision-makers. Each semester, the program selects an environmental issue to serve as a case study. Some anticipated themes include global warming, water quality and quantity, air pollution and restoration.</td>
</tr>
<tr>
<td>EVR 6936</td>
<td>Seminar in Environmental Science</td>
<td>3</td>
<td>AS</td>
<td>ESP</td>
<td>A seminar course that reviews a major theme or themes in environmental science that integrates knowledge and research from various scientific disciplines.</td>
</tr>
<tr>
<td>EVR 6937</td>
<td>Seminar in Environmental Policy</td>
<td>3</td>
<td>AS</td>
<td>ESP</td>
<td>Critical assessment of environmental policy and regulatory formulation, implementation, evaluation, and revision in the context of scientific, technological, institutional, political, social and economic factors; case studies of major U.S. policies.</td>
</tr>
<tr>
<td>EVR 6971</td>
<td>Thesis: Master's</td>
<td>2-1</td>
<td>AS</td>
<td>ESP</td>
<td>PR: CC. S/U. This course will assist students in developing dissertation topics; to think creatively about their topics; to draft a dissertation proposal and a dissertation outline. Students should register for either EVR or GEO 7921 depending on his/her subject area.</td>
</tr>
<tr>
<td>EVR 7921</td>
<td>Doctoral Dissertation Preparation</td>
<td>3</td>
<td>AS</td>
<td>ESP</td>
<td>PR: Graduate standing and consent of instructor. The dissertation is an original contribution to scholarship. The research is performed under the guidance of the major professor, which determines how many dissertation hours are completed (maximum 42 hours).</td>
</tr>
<tr>
<td>EVR 7980</td>
<td>Doctoral Dissertation Research</td>
<td>2-1</td>
<td>AS</td>
<td>ESP</td>
<td>PR: Accepted into the GEP Doctoral program; EVR 7920 is completed by all students that designate Environmental Science and Policy as their subject area; and permission of the student’s major professor.</td>
</tr>
<tr>
<td>EVT 6500</td>
<td>Individualized Instruction</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>Emphasis given to individualized instruction to include the special needs student, the slow learner, and the more capable student.</td>
</tr>
<tr>
<td>EVT 6504</td>
<td>Placement of Severely Handicapped People</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>A study of the purpose, methods, processes, and procedures used to plan, implement, and operate a Vocational Rehabilitation Cooperative School Counseling Program.</td>
</tr>
<tr>
<td>EVT 6769</td>
<td>Methods, Procedures, and Processes of Vocational Evaluation</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>A study of the purposes, methods, processes and procedures used to plan, implement, and operate a vocational evaluation program.</td>
</tr>
<tr>
<td>EVT 7155</td>
<td>Career Development in Vocational, Technical, and Adult education</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>PR: Preliminary admission to the advanced Graduate Program and CI. Examination and critical evaluation of...</td>
</tr>
<tr>
<td>EVT 7761</td>
<td>Research Seminar In</td>
<td>3</td>
<td>ED</td>
<td>EDV</td>
<td>PR: Completion of...</td>
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Course codes: EVR - Environmental Science and Policy, EVT - Environmental Science and Technology.
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<thead>
<tr>
<th>Code</th>
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<th>Offered</th>
<th>Restrictions</th>
<th>Description</th>
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<tr>
<td>EXP</td>
<td>Motivation and Emotion</td>
<td>3</td>
<td>AS PSY</td>
<td>PR: Cl.</td>
<td>A detailed examination of human motivation and emotion from both the physiological and psychological viewpoints.</td>
</tr>
<tr>
<td>EXP</td>
<td>Human Memory</td>
<td>3</td>
<td>AS PSY</td>
<td>PR: Admission to graduate program in Psychology or Cl.</td>
<td></td>
</tr>
<tr>
<td>EXP</td>
<td>Cognitive Psychology</td>
<td>3</td>
<td>AS PSY</td>
<td>PR: Admission to graduate program in Psychology or Cl.</td>
<td></td>
</tr>
<tr>
<td>EXP</td>
<td>Psychology of Language</td>
<td>3</td>
<td>AS PSY</td>
<td>PR: GS.</td>
<td>Historical survey of relations between psychology and linguistics leading to the emergence of psycholinguistics as a field of study. Current status of theory and research in the field.</td>
</tr>
<tr>
<td>EXP</td>
<td>Topics in Experimental Psychology</td>
<td>3</td>
<td>AS PSY</td>
<td>PR: Cl.</td>
<td>Electrophysiological methods and psychophysiology.</td>
</tr>
<tr>
<td>EXP</td>
<td>Graduate Seminar in Experimental Psychology</td>
<td>1-3</td>
<td>AS PSY</td>
<td>PR: Cl.</td>
<td>Seminars on topics, such as learning, perception, memory, cognitive processes, and quantitative methods.</td>
</tr>
<tr>
<td>FIL</td>
<td>Cinematography</td>
<td>4</td>
<td>TA ART</td>
<td>PR: PGY 4520C.</td>
<td>Advanced studio work using black and white, color and sound as technical and aesthetic factors in visual, artistic productions.</td>
</tr>
<tr>
<td>FIN</td>
<td>Advanced Money and Capital Markets</td>
<td>3</td>
<td>BU FIN</td>
<td>PR: ECO 6204</td>
<td>The study of the role of financial markets, instruments, and institutions in the economy. It includes the study of flow of funds, interest rate determination, and the pricing of capital assets.</td>
</tr>
<tr>
<td>FIN</td>
<td>Bank Management</td>
<td>3</td>
<td>BU FIN</td>
<td>PR: FIN 6406</td>
<td>Theory, policy and practice of commercial bank management with emphasis on strategic issues and decision making in an expanding financial services environment.</td>
</tr>
<tr>
<td>FIN</td>
<td>Financial Management</td>
<td>3</td>
<td>BU MBA</td>
<td>PR: ACG 6025 and ECO 6114</td>
<td>The study of processes, decision structures, and institutional arrangements concerned with the acquisition and utilization of funds by a firm. The course includes the management of the asset and liability structures of the firm under both certainty and uncertainty.</td>
</tr>
<tr>
<td>FIN</td>
<td>Advanced Financial Management</td>
<td>3</td>
<td>BU FIN</td>
<td>PR: FIN 6406 or equivalent.</td>
<td>A synthesis of the theory and the practice of corporate finance. Particular attention is given to the role of the agency problems and agency cost in explaining why the observed consequences of financial decisions often deviate from those predicted by traditional theory.</td>
</tr>
<tr>
<td>FIN</td>
<td>Working Capital Management</td>
<td>3</td>
<td>BU FIN</td>
<td>PR: FIN 6406</td>
<td>This course is designed to provide the student with an understanding of short-term financial management which includes decision making concerning sources and uses of cash flows to support short-term financial decisions.</td>
</tr>
<tr>
<td>Course ID</td>
<td>Course Name</td>
<td>Credits</td>
<td>Department Code</td>
<td>Prerequisites</td>
<td>Course Description</td>
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<tr>
<td>FIN 6425</td>
<td>Financial Policy</td>
<td>3</td>
<td>BU</td>
<td>FIN 6406 or CI</td>
<td>A case study approach to financial policy and strategy with emphasis on the firm’s major financial decisions.</td>
</tr>
<tr>
<td>FIN 6515</td>
<td>Investments</td>
<td>3</td>
<td>BU</td>
<td>FIN 6406, CC</td>
<td>An examination of the risks and returns of alternative investment media within the framework of various valuation models. Special attention is given to the investment process and the criteria for investment decisions.</td>
</tr>
<tr>
<td>FIN 6605</td>
<td>International Financial Management</td>
<td>3</td>
<td>BU</td>
<td>FIN 6406 or equiv., CC</td>
<td>The course provides a foundation for the understanding of financial management of international business. The subjects covered relate to international finance, multinational business finance, and financial market theory.</td>
</tr>
<tr>
<td>FIN 6804</td>
<td>Theory of Finance</td>
<td>3</td>
<td>BU</td>
<td>FIN 6406 or CI</td>
<td>A systematic and rigorous course in the theory of finance. Topics will include the theory of choice and the allocation of financial resources, the theory of optimal investment decisions and the theory of risk and uncertainty in financial decisions. It will also cover the theoretical concepts underlying financing decisions and the cost of capital.</td>
</tr>
<tr>
<td>FIN 6906</td>
<td>Independent Study</td>
<td>Var</td>
<td>BU</td>
<td>CC, S/U.</td>
<td>Students must have a contract with an instructor.</td>
</tr>
<tr>
<td>FIN 6915</td>
<td>Directed Research</td>
<td>Var</td>
<td>BU</td>
<td>GR, ML, CC, S/U.</td>
<td>Depending upon the scope and magnitude of the work required. Includes special lecture series.</td>
</tr>
<tr>
<td>FIN 6934</td>
<td>Selected Topics in Finance</td>
<td>1-4</td>
<td>BU</td>
<td>GR, ML, CC, S/U.</td>
<td>The study of advanced theoretical and empirical works in finance primarily relating to financial decisions at the level of the firm.</td>
</tr>
<tr>
<td>FIN 7808</td>
<td>Advanced Micro Finance</td>
<td>3</td>
<td>BU</td>
<td>FIN 6406, FIN 6804, ECO 6424 or Departmental approval.</td>
<td>The study of advanced theoretical and empirical works in finance primarily relating to financial decisions at the level of the firm.</td>
</tr>
<tr>
<td>FIN 7817</td>
<td>Financial Markets</td>
<td>3</td>
<td>BU</td>
<td>FIN 6246, FIN 6515, or Departmental approval.</td>
<td>The study of advanced theoretical and empirical works in finance primarily relating to financial institutions and markets.</td>
</tr>
<tr>
<td>FIN 7930</td>
<td>Selected Topics in Finance</td>
<td>3</td>
<td>BU</td>
<td>FIN 7808, QMB 7566, or Departmental approval.</td>
<td>A study of selected topics of current issues on the frontiers of financial thought.</td>
</tr>
<tr>
<td>FIN 7935</td>
<td>Finance Research Seminar</td>
<td>3</td>
<td>BU</td>
<td>FIN 7930.</td>
<td>Theoretical and/or empirical research on finance related problems. This course will require research papers to be written and presented. It is designed to aid the student in developing a thesis and the research methodology necessary for the doctoral dissertation.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>FLE 5291</td>
<td>Technology in the Foreign Language Classroom</td>
<td>3</td>
<td>ED EDX</td>
<td>PR: FLE 5313 and FLE 5331. This course is intended to prepare foreign/second language teachers to provide pedagogically sound and technologically enhanced instruction for foreign language and second language students in the K-16 realm. Basic computer literacy is recommended.</td>
<td></td>
</tr>
<tr>
<td>FLE 5313</td>
<td>Methods of Teaching Foreign Language and ESOL in the Elementary School</td>
<td>3</td>
<td>ED EDX</td>
<td>PR: FLE 5313. This course is designed to provide training in the theory and methods of teaching foreign languages and ESOL in the elementary school (FLES) to both pre- and in-service teachers.</td>
<td></td>
</tr>
<tr>
<td>FLE 5331</td>
<td>Methods of Teaching Foreign Language and ESOL in the Secondary School</td>
<td>3</td>
<td>ED EDX</td>
<td>PR: FLE 5313. This course provides for the development of knowledge and skills necessary to prepare students to assume roles as foreign language (FL) and ESOL teachers at the secondary school level. It represents the second part of a sequence of methods courses.</td>
<td></td>
</tr>
<tr>
<td>FLE 5345</td>
<td>Teaching English Language Learners K-12</td>
<td>3</td>
<td>ED EDX</td>
<td>This course is restricted to Education majors and is not repeatable for credit. It is designed to prepare preprofessional teachers to provide linguistically and culturally appropriate instruction, assessment, and learning opportunities for LEP students.</td>
<td></td>
</tr>
<tr>
<td>FLE 5366</td>
<td>ESOL Education in Content Areas</td>
<td>3</td>
<td>ED EDX</td>
<td>Enables participants to meet the special linguistic &amp; cultural educational needs of limited English proficient (LEP) students in content area classes. Provides a theoretical &amp; practical foundation for ESOL competencies in courses include ESOL infusion.</td>
<td></td>
</tr>
<tr>
<td>FLE 5895</td>
<td>Dual Language Education</td>
<td>3</td>
<td>ED EDX</td>
<td>This course is for teachers who are interested in bilingual education. The aim is to deconstruct the philosophical, theoretical, political, social and educational underpinning of instruction (K-16) when it is delivered through two languages.</td>
<td></td>
</tr>
<tr>
<td>FLE 5946</td>
<td>Practicum in Foreign Language/ESOL Teaching</td>
<td>3</td>
<td>ED EDX</td>
<td>PR: FLE 5313, CR: FLE 5331. This course prepares students for their internship by providing a structured pre-internship experience while meeting regularly in a university class. Opportunity to see teachers in action.</td>
<td></td>
</tr>
<tr>
<td>FLE 6167</td>
<td>Cross-Cultural Issues in Teaching ESOL</td>
<td>3</td>
<td>ED EDX</td>
<td>Designed for K-12 &amp; adult education environment to help participants develop awareness &amp; understanding of the major cultures represented by the different language groups within the State of Florida (teach cultural awareness &amp; cross-cultural understanding).</td>
<td></td>
</tr>
<tr>
<td>FLE 6371</td>
<td>Instruct Methods and Strategies for Teaching ESOL</td>
<td>3</td>
<td>ED EDX</td>
<td>Effective use of ESOL methods and strategies. Conceptual focus of this course is based on the teacher as self-directed, reflective practitioner and problem solver who is able to facilitate learning and change within</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>FLE 6434</td>
<td>Assessment and Progress Management for Teaching ESOL</td>
<td>3</td>
<td>ED, EDX</td>
<td></td>
<td>Designed to develop knowledge 7 skills necessary to prepare students to select, adapt, design assessment instruments &amp; testing techniques reflective of instructional goals &amp; needs of linguistically &amp; culturally diverse students in ESOL or mainstream class.</td>
</tr>
<tr>
<td>FLE 6829</td>
<td>Graduate Instruction Methods</td>
<td>1-4</td>
<td>ED, EDX</td>
<td>PR: CC. S/U only.</td>
<td>Special course to be used primarily for the training of graduate teaching assistants.</td>
</tr>
<tr>
<td>FLE 6906</td>
<td>Independent Study in Foreign Language Education</td>
<td>1-6</td>
<td>ED, EDX</td>
<td></td>
<td>Independent Study in which students must have a contract with an instructor. Rpt. S/U</td>
</tr>
<tr>
<td>FLE 6932</td>
<td>Selected Topics in Second Language Acquisition</td>
<td>3</td>
<td>ED, EDX</td>
<td>PR: Approval of graduate advisor.</td>
<td>This course would provide a flexible format to offer specialized courses in second language acquisition not available in the regular curriculum. This would allow faculty to address issues at the frontiers of the field in second language acquisition. Repeat as topics vary</td>
</tr>
<tr>
<td>FLE 6947</td>
<td>Internship</td>
<td>6</td>
<td>ED, EDX</td>
<td>PR: CI.</td>
<td>Provides students with an extended school-based experience, under the guidance of a cooperating teacher and university supervisor, for a full semester at or near the end of their graduate program. Open to graduate degree candidates only. S/U (PR: CI)</td>
</tr>
<tr>
<td>FLE 7939</td>
<td>Advanced Seminar in Foreign Language Education</td>
<td>3</td>
<td>ED, EDX</td>
<td>PR: FLE 6665</td>
<td>Advanced readings and discussion of theories, perspectives and issues in foreign/second language education from K-20, including examination of current practices, action research, accreditation, certification, teacher development, and assessment in the field.</td>
</tr>
<tr>
<td>FOL 5906</td>
<td>Directed Study</td>
<td>1-3</td>
<td>AS, WLE</td>
<td>PR: FOL 4101 or equivalent.</td>
<td>Research methods. Includes familiarity with major journals and bibliographies, with a practicum.</td>
</tr>
<tr>
<td>FOW 6805</td>
<td>Bibliography</td>
<td>1</td>
<td>AS, WLE</td>
<td>S/U.</td>
<td>Research methods. Includes familiarity with major journals and bibliographies, with a practicum.</td>
</tr>
<tr>
<td>FRE 5425</td>
<td>Advanced Written Expression</td>
<td>3</td>
<td>AS, WLE</td>
<td>PR: FRE 4421, or equivalent.</td>
<td>Course is designed to give advanced training in free composition in French.</td>
</tr>
<tr>
<td>FRE 5566</td>
<td>Contemporary France</td>
<td>3</td>
<td>AS, WLE</td>
<td>PR: FRE 3500 or equivalent or graduate standing.</td>
<td>An advanced course in French civilization and culture including a study of recent social, artistic and political trends as well as various current intellectual movements. Text and discussions in French.</td>
</tr>
<tr>
<td>FRE 6910</td>
<td>Directed Research</td>
<td>1-9</td>
<td>AS, WLE</td>
<td>PR: GR. ML. CC. S/U. Departmental approval required.</td>
<td>An advanced course in French civilization and culture including a study of recent social, artistic and political trends as well as various current intellectual movements. Text and discussions in French.</td>
</tr>
<tr>
<td>FRE 6971</td>
<td>Thesis: Master’s</td>
<td>2-9</td>
<td>AS, WLE</td>
<td>PR: CC. S/U. Departmental approval required.</td>
<td>An advanced course in French civilization and culture including a study of recent social, artistic and political trends as well as various current intellectual movements. Text and discussions in French.</td>
</tr>
<tr>
<td>FRW 5222</td>
<td>Classical Prose and Poetry</td>
<td>3</td>
<td>AS, WLE</td>
<td>PR: FRW 4101.</td>
<td>Emphasis on Malherbe, Descartes,</td>
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<tr>
<td>Course</td>
<td>Title</td>
<td>Credits</td>
<td>Notes</td>
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<tr>
<td>FRW 5314</td>
<td>Classical Drama</td>
<td>3</td>
<td>AS WLE PR: FRW 4101. Corneille, Moliere, and Racine.</td>
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<tr>
<td>FRW 5415</td>
<td>Literature of the Middle Ages</td>
<td>3</td>
<td>AS WLE PR: FRW 4100 or FRW 4101. Major genres, including epic, Arthurian romances, drama and lyric poetry. Reading in modern French translation.</td>
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<tr>
<td>FRW 5425</td>
<td>Literature of the Renaissance</td>
<td>3</td>
<td>AS WLE PR: FRW 4100 or FRW 4101. A study of Renaissance French humanism including Rabelais, Montaigne, and Pleiade poets.</td>
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</tr>
<tr>
<td>FRW 5445</td>
<td>18th Century Literature</td>
<td>3</td>
<td>AS WLE PR: FRW 4100. The classical tradition and the new currents of thought in the Age of Enlightenment.</td>
<td></td>
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<tr>
<td>FRW 5535</td>
<td>Romanticism and Early Realism</td>
<td>3</td>
<td>AS WLE PR: FRW 4101. A study of the romantic and early realistic movements with emphasis on Lamartine, Vigy, Musset, Hugo, and Balzac.</td>
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<tr>
<td>FRW 5556</td>
<td>Naturalism and Realism</td>
<td>3</td>
<td>AS WLE PR: FRW 4100 or FRW 4101. A detailed study of realism and naturalism with emphasis on Flaubert, Zola, les Goncourt, Maupassant, and Daudet.</td>
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<tr>
<td>FRW 5745</td>
<td>French Literature of Quebec</td>
<td>3</td>
<td>AS WLE PR: A survey of Francophone literature and cultures is recommended. Overview of the main representative literary works in French from Quebec in all genres (poetry, drama, novel, short story) as well as a survey of the main traits of Quebec history &amp; culture. Open to non-majors. Not repeatable for credit. Taught in French.</td>
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<tr>
<td>FRW 5755</td>
<td>African and Caribbean Literature</td>
<td>3</td>
<td>AS WLE PR: A survey of French literature. An overview of the main representative literary works in French from North and SubSahara Africa as well as the Caribbean. Open to non-majors and not repeatable for credit. Course taught in French.</td>
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<tr>
<td>FRW 5829</td>
<td>An Introduction to Modern French Literary Criticism</td>
<td>3</td>
<td>AS WLE PR: A survey of French literature. An graduate elective 3 credit course entirely taught in French, which offers a survey of the main trends and methods in 20th Century literary criticism, the French having been at the avant-garde of the field.</td>
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<tr>
<td>FRW 5934</td>
<td>Selected Topics</td>
<td>1-3</td>
<td>AS WLE PR: Upper-level or graduate standing. Study of an author, movement or theme.</td>
<td></td>
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<tr>
<td>FRW 6315</td>
<td>Seminar on Classical Drama</td>
<td>3</td>
<td>AS WLE PR: An in-depth study of the works of one or more of the following dramatists: Corneille, Racine, or Molière.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRW 6405</td>
<td>Old French</td>
<td>3</td>
<td>AS WLE PR: An introduction to the Old French language and literature. Readings from representative texts.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRW 6938</td>
<td>Graduate Seminar</td>
<td>3</td>
<td>AS WLE PR: Topics vary.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEA 6195</td>
<td>Seminar in Advanced Regional Geography</td>
<td>3</td>
<td>AS GPY PR: An analytic study of a selected region of the world.</td>
<td></td>
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<tr>
<td>GEA 6215</td>
<td>Seminar in North American Geography</td>
<td>3</td>
<td>AS GPY PR: Advanced survey of historical and contemporary issues in North American geography including: west and non-west exchange, revolutionary transformation, nation-building, regional disparities, and</td>
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<tr>
<td>Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Degree</td>
<td>Prerequisites</td>
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<tr>
<td>GEA</td>
<td>Seminar in the Geography of the American South</td>
<td>3</td>
<td>ASGPA</td>
<td>PR: GS in Geography or Cl.</td>
<td>Intensive examination of regional geographic studies and their application to the American South, including concepts related to the physical and cultural landscapes, economic growth and change, urbanization, and cultural diffusion processes.</td>
</tr>
<tr>
<td>GEA</td>
<td>Seminar in Latin American and Caribbean Geography</td>
<td>3</td>
<td>ASGPA</td>
<td>PR: GS in Geography or Cl.</td>
<td>Readings and discussions organized around an examination of regional and systematic analysis of selected topics of Latin American and Caribbean geography. Emphasis is on combining physical and cultural analysis of this region.</td>
</tr>
<tr>
<td>GEA</td>
<td>Seminar in European Geography</td>
<td>3</td>
<td>ASGPA</td>
<td>PR: GS in Geography or Cl.</td>
<td>Readings and discussions organized around an examination of regional and systematic analysis of selected topics of European Geography. Emphasis is on combining physical and cultural analysis of this region.</td>
</tr>
<tr>
<td>GEA</td>
<td>Asian Geography Seminar</td>
<td>3</td>
<td>ASGPA</td>
<td>PR: GS in Geography or Cl.</td>
<td>Analysis of regional divisions and spatial variations within Asia. Examines the significance of Asia in the global context. Focus on political, economic, cultural, and historical geographies, including development, environment, religion, and gender.</td>
</tr>
<tr>
<td>GEB</td>
<td>New Venture Formation</td>
<td>3</td>
<td>BUMBA</td>
<td>PR: ACG 6025, MAR 6815, or Cl.</td>
<td>An introductory entrepreneurship course. Students learn to develop venture ideas, evaluate venture opportunities and understand financial, marketing, and managerial needs of a venture.</td>
</tr>
<tr>
<td>GEB</td>
<td>Business Plan Development</td>
<td>3</td>
<td>BUMBA</td>
<td>PR: ACG 6025, MAR 6815, or Cl.</td>
<td>Course is designed to enable students to prepare and present a business/venture plan. Students can prepare a plan for their own venture or a “client organization.”</td>
</tr>
<tr>
<td>GEB</td>
<td>Consulting Field Project</td>
<td>3</td>
<td>BUMBA</td>
<td>PR: ACG 6025, MAR 6815 or Cl.</td>
<td>Student will be teamed with an entrepreneurial organization and will learn to prepare a business plan, feasibility study, strategic marketing plan or some other work agreed upon by client, student and instructor. Third course in entrepreneurship Track.</td>
</tr>
<tr>
<td>GEB</td>
<td>Social, Ethical, Legal Systems</td>
<td>2</td>
<td>BUMBA</td>
<td>PR: GS.</td>
<td>A study of the influence of social, cultural, legal, and political environment of institutional behavior, including the changing nature of the business system, the public policy process, corporate power, legitimacy and managerial autonomy, and organizational reactions to environmental forces.</td>
</tr>
<tr>
<td>GEB</td>
<td>Integrated Business Applications I</td>
<td>3</td>
<td>BUMBA</td>
<td>PR: CC.</td>
<td>Part I of advanced study of business decision-making processes under conditions of risk and uncertainty, including integrating analysis and policy formation at the general management level.</td>
</tr>
<tr>
<td>GEB</td>
<td>Integrated Business Applications II</td>
<td>3</td>
<td>BUMBA</td>
<td>PR: GEB 6895.</td>
<td>Part II of advanced study of business decision-making processes under</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Required Prereq</td>
<td>Course Description</td>
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<tr>
<td>GEB 6930</td>
<td>Selected Topics</td>
<td>3</td>
<td>BU MBA</td>
<td>PR: GS. The content and organization of this course will vary depending on student demand and faculty interest.</td>
<td></td>
</tr>
<tr>
<td>GEB 6949</td>
<td>Consulting Field Project</td>
<td>3</td>
<td>BU GBA</td>
<td>PR: ACG 6025; MAR 6815 or CI. Student will be teamed with an entrepreneurial organization and will learn to prepare a business plan, feasibility study, strategic marketing plan or some other work agreed upon by client, student and instructor. Third course in Entrepreneurship Track.</td>
<td></td>
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<tr>
<td>GEB 6971</td>
<td>Thesis: Master’s</td>
<td>1-1</td>
<td>BU MBA</td>
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<tr>
<td>GEO 6058</td>
<td>Geographic Literature and History</td>
<td>3</td>
<td>AS GPY</td>
<td>PR: Senior or graduate standing in geography, or CI. The origins and development of the discipline as revealed through an examination of the principal written sources. Special attention paid to leading personalities and modern periodicals.</td>
<td></td>
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<tr>
<td>GEO 6115</td>
<td>Advanced Field Techniques</td>
<td>3</td>
<td>AS GPY</td>
<td>PR: GS in Geography or CI. Field examination of one region. Students will complete field work in human and physical geography in a selected area.</td>
<td></td>
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<tr>
<td>GEO 6116</td>
<td>Perspectives on Environmental Thought</td>
<td>3</td>
<td>AS GPY</td>
<td>PR: GEO 6058 or CI. Analysis of the evolution of the major schools of environmental thought from antiquity to present-day green analysis, deep ecology, ecofeminism, and post-modern ecology.</td>
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<tr>
<td>GEO 6119</td>
<td>Geographical Techniques and Methodology</td>
<td>3</td>
<td>AS GPY</td>
<td>PR: GS in Geography. Analytic study of a technique or investigation into an aspect of methodology.</td>
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<tr>
<td>GEO 6166</td>
<td>Multivariate Statistical Analysis</td>
<td>3</td>
<td>AS GPY</td>
<td>PR: GS in Geography or CI, GEO 3164C. Examination of advanced statistical approaches used by geographers. Descriptive, spatial and inferential statistics and multi-variate analysis are highlighted.</td>
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<tr>
<td>GEO 6209C</td>
<td>Physical Geography Seminar</td>
<td>3</td>
<td>AS GPY</td>
<td>PR: GS in Geography or CI. Analytic study of one or more topics from physical geography. Selected problems may include hydrology, physiography, meteorology, climatology, soils, vegetation, etc.</td>
<td></td>
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<tr>
<td>GEO 6215</td>
<td>Geomorphology Seminar</td>
<td>3</td>
<td>AS GPY</td>
<td>PR: GEO 4372 or CI. An advanced examination of geomorphic processes and landforms with an emphasis placed on concepts related to the formation and evolution of landscapes on a variety of scales.</td>
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<tr>
<td>GEO 6217</td>
<td>Karst Geomorphology</td>
<td>3</td>
<td>AS GPY</td>
<td>PR: GS in Geography or CI. An in-depth examination of the geomorphic aspects of karst landforms. The objectives, methods and results of karst geomorphic studies in which both field and laboratory analysis have been applied to geomorphic problems are reviewed.</td>
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</tr>
<tr>
<td>GEO 6255</td>
<td>Weather, Climate and Society</td>
<td>3</td>
<td>AS GPY</td>
<td>This course explores the societal impacts of weather as well as the human impact on weather and climate. Students lead and participate in discussions on topics.</td>
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</table>
such as weather hazards, extreme temperature and human physiology, historical civilization and extreme climate, economic value of forecasts, weather modification, urbanization and other land use change, anthropogenic aerosols, past and future climates.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>GenEd</th>
<th>Program</th>
<th>Course Description</th>
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<tbody>
<tr>
<td>GEO 6263</td>
<td>Soils Seminar</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>Examination of how earth systems influence soil formation and variation. Details analysis of soils climosequences, biosequences, toposequences, lithosequences, chronosequences, and anthroposequences.</td>
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<tr>
<td>GEO 6286</td>
<td>Advances in Water Resources</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>Water resources policies are viewed from theoretical and practical perspectives focusing on management strategies in different physical and human environments.</td>
</tr>
<tr>
<td>GEO 6288</td>
<td>Hydrological Systems</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>A systematic approach to hydrology using the drainage basin as the fundamental unit of analysis is used to explore form and process, while modeling stream flows.</td>
</tr>
<tr>
<td>GEO 6345</td>
<td>Technological Hazards and Environmental Justice</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>Examination of theories, debates, methods, and models that improve our understanding of human vulnerability to technological hazards and risks, with emphasis on issues of fairness and equity in the distribution and impact of hazards.</td>
</tr>
<tr>
<td>GEO 6347</td>
<td>Natural Hazards</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>Analysis of natural hazards integrating principles of physical, social, economic, political, and technical forces that affect extreme geophysical events.</td>
</tr>
<tr>
<td>GEO 6428</td>
<td>Seminar in Advanced Human Geography</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>Analytic study of a problem selected from aspects of the human landscape (urban, political, economic, population, settlement).</td>
</tr>
<tr>
<td>GEO 6475</td>
<td>Political Geography Seminar</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>Advanced investigation of geopolitical issues including: the human construction of territoriality, ethnic relations, the making of nations and states, the geopolitics of localities, and environmental policy making.</td>
</tr>
<tr>
<td>GEO 6545</td>
<td>Economic Geography Seminar</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>An intensive examination of selected issues in economic geography including: regional development and decline; spatial labor market trends; business locational analysis; and comparative economic policy.</td>
</tr>
<tr>
<td>GEO 6605</td>
<td>Contemporary Urban Issues</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>Advanced survey of urban issues such as: industrial restructuring and urban development, inner-city ethnic relations, the geopolitics of urban governance, and urban culture.</td>
</tr>
<tr>
<td>GEO 6627</td>
<td>Site Feasibility Analysis</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>A project-oriented geographic examination of urban real estate development and site feasibility practices. Hands-on course including concepts of real estate development patterns, urban growth, and site specific factors related to feasibility of</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>GEO 6704</td>
<td>Advanced Transportation Geography</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>Review of transportation issues and analysis, focusing on modeling and planning for flows of goods and people. Provides a hands-on approach to use of GIS for such analysis.</td>
</tr>
<tr>
<td>GEO 6908</td>
<td>Independent Study</td>
<td>1-1</td>
<td>AS</td>
<td>GPY</td>
<td>Independent study in which students must have a contract with an instructor.</td>
</tr>
<tr>
<td>GEO 6918</td>
<td>Directed Research</td>
<td>1-1</td>
<td>AS</td>
<td>GPY</td>
<td>PR: GR. ML, CC. S/U.</td>
</tr>
<tr>
<td>GEO 6944</td>
<td>Internship in Geography</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>The internship in Geography is designed to provide students the opportunity to work in an appropriate governmental agency to gain practical field experience.</td>
</tr>
<tr>
<td>GEO 6947</td>
<td>Directed Teaching</td>
<td>1-6</td>
<td>AS</td>
<td>GPY</td>
<td>PR: GS, CI.</td>
</tr>
<tr>
<td>GEO 6970</td>
<td>Geographic Research Design</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>PR: Graduate standing and consent of instructor.</td>
</tr>
<tr>
<td>GEO 6971</td>
<td>Thesis: Master’s</td>
<td>2-1</td>
<td>AS</td>
<td>GPY</td>
<td>PR: CC. S/U.</td>
</tr>
<tr>
<td>GEO 7021</td>
<td>Doctoral Dissertation Preparation</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>PR: Graduate standing and consent of instructor.</td>
</tr>
<tr>
<td>GEO 7606</td>
<td>Seminar in Urban Environments</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>PR: Graduate standing and consent of instructor.</td>
</tr>
<tr>
<td>GEO 7980</td>
<td>Doctoral Dissertation Research</td>
<td>2-1</td>
<td>AS</td>
<td>GPY</td>
<td>PR: Accepted into the GEP Doctoral program; GEO 7920 (Doctoral Dissertation Preparation) is completed by all students in the program that designate Geography as their subject area; and permission of the student’s major professor.</td>
</tr>
<tr>
<td>GER 5845</td>
<td>History of the German Language</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>A diachronic approach to the study of the German language. The course traces the history and development of the language from Indo-European through Germanic, Old, Middle, and New High German.</td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
<td>Units</td>
<td>Credits</td>
<td>Description</td>
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</tr>
<tr>
<td>GER 6060</td>
<td>German for Reading</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>Designed to provide a reading ability in German that will support research in other disciplines.</td>
</tr>
<tr>
<td>GER 6908</td>
<td>Independent Study</td>
<td>1-9</td>
<td>AS</td>
<td>WLE</td>
<td>PR: CC. S/U.</td>
</tr>
<tr>
<td>GEW 5475</td>
<td>20th Century Literature to 1945</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>A study of major styles in German literature from 1900 to WW II with emphasis on Hauptmann, Schnitzler, Hofmannsthal, George Rilke, Kaiser, Heym, Trakl, Thomas Mann, Hesse, Kafka, Benn, Brecht.</td>
</tr>
<tr>
<td>GEW 5489</td>
<td>20th Century Literature: 1945 to Present</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>Study of major trends in German literature since WW II with emphasis on Borchert, Frisch, Durrenmatt, Boll, Uwe, Johnson, Grass, Aichinger, Eich Enzensberger, Bachmann.</td>
</tr>
<tr>
<td>GEW 5515</td>
<td>The Enlightenment</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>Selected dramas and critical writings by Lessing, Wieland, Kant.</td>
</tr>
<tr>
<td>GEW 5545</td>
<td>Romanticism</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>Jenaer circle and Heidelberger circle; the late romantic period, the writers between Classicism and Romanticism.</td>
</tr>
<tr>
<td>GEW 5555</td>
<td>Realism</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>Selected works by Grillparzer, Grabbe, Buchner, Hebbel, Heine, Immerman, Stifter, Keller, Meyer, Storm, Raabe, Hulshoff, and Morike.</td>
</tr>
<tr>
<td>GEW 5606</td>
<td>Faust</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>Sources, form, content, and literary significance of Urfaust and Faust.</td>
</tr>
<tr>
<td>GEW 5615</td>
<td>Schiller</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>Selected dramas, philosophical, and aesthetic writings.</td>
</tr>
<tr>
<td>GEW 5934</td>
<td>Selected Topics</td>
<td>1-3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: Upper-level or graduate standing.</td>
</tr>
<tr>
<td>GEY 5620</td>
<td>Sociological Aspects Of Aging</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>Examines, within a sociological frame of reference, the interrelationships between the aged (or aging) and the structure and function of the social system and its major institutionalized subsystems.</td>
</tr>
<tr>
<td>GEY 5630</td>
<td>Economics and Aging</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>Examines basic economic systems as they impact the aged. Emphasis is on applied aspects of economic planning, pensions, insurance, social security and other support systems.</td>
</tr>
<tr>
<td>GEY 5642</td>
<td>Perspectives on Death and Dying</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>Study of the various psychological, medical, legal, and religious problems caused by dying and death, and how individuals and groups have responded in the past and present.</td>
</tr>
<tr>
<td>GEY 6206</td>
<td>Family Caregiving in Aging and Chronic Illness</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>The course will address the mental and physical health consequences, cultural diversity issues, and stress process models of caregiving, as well as clinical and public policy interventions to assist family caregivers of adults with chronic illness.</td>
</tr>
<tr>
<td>GEY 6230</td>
<td>Principles of Health Care Risk Management and Patient Safety</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>This course provides an overview of the various aspects of health care risk management and how the risk varies by health care setting. Case studies and exercises provide students with &quot;real world&quot; situations they are likely to encounter.</td>
</tr>
<tr>
<td>GEY 6321</td>
<td>Gerontological Case Management</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>This course examines the function of case management in meeting the...</td>
</tr>
<tr>
<td>GEY</td>
<td>6325 Social Policy and Planning for Gerontologists</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>care needs of the older adult. Elements of the case management process as well as ethical and legal issues in case management are covered. Not repeatable; not restricted to majors.</td>
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<tr>
<td>GEY</td>
<td>6326 Geriatric Interdisciplinary Team Training</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>This course addresses the importance of interdisciplinary teams in today’s health care and social service delivery systems for older adults. Issues include formation of teams, critical issues of aging, team care plans, and monitoring team functioning.</td>
</tr>
<tr>
<td>GEY</td>
<td>6340 Housing for the Elderly</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>Major issues and aspects of conventional and planned housing for the elderly. Several field trips will be taken.</td>
</tr>
<tr>
<td>GEY</td>
<td>6402 Statistical and Qualitative Methods in Aging Research</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>The major goal of this course is to deliver fundamental quantitative and qualitative research concepts that are useful in aging research. Other goals include hands-on exposure to secondary data analysis.</td>
</tr>
<tr>
<td>GEY</td>
<td>6403 Multivariate Statistical Analysis for Aging Research</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>This course will give students experience with many of today’s advanced statistical techniques. Primary emphasis will be on the description of these methods of analysis, situations in which their application is most appropriate, and hands-on experience.</td>
</tr>
<tr>
<td>GEY</td>
<td>6450 Gerontological Research and Planning</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>PR: CI. Social research and planning methods in the field of gerontology. Directed to the consumers of research findings-person whose positions call for the ability to interpret, evaluate, and apply the findings produced by others.</td>
</tr>
<tr>
<td>GEY</td>
<td>6461 Retirement and Long Term Care Housing for Elderly</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>This course will focus on population trends, housing and environment theory, need and availability of affordable housing with services, adapting homes for elders, and a number of age-related housing solutions. Not restricted to majors; not repeatable.</td>
</tr>
<tr>
<td>GEY</td>
<td>6500 Seminar in Principles of Administration</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>This course deals with management problems and practices in the administration of institutions in the field of aging. Consideration is given to federal and state legislation, the management of people, and fiscal management.</td>
</tr>
<tr>
<td>GEY</td>
<td>6600 Human Development and Aging</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>Normal aging, change and basic psychological processes will be examined from a human development perspective. Emphasis will be on middle aged and older</td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
<td>Credits</td>
<td>Units</td>
<td>Prerequisite(s)</td>
<td>Description</td>
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<tr>
<td>GEY 6607</td>
<td>Alzheimer's Disease Management</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>This course will provide instruction on effective approaches for providing care to persons with Alzheimer’s disease and related disorders, successful behavior management, and operating a dementia program. Not restricted to majors; not repeatable.</td>
</tr>
<tr>
<td>GEY 6613</td>
<td>Physical Change and Aging</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>Common, normal and pathological physical changes associated with aging will be discussed as they affect behavior. Aspects of physical and mental illness and pharmacology with gerontological relevance will be surveyed.</td>
</tr>
<tr>
<td>GEY 6614</td>
<td>Aging and Mental Disorders</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>Examination of the basic principles of abnormal psychopathology and basic concepts of psychopathology. Major theories about behavior and behavior change will be explored. Common gerontological mental health issues will be studied with particular focus upon adjustment to change and loss.</td>
</tr>
<tr>
<td>GEY 6615</td>
<td>Psychopathology and Aging II</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>A continuation of Psychopathology and Aging I. It familiarizes the student with the psychopathology of aging. Major topics in the DSM-IV will be covered.</td>
</tr>
<tr>
<td>GEY 6616</td>
<td>Mental Health Assessment of Older Adults</td>
<td>3</td>
<td>BC</td>
<td>GEY, PR: GEY 6614 or CI</td>
<td>Designed to provide the mental health counselor with a basic understanding of evaluation principles and the application of assessment approaches to older adults.</td>
</tr>
<tr>
<td>GEY 6617</td>
<td>Gerontological Counseling Theories and Practice</td>
<td>3</td>
<td>BC</td>
<td>GEY, PR: GEY 6614 or CI</td>
<td>Examination of mental health treatment modalities and approaches to counseling with older adults. Personality theories and their relationship to counseling will be included emphasizing the development of a treatment plan through the integration of assessment data.</td>
</tr>
<tr>
<td>GEY 6618</td>
<td>Gerontological Group and Family Counseling</td>
<td>3</td>
<td>BC</td>
<td>GEY, PR: GEY 6614 or CI</td>
<td>An advanced course directed at clinical practice with older adults. Appropriate techniques and skills will be integrated with models of psychotherapy, counseling, and personality development. Primary focus will be on intervention with groups, families, and couples.</td>
</tr>
<tr>
<td>GEY 6626</td>
<td>Health, Ethnicity, and Aging</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>This course addresses aging among diverse racial and ethnic populations, cultural competency and health disparities inaccess to and utilization of services among persons from diverse racial and ethnic populations. Not restricted to majors; not repeatable.</td>
</tr>
<tr>
<td>GEY 6627</td>
<td>Women and Aging</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>The purpose of this course is to examine older women’s lives from a feminist perspective. Factors such as longer life expectancy and gender</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>Restriction</td>
<td>Description</td>
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<tr>
<td>GEY 6643</td>
<td>End of Life Care for Dementia Patients</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>This course addresses progressive degenerative dementias: Alzheimer’s disease, dementia with Lewy bodies, vascular and fronto-temporal dementia, and will address treatment, medical, ethical and legal questions. Not restricted to majors. Not repeatable.</td>
</tr>
<tr>
<td>GEY 6646</td>
<td>Gerontological Issues and Concepts</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>This course presents the concepts, theories, and issues relevant to our aging society. Emphasis will be placed on generalized knowledge of the aging process, and implications for the individual, family, government, and society in general. Students will engage in spirited debate and gain important background that will prepare them for their other graduate work in Gerontology. Social Work, and related fields.</td>
</tr>
<tr>
<td>GEY 6647</td>
<td>Ethical and Legal Issues in Aging</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>A consideration of major ethical and legal issues in aging and their implications for policies, priorities, and services.</td>
</tr>
<tr>
<td>GEY 6901</td>
<td>Directed Reading</td>
<td>1-4</td>
<td>BC</td>
<td>GEY PR: S/U.</td>
<td>A reading program of selected topics under the supervision of a faculty member.</td>
</tr>
<tr>
<td>GEY 6910</td>
<td>Directed Research</td>
<td>1-4</td>
<td>BC</td>
<td>GEY PR: S/U.</td>
<td></td>
</tr>
<tr>
<td>GEY 6934</td>
<td>Special Topics In Gerontology</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>Courses on topics such as preretirement, mental health, human services organization, and senior center administration.</td>
</tr>
<tr>
<td>GEY 6940</td>
<td>Field Placement</td>
<td>1-6</td>
<td>BC</td>
<td>GEY PR: S/U.</td>
<td>An internship in an agency or organization engaged in planning or administering programs for older people of in providing direct services for older people.</td>
</tr>
<tr>
<td>GEY 6941</td>
<td>Field Placement in Mental Health</td>
<td>1-6</td>
<td>BC</td>
<td>GEY PR: 6616, 6617 and GEY 6618 or Cl.</td>
<td>A highly structured supervised counseling experience providing mental health services to older adults.</td>
</tr>
<tr>
<td>GEY 6971</td>
<td>Thesis: Master's</td>
<td>2-19</td>
<td>BC</td>
<td>S/U</td>
<td></td>
</tr>
<tr>
<td>GEY 7404</td>
<td>Ph.D. Seminar in Grant Writing</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>This course is designed as a seminar for doctoral students pursuing a research career requiring outside funding for their research. Skills practiced include literature search, preparation of budgets, detail of research methods, and critique of proposals.</td>
</tr>
<tr>
<td>GEY 7602</td>
<td>Ph.D. Seminar in Health and Aging</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>This doctoral seminar focuses on issues of physical and functional health in older adults, including acute and chronic conditions. Specific content will be different each time. Repeatable twice for credit.</td>
</tr>
<tr>
<td>GEY 7604</td>
<td>Biomedical Aging</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
<td>This course examines biomedical issues of aging, from the genetic to...</td>
</tr>
</tbody>
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>GEY</th>
<th>Course Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEY 7610</td>
<td>Psychological Issues of Aging: Interdisciplinary Perspective</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
</tr>
<tr>
<td></td>
<td>This course provides an overview of theory &amp; research on individual human development and aging. Emphasis is on cognition, personality, psychopathology, stress and coping, care giving, and end-of-life issues. Open to all majors; not repeatable.</td>
<td></td>
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<tr>
<td>GEY 7611</td>
<td>Ph.D. Seminar in Mental Health</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
</tr>
<tr>
<td></td>
<td>This doctoral seminar focuses on issues of mental health in older adults, including issues like depression, anxiety, and psychopathology. Specific content will vary. Repeatable twice for credit.</td>
<td></td>
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</tr>
<tr>
<td>GEY 7622</td>
<td>Ph.D. Seminar in Policy and the Elderly</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
</tr>
<tr>
<td></td>
<td>This course is designed to offer a comprehensive examination of the major public-policy issues generated by the health care needs of those ages 65 and older and the programs/institutions that have emerged to meet these needs.</td>
<td></td>
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</tr>
<tr>
<td>GEY 7623</td>
<td>Social and Health Issues in Aging</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
</tr>
<tr>
<td></td>
<td>This is a doctoral level class that addresses both social and health aspects of aging. Emphasis is on social and family context in aging, health policies, long term care, and racial and ethnic diversity. It is open to all majors and is not repeatable.</td>
<td></td>
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<tr>
<td>GEY 7649</td>
<td>Population Aging</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
</tr>
<tr>
<td></td>
<td>PhD students in Aging Studies and others will develop an understanding of the causes/consequences of aging &amp; its effects on the populations of the U.S. and the world. Emphasis is on demographic, social, political, and economic processes. Not repeatable.</td>
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<tr>
<td>GEY 7651</td>
<td>Ph.D. Seminar in Cognition</td>
<td>3</td>
<td>BC</td>
<td>GEY</td>
</tr>
<tr>
<td></td>
<td>This doctoral seminar focuses on issues of cognition in older adults, including learning and memory, and also addresses change and chronic conditions that affect them. Specific content will be different each time. Repeatable twice for credit.</td>
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<tr>
<td>GEY 7902</td>
<td>Directed Individual Study in Aging Studies</td>
<td>1-9</td>
<td>BC</td>
<td>GEY</td>
</tr>
<tr>
<td></td>
<td>An advanced reading program of selected topics related to interdisciplinary avenues of inquiry under the supervision of an aging studies faculty member. A written contract describing the requirements must be signed by the student and faculty member prior to registration.</td>
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</tr>
<tr>
<td>GEY 7911</td>
<td>Directed Research in Aging Studies</td>
<td>1-19</td>
<td>BC</td>
<td>GEY</td>
</tr>
<tr>
<td></td>
<td>Research on selected topics in aging studies under the direct supervision of a member of the graduate faculty in aging studies.</td>
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</tr>
<tr>
<td>GEY 7936</td>
<td>Proseminar in Aging Studies</td>
<td>1-10</td>
<td>BC</td>
<td>GEY</td>
</tr>
<tr>
<td></td>
<td>Reading and discussion of current topics, books, articles, and papers in aging studies. Examination of theory and research issues in the field of gerontology. Students develop their</td>
<td></td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Grading</td>
<td>Department</td>
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<tr>
<td>GEY 7980</td>
<td>Dissertation and Doctoral</td>
<td>2-1</td>
<td>BC</td>
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<tr>
<td>GIS 5049</td>
<td>GIS for Non-Majors</td>
<td>3</td>
<td>AS</td>
<td>GPy</td>
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<tr>
<td>GIS 5075</td>
<td>Global Positioning Systems</td>
<td>3</td>
<td>AS</td>
<td>GPy</td>
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<tr>
<td>GIS 6038C</td>
<td>Remote Sensing</td>
<td>3</td>
<td>AS</td>
<td>GPy</td>
</tr>
<tr>
<td>GIS 6039</td>
<td>Remote Sensing Seminar</td>
<td>3</td>
<td>AS</td>
<td>GPy</td>
</tr>
<tr>
<td>GIS 6100</td>
<td>Advanced Geographic Information Systems</td>
<td>3</td>
<td>AS</td>
<td>GPy</td>
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<tr>
<td>GIS 6112</td>
<td>Spatial Database Development</td>
<td>3</td>
<td>AS</td>
<td>GPy</td>
</tr>
<tr>
<td>GIS 6306</td>
<td>Environmental Applications of Geographic Information Systems</td>
<td>3</td>
<td>AS</td>
<td>GPy</td>
</tr>
<tr>
<td>GIS 6307</td>
<td>GIS Seminar</td>
<td>3</td>
<td>AS</td>
<td>GPy</td>
</tr>
<tr>
<td>GIS 6355</td>
<td>Water Resources Applications of GIS</td>
<td>3</td>
<td>AS</td>
<td>GPy</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>PR:</td>
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<tr>
<td>GLY 5752</td>
<td>Geological Field Excursion</td>
<td>2</td>
<td>AS</td>
<td>GLY</td>
</tr>
<tr>
<td>GLY 5865</td>
<td>Statistical Models in Geology</td>
<td>3</td>
<td>AS</td>
<td>GLY</td>
</tr>
<tr>
<td>GLY 5932</td>
<td>Selected Topics in Geology</td>
<td>1-4</td>
<td>AS</td>
<td>GLY</td>
</tr>
<tr>
<td>GLY 6075</td>
<td>Greenhouse-Icehouse Earth</td>
<td>3</td>
<td>AS</td>
<td>GLY</td>
</tr>
<tr>
<td>GLY 6156</td>
<td>Geology of North America</td>
<td>2</td>
<td>AS</td>
<td>GLY</td>
</tr>
<tr>
<td>GLY 6246</td>
<td>General Geochemistry</td>
<td>3</td>
<td>AS</td>
<td>GLY</td>
</tr>
<tr>
<td>GLY 6248</td>
<td>Sedimentary Geochemistry</td>
<td>3</td>
<td>AS</td>
<td>GLY</td>
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<tr>
<td>GLY 6255</td>
<td>Tracer Geochemistry</td>
<td>3</td>
<td>AS</td>
<td>GLY</td>
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<tr>
<td>GLY 6285C</td>
<td>Analytical Techniques in Geology</td>
<td>3</td>
<td>AS</td>
<td>GLY</td>
</tr>
<tr>
<td>GLY 6345</td>
<td>Sedimentary Petrography</td>
<td>3</td>
<td>AS</td>
<td>GLY</td>
</tr>
<tr>
<td>GLY 6395C</td>
<td>Topics in Igneous and Metamorphic Petrology</td>
<td>2-4</td>
<td>AS</td>
<td>GLY</td>
</tr>
<tr>
<td>GLY 6424</td>
<td>Global Tectonics</td>
<td>2</td>
<td>AS</td>
<td>GLY</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>Prerequisites</td>
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<tr>
<td>-------------</td>
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</tr>
<tr>
<td>GLY 6475C</td>
<td>Principles of Applied Geophysics</td>
<td>4</td>
<td>AS</td>
<td>GLY PR: One year of Physics or CI.</td>
</tr>
<tr>
<td>GLY 6492</td>
<td>Hydrogeology Internship Project</td>
<td>1-3</td>
<td>AS</td>
<td>GLY PR: Enrollment in Hydrogeology Internship program; 24 hours of approved graduate courses. Internship project in applied hydrogeology. Required for hydrogeology-internship MS program (minimum 3 hours).</td>
</tr>
<tr>
<td>GLY 6526</td>
<td>Advanced Stratigraphy</td>
<td>3</td>
<td>AS</td>
<td>GLY PR: OCG 6656 or equiv. or CI.</td>
</tr>
<tr>
<td>GLY 6573</td>
<td>Fluvial Hydrology and Geomorphology</td>
<td>3</td>
<td>AS</td>
<td>GLY PR: MAC 2311 or the equivalent.</td>
</tr>
<tr>
<td>GLY 6575C</td>
<td>Coastal Sedimentation</td>
<td>3</td>
<td>AS</td>
<td>GLY PR: GY 4555 or equiv. or CI.</td>
</tr>
<tr>
<td>GLY 6655</td>
<td>Topics in Paleobiology</td>
<td>3</td>
<td>AS</td>
<td>GLY PR: GY 3610 equiv., PCB 4674 or equiv. or CI.</td>
</tr>
<tr>
<td>GLY 6739</td>
<td>Selected Topics in Geology</td>
<td>1-4</td>
<td>AS</td>
<td>GLY PR: CI. Each topic is a course directed by a faculty member. All areas of geology are included.</td>
</tr>
<tr>
<td>GLY 6824</td>
<td>Ecohydrology</td>
<td>3</td>
<td>AS</td>
<td>GLY PR: MAC 2311 or the equivalent.</td>
</tr>
<tr>
<td>GLY 6827C</td>
<td>Advanced Hydrogeology</td>
<td>4</td>
<td>AS</td>
<td>GLY PR: GY 4822, one year college calculus or CI. Flow systems, analytical and numerical solutions to ground-water flow problems. Emphasis on the theoretical aspects of ground-water flow systems and their interaction with the geologic framework. Lec/Lab. Field trips.</td>
</tr>
<tr>
<td>GLY 6828</td>
<td>Ground-Water Geochemistry</td>
<td>3</td>
<td>AS</td>
<td>GLY PR: One year of college Chemistry, GY 4822, GY 6246, or CI. Chemical behavior of ground water. Includes interaction of water with aquifer materials, chemical effects of waste disposal, use of chemical tracers, and transport of hazardous chemicals. Methods of sampling and data interpretation are emphasized. Lec.</td>
</tr>
<tr>
<td>GLY 6836</td>
<td>Numerical Modeling of</td>
<td>3</td>
<td>AS</td>
<td>GLY PR: GY 6827C, or CI. An advanced graduate course in selected regions of the earth.</td>
</tr>
<tr>
<td>Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>Prerequisites</td>
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<tr>
<td>GLY 6905</td>
<td>Independent Study</td>
<td>1-1</td>
<td>AS</td>
<td>GLY PR: CC. S/U.</td>
</tr>
<tr>
<td>GLY 6910</td>
<td>Directed Research</td>
<td>1-1</td>
<td>AS</td>
<td>GLY PR: GR. ML, CC. S/U.</td>
</tr>
<tr>
<td>GLY 6931</td>
<td>Graduate Seminar</td>
<td>1</td>
<td>AS</td>
<td>GLY PR: CC. S/U.</td>
</tr>
<tr>
<td>GLY 6933</td>
<td>Advanced Topics in Geology</td>
<td>2</td>
<td>AS</td>
<td>GLY PR: GS.</td>
</tr>
<tr>
<td>GLY 6971</td>
<td>Thesis: Master’s</td>
<td>2-1</td>
<td>AS</td>
<td>GLY S/U.</td>
</tr>
<tr>
<td>GLY 7912</td>
<td>Directed Research</td>
<td>1-3</td>
<td>AS</td>
<td>GLY PR: GR. Ph.D. Level. S/U.</td>
</tr>
<tr>
<td>GLY 7980</td>
<td>Dissertation: Doctoral</td>
<td>2-1</td>
<td>AS</td>
<td>GLY PR: Admission to Candidacy. S/U.</td>
</tr>
<tr>
<td>GMS 6001</td>
<td>Foundation in Biomedical Sciences</td>
<td>4-8</td>
<td>ME</td>
<td>MSG PR: B.S./B.A. and admission into a Graduate Program at the University of South Florida. Instructor permission required for those not meeting these prerequisites.</td>
</tr>
<tr>
<td>GMS 6002</td>
<td>Success Skills in Biomedical Sciences</td>
<td>1</td>
<td>ME</td>
<td>MSG PR: GMS 6091.</td>
</tr>
<tr>
<td>GMS 6012</td>
<td>Basic Medical Genetics</td>
<td>3</td>
<td>ME</td>
<td>MSG PR: 1 yr. Biology; 1 yr. Chemistry.</td>
</tr>
<tr>
<td>GMS 6020</td>
<td>Neuroscience</td>
<td>5-6</td>
<td>ME</td>
<td>MSG PR: Cl.</td>
</tr>
<tr>
<td>GMS 6058</td>
<td>Cancer Biology Lab Rotations</td>
<td>1-3</td>
<td>ME</td>
<td>MSG PR: Cl.</td>
</tr>
<tr>
<td>GMS 6065</td>
<td>Advances in Cancer Research</td>
<td>2</td>
<td>ME</td>
<td>MSG PR: Cl.</td>
</tr>
<tr>
<td>GMS 6066</td>
<td>Molecular Medicine</td>
<td>1</td>
<td>ME</td>
<td>MSG</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Type</td>
<td>Mode</td>
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<tr>
<td>GMS 6067</td>
<td>Current Topics in Molecular Medicine</td>
<td>1</td>
<td>ME</td>
<td>MSG</td>
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<tr>
<td>GMS 6069</td>
<td>Translational Biotechnology</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
</tr>
<tr>
<td>GMS 6091</td>
<td>Responsible Conduct in Research</td>
<td>1</td>
<td>ME</td>
<td>MSG</td>
</tr>
<tr>
<td>GMS 6092</td>
<td>Introduction to Behavioral Medicine</td>
<td>4</td>
<td>ME</td>
<td>MSG</td>
</tr>
<tr>
<td>GMS 6093</td>
<td>Clinical and Translational Mentored Research</td>
<td>1-2</td>
<td>ME</td>
<td>MSG</td>
</tr>
<tr>
<td>GMS 6094</td>
<td>Biomedical Ethics</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
</tr>
<tr>
<td>GMS 6095</td>
<td>Principles of Intellectual Property</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
</tr>
<tr>
<td>GMS 6100</td>
<td>Medical Microbiology</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
</tr>
<tr>
<td>GMS 6101</td>
<td>Molecular and Cellular Immunology</td>
<td>3-4</td>
<td>ME</td>
<td>MSG</td>
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</table>

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<p>| GMS  | 6102 | Experimental Design and Analysis | 3  | ME  | MSG | PR: B.S./B.A. and admission into the Ph.D. Program at the University of South Florida College of Medicine. Instructor permission required for those not meeting these prerequisites. | A focused course designed to introduce students to the scientific method, experimental designs, approaches, and analyses that are essential to the modern biomedical research scientist. The course is restricted to the modern biomedical research scientist. The course is not repeatable. |
| GMS  | 6107 | Advances in Virology | 2  | ME  | MSG | PR: 1 yr. Biology; 1 yr. Chemistry. | Lecture, directed literature readings, and discussion form the basis to instruct graduate and advanced undergraduate students in Medical Virology. The course will now cover pathobiology and molecular biology of medically important viruses. |
| GMS  | 6141 | Basic Medical Immunology and Microbiology | 3  | ME  | MSG | PR: General Biology (1 year), General Chemistry (1 year). | The course focuses on the fundamental aspects of immunology and microbiology that are critical to understanding the nature of the immune response and identify the various microbiological agents that are relevant to human health and disease. |
| GMS  | 6183 | Clinical Research Methods | 3  | ME  | MSG | PR: General Biology (1 year), General Chemistry (1 year). | The course will provide a foundation for healthcare providers to pursue investigator-initiated clinical research. It is not restricted to majors or nonmajors and cannot be repeated for credit. |
| GMS  | 6200C | Biochemistry, Molecular and Cellular Biology | 5  | ME  | MSG | PR: Admission to graduate program in medical sciences or CC. | The overall objectives of GMS 6200 are to provide students with a solid foundation of biochemical principles and a fundamental understanding of structures and processes of living systems at the molecular and cellular levels. |
| GMS  | 6201 | Basic Medical Biochemistry | 3  | ME  | MSG | PR: 1 year Biology; 1 year Chemistry. | The course examines fundamental aspects of biochemistry critical to understanding the chemical and cellular mechanisms relevant to health and disease including intermediary metabolism, enzymology and storage and transfer of genetic information. |
| GMS  | 6334 | Pathobiology of Human Cancer | 3  | ME  | MSG | PR: Pathology Departmental Approval. | Using tissue-related oncology topics that complement molecular biology &amp; experimental therapeutics, this graduate course will provide the morphologic and biologic basis of human cancer. This course is not restricted and is repeatable for 3 credits. |
| GMS  | 6340 | Laboratory Fundamentals and Adjunct Cancer Therapies | 3  | ME  | MSG | | This course presents an extensive review of clinical laboratory fundamentals as part of the disease diagnosis process together with discussions of the therapies designed to reverse adverse cellular functions and adjunct therapies for cancer management. |
| GMS  | 6400C | Core Physiology | 4- | ME  | MSG | PR: B.S. and permission | This course is designed to give the |</p>
<table>
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<tr>
<th>Course Code</th>
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<th>Hours</th>
<th>Offered by</th>
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<tr>
<td>GMS 6431</td>
<td>Cell Physiology</td>
<td>4</td>
<td>ME MSG</td>
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<tr>
<td>GMS 6440</td>
<td>Basic Medical Physiology</td>
<td>3</td>
<td>ME MSG</td>
<td></td>
</tr>
<tr>
<td>GMS 6441</td>
<td>Clinical Approaches to Endocrinology</td>
<td>3</td>
<td>ME MSG</td>
<td></td>
</tr>
<tr>
<td>GMS 6451</td>
<td>Nutrition and Metabolism</td>
<td>3</td>
<td>ME MSG</td>
<td></td>
</tr>
<tr>
<td>GMS 6452</td>
<td>Clinical Nutrition</td>
<td>3</td>
<td>ME MSG</td>
<td></td>
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<tr>
<td>GMS 6453</td>
<td>Functional Approach to Diabetes and Coronary Heart</td>
<td>3</td>
<td>ME MSG</td>
<td></td>
</tr>
<tr>
<td>GMS 6454</td>
<td>Functional Medicine and Infectious Disease</td>
<td>3</td>
<td>ME MSG</td>
<td></td>
</tr>
<tr>
<td>GMS 6455</td>
<td>Clinical Intensives in Metabolic and Nutri. Medicine</td>
<td>3</td>
<td>ME MSG</td>
<td></td>
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</tbody>
</table>

The MSG Courses provide students with a comprehensive understanding of the basic functions of the human body. This will be approached from molecular, cellular, organ system and total organism aspects.

Examine organelles and macromolecular complexes of eukaryotic cells with respect to structural and functional roles in major cellular activities. Emphasizes on experimental basis for factual knowledge in modern cell biology, discusses the validity of current concepts in relation to the regulation of cellular functions. Suitable for first and second year graduate students.

The course presents a concise introduction to the study of human physiology from a perspective of the function of various human organ systems with an emphasis on understanding important concepts and their correlation to the practice of clinical medicine.

The course focuses on the function of the human endocrine system and examines factors influencing hormone function and physiological hormone balance. Clinical approaches to achieve hormone homeostasis are emphasized including hormone replacement therapy.

The course provides a discussion of the experimental analysis of human nutrition and the methods used in detoxification of exogenous toxins together with a critical analysis of the roles of fatty acid and amino acid metabolism in organ homeostasis.

A course that is designed to provide a thorough foundation in all aspects of human nutrition and which emphasizes the close relationship between nutrition and various chronic diseases and includes obesity, weight management and life-cycle nutrition.

The course examines specific aspects of diabetes and coronary heart disease critical to understanding factors that result in degraded cardiovascular tone and the cellular mechanisms that control carbohydrate metabolism and their role in various diseases.

This course covers advanced human nutrition together with the utilization of various botanical supplements that have been applied to metabolic and nutritional medicine. A functional approach to infectious diseases will also be explored.

The course focuses on the applied aspects of metabolic and nutritional medicine, including extensive patient.
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Type</th>
<th>Prerequisites</th>
<th>Course Description</th>
</tr>
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<tbody>
<tr>
<td>GMS 6461</td>
<td>Systems Physiology and Pharmacology</td>
<td>5</td>
<td>ME</td>
<td>MSG PR: GMS 6001 OR equivalent Cell and Molecular Biology course OR Instructor approval; CR: None required - recommend Graduate Neuroscience (GMS 6020)</td>
<td>This course will serve as an introduction into human physiology and pharmacology, emphasizing systemic function. The course is not restricted to majors, and is not repeatable.</td>
</tr>
<tr>
<td>GMS 6503</td>
<td>Methods in Pharmacology</td>
<td>2-6</td>
<td>ME</td>
<td>MSG</td>
<td>This course is designed to familiarize students with selected research methods in pharmacology by participation in laboratory exercises designed and supervised by the faculty.</td>
</tr>
<tr>
<td>GMS 6505</td>
<td>Basic Medical Pharmacology</td>
<td>3</td>
<td>ME</td>
<td>MSG PR: 1 yr. Biology; 1 yr. Chemistry.</td>
<td>The course presents a concise introduction to human pharmacology, emphasizing an understanding of the pharmacology principles that govern interaction between drugs, xenobiotics and humans and the relationship to modern medical diagnostics and therapy.</td>
</tr>
<tr>
<td>GMS 6512</td>
<td>Ion Channel Pharmacology and Disease</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
<td>This course is designed to familiarize students with the role of ion channels in the genesis of pathophysiological conditions and how these proteins may be targeted for therapeutic intervention.</td>
</tr>
<tr>
<td>GMS 6513</td>
<td>Principles of Pharmacology and Therapeutics</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
<td>This course is designed to familiarize students with basic principles of pharmacology and therapeutics. Students will be exposed to classical concepts of pharmacology such as drug-receptor interactions as well as modern techniques such as gene therapy.</td>
</tr>
<tr>
<td>GMS 6514</td>
<td>Instructional Skills in Pharmacology</td>
<td>1</td>
<td>ME</td>
<td>MSG</td>
<td>Students are given practical experience in current teaching techniques including an understanding the purpose of lecture, small groups and evaluation. There is direct faculty supervision and critique following direct classroom experience.</td>
</tr>
<tr>
<td>GMS 6541</td>
<td>Pharmacology for Health Professionals</td>
<td>4</td>
<td>ME</td>
<td>MSG CR: Physiology.</td>
<td>The basic principles of pharmacology (pharmacodynamics &amp; pharmacokinetics) will be presented along with major drug classes (analgesics, antibiotics, cardiovascular drugs, central nervous system drugs.</td>
</tr>
<tr>
<td>GMS 6601</td>
<td>Methods of Electron Microscopy in Medical Research</td>
<td>3</td>
<td>ME</td>
<td>MSG PR: GMS 6608 or CC.</td>
<td>This lecture and laboratory course deals with theoretical and technical issues regarding the use of the electron microscope in biomedical research.</td>
</tr>
<tr>
<td>GMS 6602</td>
<td>Neural Correlates of Behavior</td>
<td>3</td>
<td>ME</td>
<td>MSG PR: CC.</td>
<td>This course focuses on the organization and function of nervous system structures that control and regulate various aspects of somatic and visceral motor behavior.</td>
</tr>
</tbody>
</table>
| GMS 6604    | Human Embryology                                     | 3       | ME   | MSG PR: CC.                                       | This course deals with the structural
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Type</th>
<th>Industrial Experience</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMS 6605</td>
<td>Basic Medical Anatomy</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
<td>The course focuses on a basic introduction to human anatomy and how anatomical concepts relate to the organization of the body at a macroscopic level for each organ and how each of the organs and organ systems function in their role in normal homeostasis.</td>
</tr>
<tr>
<td>GMS 6608</td>
<td>Advanced Microscopic Anatomy</td>
<td>3-6</td>
<td>ME</td>
<td>MSG</td>
<td>This lecture and laboratory course examines the human organism at the microscopic level, focusing on cellular morphology and the histological organization of tissues and organ systems.</td>
</tr>
<tr>
<td>GMS 6609</td>
<td>Advanced Human Gross Anatomy</td>
<td>6-12</td>
<td>ME</td>
<td>MSG</td>
<td>This lecture and laboratory course focuses on the anatomical relationships between various structures that comprise the human body.</td>
</tr>
<tr>
<td>GMS 6610</td>
<td>Advanced Neuroanatomy</td>
<td>3-6</td>
<td>ME</td>
<td>MSG</td>
<td>This lecture and laboratory course deals with the structure and function of the human nervous system. The course is organized using both regional and systemic approaches.</td>
</tr>
<tr>
<td>GMS 6611</td>
<td>Introduction to Anatomical Research</td>
<td>1-3</td>
<td>ME</td>
<td>MSG</td>
<td>This course consists of scheduled rotations through the laboratory of at least three members of the anatomy department faculty.</td>
</tr>
<tr>
<td>GMS 6612</td>
<td>Supervised Teaching in Human Anatomy</td>
<td>1-3</td>
<td>ME</td>
<td>MSG</td>
<td>This course deals with the philosophy and mechanics of teaching. The course also involves supervised, practical experience in the various aspects of teaching in both the classroom and laboratory.</td>
</tr>
<tr>
<td>GMS 6630</td>
<td>Basic Medical Histology</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
<td>The course introduces the principles of histology, how they govern the structure and function of cell types and the organization of the tissues involved in organ architecture and function and how staining techniques identify cells at the molecular level.</td>
</tr>
<tr>
<td>GMS 6671</td>
<td>History of Pathology and Cell Biology</td>
<td>2</td>
<td>ME</td>
<td>MSG</td>
<td>This course is composed of five traditional didactic lectures, mini-presentations (10-15 min) by students on landmark advances in Anatomy and Pathology, and a submission of a brief paper based on these presentations.</td>
</tr>
<tr>
<td>GMS 6706</td>
<td>Basic Medical Neuroscience</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
<td>The course focuses on the function of the human nervous system and examines nerve cell biology and how cells are organized into functional systems. Structure/function relationships are emphasized including examples of abnormal cell function in disease.</td>
</tr>
<tr>
<td>GMS 6735</td>
<td>Neuropharmacology</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
<td>This course will familiarize students with information on the biochemical basis of neural regulatory systems in the brain and the application of the latest approaches to the study of neurotransmitters and drug action in the nervous system.</td>
</tr>
<tr>
<td>GMS</td>
<td>6751</td>
<td>Integrated Clinical Neurobiology</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
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<tr>
<td>GMS</td>
<td>6752</td>
<td>Autoimmune Diseases and Cognitive Function</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
</tr>
<tr>
<td>GMS</td>
<td>6836</td>
<td>Approach Clinical and Behavioral Research Adolescent</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
</tr>
<tr>
<td>GMS</td>
<td>6840</td>
<td>Cultural and Diversity Issues in Clinical Research</td>
<td>2</td>
<td>ME</td>
<td>MSG</td>
</tr>
<tr>
<td>GMS</td>
<td>6841</td>
<td>Fundamentals of Translational Research</td>
<td>1</td>
<td>ME</td>
<td>MSG</td>
</tr>
<tr>
<td>GMS</td>
<td>6843</td>
<td>Scientific Communication</td>
<td>2</td>
<td>ME</td>
<td>MSG</td>
</tr>
<tr>
<td>GMS</td>
<td>6844</td>
<td>Principles of Patient-Oriented Research</td>
<td>1</td>
<td>ME</td>
<td>MSG</td>
</tr>
<tr>
<td>GMS</td>
<td>6870</td>
<td>Medical Ethics and Humanities: Tools &amp; Foundations</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
</tr>
</tbody>
</table>
| GMS  | 6871 | Health Sciences Ethics | 2 | ME | MSG | The course examines fundamental ethical issues, such as informed consent, that are important components of the practice of the
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Requirements</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMS 6875</td>
<td>Ethical and Regulatory Aspects of Clinical Research</td>
<td>3</td>
<td>ME, MSG</td>
<td>PR: Postdoctoral Status. CR: CI. This course addresses ethical and regulatory aspects of clinical research, specifically in relation to biomedical research that is patient-oriented. Instructor permission is required. The course is 3 credits and is not repeatable.</td>
</tr>
<tr>
<td>GMS 6890</td>
<td>Medicine and the Arts</td>
<td>3</td>
<td>ME, MSG</td>
<td>Study opportunities in metropolitan cities in which students engage in one week of intensive study. (Medical Centers, Museums, Theatre)</td>
</tr>
<tr>
<td>GMS 6891</td>
<td>Medicine and the Movies</td>
<td>3</td>
<td>ME, MSG</td>
<td>In-depth explorations of the ways in which film presents and illuminates ethical dilemmas/other topics in modern medicine. Students evaluate film stories critically so that exaggerations, distortions, and accuracies can be considered and discussed.</td>
</tr>
<tr>
<td>GMS 6902</td>
<td>Bioethics and Medical Humanities Independent Study</td>
<td>3</td>
<td>ME, MSG</td>
<td>PR: Approval from program director/advisor. Develop with faculty advisor an individual project with the goal of in-depth study in the focus area.</td>
</tr>
<tr>
<td>GMS 6905</td>
<td>Grantmanship I</td>
<td>1</td>
<td>ME, MSG</td>
<td>PR: Postdoctoral Status; CR: Permission of Instructor. Introduction to basic skills for writing successful, peer-reviewed external grant proposals, especially to the NIH for patient-oriented research and mentored career development grants, for postdoctoral-level academic health research career development.</td>
</tr>
<tr>
<td>GMS 6906</td>
<td>Grantmanship II</td>
<td>2</td>
<td>ME, MSG</td>
<td>PR: GMS 6905. This course is the second in a two-course series to complete instruction in the skills and techniques necessary for writing successful NIH grant proposals whose primary focus is patient-oriented/translational career development or research grants. Develop, in conjunction with a faculty advisor, an individual project with the goal of completing an in-depth study of a topic directly relevant to the student’s program of study in the medical sciences.</td>
</tr>
<tr>
<td>GMS 6908</td>
<td>Medical Sciences Independent Study</td>
<td>1-3</td>
<td>ME, MSG</td>
<td>PR: Selected courses in program of study, identified by advisor. Develop in conjunction with a faculty advisor, an individual project with the goal of completing an in-depth study of a topic directly relevant to the student’s program of study in the medical sciences.</td>
</tr>
<tr>
<td>GMS 6921</td>
<td>Building a Patient-Oriented Research Center</td>
<td>2</td>
<td>ME, MSG</td>
<td>PR: Postdoctoral Status, CI. Introduction to the important characteristics of academic patient-oriented faculty in a colloquium format to encourage interactions and sharing of information between faculty and students. 2 semesters, 1 credit each semester=2 cr. Instructor permission.</td>
</tr>
<tr>
<td>GMS 6941</td>
<td>Bioethics and Medical Humanities Internship</td>
<td>3</td>
<td>ME, MSG</td>
<td>PR: Approval from advisor/program director. Supervised Field experience in related activities/organizations relating to bioethics and/or medical humanities.</td>
</tr>
<tr>
<td>GMS 6942</td>
<td>Laboratory Rotations in Biomedical Sciences</td>
<td>1-3</td>
<td>ME, MSG</td>
<td>PR: B.S. in Biology, Chemistry, Physics, Engineering, or similar field. This course is designed to introduce the early-career Ph.D. student to the types of questions and techniques involved in biomedical research. The course can be taken for credit more than once.</td>
</tr>
<tr>
<td>GMS 6943</td>
<td>Biotechnology</td>
<td>3</td>
<td>ME, MSG</td>
<td>PR: BS in Biochemistry, The course teaches, hands-on, in...</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Corequisites</td>
<td>Prerequisites</td>
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</tr>
<tr>
<td>GMS 7910</td>
<td>Directed Research</td>
<td>1-1</td>
<td>ME MSG</td>
<td>PR: Gr. Ph.D. level.</td>
</tr>
<tr>
<td>GMS 7930</td>
<td>Selected Topics</td>
<td>1-3</td>
<td>ME MSG</td>
<td>PR: CC.</td>
</tr>
<tr>
<td>GMS 7939</td>
<td>Graduate Seminar</td>
<td>1</td>
<td>ME MSG</td>
<td>PR: CC.</td>
</tr>
<tr>
<td>GMS 7980</td>
<td>Dissertation: Doctoral</td>
<td>2-1</td>
<td>ME MSG</td>
<td>PR: Admission to Candidacy. S/U</td>
</tr>
<tr>
<td>GRW 5905</td>
<td>Directed Reading</td>
<td>1-4</td>
<td>AS WLE</td>
<td>Departmental approval required. Study of an author, movement or theme.</td>
</tr>
<tr>
<td>GRW 5934</td>
<td>Selected Topics</td>
<td>1-4</td>
<td>AS WLE</td>
<td>Available to majors and non-majors.</td>
</tr>
<tr>
<td>HIS 6112</td>
<td>Analysis of Historical Knowledge</td>
<td>4</td>
<td>AS HTY</td>
<td>PR: GS, CI.</td>
</tr>
<tr>
<td>HIS 6908</td>
<td>Independent Study</td>
<td>1-1</td>
<td>AS HTY</td>
<td>PR: CI. S/U</td>
</tr>
<tr>
<td>HIS 6914</td>
<td>Directed Research</td>
<td>1-1</td>
<td>AS HTY</td>
<td>PR: CI. ML. S/U.</td>
</tr>
<tr>
<td>HIS 6925</td>
<td>Colloquium in History</td>
<td>4</td>
<td>AS HTY</td>
<td>PR: CI.</td>
</tr>
<tr>
<td>HIS 6939</td>
<td>Seminar in History</td>
<td>4</td>
<td>AS HTY</td>
<td>PR: CI.</td>
</tr>
<tr>
<td>HIS 6971</td>
<td>Thesis: Master’s</td>
<td>2-1</td>
<td>AS HTY</td>
<td>PR: CI. Z/U.</td>
</tr>
<tr>
<td>HSC 5037</td>
<td>Professional Foundations of Health Education</td>
<td>1</td>
<td>PH CFH</td>
<td></td>
</tr>
<tr>
<td>HSC 6054</td>
<td>Design and Analysis of Experiments for Health Researchers</td>
<td>3</td>
<td>PH EPB</td>
<td>PR: PHC 6051, PHC 6701 or CI.</td>
</tr>
<tr>
<td>HSC 6055</td>
<td>Survival Analysis</td>
<td>3</td>
<td>PH EPB</td>
<td>PR: PHC 6051, PHC 6701 or CI.</td>
</tr>
<tr>
<td>HSC 6056</td>
<td>Survey Sampling Methods in Health Sciences</td>
<td>3</td>
<td>PH EPB</td>
<td>PR: PHC 6050, PHC 6701 or CI.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>HSC 6556</td>
<td>Pathobiology of Human Disease I</td>
<td>3</td>
<td>PH EOH</td>
<td>PR: CI. A basic study of broad pathobiological areas of biological injury, genetic and inborn errors of metabolism, and host-parasite relationships. In addition, the pathobiology of human disease is closely related to general biology in order to provide a strong foundation for the public health student.</td>
</tr>
<tr>
<td>HSC 6557</td>
<td>Pathobiology of Human Disease II</td>
<td>3</td>
<td>PH EOH</td>
<td>PR: HSC 6556 and CI. Overview of the distinct pathogenesis and etiology and selected acute and chronic diseases and their preventive aspects and impacts on the health care system. Provides basic knowledge of disease and illness patterns and their relationship to health planning.</td>
</tr>
<tr>
<td>HSC 7285</td>
<td>Accreditation/ Licensed Health Care Organization</td>
<td>3</td>
<td>BC FMH</td>
<td>This course will examine and discuss voluntary accreditation and governmental licensure: the principal formal methods of holding health care organizations accountable for the quality of service they provide. Emphasis is on current status and requirements of accrediting and licensing authorities.</td>
</tr>
<tr>
<td>HUM 6453</td>
<td>Studies in American Arts and Letters I</td>
<td>3</td>
<td>AS HUM GS.</td>
<td>Study of selected works dealing with the development of cultural patterns on the western frontiers and their effects on aesthetic judgment. From 1790 to 1890.</td>
</tr>
<tr>
<td>HUM 6456</td>
<td>Studies in Latin American Arts and Letters</td>
<td>3</td>
<td>AS HUM GS.</td>
<td>Analysis of selected Latin American works of art in their cultural context.</td>
</tr>
<tr>
<td>HUM 6465</td>
<td>Studies in American Arts and Letters II</td>
<td>3</td>
<td>AS HUM</td>
<td>Examples from the arts and letters of the U.S.; analyses of their relationships to the concepts of progress and aesthetic judgment. From 1890 to present.</td>
</tr>
<tr>
<td>HUM 6475</td>
<td>Studies in Contemporary Arts and Letters</td>
<td>3</td>
<td>AS HUM GS.</td>
<td>Concentration on major artists and recent trends.</td>
</tr>
<tr>
<td>HUM 6493</td>
<td>Studies in Classical Arts and Letters</td>
<td>3</td>
<td>AS HUM GS.</td>
<td>Examples from the arts and letters of ancient Greece and their relationships to Aegean myths, religions, and philosophies. Classical Greek influences on later cultures.</td>
</tr>
<tr>
<td>HUM 6494</td>
<td>Studies in Medieval Arts and Letters</td>
<td>3</td>
<td>AS HUM GS.</td>
<td>Studies in medieval philosophies, visual arts, music, literature, and architecture and their interrelationships.</td>
</tr>
<tr>
<td>HUM 6496</td>
<td>Studies in Enlightenment Arts and Letters</td>
<td>3</td>
<td>AS HUM GS.</td>
<td>Studies in painting, sculpture, music, literature, and architecture in relation to philosophical determinism and political absolutism.</td>
</tr>
<tr>
<td>HUM 6497</td>
<td>Studies in Nineteenth Century Arts and Letters</td>
<td>3</td>
<td>AS HUM GS.</td>
<td>Examples from the arts and letters of the nineteenth century, their relationship to philosophical, social, and historical developments, and to the arts and letters of the twentieth century.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Title</td>
<td>Credits</td>
<td>Restriction</td>
<td>Notes</td>
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<tr>
<td>HUM 6585</td>
<td>Cinematic Art</td>
<td>3</td>
<td>AS HUM</td>
<td>PR: Graduate Standing. Films studied will be organized around a director, a nation, a movement, or a period. Cinema will be treated as a collaborative medium best approached from an interdisciplinary perspective, integrating visual, narrative, dramatic, and musical analysis.</td>
</tr>
<tr>
<td>HUM 6801</td>
<td>Theories and Methods of Cultural Studies</td>
<td>3</td>
<td>AS HUM</td>
<td>PR: GS. This course examines the relationship between the arts and society by introducing various approaches to the study of literature, art, and culture that are of contemporary relevance to graduate students in the liberal arts and humanities.</td>
</tr>
<tr>
<td>HUM 6815</td>
<td>Research in Humanities</td>
<td>3</td>
<td>AS HUM</td>
<td>A course emphasizing the practical aspects of research in the humanities including analyzing primary sources, assembling a bibliography, synthesizing secondary sources, and defining an argument. Topic varies.</td>
</tr>
<tr>
<td>HUM 6870</td>
<td>Teaching Practicum in Humanities</td>
<td>1-3</td>
<td>AS HUM</td>
<td>PR: GS. Required for Teaching Assistants of Humanities courses. Workshops, meetings, and individual conferences treat topics related to teaching interdisciplinary courses focusing on the critical study of literature, music, and the arts. Credits do not count toward the MLA degree.</td>
</tr>
<tr>
<td>HUM 6909</td>
<td>Independent Study</td>
<td>1-9</td>
<td>AS HUM</td>
<td>S/U. Independent study in which student must have a contract with an instructor.</td>
</tr>
<tr>
<td>HUM 6915</td>
<td>Directed Research</td>
<td>1-1</td>
<td>AS HUM</td>
<td>PR: Cl. S/U. Each topic is a course of study in a subject not covered by a regular course.</td>
</tr>
<tr>
<td>HUM 6939</td>
<td>Selected Topics in Humanities</td>
<td>1-3</td>
<td>AS HUM</td>
<td>GS. Each topic is a course of study in a subject not covered by a regular course.</td>
</tr>
<tr>
<td>HUM 6940</td>
<td>Internship in Humanities</td>
<td>1-3</td>
<td>AS HUM</td>
<td>PR: GS. A structured, out-of-class learning experience providing first-hand, practical training in Humanities-related professional careers in the community.</td>
</tr>
<tr>
<td>HUM 6971</td>
<td>Thesis: Masters</td>
<td>2-1</td>
<td>AS HUM</td>
<td>In consultation with an advisor, the student plans, organizes, and writes a thesis on a topic in interdisciplinary arts and ideas.</td>
</tr>
<tr>
<td>IDH 5956</td>
<td>Honors Graduate Project</td>
<td>3</td>
<td>HC HON</td>
<td>PR: Senior Status and permission of Honors College. Advanced Honors Project. Repeatable up to 12 hours.</td>
</tr>
<tr>
<td>IDH 5975</td>
<td>Honors Thesis</td>
<td>3</td>
<td>HC HON</td>
<td>PR: Senior Status and permission of Honors College. Advanced Honors Thesis. Repeatable up to 12 hours.</td>
</tr>
<tr>
<td>IDS 5177</td>
<td>The Atelier, Its Management and History</td>
<td>3</td>
<td>TA ART</td>
<td>This class will consider the history of printmaking and other forms of collaborative art production through the prism of the atelier and its management.</td>
</tr>
<tr>
<td>IDS 5178</td>
<td>Problems in Museum Studies</td>
<td>3</td>
<td>TA ART</td>
<td>PR: Art Advisor’s Approval This class is designed as both an academic and theoretical course to introduce students to the museum profession and develop critical thinking skills required to solve problems in the rapidly changing typography of museums. Students</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Hours</td>
<td>Taught By</td>
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<tr>
<td>IDS 6215</td>
<td>Seminar in Global Sustainability</td>
<td>3</td>
<td></td>
<td>AS</td>
</tr>
<tr>
<td>IDS 6946</td>
<td>Sustainability Internship</td>
<td>6</td>
<td></td>
<td>AS</td>
</tr>
<tr>
<td>IDS 6948</td>
<td>Gallery and Museum Internship</td>
<td>2-6</td>
<td></td>
<td>TA</td>
</tr>
<tr>
<td>IDS 6951</td>
<td>Sustainability Project</td>
<td>3</td>
<td></td>
<td>AS</td>
</tr>
<tr>
<td>INP 6057</td>
<td>Industrial Psychology</td>
<td>3</td>
<td></td>
<td>AS</td>
</tr>
<tr>
<td>INP 6935</td>
<td>Topics in Industrial-Organizational Psychology</td>
<td>3</td>
<td></td>
<td>AS</td>
</tr>
<tr>
<td>INP 7937</td>
<td>Graduate Seminar in Industrial-Organizational Psychology</td>
<td>1-3</td>
<td></td>
<td>AS</td>
</tr>
<tr>
<td>INR 5012</td>
<td>Globalization</td>
<td>3</td>
<td></td>
<td>AS</td>
</tr>
<tr>
<td>INR 5086</td>
<td>Issues in International Relations</td>
<td>3</td>
<td></td>
<td>AS</td>
</tr>
<tr>
<td>INR 6007</td>
<td>Seminar in International Relations</td>
<td>3</td>
<td></td>
<td>AS</td>
</tr>
<tr>
<td>INR 6036</td>
<td>Seminar in International Political Economy</td>
<td>3</td>
<td></td>
<td>AS</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Prerequisites</td>
<td>Co-requisites</td>
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<tr>
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</tr>
<tr>
<td>INR 6107</td>
<td>American Foreign Policy</td>
<td>3</td>
<td>AS POL GS.</td>
<td></td>
</tr>
<tr>
<td>INR 6690</td>
<td>Research Seminar in Globalization</td>
<td>3</td>
<td>AS INT PR: INR 5012.</td>
<td></td>
</tr>
<tr>
<td>ISC 7930</td>
<td>Selected Topics in Interdisciplinary Science</td>
<td>1-4</td>
<td>AS IAS</td>
<td></td>
</tr>
<tr>
<td>ISM 6021</td>
<td>Management Information Systems</td>
<td>2</td>
<td>BU QMB</td>
<td></td>
</tr>
<tr>
<td>ISM 6056</td>
<td>Web Application Development</td>
<td>3</td>
<td>BU QMB</td>
<td></td>
</tr>
<tr>
<td>ISM 6123</td>
<td>Systems Analysis and Design</td>
<td>3</td>
<td>BU QMB</td>
<td>PR: ISM 6021 or equiv.</td>
</tr>
<tr>
<td>ISM 6124</td>
<td>Advanced Systems Analysis and Design</td>
<td>3</td>
<td>BU QMB</td>
<td></td>
</tr>
<tr>
<td>ISM 6125</td>
<td>Software Architecture</td>
<td>3</td>
<td>BU QMB</td>
<td>PR: ISM 6124</td>
</tr>
<tr>
<td>ISM 6136</td>
<td>Data Mining</td>
<td>3</td>
<td>BU QMB</td>
<td>PR: Students should have had a database course and a statistics course.</td>
</tr>
<tr>
<td>ISM 6145</td>
<td>Seminar on Software Testing</td>
<td>3</td>
<td>BU QMB</td>
<td>PR: ISM 6124 or an introductory course in</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Distribution</td>
<td>PR Requirements</td>
</tr>
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<tr>
<td>ISM 6155</td>
<td>Enterprise Information Systems Management</td>
<td>3</td>
<td>BU QMB</td>
<td>PR: ISM 6124, ISM 6218.</td>
</tr>
<tr>
<td>ISM 6208</td>
<td>Data Warehousing</td>
<td>3</td>
<td>BU QMB</td>
<td>PR: As a prerequisite, students should have had at least two courses covering relational database systems (usually including ISM 6218: Advanced Database Systems), or significant work experience.</td>
</tr>
<tr>
<td>ISM 6217</td>
<td>Database Administration</td>
<td>3</td>
<td>BU QMB</td>
<td>PR: ISM 6123 or equiv., CC.</td>
</tr>
<tr>
<td>ISM 6218</td>
<td>Advanced Database Management</td>
<td>3</td>
<td>BU QMB</td>
<td>PR: ISM 6217 or ISM 4212 or equivalent.</td>
</tr>
<tr>
<td>ISM 6225</td>
<td>Distributed Information Systems</td>
<td>3</td>
<td>BU QMB</td>
<td>PR: ISM 6123, CC.</td>
</tr>
<tr>
<td>ISM 6305</td>
<td>Managing the Information System Function</td>
<td>3</td>
<td>BU QMB</td>
<td>PR: ISM 6021 or equiv., CC.</td>
</tr>
<tr>
<td>ISM 6316</td>
<td>Project Management</td>
<td>3</td>
<td>BU QMB</td>
<td>PR: ISM 6021.</td>
</tr>
<tr>
<td>ISM 6405</td>
<td>Decision Support Systems Applications</td>
<td>3</td>
<td>BU QMB</td>
<td>PR: QMB 6305, QMB 6603.</td>
</tr>
</tbody>
</table>

IOT 6507: **Advanced Database Management**

- **Course Title**: Advanced Database Management
- **Credits**: 3
- **Distribution**: BU QMB
- **PR Requirements**: ISM 6217 or ISM 4212 or equivalent.
- **Course Description**: This course covers core business database technologies. Topics include database design, transaction processing, parallelism, and distributed databases. Emerging business intelligence technologies are covered. A database system is used for projects.

**Course Notes**:
- **Credit Hours**: 3
- **Prerequisites**: ISM 6123 or ISM 4212 or equivalent.
- **Course Objectives**: Students will gain experience in managing and designing database systems. The course covers topics such as database design, transaction processing, parallelism, and distributed databases. Emerging business intelligence technologies are also covered.

**Course Requirements**:
- **Course Materials**: Required reading materials include textbooks, course guides, and online resources.
- **Assessment**: Assessment includes weekly homework assignments, mid-term and final exams, and a project. The project involves designing and implementing a database system for a real-world application.

**Course Schedule**:
- **Topics Covered**:
  - Database Design Principles
  - Transaction Processing
  - Parallel Database Systems
  - Distributed Database Systems
  - Emerging Business Intelligence Technologies

**Course Outcomes**:
- Students will be able to design and implement database systems for real-world applications.
- Students will understand the principles of transaction processing in distributed and parallel environments.
- Students will be able to analyze and design database systems for emerging business intelligence technologies.
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
<th>Units</th>
<th>Department</th>
<th>Prerequisite</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISM  6442</td>
<td>International Aspects of Information Science</td>
<td>3</td>
<td>BU</td>
<td>QMB</td>
<td>PR: ISM 6021</td>
<td>Role of managers and information technology professionals in global business organizations and in deploying information systems to enable global operations.</td>
</tr>
<tr>
<td>ISM  6485</td>
<td>Electronic Commerce</td>
<td>3</td>
<td>BU</td>
<td>QMB</td>
<td>PR: ISM 6021, CI or CC.</td>
<td>This course is geared to a broad audience and will introduce information technology enablers that facilitate electronic commerce. The lectures, discussions and class presentations will also serve to understand the business landscape and business models.</td>
</tr>
<tr>
<td>ISM  6905</td>
<td>Independent Study</td>
<td>1-5</td>
<td>BU</td>
<td>QMB</td>
<td>PR: CC, S/U.</td>
<td>Independent Study as directed by designated faculty.</td>
</tr>
<tr>
<td>ISM  6930</td>
<td>Selected Topics in MIS</td>
<td>1-6</td>
<td>BU</td>
<td>QMB</td>
<td>PR: CC.</td>
<td>Selected topics in MIS.</td>
</tr>
<tr>
<td>ISM  6971</td>
<td>Thesis: Master’s</td>
<td>2-6</td>
<td>BU</td>
<td>QMB</td>
<td></td>
<td>Students may select the thesis option in order to complete the Master of Science in the Management Information Systems (MS/MIS) program. Faculty permission is required to register for MS Thesis credit. Six credits are the maximum number of credits allowed for MS Thesis credit.</td>
</tr>
<tr>
<td>ISM  7120</td>
<td>Information Requirements Management</td>
<td>3</td>
<td>BU</td>
<td>QMB</td>
<td>PR: CC.</td>
<td>Understanding the theoretical foundation for analyzing problem situations and determining information technology requirements; tools and skill requirements of the systems manager; and methods of managing computer-based information systems.</td>
</tr>
<tr>
<td>ISM  7140C</td>
<td>Systems Development Methodologies</td>
<td>3</td>
<td>BU</td>
<td>QMB</td>
<td>PR: CC.</td>
<td>Realistic in-depth application perspective of the tools and techniques of systems development.</td>
</tr>
<tr>
<td>ISM  7231</td>
<td>File Access Methods and Systems Software for Application Development</td>
<td>3</td>
<td>BU</td>
<td>QMB</td>
<td>PR: Departmental Approval.</td>
<td>An information system, viewed as a user application process interacting with data in a particular hardware/software environment, is analyzed to provide insights into various file access alternatives and advantages.</td>
</tr>
<tr>
<td>ISM  7422</td>
<td>Business Applications of Artificial Intelligence and Expert Systems</td>
<td>3</td>
<td>BU</td>
<td>QMB</td>
<td>PR: Departmental Approval.</td>
<td>Theory, concepts, methodologies, current trends, potential, interrelationships of artificial intelligence, expert systems, and decision process.</td>
</tr>
<tr>
<td>ISM  7441C</td>
<td>Computer-Based Applications in Operations Management</td>
<td>3</td>
<td>BU</td>
<td>QMB</td>
<td>PR: Departmental Approval.</td>
<td>Introduction to applications of computer technology in manufacturing and operations management. Focus on the design and implementation of applications to support the operations manager.</td>
</tr>
<tr>
<td>ISM  7905</td>
<td>Independent Study</td>
<td>1-5</td>
<td>BU</td>
<td>QMB</td>
<td>PR: CC, S/U.</td>
<td>Independent study in which student must have a contract with an instructor.</td>
</tr>
<tr>
<td>ISM  7910</td>
<td>MIS Research Seminar I</td>
<td>3</td>
<td>BU</td>
<td>QMB</td>
<td>PR: Departmental Approval.</td>
<td>Introduction to the MIS literature as it has developed over the past 30 years. Primary focus on the research literature. Other important writings</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Department</td>
<td>Prerequisite</td>
<td>Description</td>
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<tr>
<td>ISM 7911</td>
<td>MIS Research Seminar II</td>
<td>3</td>
<td>BU</td>
<td>QMB</td>
<td>PR: ISM7910 ISM 7910. An examination of recently published empirical research in MIS and related disciplines, focusing on the development of a sound theoretical foundation for hypotheses, selection of appropriate design and statistical techniques, and evaluation of the results.</td>
<td></td>
</tr>
<tr>
<td>ISM 7912</td>
<td>Seminar on Behavioral IS Research</td>
<td>3</td>
<td>BU</td>
<td>QMB</td>
<td>PR: ISM 7910 This course is team taught by IS/DS faculty with research interests in behavioral and organizational fields. The seminar structure of the course allows flexibility of current research topics and opportunities for significant student faculty interaction. Students will achieve a broad understanding of the research areas and methods associated with behavioral and organizational IS research.</td>
<td></td>
</tr>
<tr>
<td>ISM 7930</td>
<td>Selected Topics in MIS</td>
<td>1-3</td>
<td>BU</td>
<td>QMB</td>
<td>PR: CC. Interdisciplinary studies with course content dependent on student demand and instructor's interest.</td>
<td></td>
</tr>
<tr>
<td>ISM 7931</td>
<td>Directed Research</td>
<td>1-6</td>
<td>BU</td>
<td>QMB</td>
<td>PR: Ph.D. level, CC. S/U.</td>
<td></td>
</tr>
<tr>
<td>ISM 7980</td>
<td>Dissertation</td>
<td>2-2</td>
<td>BU</td>
<td>QMB</td>
<td>PR: CC.</td>
<td></td>
</tr>
<tr>
<td>ISS 5934</td>
<td>Selected Topics</td>
<td>1-3</td>
<td>AS</td>
<td>AFA</td>
<td>PR: CI plus senior standing or graduate status. Overviews the ethical problems of development, as well as presents the ways in which the problems of development may be investigated. Students are taught qualitative methodological techniques and apply these techniques in fieldwork projects. Open to all graduate students.</td>
<td></td>
</tr>
<tr>
<td>ISS 6184</td>
<td>Development Ethics: Principles and Practice</td>
<td>3</td>
<td>AS</td>
<td>ISS</td>
<td>PR: CI and GS or senior standing. A supervised program of intensive reading of interdisciplinary materials of specific interest.</td>
<td></td>
</tr>
<tr>
<td>ISS 6900</td>
<td>Directed Reading</td>
<td>1-3</td>
<td>AS</td>
<td>ISS</td>
<td>PR: CI and GS or senior standing. A supervised program of intensive reading of interdisciplinary materials of specific interest.</td>
<td></td>
</tr>
<tr>
<td>ISS 6910</td>
<td>Directed Research</td>
<td>1-1</td>
<td>AS</td>
<td>ISS</td>
<td>PR: CI and senior standing or GS. Interdisciplinary studies with course content dependent on student demand and instructor's interest. Rpt. As topics vary.</td>
<td></td>
</tr>
<tr>
<td>ISS 6934</td>
<td>Selected Topics</td>
<td>1-3</td>
<td>AS</td>
<td>ISS</td>
<td>PR: CI and GS or senior standing. A supervised program of intensive reading of interdisciplinary materials of specific interest.</td>
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</tr>
<tr>
<td>ITW 6910</td>
<td>Directed Research</td>
<td>1-1</td>
<td>AS</td>
<td>WLE</td>
<td>PR: GR. ML. S/U. Selected topics in Italian literature.</td>
<td></td>
</tr>
<tr>
<td>JOU 5105</td>
<td>Newswriting and Editing</td>
<td>3</td>
<td>AS</td>
<td>COM</td>
<td>PR: GS in Mass Communications or CI. Introduction to the basics of gathering, writing, and editing the news, with an emphasis on practical assignments done under professional conditions and standards. Discussions, readings emphasize the larger context and implications of news.</td>
<td></td>
</tr>
<tr>
<td>JOU 5305</td>
<td>Explorations in Newswriting</td>
<td>3</td>
<td>AS</td>
<td>COM</td>
<td>PR: CC. Students work to develop writing styles, reporting on and creating stories about significant issues, events, and ideas. The course</td>
<td></td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>JOU 5344</td>
<td>Multimedia Journalism</td>
<td>3</td>
<td>AS COM PR: An appropriate undergraduate degree in mass communications or significant professional experience in journalistic writing styles.</td>
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<tr>
<td>JOU 6107</td>
<td>News Coverage of Public Life</td>
<td>3</td>
<td>AS COM PR: CC.</td>
<td>Problems and methods of reporting urban affairs, including municipal government, and politics: city, county, and state. Research/analyses of current issues.</td>
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<tr>
<td>JOU 6122</td>
<td>Reporting: Methods and Perspectives</td>
<td>3</td>
<td>AS COM PR: CC.</td>
<td>Instruction and practice in computer-assisted reporting, social science research, interviewing, data-document research, observational techniques, and other methods of news gathering.</td>
<td></td>
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</tr>
<tr>
<td>JOU 6191</td>
<td>Seminar: Contemporary Issues in Journalism</td>
<td>3</td>
<td>AS COM PR: CC.</td>
<td>A study of the role of the free press in a democratic society and its efforts to fulfill its social and ethical responsibilities by analyses and discussions of the problems which face the reporter, the editor, and the publisher.</td>
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<tr>
<td>JOU 6349</td>
<td>Advanced Multimedia Journalism</td>
<td>3</td>
<td>AS COM PR: JOU 5342.</td>
<td>Students learn what it means to work in a multimedia environment and will create a journalism project across multiple media platforms, including broadcast, print and the web. They will also explore the theoretical assumptions of the field.</td>
<td></td>
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<tr>
<td>JOU 6501</td>
<td>Media Management</td>
<td>3</td>
<td>AS COM</td>
<td>The course provides students with a foundation in understanding the financial and economic environment of the mass media and the process of managing mass media enterprises in the new multimedia environment. It is not restricted nor repeatable for credit.</td>
<td></td>
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</tr>
<tr>
<td>LAE 5462</td>
<td>Young Adult and World Literature for New Teachers</td>
<td>3</td>
<td>ED EDI PR: Teaching position w/ either English degree or 30 hrs of Undergraduate English</td>
<td>A study of the types of literature read by adolescents, including literature representative of other cultures, with emphasis upon the criteria for the choice of good books and knowledge of available books and teaching materials.</td>
<td></td>
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</tr>
<tr>
<td>LAE 5862</td>
<td>Classroom Communication in English Education</td>
<td>3</td>
<td>ED EDI</td>
<td>Identifies characteristics of classroom communication environment; offers insights, info, instructional strategies designed to help you become</td>
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</tr>
</tbody>
</table>

*ED: English*  
*LAE: Literature and American English*
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAE 5932</td>
<td>Selected Topics in the Teaching of English</td>
<td>3</td>
<td>ED</td>
<td>EDT</td>
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<td>PR: Certification in English and/or Mass Communications and approval of graduate advisor.</td>
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<td>Investigation of topics which are of special interest to the student and are related to the teaching of English in the secondary school. Topics will be selected by the student in accordance with his particular goals and will be approved by the student's graduate advisor.</td>
</tr>
<tr>
<td>LAE 6301</td>
<td>Language Learning in Childhood</td>
<td>3</td>
<td>ED</td>
<td>EDE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Research used to assess the language behavior of normal children and application of selected research methodology to understanding linguistic behavior of children.</td>
</tr>
<tr>
<td>LAE 6315</td>
<td>Writing and Writers: Trends &amp; Issues</td>
<td>3</td>
<td>ED</td>
<td>EDE</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>The purpose of this course is to examine writing as a developing symbol system that is embedded in social and cultural contexts. Students will develop instructional strategies to facilitate children's writing development, as well as develop individual strategies for composing personal and professional texts.</td>
</tr>
<tr>
<td>LAE 6316</td>
<td>Trends in Literature in a Diverse Society</td>
<td>3</td>
<td>ED</td>
<td>EDE</td>
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<tr>
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<td>Focuses on the examination of historical and contemporary multicultural children's literature in order to help teachers and students gain a pluralistic perspective of society. Instructional programs are designed to lead school-age children to a broader understanding, respect, and appreciation of all persons representing various cultural, ethnic, and societal groups.</td>
</tr>
<tr>
<td>LAE 6325</td>
<td>Methods of Teaching Middle School Language Arts</td>
<td>4</td>
<td>ED</td>
<td>EDI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Balanced literacy methods for integrating reading, writing, speaking, listening, viewing, and critical thinking activities into a literature based program for middle school students. Note: This course has a field component of 36 hours.</td>
</tr>
<tr>
<td>LAE 6339</td>
<td>Methods of Teaching Secondary English Language Arts</td>
<td>4</td>
<td>ED</td>
<td>EDI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Balanced literacy methods for integrating reading, writing, speaking, listening, viewing, and critical thinking activities into a literature-based program for secondary school students. Note: This course has a field component of 36 hours.</td>
</tr>
<tr>
<td>LAE 6345</td>
<td>Teaching Written Composition</td>
<td>3</td>
<td>ED</td>
<td>EDT</td>
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<tr>
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<td>Techniques for motivating, guiding, correcting, and evaluating student writing.</td>
</tr>
<tr>
<td>LAE 6366</td>
<td>New Perspectives on the Teaching of Young Adult Literature in Middle &amp; Secondary Schools</td>
<td>3</td>
<td>ED</td>
<td>EDT</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>PR: Certification in English or Mass Communications</td>
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<td>The primary purpose of this course is to improve the quality of language arts instruction at the middle and secondary levels. To achieve this basic purpose, we will focus chiefly on adolescents' perception of and responses to literature and the implications for organization and presentation of literature curricula.</td>
</tr>
<tr>
<td>LAE 6374</td>
<td>Practice in Teaching Grammar</td>
<td>3</td>
<td>AS</td>
<td>ENG</td>
</tr>
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<td></td>
<td></td>
<td></td>
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<td>Demonstrates techniques incorporating instruction of essential elements of English</td>
</tr>
<tr>
<td>LAE</td>
<td>6375</td>
<td>Contemporary Composition Studies</td>
<td>3</td>
<td>AS</td>
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<tr>
<td>LAE</td>
<td>6389</td>
<td>Practice in Teaching Literature</td>
<td>1-3</td>
<td>AS</td>
</tr>
<tr>
<td>LAE</td>
<td>6415</td>
<td>Literature And The Learner</td>
<td>3</td>
<td>ED</td>
</tr>
<tr>
<td>LAE</td>
<td>6467</td>
<td>World Literature for Teachers</td>
<td>3</td>
<td>ED</td>
</tr>
<tr>
<td>LAE</td>
<td>6616</td>
<td>Trends in Language Arts Instruction</td>
<td>3</td>
<td>ED</td>
</tr>
<tr>
<td>LAE</td>
<td>6644</td>
<td>Current Teaching of the English Language and the Study of Traditional Grammar</td>
<td>3</td>
<td>ED</td>
</tr>
<tr>
<td>LAE</td>
<td>6738</td>
<td>Teaching Reading in English Curriculum</td>
<td>3</td>
<td>ED</td>
</tr>
<tr>
<td>LAE</td>
<td>6793</td>
<td>Professional Leadership and Research in the Teaching of Writing</td>
<td>3</td>
<td>ED</td>
</tr>
</tbody>
</table>

grammars/mechanics into composition courses. Pedagogy is essential for teachers in secondary schools, community colleges, or advanced composition at the university level.
<p>| LAE | 6861 | American and British Literature with Technology | 3 | ED | EDI | A study of five sections of literature: 1) British Literature before Shakespeare, 2) British Literature after Shakespeare to 1740, 3) British Literature 1740-1900, 4) American Literature before 1900, and 5) Twentieth Century British and American Literature (1890 to the Present) while developing an individual’s skill with technology. |
| LAE | 6906 | Independent Study in English Education | 1-6 | ED | EDT | This course permits a student to explore a topic of interest in depth under the direction and supervision of a faculty member. |
| LAE | 6923 | Teachers Writing: A Writing Workshop Approach to the Teaching of Writing | 3 | ED | EDI | PR: Must be invited to attend the Tampa Bay Area Writing Project Invitational Summer Institute, having fulfilled all application requirements, including the interview. CR: LAE 6792. Engage teachers as writers, knowing the best teachers of writing must write. Teachers write together, critically examine new writing strategies, establish a professional support network to serve as foundation for enhancement of their teaching of writing. |
| LAE | 6947 | Internship | 6 | ED | EDI | CI. Provides students with an extended school-based experience, under the guidance of a cooperating teacher and university supervisor, for a full semester at or near the end of their graduate program. Open to graduate degree candidates only. S/U (PR: CI) |
| LAE | 6971 | Thesis: Masters/Educational Specialist | 2-19 | ED | EDT | S/U. Apprenticed, closely supervised study of and practice in teaching of college and university advanced composition. Student may elect to work with nonfiction, fiction, or poetry. |
| LAE | 7376 | Problems in Advanced English Instruction of Composition | 3 | AS | ENG | PR: Admission to the Ph.D. program in English. Apprenticed, closely supervised study of and practice in teaching of college and university advanced composition. Student may elect to work with nonfiction, fiction, or poetry. |
| LAE | 7390 | Problems in Advanced English Instruction and Scholarly Research | 3 | AS | ENG | PR: Ph.D. Candidacy. This course provides closely supervised training in upper-level college English instruction and experience with professional research. Experience in lecture, seminar discussion, examinations, evaluation, conferences, directing undergraduate research, course development, use of secondary materials, publication procedure, and collation. |
| LAE | 7717 | Theories And Patterns Of Advanced Language Arts Instruction | 3 | ED | EDE | PR: LAE 6616 or equiv. New research findings and theories relating to language patterns and contemporary programs for teaching language arts. |
| LAE | 7739 | The Education of English Teachers | 3 | ED | EDI | PR: Doctoral standing or CI. Introduces &amp; informs adv grad students about the conceptions of curriculum development related to the preparation of Eng teachers. Intended for those interested in careers in teacher educ or expect to influence the policies &amp; practices of teacher educ. |
| LAE | 7747 | Literature Program | 3 | ED | EDE | PR: EDF 6481, LAE 6415, Investigation and analysis of the |</p>
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
<th>Days</th>
<th>Duration</th>
<th>Prerequisite</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAE 7794</td>
<td>Survey of Research on Writing Development and Instruction</td>
<td>3</td>
<td>ED</td>
<td>EDE</td>
<td>PR: Ph.D. Standing.</td>
<td>The purpose of this course is to survey, discuss, analyze, and critique seminal and current research on writing development and instruction in the context of school. Students will also engage in research on writing development or instruction.</td>
</tr>
<tr>
<td>LAE 7795</td>
<td>Research and Theory in the teaching of Writing</td>
<td>3</td>
<td>ED</td>
<td>EDE</td>
<td>PR: Doctoral student standing.</td>
<td>An in-depth study of the research and theory in the teaching of writing. Emphasis is on the historical perspectives, current theory, and specific research in the process writing movement.</td>
</tr>
<tr>
<td>LAE 7910</td>
<td>Directed Research in English Education</td>
<td>1-9</td>
<td>ED</td>
<td>EDT</td>
<td>PR: CI.</td>
<td>This course permits a doctoral student to conduct advanced research and to pursue specific areas of interest with a faculty member as supervisor. A contract is required with the faculty member. S/U.</td>
</tr>
<tr>
<td>LAS 6913</td>
<td>Independent Study and Research in Latin American</td>
<td>1-9</td>
<td>AS</td>
<td>INT</td>
<td>PR: CI.</td>
<td>This course will provide graduate students with an opportunity to engage in research and/or study abroad in Latin America &amp; the Caribbean, to earn credits towards their degree. Open to LAC majors and non majors. Repeatable up to 9 credits.</td>
</tr>
<tr>
<td>LAS 6936</td>
<td>Seminar in Latin American Studies I</td>
<td>3</td>
<td>AS</td>
<td>INT</td>
<td></td>
<td>This seminar introduces students to the general study of the region and peoples of Latin America and their emigrant populations in the United States. Repeatable as topic varies.</td>
</tr>
<tr>
<td>LAS 6971</td>
<td>Thesis in Latin America and Caribbean</td>
<td>1-2</td>
<td>AS</td>
<td>INT</td>
<td>PR: Graduate Standing.</td>
<td>This course will allow graduate students to earn credits while working on a thesis that is focused in Latin America &amp; the Caribbean. Open to all graduate majors. Repeatable.</td>
</tr>
<tr>
<td>LIN 5700</td>
<td>Applied Linguistics</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td></td>
<td>Analysis of the phonological, morphological, and syntactic features of English as a basis for linguistic application to problems of English language acquisition by non-native speakers.</td>
</tr>
<tr>
<td>LIN 6018</td>
<td>Topics in Theoretical Linguistics</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td></td>
<td>Offerings will include current issues in any area of linguistic theory.</td>
</tr>
<tr>
<td>LIN 6081</td>
<td>Introduction to Graduate Study in Linguistics</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>Required of all M.A. candidates.</td>
<td>An introduction to the aims and methodologies of linguistics as a graduate discipline: The field of linguistics, its subdisciplines, and its relationship to adjacent arts and sciences; bibliographical resources; methods of research and research writing; and a brief survey of the historical development of linguistics and current issues in the field.</td>
</tr>
<tr>
<td>LIN 6117</td>
<td>History of Linguistic Thought</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: CC.</td>
<td>Survey of the development of language study in the West from Antiquity to the present. Classical and medieval theories of language; origins</td>
</tr>
<tr>
<td>Course Code</td>
<td>Title</td>
<td>Credits</td>
<td>Type</td>
<td>Language</td>
<td>Additional Notes</td>
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<tr>
<td>LIN 6129</td>
<td>Studies in English Language and Linguistics</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td></td>
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</tr>
<tr>
<td>LIN 6322</td>
<td>Phonological Description</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: CI</td>
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</tr>
<tr>
<td>LIN 6351</td>
<td>The Sound System of English</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: LIN 5700 or EQ, Training in applied phonetic transcription of American English speech; analysis and description of major phonological processes and dialect features of American English, with practice in teaching pronunciation.</td>
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<tr>
<td>LIN 6571</td>
<td>The Structure of a Specific Language</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
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</tr>
<tr>
<td>LIN 6601</td>
<td>Sociolinguistics</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
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<tr>
<td>LIN 6675</td>
<td>The Grammatical Structure of American English</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: LIN 5700 or EQ, Analysis and description of major morphological and syntactic structures of American English, with emphasis upon applied linguistics.</td>
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</tr>
<tr>
<td>LIN 6715</td>
<td>Language Acquisition</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: LIN 3010, LIN 4377 or CI. A survey of current research and theory in the processes of normal language acquisition and development.</td>
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</tr>
<tr>
<td>LIN 6720</td>
<td>Second Language Acquisition</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: LIN 6715 or EQ. Neurolinguistic, psycholinguistic, and sociolinguistic bases of second language acquisition by both children and adults.</td>
<td></td>
</tr>
<tr>
<td>LIN 6722</td>
<td>Writing Processes in Second Languages Acquisition</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: LIN 6081, TSL 5371, TSL 5371. A survey of current theory and research in second language writing development and instruction, with emphasis upon second language writing in academic settings. May be taken as an elective by students in the Ph.D. program in Second Language Acquisition and Instructional Technology or the M.A. program in Applied Linguistics.</td>
<td></td>
</tr>
<tr>
<td>LIN 6748</td>
<td>Contrastive Analysis</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td></td>
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<tr>
<td>LIN 6908</td>
<td>Independent Study</td>
<td>1-1</td>
<td>AS</td>
<td>WLE</td>
<td>PR: CC. S/U. Independent study in which the student must have a contract with an instructor.</td>
<td></td>
</tr>
<tr>
<td>LIN 6910</td>
<td>Directed Research</td>
<td>1-9</td>
<td>AS</td>
<td>WLE</td>
<td>PR: GR. ML, CC. S/U.</td>
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</table>

Analysis of the phonological component of a grammar, its role and formal structures. The generative model is compared to taxonomic descriptions. Theory and data-solution problems.
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<tr>
<td>LIN</td>
<td>6932</td>
<td>Selected Topics</td>
<td>1-4</td>
<td>AS</td>
<td>WLE</td>
<td>PR: CC.</td>
<td>Content will depend upon instructor's interests and students' needs. Such topics and neurolinguistics, bilingualism, and discourse analysis may be taught.</td>
</tr>
<tr>
<td>LIN</td>
<td>6940</td>
<td>Graduate Instruction Methods</td>
<td>1-4</td>
<td>AS</td>
<td>WLE</td>
<td>S/U only.</td>
<td>Special course to be used primarily for the training of teaching assistants.</td>
</tr>
<tr>
<td>LIN</td>
<td>6971</td>
<td>Thesis: Master’s</td>
<td>2-1</td>
<td>9</td>
<td>AS</td>
<td>WLE</td>
<td>S/U.</td>
</tr>
<tr>
<td>LIS</td>
<td>5020</td>
<td>Foundations of Library and Information Science</td>
<td>3</td>
<td>AS</td>
<td>LIS</td>
<td>Introduction to the study of library and information science, history; organization; specialized literature; outstanding leaders; current trends, issues, and problems; the place of the information agency in society with its contributions to that society.</td>
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<tr>
<td>LIS</td>
<td>5268</td>
<td>Microcomputer Applications Library and Information Centers</td>
<td>3</td>
<td>AS</td>
<td>LIS</td>
<td>Microcomputer hardware and software for libraries and their application in library/information settings. Projects using major applications for budgets, databases, and telecommunications are undertaken.</td>
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<tr>
<td>LIS</td>
<td>5315</td>
<td>Instructional Graphics</td>
<td>3</td>
<td>AS</td>
<td>LIS</td>
<td>Theoretical aspects, planning and production of instructional graphic material. The theory of graphic communications. Interpreting needs for instructional materials appropriate for given behavioral objectives.</td>
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<tr>
<td>LIS</td>
<td>5333</td>
<td>TV in Schools and Libraries</td>
<td>3</td>
<td>AS</td>
<td>LIS</td>
<td>Small format video tape recordings and the utilization of open and closed broadcasts in schools and libraries.</td>
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<tr>
<td>LIS</td>
<td>5418</td>
<td>Health Informatics for Medical Librarians</td>
<td>3</td>
<td>AS</td>
<td>LIS</td>
<td>PR: LIS 5020 or LIS 6620. CR: LIS 6475.</td>
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<tr>
<td>LIS</td>
<td>5937</td>
<td>Selected Topics in Library Studies</td>
<td>1-4</td>
<td>AS</td>
<td>LIS</td>
<td>Covers a variety of topics in such areas as collection development, reference services, technical services, and administration.</td>
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<tr>
<td>LIS</td>
<td>6110</td>
<td>History of Libraries</td>
<td>3</td>
<td>AS</td>
<td>LIS</td>
<td>Development of libraries as found from the earliest records to the great libraries of modern times, and the library as a social institution.</td>
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<tr>
<td>LIS</td>
<td>6111</td>
<td>History of Children's Literature</td>
<td>3</td>
<td>AS</td>
<td>LIS</td>
<td>Historical bibliographical survey of imaginative and information literature for children.</td>
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<tr>
<td>LIS</td>
<td>6206</td>
<td>Adult Services in Libraries</td>
<td>3</td>
<td>AS</td>
<td>LIS</td>
<td>PR: LIS 6511 or CI.</td>
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<tr>
<td>LIS</td>
<td>6212</td>
<td>Reading Guidance Programs in Libraries and Classrooms</td>
<td>3</td>
<td>AS</td>
<td>LIS</td>
<td>Working with factors and forces influencing reading habits of children and youth; programs for teaching investigative and library skills materials and methods for guidance.</td>
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<td>Course Code</td>
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<tr>
<td>LIS 6225</td>
<td>Storytelling</td>
<td>3</td>
<td>AS</td>
<td>LIS PR: LIS 6585 or CI.</td>
<td>Building storytelling programs for school and public libraries or other educational institutions. Analysis of historical aspects, materials suitable for use and audience reaction.</td>
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<tr>
<td>LIS 6260</td>
<td>Information Science in Librarianship</td>
<td>3</td>
<td>AS</td>
<td>LIS</td>
<td>Historical overview of the emergence of information science as a discipline. The fundamental concepts of information retrieval systems and subsystems, related information technologies, including indexing and abstracting, and their applications to the field of librarianship.</td>
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<tr>
<td>LIS 6271</td>
<td>Research Methods in Library and Information Science</td>
<td>3</td>
<td>AS</td>
<td>LIS PR: LIS 5020, LIS 6603, and LIS 6725 or LIS 6735.</td>
<td>Overview of present status of research in library and information science; introduction to research methods and their application to librarianship; designed to prepare students to evaluate and plan research studies relating to library and information science.</td>
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<tr>
<td>LIS 6303</td>
<td>Preparing Instructional Media</td>
<td>3</td>
<td>AS</td>
<td>LIS</td>
<td>Fundamentals of preparing and using audiovisuals as they relate to the communication process.</td>
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<tr>
<td>LIS 6316</td>
<td>Visualization of Knowledge</td>
<td>3</td>
<td>AS</td>
<td>LIS PR: LIS 6260</td>
<td>This course covers the perceptual basis of information visualization, major visualization methods, information retrieval system utilizing information visualization, and future trends and issues of information visualization in digital libraries.</td>
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<tr>
<td>LIS 6402</td>
<td>Advanced Library Administration</td>
<td>3</td>
<td>AS</td>
<td>LIS</td>
<td>Applications of staff management principles to library situations. Includes staff roles in current and future operations, application of library performance measures to determine staff effectiveness; preparation of staff manuals; problems of special classes of library workers, such as volunteers and students.</td>
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<tr>
<td>LIS 6409</td>
<td>Introduction to Library Administration</td>
<td>3</td>
<td>AS</td>
<td>LIS</td>
<td>Behavioral approach to libraries as organizations; administrative principles, theories, and problems of all types of libraries; methods of administration; use of case studies, role plays, and in-basket exercises.</td>
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<tr>
<td>LIS 6432</td>
<td>Seminar in Academic Libraries</td>
<td>3</td>
<td>AS</td>
<td>LIS PR: LIS 6409 or CC.</td>
<td>Identification of problems and critical examination of methods in administrative areas of technical, student and teaching staff services, fiscal and legal responsibilities, staff organization and supervision in academic libraries.</td>
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<tr>
<td>LIS 6445</td>
<td>Seminar in Public Libraries</td>
<td>3</td>
<td>AS</td>
<td>LIS PR: LIS 6409 or CC.</td>
<td>Critical examination of public and institutional library administration, services, resources, and facilities at the municipal, county, and regional levels. Role of state and federal governments in library development.</td>
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<tr>
<td>LIS 6455</td>
<td>Organization and Administration of the School Media Center</td>
<td>3</td>
<td>AS</td>
<td>LIS PR: LIS 6409 or CC.</td>
<td>Media quarters, facilities, collections, equipment, and services. Principles of organization and administration of media programs in elementary and college-level libraries.</td>
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<tr>
<td>LIS 6463</td>
<td>3 AS LIS</td>
<td>Library Networks and Systems</td>
<td>Development of library networks at the local, state, regional, and national levels with consideration of organization, administration, services, funding, and legislation.</td>
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<tr>
<td>LIS 6464</td>
<td>3 AS LIS</td>
<td>Library Systems Analysis and Planning</td>
<td>Application of systems planning and data processing technology to library files. Emphasis on analysis of selected library subsystems.</td>
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<tr>
<td>LIS 6472</td>
<td>3 AS LIS</td>
<td>Seminar in Special Libraries</td>
<td>PR: LIS 6409 or CC.</td>
<td>Identification of problems and critical examination of methods in administrative areas of technical and special service clientele; fiscal and legal responsibilities, staff organization, and services in special libraries.</td>
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<tr>
<td>LIS 6473</td>
<td>3 AS LIS</td>
<td>Law Librarianship</td>
<td>PR: LIS 6260, LIS 6409, LIS 6603, LIS 6735, or CC.</td>
<td>All aspects of law librarianship, including administration, acquisition, organization, and use of information resources for persons in the law fields. Field trip may be required.</td>
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<tr>
<td>LIS 6475</td>
<td>3 AS LIS</td>
<td>Health Sciences Librarianship</td>
<td>PR: LIS 6260, LIS 6409, LIS 6603, LIS 6735 or CC.</td>
<td>Field trip may be required. All aspects of health science librarianship, including administration, acquisition, organization, and use of information resources for persons in the health fields such as physicians, medical students, nursing students, allied health personnel and students, and researchers.</td>
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<tr>
<td>LIS 6511</td>
<td>3 AS LIS</td>
<td>Collection Development and Maintenance</td>
<td>CP: LIS 6271.</td>
<td>Developmental approach to building library collections of both print and non-print materials. Emphasis upon evaluation, selection, and acquisition of library materials as they uphold the objectives of the institutions for which they are selected and acquired.</td>
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<tr>
<td>LIS 6542</td>
<td>3 AS LIS</td>
<td>The Curriculum and Instructional Technology</td>
<td></td>
<td>Effective utilization of instructional materials as they relate to specific areas of curriculum in elementary and high school programs.</td>
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<tr>
<td>LIS 6555</td>
<td>3 AS LIS</td>
<td>Books and Related Materials for Young Adults</td>
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<td>Young adult materials for use in secondary school libraries, young adult sections of public libraries, and other institutions serving youth. Equal emphasis upon (1) selection principles and bibliographical sources, as well as upon (2) utilization in terms of service to the young adult.</td>
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<tr>
<td>LIS 6585</td>
<td>3 AS LIS</td>
<td>Materials for Children</td>
<td></td>
<td>Examination of materials for all institutions in which children are served: school media centers, public libraries, kindergartens, etc. Stress on selection aids, reviewing techniques, utilizations.</td>
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<tr>
<td>LIS 6603</td>
<td>3 AS LIS</td>
<td>Basic Information Sources and Services</td>
<td></td>
<td>An examination of the basic sources of information in the general library; of bibliographical control of all communication media, with emphasis on those tools of most value to general reference services.</td>
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<tr>
<td>LIS 6609</td>
<td>3 AS LIS</td>
<td>Online Information Sources and Services</td>
<td>PR: LIS 6260, LIS 6603, or CC.</td>
<td>Principles of online searching and characteristics of machine-readable materials.</td>
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<td>Units</td>
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<td><em>prereq</em></td>
<td>Description</td>
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<tr>
<td>LIS 6610</td>
<td>Information Sources and Services in the Humanities</td>
<td>3</td>
<td>AS LIS</td>
<td>PR: LIS 6603 or CC.</td>
<td>Consideration of the bibliographical and reference materials in the humanities with training and practice in their use for solving problems in the reference service.</td>
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<tr>
<td>LIS 6620</td>
<td>Information Sources and Services in the Social Sciences</td>
<td>3</td>
<td>AS LIS</td>
<td>PR: LIS 6603 or CC.</td>
<td>Consideration of the bibliographical and reference materials in the social sciences with training and practice in their use for solving problems in reference service.</td>
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<tr>
<td>LIS 6624</td>
<td>Information Sources and Services in Business and Law</td>
<td>3</td>
<td>AS LIS</td>
<td>PR: LIS 6603 or CI.</td>
<td>Consideration of representative reference sources in business and law with training and practice in their use for solving information problems in academic, public, and special libraries.</td>
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<tr>
<td>LIS 6630</td>
<td>Information Sources and Services in Science and Technology</td>
<td>3</td>
<td>AS LIS</td>
<td>PR: LIS 6603 or CC.</td>
<td>Study of representative reference sources in pure and applied sciences with equal attention given to typical problems encountered in scientific and technological reference service.</td>
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<tr>
<td>LIS 6661</td>
<td>Government Documents</td>
<td>3</td>
<td>AS LIS</td>
<td></td>
<td>The nature of state, federal, United Nations, and international documents, their reference and research value; the techniques of acquisition, organization, and reference use.</td>
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<tr>
<td>LIS 6724</td>
<td>Classification and Cataloging of Non-Book Materials</td>
<td>3</td>
<td>AS LIS</td>
<td>PR: LIS 6735 or CC.</td>
<td>Principles and practices in cataloging and organizing non-book materials.</td>
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<tr>
<td>LIS 6725</td>
<td>Organization of Knowledge I</td>
<td>3</td>
<td>AS LIS</td>
<td></td>
<td>Principles of the organization of knowledge emphasizing descriptive cataloging, including the MARC format, the use of LSCSH and the Library of Congress classification, and searching the OCLC Online Union Catalog.</td>
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<tr>
<td>LIS 6726C</td>
<td>Indexing and Abstracting</td>
<td>3</td>
<td>AS LIS</td>
<td>PR: LIS 6725 or LIS 6735</td>
<td>Principles and procedures for indexing and abstracting products of human knowledge in various formats, including vocabulary control, thesaurus construction, classification, and coding in manual, automated, and intelligent systems.</td>
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<tr>
<td>LIS 6735</td>
<td>Technical Services in Small Libraries</td>
<td>3</td>
<td>AS LIS</td>
<td></td>
<td>Covers aspects of technical services including acquisitions, cataloging, and circulation systems as they relate to school media centers, small public libraries, and information centers. Automation is emphasized in all aspects of the course.</td>
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<tr>
<td>LIS 6745</td>
<td>Organization of Knowledge II</td>
<td>3</td>
<td>AS LIS</td>
<td>PR: LIS 6725.</td>
<td>Introduction to the practice in using selected schedules of Library of Congress Classification System and the Library of Congress Subject Heading List; changing policies and procedures in cataloging and an introduction to the use of the MARC format for inputting cataloging data into machine readable files.</td>
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<tr>
<td>LIS 6906</td>
<td>Independent Study</td>
<td>1-4</td>
<td>AS LIS</td>
<td>PR: 20 hours in program and consent of advisor.</td>
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<td>Course Title</td>
<td>Credits</td>
<td>Department</td>
<td>Prerequisite(s)</td>
<td>Description</td>
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<tr>
<td>LIS 6946</td>
<td>Supervised Field Work</td>
<td>3</td>
<td>LIS</td>
<td>PR: CC.</td>
<td>Supervised experience in an approved cooperating library. Includes practice work, seminar sessions and individual conferences, a progress report, and a final report on the field experience.</td>
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<tr>
<td>LIT 6096</td>
<td>Studies in Contemporary Literature</td>
<td>3</td>
<td>ENG</td>
<td></td>
<td>Drama, poetry, fiction, and literary criticism; authors to be studied include Ionesco, Thomas, Miller, T. Williams, Beckett, Camus, Burgess, Morrison, and Walker.</td>
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<tr>
<td>LIT 6105</td>
<td>Studies in Continental Literature</td>
<td>3</td>
<td>ENG</td>
<td></td>
<td>General areas include the Renaissance, the Enlightenment, the Novel in Europe, the Romantic Movement on the Continent, and Classical Comedy.</td>
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<tr>
<td>LIT 6934</td>
<td>Selected Topics in English Studies</td>
<td>1-6</td>
<td>ENG</td>
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<td>Current topics offered on a rotating basis include The Nature of Tragedy; The Nature of Comedy and Satire; and the Nature of Myth, Allegory, and Symbolism; the Epic; Utopian Literature. Other topics will be added in accordance with student demand and instructor interest.</td>
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<tr>
<td>LNW 5900</td>
<td>Directed Reading</td>
<td>1-4</td>
<td>WLE</td>
<td>Departmental approval required. S/U.</td>
<td>Study of an author, movement, or theme.</td>
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<tr>
<td>LNW 5934</td>
<td>Selected Topics</td>
<td>4</td>
<td>WLE</td>
<td></td>
<td>Readings in the philosophic writings of Cicero, Seneca, and Lucretius, together with an examination of Stoic, Epicurean, and Eclectic thought.</td>
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<tr>
<td>LNW 6505</td>
<td>Roman Philosophy</td>
<td>3</td>
<td>WLE</td>
<td></td>
<td>Readings in the Odes and Epodes of Horace; study of the Ode's tradition.</td>
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<tr>
<td>LNW 6655</td>
<td>Horace</td>
<td>3</td>
<td>WLE</td>
<td></td>
<td>Readings in the Aeneid, the Eclogues, and the Georgics.</td>
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<tr>
<td>LNW 6910</td>
<td>Supervised Research</td>
<td>3</td>
<td>WLE</td>
<td>PR: CC.</td>
<td>Riemann-Stieltjes integrals, uniform convergence, Fourier series, Lebesgue measure and integration on R.</td>
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<tr>
<td>MAA 5306</td>
<td>Real Analysis I</td>
<td>3</td>
<td>MTH</td>
<td>PR: MAA 4211.</td>
<td>Metric spaces, Banach spaces, and function spaces; measure and integration on abstract spaces.</td>
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<tr>
<td>MAA 5405</td>
<td>Applied Complex Analysis</td>
<td>3</td>
<td>MTH</td>
<td>PR: CI.</td>
<td>Linear transformations, analytic functions, conformal mapping, Cauchy's theorem and applications, power series, partial fractions and factorization, elementary Riemann surfaces, Riemann mapping theorem.</td>
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<tr>
<td>MAA 6406</td>
<td>Complex Analysis I</td>
<td>3</td>
<td>MTH</td>
<td>PR: MAA 5405 or CI.</td>
<td>Topics in: conformal mappings, normal families, Picard's theorem, univalent functions, extremal properties, elliptic functions, approximation theory, Riemann surfaces.</td>
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<tr>
<td>MAA 6407</td>
<td>Complex Analysis II</td>
<td>3</td>
<td>MTH</td>
<td>PR: MAA 6406 or CI.</td>
<td>Normed linear spaces and topological vector spaces; open mapping, closed graph, and Hahn-Banach Theorem,</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>Department</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>MAA 6616</td>
<td>Abstract Integration</td>
<td>3</td>
<td>AS</td>
<td>MTH</td>
<td>MTH PR: 5307 or Cl.</td>
<td>Measure as abstract integration; Riesz representation theorem, Fubini’s Theorem, Radon-Nikodym Theorem, LP spaces.</td>
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<tr>
<td>MAD 5101</td>
<td>LISP: Programming With Algebraic Applications</td>
<td>3</td>
<td>AS</td>
<td>MTH</td>
<td>PR: MHF 5306 or MAD 6510 or MAS 5311 or Cl.</td>
<td>Programming in LISP, functional languages, foundations of Lambda Calculus and algebraic applications (theorem proving and game playing).</td>
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<tr>
<td>MAD 5305</td>
<td>Graph Theory</td>
<td>3</td>
<td>AS</td>
<td>MTH</td>
<td>PR: MAS 3105 or Cl.</td>
<td>Brief introduction to classical graph theory (4-color theorem, etc.), directed graphs, connected digraphs, condensations, incidence matrices, Polya’s Theorem, networks.</td>
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<tr>
<td>MAD 6206</td>
<td>Combinatorics I</td>
<td>3</td>
<td>AS</td>
<td>MTH</td>
<td>PR: MAS 3105 and MAS 4301 or Cl.</td>
<td>Elementary counting principles, distributions, sets, multisets, partitions of sets and integers, generating functions and recurrences, graphical methods, probabilistic methods.</td>
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<tr>
<td>MAD 6207</td>
<td>Combinatorics II</td>
<td>3</td>
<td>AS</td>
<td>MTH</td>
<td>PR: MAS 5311 and MAD 6206 or Cl.</td>
<td>Combinatorics of finite sets: posets, hypergraphs and external problems, matroids, block designs, Mobius inversion for partially ordered sets, Polya’s enumeration theory.</td>
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<tr>
<td>MAD 6510</td>
<td>Analysis of Algorithms</td>
<td>4</td>
<td>AS</td>
<td>MTH</td>
<td>PR: MAS 4301 or Cl.</td>
<td>Mathematical theory of algorithms for information processing, including time and space requirements of algorithms, construction of optimal algorithms.</td>
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<tr>
<td>MAD 6616</td>
<td>Algebraic Automata Theory</td>
<td>3</td>
<td>AS</td>
<td>MTH</td>
<td>PR: MAS 4301 or Cl.</td>
<td>Deterministic and non-deterministic finite automata, Mealy and Moore machines, push-down automata, Turing machines, regular languages, context free languages, halting problem, and universal Turing machines.</td>
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<tr>
<td>MAD 6617</td>
<td>Algebraic Coding Theory</td>
<td>3</td>
<td>AS</td>
<td>MTH</td>
<td>PR: MAS 5311 or Cl.</td>
<td>Linear block codes over an arbitrary finite field: Hamming, Golay, BCH, quadratic residue, Reed-Muller, and MDS codes, the MacWilliams identity, bounds on minimum distance, and relationship to design theory.</td>
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<tr>
<td>MAE 5875</td>
<td>Abstract Algebra for Teachers</td>
<td>3</td>
<td>AS</td>
<td>MTH</td>
<td>PR: MAS 3105 and MAS 4301 and Bachelor’s degree or Cl. No credit for Mathematics majors.</td>
<td>Groups, fields, vector spaces as they relate to high school algebra and geometry.</td>
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<tr>
<td>MAE 6115</td>
<td>Current Trends in Elementary Mathematics Education</td>
<td>3</td>
<td>ED</td>
<td>EDE</td>
<td>PR: MAE 4310 or equiv.</td>
<td>Philosophy, content, and process of mathematics instruction in elementary school programs.</td>
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<tr>
<td>MAE 6117</td>
<td>Teaching Elementary Math</td>
<td>3</td>
<td>ED</td>
<td>EDE</td>
<td></td>
<td>This course provides for the development of knowledge and skills necessary to prepare students as teachers of mathematics in elementary classes as recommended by the National Council of Teachers of Mathematics in its guidelines for teachers.</td>
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<tr>
<td>MAE 6126</td>
<td>Current Trends in Middle Grades Mathematics</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission to the MAT program in middle grades mathematics or</td>
<td>This course examines current trends and issues in middle grades mathematics. It familiarizes teachers of middle grades math.</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Type</td>
<td>Mode</td>
<td>PR/CE</td>
<td>Course Description</td>
<td>Notes</td>
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<tr>
<td>MAE 6127</td>
<td>Probability and Statistics for Middle Grades Teachers</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>MAE 6356.</td>
<td>This course examines probability and statistics topics for middle grades mathematics teachers. Topics include data collection and display, measures of central tendency and variability, probabilities, and sampling procedures. with new developments in this field with a focus on curriculum issues and issues arising from state, national, and international assessments.</td>
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<tr>
<td>MAE 6136</td>
<td>Current Trends in Secondary Mathematics Education</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>MAE 4330 or DPR.</td>
<td>Curricular patterns and instructional practices in secondary mathematics.</td>
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<tr>
<td>MAE 6137</td>
<td>Topics in Teaching Probability and Statistics</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission to a graduate program in mathematics education.</td>
<td>This course examines issues related to teaching probability and statistics in secondary schools.</td>
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<tr>
<td>MAE 6315</td>
<td>Algebraic Thinking for Elementary Teachers</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission into the MA in Elementary with a Mathematics/Science emphasis.</td>
<td>This course is designed to enhance the algebra content knowledge of elementary teachers and to consider how algebraic experiences and informal algebraic concepts can be introduced into the elementary curriculum.</td>
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<tr>
<td>MAE 6316</td>
<td>Geometry and Measurement for Elementary Teachers</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission into the MA in Elementary with a Mathematics/Science emphasis.</td>
<td>This course is designed to enhance the geometric content knowledge of elementary teachers and to consider how geometric experiences and concepts can be introduced into the elementary curriculum.</td>
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<tr>
<td>MAE 6324</td>
<td>Advanced Math Topics - Middle Grades Teachers</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission into the MA in Middle Grades Mathematics or CI. Completion of MAE 6127, MAE 6328, MAE 6329, and MAE 6325.</td>
<td>This course examines advanced functions topics, basic concepts of trigonometry, and the foundations of calculus. Teachers experience instructional approaches appropriate for use in middle grades classrooms.</td>
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<tr>
<td>MAE 6325</td>
<td>Number Theory for Middle Grades Teachers</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission into the MA in Middle Grades Mathematics or CI.</td>
<td>This course examines number theory concepts appropriate for middle grades mathematics teachers, including historical connections. Teachers experience instructional approaches appropriate for use in middle grades classrooms.</td>
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<tr>
<td>MAE 6328</td>
<td>Algebra for Middle Grades Teachers</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission into the MA in Middle Grades Mathematics or CI. Completion of MAE 6127, MAE 6328, MAE 6329, and MAE 6325.</td>
<td>This course examines in algebra content appropriate for middle grades mathematics teachers, including the use of technology to study algebra. Teachers experience instructional approaches appropriate for use in middle grades classrooms.</td>
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<tr>
<td>MAE 6329</td>
<td>Geometry and Measurement for Middle Grades Teachers</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission into the MA in Middle Grades Mathematics or CI.</td>
<td>This course examines in geometry content appropriate for middle grades mathematics teachers, including the use of technology to study geometry. Teachers experience instructional approaches appropriate for use in middle grades classrooms.</td>
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<tr>
<td>MAE 6334</td>
<td>Problem Solving for Elementary Teachers</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission into the MA in Elementary with a Mathematics/Science emphasis.</td>
<td>This course analyzes problem-solving strategies of elementary teachers and their students.</td>
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<tr>
<td>MAE 6336</td>
<td>Topics in Teaching Calculus</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission to a graduate program in mathematics education.</td>
<td>This course examines issues related to teaching calculus in secondary schools.</td>
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<td>Course Code</td>
<td>Course Title</td>
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<td>Prerequisites</td>
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<tr>
<td>MAE 6337</td>
<td>Topics in Teaching Algebra</td>
<td>1-4</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Undergraduate degree in mathematics or certification in secondary school mathematics. Topics in algebra, philosophy, new trends, and methods of teaching secondary school algebra.</td>
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<tr>
<td>MAE 6338</td>
<td>Topics in Teaching Geometry</td>
<td>1-4</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Undergraduate degree in mathematics or certification in secondary school mathematics. Topics in geometry, philosophy, new trends, and methods of teaching secondary school geometry.</td>
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<tr>
<td>MAE 6356</td>
<td>Teaching of Pre-Secondary School Mathematics</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: 12 hours of mathematics. DPR. Development of strategies and materials for teaching mathematical concepts and skills appropriate to pre-secondary school years.</td>
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<tr>
<td>MAE 6362</td>
<td>Senior High Mathematics Methods</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission into the MAT in Mathematics Education (6-12) or Cl. This course is designed to prepare teachers for a successful induction to teaching mathematics in the high schools of today. It is designed to bridge the perceived gap between theory and practice.</td>
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<tr>
<td>MAE 6370</td>
<td>Mathematics for High School Teachers</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission to a graduate program in mathematics education. This course examines high school mathematics from an advanced perspective and makes connections between college level mathematics and the mathematics of the secondary school.</td>
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<tr>
<td>MAE 6643</td>
<td>Communication Skills in Mathematics</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission into the MAT in Middle Grades Mathematics or Cl. This course examines issues related to communicating in mathematics, including reading, writing, speaking, and listening. It satisfies the reading in the content area mandate for certification.</td>
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<tr>
<td>MAE 6899</td>
<td>Internship Seminar in Mathematics Education</td>
<td>1-3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission into a graduate initial certification program in mathematics education. Cr: MAE 6947, Graduate Internship: Mathematics Education. This seminar accompanies the graduate internship in mathematics education and provides teacher candidates an opportunity to interact with peers and university faculty regarding classroom experiences.</td>
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<tr>
<td>MAE 6906</td>
<td>Independent Study in Mathematics Education</td>
<td>1-6</td>
<td>ED</td>
<td>EDO</td>
<td>This course permits a student to explore a topic of interest in depth under the direction and supervision of a faculty member.</td>
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<td>MAE 6945</td>
<td>Practicum in Mathematics Education</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission into a graduate initial certification program in mathematics education. This practicum provides individuals in the MAT program in mathematics education with early field experiences in mathematics classrooms at the middle or high school levels, depending on the program of study.</td>
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<tr>
<td>MAE 6947</td>
<td>Internship</td>
<td>6</td>
<td>ED</td>
<td>EDI</td>
<td>PR: CI. Provides students with an extended school-based experience, under the guidance of a cooperating teacher and university supervisor, for a full semester at or near the end of their graduate program. Open to graduate degree candidates only. S/U (PR: CI)</td>
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<tr>
<td>MAE 6971</td>
<td>Thesis: Masters/Educational Specialist</td>
<td>2-1</td>
<td>ED</td>
<td>EDO</td>
<td>S/U.</td>
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<tr>
<td>MAE 7138</td>
<td>Assessment in Mathematics Education</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission to the Ph.D. Program with emphasis in Mathematics Education or Cl. This course discusses issues related to assessment in mathematics education at all levels, including state, national, and international assessments. It also discusses issues related to rubrics and alternative assessments in mathematics education.</td>
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<td>Course Code</td>
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<td>Prerequisite</td>
<td>Description</td>
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<td>MAE 7146</td>
<td>Curriculum History/Research Mathematics Education</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission to the Ph.D. Program with emphasis in Mathematics Education or CI. This course surveys curriculum history in mathematics education, discusses current research on mathematics education curricula, and explores issues related to conducting research on curriculum in this field.</td>
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<tr>
<td>MAE 7655</td>
<td>Technology Issues in Mathematics Education</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission to the Ph.D. Program with emphasis in Mathematics Education or CI. This course focuses on issues surrounding the use of technology in mathematics education. It examines perspectives and research about technology in mathematics education and their implications for technology instruction in school mathematics programs.</td>
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<tr>
<td>MAE 7794</td>
<td>Preparing Teachers of Mathematics, K-12</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission to the Ph.D. Program with emphasis in Mathematics Education or CI. This course focuses on analyzing and examining the research in mathematics teaching and teacher education as it relates to the initial preparation of teachers of mathematics and to the professional development of practicing teachers of mathematics.</td>
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<tr>
<td>MAE 7796</td>
<td>Research Issues in Mathematics Education</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission to the Ph.D. Program with emphasis in Mathematics Education or CI. This course focuses on current research in mathematics education and its implications for instruction in school mathematics programs, particularly its impact on mathematics curricula, learning, and instruction.</td>
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<tr>
<td>MAE 7910</td>
<td>Directed Research in Mathematics Education</td>
<td>1-1</td>
<td>ED</td>
<td>EDO</td>
<td>PR: CI.</td>
<td>This course permits a doctoral student to conduct advanced research and to pursue specific areas of interest with a faculty member as supervisor. A contract is required with the faculty member. S/U.</td>
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<tr>
<td>MAE 7945</td>
<td>Practicum in Mathematics Education</td>
<td>3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission to the Ph.D. Program with emphasis in Mathematics Education or CI. This practicum provides doctoral students in mathematics education an opportunity to engage in professional experiences in teaching or research that are individualized to meet future academic needs and goals.</td>
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<tr>
<td>MAE 7980</td>
<td>Dissertation</td>
<td>2-3</td>
<td>ED</td>
<td>EDO</td>
<td>PR: Admission to Candidacy. Course explores politics and control at the individual, small group, and organizational levels. Students will also explore the power relationships between organizations and the larger political/economic systems of which they are a part and with which they interact.</td>
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<tr>
<td>MAN 6053</td>
<td>Politics and Control in Organizations</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>PR: GS.</td>
<td>Course explores politics and control at the individual, small group, and organizational levels. Students will also explore the power relationships between organizations and the larger political/economic systems of which they are a part and with which they interact.</td>
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<tr>
<td>MAN 6055</td>
<td>Human Behavior and Organization</td>
<td>2</td>
<td>BU</td>
<td>MBA</td>
<td>PR: GS.</td>
<td>An examination of the theory and practice of management, including the study of goals and means, the functions of management, and the administrative process in general.</td>
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<tr>
<td>MAN 6107</td>
<td>Leadership Perspective</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>Course deals with questions,</td>
<td></td>
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<tr>
<td>MAN 6116</td>
<td>Managing Diversity</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>Course deals with questions,</td>
<td></td>
<td></td>
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<tr>
<td>MAN 6140</td>
<td>Decision Making &amp; Problem Solving</td>
<td>2</td>
<td>BU</td>
<td>MAN</td>
<td>dimensions of style and structure, problems and paradigms of solutions that have come out of management experience of a changing workforce during the past twenty years. Emerging styles of leadership among people of diverse cultural backgrounds will be explored as solutions, not as problems.</td>
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<tr>
<td>MAN 6149</td>
<td>Leadership and Teams</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>PR: GS.</td>
<td>Exploration, analysis and applications of Leadership theory, research concepts and skills in teams and organizations. Course provides insights into opportunities and challenges faced by leaders as they seek to adapt themselves and their organizations to the global business environment.</td>
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<tr>
<td>MAN 6204</td>
<td>Organization Design and Structure</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>Systematic study of architecture, design and management approaches that influence the effectiveness of public and private organizations, including theory, environment, technology, culture, behavior control and work design.</td>
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<tr>
<td>MAN 6256</td>
<td>Politics and Control in Organizations</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>Course explores politics and control at the individual, small group, and organizational levels. Students will also explore the power relationships between organizations and the larger political/economic systems of which they are a part and with which they interact.</td>
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<tr>
<td>MAN 6289</td>
<td>Organizational Change and Development</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>PR: MAN 6055 or CI.</td>
<td>A combination laboratory-field course requiring the integration of behavioral science theories, tools, concepts, and techniques learned in the lab to an OB application in a &quot;real&quot; organization.</td>
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<tr>
<td>MAN 6305</td>
<td>Human Resource Management</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>PR: GS.</td>
<td>Course focuses on the complex decision-making processes involved in the management of human resources within an organizational system geared to meeting both individual needs and organizational objectives.</td>
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<tr>
<td>MAN 6448</td>
<td>Negotiating Agreement and Resolving Conflict</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>Provide the student with an overview of conflict resolution within/between organizations. Includes negotiation, mediation, arbitration, peer review, and other alternatives to litigation; internal dispute resolution, dispute system design/implementation.</td>
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<tr>
<td>MAN 6525</td>
<td>Quality Management</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>PR: GS.</td>
<td>This course provides the student with an understanding of the fundamentals of quality management. Students will develop an appreciation for the complexities of modern organizations in the pursuit of quality. A cross-function multidisciplinary approach is used.</td>
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<tr>
<td>MAN 6527</td>
<td>Advanced Seminar in Quality Management</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>PR: MAN 6525</td>
<td>This course explores the new paradigm shift occurring in business. Focusing on quality enhancement</td>
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<tr>
<td>Course Code</td>
<td>Course Name and Title</td>
<td>Units</td>
<td>Restriction</td>
<td>Prerequisite</td>
<td>Description</td>
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<tr>
<td>MAN 6569</td>
<td>Quantitative Applications for Management Decisions</td>
<td>3</td>
<td>BU</td>
<td>QMB</td>
<td>The integration of quantitative approaches and management science tools into the decision making process at various organizational levels and in various organizational settings involved in the production and dissemination of goods and services.</td>
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<tr>
<td>MAN 6601</td>
<td>International Management</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>A study of the characteristics of the international and multinational company, environmental constraints, personnel and labor relations factors, and strategic planning and policies.</td>
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<tr>
<td>MAN 6607</td>
<td>Managing International Cultural Differences</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>Examines the effects of culture and nationality on business practices in selected regions and countries and suggests ways to build synergistic solutions from multicultural differences.</td>
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<tr>
<td>MAN 6726</td>
<td>Strategic Planning</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>Examines techniques to creatively vision and analyze the future to prepare individuals and organizations for future opportunities and threats. Designed to familiarize students with techniques for analyzing the future, critical issues, how the future will impact them as individuals.</td>
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<tr>
<td>MAN 6806</td>
<td>Entrepreneurship and Small Business Management Counseling</td>
<td>1-3</td>
<td>BU</td>
<td>MAN</td>
<td>Small business management consulting to an on-going firm or development of a business plan for a new enterprise. Emphasis on developing consulting skills and recognizing implications of entrepreneurs capabilities and attitudes for success.</td>
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<tr>
<td>MAN 6905</td>
<td>Independent Study</td>
<td>1-9</td>
<td>BU</td>
<td>MAN</td>
<td>Independent study in which student must have a contract with an instructor.</td>
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<tr>
<td>MAN 6911</td>
<td>Directed Research</td>
<td>1-9</td>
<td>BU</td>
<td>MAN</td>
<td>S/U. PR: GR. ML, CC.</td>
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<tr>
<td>MAN 6930</td>
<td>Selected Topics</td>
<td>1-4</td>
<td>BU</td>
<td>MAN</td>
<td>Designed to be taken either under general guidance of faculty member on some facet of management not offered in a regular course or with regularly scheduled graduate courses for more in-depth study.</td>
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<tr>
<td>MAN 6971</td>
<td>Thesis: Master’s</td>
<td>1-9</td>
<td>BU</td>
<td>MAN</td>
<td>Interdisciplinary overview of theory and research on macro organizational variables affecting organizational design and effectiveness. Focus on relationships between organizational structure and dynamics of human behavior.</td>
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<tr>
<td>MAN 7205</td>
<td>Organization Theory</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>Interdisciplinary overview of theory and research on macro organizational variables affecting organizational design and effectiveness. Focus on relationships between organizational structure and dynamics of human behavior.</td>
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<tr>
<td>MAN 7225</td>
<td>Research Elective in Management</td>
<td>3</td>
<td>BU</td>
<td>MAN</td>
<td>Parametric &amp; nonparametric statistics required. Research: Methods for organization analysis and management, design, sample</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Department</td>
<td>Prerequisites</td>
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<tr>
<td>MAN 7245</td>
<td>Organizational Behavior</td>
<td>3</td>
<td>BU MAN</td>
<td>PR: MAN 7205 or Cl.</td>
<td>Behavioral concepts and practices in organizations. Emphasis on individual groups, intragroup and intergroup development and actions; organization; socialization; motivation; values; performance; communication effectiveness.</td>
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<tr>
<td>MAN 7285</td>
<td>Organizational Development</td>
<td>3</td>
<td>BU MAN</td>
<td>PR: MAN 7205 or Cl.</td>
<td>Theory and research relating to management efforts to design and implement continual developmental activities to alter climate and improve productivity and effectiveness in dynamic organizations.</td>
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<tr>
<td>MAN 7900</td>
<td>Directed Readings in Management</td>
<td>3</td>
<td>BU MAN</td>
<td>PR: MAN 7245 and MAN 7285 or Cl.</td>
<td>Advanced reading program from selected areas in management under supervision of faculty member, requiring written contract describing requirements, prior to registration.</td>
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<tr>
<td>MAN 7905</td>
<td>Independent Study in Management</td>
<td>1-4</td>
<td>BU MAN</td>
<td>PR: CC. S/U only.</td>
<td>Course permits a management doctoral student to conduct research and pursue specific areas of interest with a faculty member as supervisor. Contract required to establish performance levels expected.</td>
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<tr>
<td>MAN 7910</td>
<td>Directed Research in Management</td>
<td>3</td>
<td>BU MAN</td>
<td>PR: MAN 7245 and MAN 7285 or Cl. S/U.</td>
<td>Advanced directed research program in a specific area of management under supervision of a management faculty member.</td>
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<tr>
<td>MAN 7920</td>
<td>Research Symposium</td>
<td>1</td>
<td>BU MAN</td>
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<td>A flexible format to offer specialized courses in management not available in regular curriculum.</td>
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<tr>
<td>MAN 7930</td>
<td>Selected Topics in Management</td>
<td>3</td>
<td>BU MAN</td>
<td>PR: MAN 7245 and MAN 7285 or Cl.</td>
<td>Critical examination of problems and issues relevant to contemporary management, such as productivity improvement, environmental constraints, etc.</td>
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<tr>
<td>MAN 7932</td>
<td>Seminar in Management</td>
<td>3</td>
<td>BU MAN</td>
<td>PR: MAN 7245 and MAN 7285 or Cl.</td>
<td>Introduces basic theoretical issues and empirical research in strategic management.</td>
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<tr>
<td>MAN 7980</td>
<td>Dissertation</td>
<td>2-2</td>
<td>BU MAN</td>
<td>PR: Successful completion of preliminary exams; successful completion of Field Exams in each Major and Secondary field and admission to candidacy for Ph.D. program in Management.</td>
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<tr>
<td>MAP 5316</td>
<td>Ordinary Differential Equations I</td>
<td>3</td>
<td>AS MTH</td>
<td>PR: MAP 2302 and MAA 4211, or Cl.</td>
<td>Existence and uniqueness theory, properties of solutions, linear systems, stability theory. Sturm-Liouville theory.</td>
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<tr>
<td>MAP 5317</td>
<td>Ordinary Differential Equations II</td>
<td>3</td>
<td>AS MTH</td>
<td>PR: MAP 5316 and MAA 5307 or Cl.</td>
<td>Topics selected from fixed point theory, comparison theory, oscillation theory, Poincare-Bendixon Theory, Lyapunov functions, eigenfunction expansions.</td>
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<tr>
<td>MAP 5345</td>
<td>Applied Partial Differential Equations</td>
<td>3</td>
<td>AS MTH</td>
<td>PR: MAP 5407 or Cl.</td>
<td>Separation of variables, the heat equation, wave equation, Laplace’s equation, classification, Green’s equation, etc.</td>
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<td>Credit</td>
<td>Department</td>
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<tr>
<td>MAP 5407</td>
<td>Methods of Applied Mathematics</td>
<td>3</td>
<td>AS MTH</td>
<td>PR: MAP 2302 or CI. Sturm-Liouville theory, Fourier series, Green's functions, matrix methods for linear systems of ordinary differential equations, and topics from calculus of variations, control theory, numerical solutions of differential equations.</td>
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<tr>
<td>MAP 6205</td>
<td>Control Theory and Optimization</td>
<td>3</td>
<td>AS MTH</td>
<td>PR: MAA 5307 and MAP 5316 or CI. Projection theorems and minimum norm problems, convex analysis, duality principle, constrained optimization, finite dimensional linear systems, controllability, optimal control and pontryagin maximum principle.</td>
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<tr>
<td>MAP 6206</td>
<td>Mathematical Optimization Theory II</td>
<td>3</td>
<td>AS MTH</td>
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<tr>
<td>MAP 6336</td>
<td>Theory of Ordinary Differential Equations I</td>
<td>3</td>
<td>AS MTH</td>
<td>PR: MAA 5307 and MAP 5317, or CI. Advanced topics selected from: existence and uniqueness theory, singularity theory, asymptotics and stability, eigenfunctions, perturbations, topological methods, spectral theory of differential operators.</td>
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<tr>
<td>MAP 6356</td>
<td>Partial Differential Equations</td>
<td>3</td>
<td>AS MTH</td>
<td>PR: MAA 5345 and MAA 5307, or CI. Advanced topics from: elliptic boundary value problems, semigroup theory, Sobolev spaces, degree theory, regularity, evolution equations.</td>
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<tr>
<td>MAR 6158</td>
<td>International Marketing Management</td>
<td>3</td>
<td>BU MKT</td>
<td>PR: MAP 6815, CC. A study of marketing management activities from the perspective of firms doing business across national boundaries. Emphasis is upon aspects of marketing which are unique to international business and problem-solving within an international context.</td>
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<tr>
<td>MAR 6216</td>
<td>Logistics and Physical Distribution Management</td>
<td>3</td>
<td>BU MKT</td>
<td>PR: MAP 6815 or CI. A study of managerial methods focusing on the establishment and control of optimum customer service levels in the areas of inventory, transportation, fixed facility location, material handling, and information. Component parts of each system are analyzed quantitatively. Reading, lecture, and case analysis.</td>
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<tr>
<td>MAR 6336</td>
<td>Promotional Management</td>
<td>3</td>
<td>BU MKT</td>
<td>PR: MAP 6815, CC. Management of the promotional function as part of the total marketing program. Includes a study of relevant buyer behavior concepts, resources and budgets, media, creative aspects, and effectiveness measurements as they relate to the management tasks of developing, implementing, and evaluating promotional strategy.</td>
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<tr>
<td>MAR 6406</td>
<td>Sales Management</td>
<td>3</td>
<td>BU MKT</td>
<td>PR: MAP 6815, CC. A study of the sales function of the firm approached from the perspective of the sales manager. Emphasis is placed upon the development of the student's problem-solving, decision-making, and analytical skills.</td>
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<tr>
<td>MAR 6646</td>
<td>Research for Marketing Managers</td>
<td>3</td>
<td>BU MKT</td>
<td>PR: MAP 6815, QMB 6305, ISM 6021. A study of marketing research methods and information systems and their relationship to marketing.</td>
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<td>Course Title</td>
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<td>Cr. Req.</td>
<td>Prerequisite</td>
<td>Description</td>
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<tr>
<td>MAR 6815</td>
<td>Marketing Management</td>
<td>2</td>
<td>BU</td>
<td>MBA</td>
<td>PR: ECO 6114, CC. Analysis of operational and strategic planning problems confronting marketing managers. Topics include buyer behavior, market segmentation, information systems, product selection and development, pricing, distribution, promotion, and sales force management.</td>
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<tr>
<td>MAR 6816</td>
<td>Marketing Strategy</td>
<td>3</td>
<td>BU</td>
<td>MKT</td>
<td>PR: MAR 6815, CC. A study of strategic marketing planning and problem-solving processes as practiced by the modern market-oriented firm. The course is designed to develop marketing problem-solving, decision-making, and planning skills through the extensive use of case analysis.</td>
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<tr>
<td>MAR 6907</td>
<td>Independent Study</td>
<td>1-1</td>
<td>BU</td>
<td>MKT</td>
<td>PR: CC. S/U. Must have a contract with an instructor.</td>
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<tr>
<td>MAR 6916</td>
<td>Directed Research</td>
<td>1-1</td>
<td>BU</td>
<td>MKT</td>
<td>PR: GR. M.L, CC. S/U.</td>
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<tr>
<td>MAR 6936</td>
<td>Selected Topics in Marketing</td>
<td>1-4</td>
<td>BU</td>
<td>MKT</td>
<td>PR: CI. The content and organization of this course will vary according to the interests of the faculty and students involved in any given term.</td>
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<tr>
<td>MAR 7555</td>
<td>Consumer Behavior Theory</td>
<td>3</td>
<td>BU</td>
<td>MKT</td>
<td>PR: CC. This course investigates the interrelationships and applications of behavioral science theories, concepts and methodologies to problems of understanding group as well as individual behavior in the market place.</td>
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<tr>
<td>MAR 7635</td>
<td>Advanced Marketing Research: Design and Technique</td>
<td>3</td>
<td>BU</td>
<td>MKT</td>
<td>PR: QMB 7565, QMB 7566 or CI. An intensive study of the theoretical, conceptual, and methodological issues in survey and experimental marketing research. A review and expansion of advanced marketing data analysis methods.</td>
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<tr>
<td>MAR 7667</td>
<td>Marketing Models and Strategy Applications</td>
<td>3</td>
<td>BU</td>
<td>MKT</td>
<td>PR: CC. A model-building approach to the management of marketing. Includes models developed to aid in the design, implementation, and evaluation of corporate marketing strategies; information systems and marketing audits; and the interrelationships of economic, quantitative, and behavioral disciplines that provide the structure and tools necessary to develop and implement marketing decision support systems.</td>
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<tr>
<td>MAR 7787</td>
<td>Marketing Theory and Thought</td>
<td>3</td>
<td>BU</td>
<td>MKT</td>
<td>PR: GS and CI. An intensive study of marketing concepts and theories from 1900 to present. Emphasis is placed on the development of theory, as well as predictions of future theoretical developments.</td>
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<tr>
<td>MAR 7910</td>
<td>Independent Study in</td>
<td>1-</td>
<td>BU</td>
<td>MKT</td>
<td>PR: CC. S/U. This course permits a doctoral study in a special area.</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Prerequisite</td>
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<tr>
<td>MAR 7930</td>
<td>Advanced Seminar in Marketing</td>
<td>2</td>
<td>BU MKT PR: CC</td>
<td>Broad readings within the field of marketing; an intensive survey and analysis of current marketing problems, their significance, evaluation, and probable outcome; suggestions of possible future empirical research directions and investigations.</td>
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<tr>
<td>MAR 7931</td>
<td>Seminar on Selected Marketing Topics</td>
<td>2</td>
<td>BU MKT PR: CC</td>
<td>Intensive study of the theoretical, conceptual, and methodological issues and problems which impact managerial applications in selected topic areas, such as marketing channels, distribution/logistics, environmental or (social) nonprofit marketing, consumer behavior, advertising/media research, or international marketing.</td>
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<tr>
<td>MAR 7980</td>
<td>Dissertation</td>
<td>2-1</td>
<td>BU MKT PR: Successful completion of preliminary exams; successful completion of field exam in each major and secondary field; and admission to candidacy for Ph.D. program in marketing.</td>
<td>Directed research.</td>
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<tr>
<td>MAS 5215</td>
<td>Number Theory</td>
<td>3</td>
<td>AS MTH PR: MAS 3105 and MAS 4301, or CI.</td>
<td>Fundamental theorem of arithmetic, modular arithmetic, Chinese remainder theorem, Mersenne primes, perfect numbers, Euler-Fermat theorem, pseudo primes, primitive roots, law of quadratic reciprocity, factorization and primality testing algorithms.</td>
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<tr>
<td>MAS 5311</td>
<td>Algebra I</td>
<td>3</td>
<td>AS MTH PR: MAS 3105 and MAS 4301 or CI.</td>
<td>Group theory: Sylow theorems; classification of groups of small order. Ring theory: ideals, quotient rings, polynomial rings, Euclidean domains, principal ideal domains and unique factorization.</td>
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<tr>
<td>MAS 5312</td>
<td>Algebra II</td>
<td>3</td>
<td>AS MTH PR: MAS 5311 or CI.</td>
<td>Continuation of MAS 5311. Finitely generated modules over a principal ideal domain, basic field theory, finite fields, Galois theory.</td>
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<tr>
<td>MAT 5932</td>
<td>Selected Topics</td>
<td>1-4</td>
<td>AS MTH PR: Cl.</td>
<td>Each course covers a single topic outside the usual curriculum.</td>
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<tr>
<td>MAT 6908</td>
<td>Independent Study</td>
<td>1-1</td>
<td>AS MTH S/U.</td>
<td>Independent study in which student must have a contract with an instructor.</td>
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<tr>
<td>MAT 6911</td>
<td>Directed Research</td>
<td>1-1</td>
<td>AS MTH PR: Master's degree. S/U.</td>
<td>Direction of this seminar is by a</td>
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<tr>
<td>MAT 6932</td>
<td>Selected Topics</td>
<td>1-4</td>
<td>AS MTH PR: Cl.</td>
<td>Each course covers a single topic outside the usual curriculum.</td>
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<tr>
<td>MAT 6939</td>
<td>Graduate Seminar</td>
<td>1-4</td>
<td>AS MTH S/U.</td>
<td>Direction of this seminar is by a</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Area</td>
<td>PR</td>
<td>Course Description</td>
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<tr>
<td>MAT 6971</td>
<td>Thesis: Master's</td>
<td>2-10</td>
<td>AS</td>
<td>MTH</td>
<td>PR: Cl. S/U</td>
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<tr>
<td>MAT 7912</td>
<td>Directed Research</td>
<td>1-10</td>
<td>AS</td>
<td>MTH</td>
<td>PR: Ph.D. level: S/U.</td>
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<tr>
<td>MAT 7980</td>
<td>Dissertation: Doctoral</td>
<td>2-10</td>
<td>AS</td>
<td>MTH</td>
<td>PR: Admission to Candidacy</td>
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<tr>
<td>MCB 5206</td>
<td>Public Health and Pathogenic Microbiology</td>
<td>3</td>
<td>AS</td>
<td>BCM</td>
<td>PR: MCB 3020C, Cl.</td>
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<tr>
<td>MCB 5208</td>
<td>Cellular Microbiology</td>
<td>3</td>
<td>AS</td>
<td>BCM</td>
<td>PCB 3023; MCB 3033</td>
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<tr>
<td>MCB 5655</td>
<td>Applied and Environmental Microbiology</td>
<td>3</td>
<td>AS</td>
<td>BIN</td>
<td>PR: MCB 3020C.</td>
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<tr>
<td>MCB 5815</td>
<td>Medical Mycology</td>
<td>3</td>
<td>AS</td>
<td>BCM</td>
<td>PR: MCB 3020C or Cl.</td>
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<tr>
<td>MCB 6433</td>
<td>Clinical Correlations in Molecular Medicine</td>
<td>3</td>
<td>ME</td>
<td>MSG</td>
<td>PR: GMS 6001 or GMS 6200.</td>
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<tr>
<td>MCB 6760</td>
<td>Microbial Symbioses</td>
<td>3</td>
<td>AS</td>
<td>BIN</td>
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<tr>
<td>MCB 6919</td>
<td>Independent Study</td>
<td>1-10</td>
<td>AS</td>
<td>BCM</td>
<td>PR: Cl. S/U.</td>
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<tr>
<td>MCB 6930</td>
<td>Graduate Microbiology Seminar</td>
<td>1</td>
<td>AS</td>
<td>BCM</td>
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<tr>
<td>MCB 6971</td>
<td>Thesis: Master's</td>
<td>2-10</td>
<td>AS</td>
<td>BCM</td>
<td>PR: Cl. S/U.</td>
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<tr>
<td>MET 6140</td>
<td>Weather, Climate, and Society</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td>PR: Undergraduate general meteorology or</td>
<td></td>
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</tbody>
</table>

Students are required to present research papers from the literature. A comprehensive survey of pathogenic microbes responsible for disease in man and other animals and the impact of these infectious agents on the public health. These pathogens will be studied with respect to their morphology, cultivation, mechanisms of pathogenicity, laboratory diagnosis, and epidemiology. This course is a microbiology elective and has a mandatory field trip. The course concentrates on molecular medicine and focuses on several disease conditions that provide an "in-depth" understanding of how changes in cellular structure/function and metabolic pathway regulation can result in diseases and their therapy. A detailed study of the diversity and biological significance of symbiotic associations formed by prokaryotic and eukaryotic microbes with higher organisms. Emphasis is on the regulatory interplay between host and symbiont and the factors influencing the initiation, development, and maintenance of these associations. A critical examination and discussion of current literature of microbiology. This course explores the societal impacts of weather as well as the
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Department</th>
<th>PR:</th>
<th>Description</th>
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<tbody>
<tr>
<td>MHF 5306</td>
<td>Mathematical Logic and Foundations I</td>
<td>3</td>
<td>MTH</td>
<td>MAS 4301 or CI</td>
<td>Two-course sequence covering: predicate calculus and classical model theory; transfinite set theory and the system ZFC; recursion theory and decidability.</td>
</tr>
<tr>
<td>MHF 5402</td>
<td>The Early History of Mathematics</td>
<td>3</td>
<td>MTH</td>
<td>MAC 2312</td>
<td>A study of the history and development of mathematics and its cultural impact from the formation of number systems to the Renaissance.</td>
</tr>
<tr>
<td>MHF 5405</td>
<td>History of Modern Mathematics</td>
<td>3</td>
<td>MTH</td>
<td>MAC 2313</td>
<td>Traces the development of mathematical ideas in Western culture. Special emphasis is placed on those concepts which led to the Calculus. This course is open to majors and non-majors alike.</td>
</tr>
<tr>
<td>MHF 6307</td>
<td>Mathematical Logic And Foundations II</td>
<td>3</td>
<td>MTH</td>
<td>MHF 5306</td>
<td>Continuation of MHF 5306.</td>
</tr>
<tr>
<td>MHS 5020</td>
<td>Foundations of Mental Health Counseling</td>
<td>3</td>
<td>REH</td>
<td>CC</td>
<td>A skill-building course on the utilization of one's self in mental health counseling relationships. Includes study of the origin, history, professional functions and current issues in the discipline of mental health counseling.</td>
</tr>
<tr>
<td>MHS 5480</td>
<td>Human Growth and Development</td>
<td>3</td>
<td>REH</td>
<td>RCS 5780, MHS 5020, Majors only</td>
<td>Human development theory as applied in psychotherapy and case management rehabilitation, mental health, and addiction settings.</td>
</tr>
<tr>
<td>MHS 5905</td>
<td>Directed Studies</td>
<td>1-4</td>
<td>ED</td>
<td>EDG</td>
<td>Independent studies on a selected topic.</td>
</tr>
<tr>
<td>MHS 6006</td>
<td>Trends and Principles of the Counseling Profession</td>
<td>4</td>
<td>ED</td>
<td>EDG</td>
<td>PR: CI</td>
</tr>
<tr>
<td>MHS 6021</td>
<td>Counseling in Community Settings</td>
<td>3</td>
<td>ED</td>
<td>EDG</td>
<td>PR: MHS 6006, MHS 6070, MHS 6200, MHS 6340, MHS 6400, MHS 6420, MHS 6470, MHS 6509, MHS 6700, CR: MHS 6800</td>
</tr>
<tr>
<td>MHS 6070</td>
<td>Study of Mental Disorders for Counselors</td>
<td>4</td>
<td>ED</td>
<td>EDG</td>
<td>PR: MHS 6006 or CI</td>
</tr>
<tr>
<td>MHS 6072</td>
<td>Epidemiology and Prevention in Children’s Mental Health</td>
<td>3</td>
<td>BC</td>
<td>FMH</td>
<td>Provides introduction to epidemiological research methods in children’s mental health; prepares professionals to critically evaluate research literature and to design studies to better affect children’s mental health. Unrestricted. Nonrepeatable.</td>
</tr>
<tr>
<td>MHS 6073</td>
<td>Child and Adolescent Psychopathology and Resilience</td>
<td>3</td>
<td>BC</td>
<td>FMH</td>
<td>Students will gain basic knowledge about psychological disorders necessary to assess/treat/serve children, adolescents, and their...</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>MHS 6095</td>
<td>Family-Centered Interdisciplinary Practice: SOC</td>
<td>3</td>
<td>BC FMH</td>
<td>Provides an overview of a SOC approach to children’s mental health; prepares professionals to work in respectful partnership with families/youth and to participate in interdisciplinary teams serving children and their families. Unrestricted. Nonrepeatable.</td>
<td></td>
</tr>
<tr>
<td>MHS 6096</td>
<td>Program Development and Implementation in Children's Mental Health</td>
<td>3</td>
<td>BC FMH</td>
<td>Course introduces students to the science of implementation and key frameworks, theories, strategies; includes critical elements, influences, stages applied to carry out successful implementation of initiatives. Unrestricted. Nonrepeatable.</td>
<td></td>
</tr>
<tr>
<td>MHS 6097</td>
<td>Financing of Children's Mental Health Services</td>
<td>3</td>
<td>BC FMH</td>
<td>Addresses theoretical, evaluative, political issues regarding financing of children’s mental health services; will further students’ critical thinking about financing strategies/structures that support effective systems of care. Unrestricted/nonrepeatable.</td>
<td></td>
</tr>
<tr>
<td>MHS 6098</td>
<td>Leadership within Systems of Care</td>
<td>3</td>
<td>BC FMH</td>
<td>Introduces students to various theories of leadership and empirical evidence linking leadership competencies to organizational and community success in children’s mental health, emphasizing real-world challenges and solutions. Unrestricted. Nonrepeatable.</td>
<td></td>
</tr>
<tr>
<td>MHS 6200</td>
<td>Assessment and Appraisal Procedures</td>
<td>4</td>
<td>ED EDG PR: MHS 6006</td>
<td>The study of statistical concepts, assessment instruments and procedures relevant to school and community counseling with an emphasis on standardized test data and the use of an individual case study approach.</td>
<td></td>
</tr>
<tr>
<td>MHS 6201</td>
<td>Applied Behavior Analysis in Complex Community Environments</td>
<td>3</td>
<td>BC FMH</td>
<td>Prepares students to recognize factors that may affect the application of behavior analysis principles within and across community settings and to design intervention plans that fit given characteristics of the social and physical context of these home, school and other community settings.</td>
<td></td>
</tr>
<tr>
<td>MHS 6210</td>
<td>Wraparound Interventions and the System of Care</td>
<td>3</td>
<td>BC FMH</td>
<td>Explores the wraparound philosophy and focuses on developing supportive community structures for the delivery of wraparound services. Research, evaluation, and methodology in wraparound interventions are addressed. Unrestricted/nonrepeatable.</td>
<td></td>
</tr>
<tr>
<td>MHS 6311</td>
<td>Online Services in Counseling and Helping Professions</td>
<td>3</td>
<td>ED EDG</td>
<td>To provide students in helping professions with basic and advanced knowledge and skills associated with the provision of online services in counseling and related helping professions. Also to provide training on how to evaluate and design such</td>
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<td>Course Code</td>
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<tr>
<td>MHS 6340</td>
<td>Career Development</td>
<td>4</td>
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<td>EDG</td>
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<tr>
<td>MHS 6341</td>
<td>Career Program Design and Evaluation</td>
<td>3</td>
<td>ED</td>
<td>EDG</td>
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<tr>
<td>MHS 6400</td>
<td>Counseling Theories and Practices</td>
<td>4</td>
<td>ED</td>
<td>EDG</td>
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<tr>
<td>MHS 6418</td>
<td>School Counselor Accountability and Curriculum</td>
<td>3</td>
<td>ED</td>
<td>EDG</td>
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<tr>
<td>MHS 6420</td>
<td>Multicultural Counseling with Diverse Populations</td>
<td>3</td>
<td>ED</td>
<td>EDG</td>
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<tr>
<td>MHS 6421</td>
<td>Counseling Children</td>
<td>4</td>
<td>ED</td>
<td>EDG</td>
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<tr>
<td>MHS 6430</td>
<td>Dynamics of Marriage &amp; Family Systems Theory</td>
<td>4</td>
<td>ED</td>
<td>EDG</td>
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<tr>
<td>MHS 6431</td>
<td>Family Therapy &amp; Techniques</td>
<td>4</td>
<td>ED</td>
<td>EDG</td>
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<tr>
<td>MHS 6432</td>
<td>Marriage Therapy</td>
<td>4</td>
<td>ED</td>
<td>EDG</td>
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</table>
| MHS 6450    | Counseling Substance                            | 4     | ED   | EDG|     | PR: MHS 6400. | This course prepares counselors to 
<table>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
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<tbody>
<tr>
<td>MHS 6470</td>
<td>Human Sexuality Issues for Counselors</td>
<td>4 ED</td>
<td>EDG</td>
<td>PR: MHS 6400. Emphasizes include exploration of various dimensions of human sexuality; dynamics of major individual and societal sexuality issues; theoretical approaches to counseling related to sexuality issues.</td>
</tr>
<tr>
<td>MHS 6509</td>
<td>Group Counseling Theories and Practices</td>
<td>4 ED</td>
<td>EDG</td>
<td>PR: MHS 6400. An experiential study of group structure, group dynamics, methodology, and leadership models applicable to counseling clients in school and community settings. Includes skill building through supervised practice.</td>
</tr>
<tr>
<td>MHS 6601</td>
<td>Consultation for the Counseling Profession</td>
<td>3 ED</td>
<td>EDG</td>
<td>PR: MHS 6400 and MHS 6006. Non-majors need instructor's approval. A study of consultation theory and practice as used by counselors working in schools and mental health facilities, particularly with educators, other professionals, and parents, individually and in groups.</td>
</tr>
<tr>
<td>MHS 6620</td>
<td>Counseling in Community Setting</td>
<td>3 ED</td>
<td>EDG</td>
<td>Study of community counseling within the context of health and human service systems including treatment modalities, administration, and fiscal considerations.</td>
</tr>
<tr>
<td>MHS 6645</td>
<td>Mental Health Informatics</td>
<td>3 BC</td>
<td>FMH</td>
<td>This course examines how information technologies and knowledge management affect access to mental health and impact policy. Current applications include the management of mental health databases and the development of behavioral telehealth programs.</td>
</tr>
<tr>
<td>MHS 6700</td>
<td>Legal and Ethical Issues in the Counseling Profession</td>
<td>3 ED</td>
<td>EDG</td>
<td>PR: MHS 6006. Study of legal, ethical and related issues affecting the role and responsibilities of counselors in schools and mental health facilities.</td>
</tr>
<tr>
<td>MHS 6800</td>
<td>Practicum in Counseling Adolescents and Adults</td>
<td>4 ED</td>
<td>EDG</td>
<td>PR: MHS 6400. S/U. DPR. Supervised counseling for integration and application of knowledge and skills gained in didactic study.</td>
</tr>
<tr>
<td>MHS 6885</td>
<td>Internship in Community Agency Counseling</td>
<td>3-6 ED</td>
<td>EDG</td>
<td>Field experience involving one semester of full-time participation in the counseling and related activities of a public or private agency providing mental health services to the community.</td>
</tr>
<tr>
<td>MHS 6887</td>
<td>Internship in Career and College Counseling</td>
<td>3-6 ED</td>
<td>EDG</td>
<td>PR: MHS 6800, MHS 6006, MHS 6200, MHS 6340, MHS 6341, MHS 6400, MHS 6420, MHS 6700, EDF 6481, CR: MHS 6601. Field experience (1 semester full-time or 2 semesters of part time participation) in career and/or college counseling and related activities of a public or private career center or college center/site/agency. It is restricted to counseling students.</td>
</tr>
<tr>
<td>MHS 6900</td>
<td>Special Topics in Planning, Evaluation and Accountability</td>
<td>1-3 BC</td>
<td>FMH</td>
<td>This course will address selected special topics. Prerequisite is at least three credits in research and evaluation courses at the graduate level.</td>
</tr>
<tr>
<td>MHS 6901</td>
<td>Independent Studies in Mental Health Studies</td>
<td>1-4 BC</td>
<td>FMH</td>
<td>Students conduct independent study in an area related to behavioral</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Format</td>
<td>Prerequisites</td>
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</tr>
<tr>
<td>MHS 6905</td>
<td>Individual Study</td>
<td>1-4</td>
<td>ED</td>
<td>EDG</td>
</tr>
<tr>
<td>MHS 6906</td>
<td>Independent Study in Behavior Analysis Applications in Community Settings</td>
<td>1-6</td>
<td>ED</td>
<td>EDG</td>
</tr>
<tr>
<td>MHS 6930</td>
<td>Seminar In Guidance</td>
<td>1-4</td>
<td>ED</td>
<td>EDG</td>
</tr>
<tr>
<td>MHS 6938</td>
<td>Applied Behavior Analysis in Community Settings</td>
<td>1-4</td>
<td>BC</td>
<td>FMH</td>
</tr>
<tr>
<td>MHS 6940</td>
<td>Practicum in Behavior Analysis in Community Settings</td>
<td>2-4</td>
<td>BC</td>
<td>FMH</td>
</tr>
<tr>
<td>MHS 6970</td>
<td>Thesis: Masters/Educational Specialist</td>
<td>2-1</td>
<td>ED</td>
<td>EDG</td>
</tr>
<tr>
<td>MHS 6971</td>
<td>Thesis in Applied Behavior Analysis</td>
<td>2-6</td>
<td>BC</td>
<td>FMH</td>
</tr>
<tr>
<td>MHS 7401</td>
<td>Advanced Counseling: Theories and Practicum</td>
<td>4</td>
<td>ED</td>
<td>EDG</td>
</tr>
<tr>
<td>MHS 7610</td>
<td>Supervision: Theories and Practicum</td>
<td>4</td>
<td>ED</td>
<td>EDG</td>
</tr>
<tr>
<td>MHS 7740</td>
<td>Survey Course in Planning, Evaluation and Accountability</td>
<td>3</td>
<td>BC</td>
<td>FMH</td>
</tr>
<tr>
<td>MHS 7747</td>
<td>Measurement Issues in</td>
<td>3</td>
<td>BC</td>
<td>FMH</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Type</td>
<td>Notes</td>
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<tr>
<td>MHS 7930</td>
<td>Advanced Seminar in Counselor Education</td>
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<td>ED</td>
<td>EDG</td>
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<tr>
<td>MHS 7980</td>
<td>Dissertation</td>
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<td>ED</td>
<td>EDG</td>
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<tr>
<td>MMC 6206</td>
<td>Mass Communications Ethics</td>
<td>3</td>
<td>AS</td>
<td>COM</td>
</tr>
<tr>
<td>MMC 6306</td>
<td>International Communications Seminar</td>
<td>3</td>
<td>AS</td>
<td>COM</td>
</tr>
<tr>
<td>MMC 6400</td>
<td>Mass Communication Theory</td>
<td>3</td>
<td>AS</td>
<td>COM</td>
</tr>
<tr>
<td>MMC 6415</td>
<td>Strategic Communication Media</td>
<td>3</td>
<td>AS</td>
<td>COM</td>
</tr>
<tr>
<td>MMC 6418</td>
<td>Strategic Message Design</td>
<td>3</td>
<td>AS</td>
<td>COM</td>
</tr>
<tr>
<td>MMC 6421</td>
<td>Research Methods in Mass Communications</td>
<td>3</td>
<td>AS</td>
<td>COM</td>
</tr>
<tr>
<td>MMC 6607</td>
<td>Public Opinion and the Mass Media</td>
<td>3</td>
<td>AS</td>
<td>COM</td>
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</table>

The course will examine both quantitative and qualitative measurement issues.
<table>
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<tr>
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<th>Course Title</th>
<th>Credits</th>
<th>Type</th>
<th>Department</th>
<th>Prerequisite</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>MMC 6612</td>
<td>Seminar: Law and the Mass Media</td>
<td>3</td>
<td>AS</td>
<td>COM</td>
<td>PR: CC.</td>
<td>Interrelationships of the media and government at the judicial, executive, and legislative levels. Focus is on legal limitations and privileges of the media; theory and philosophy of the First Amendment; research procedures in court and administrative agency documents.</td>
</tr>
<tr>
<td>MMC 6900</td>
<td>Directed Reading in Mass Communications</td>
<td>1-3</td>
<td>AS</td>
<td>COM</td>
<td>PR: CI and permission of graduate advisor. S/U.</td>
<td>Readings in specialized areas of mass communications as agreed to by the instructor and the student by contract.</td>
</tr>
<tr>
<td>MMC 6910</td>
<td>Individual Research in Mass Communications</td>
<td>1-3</td>
<td>AS</td>
<td>COM</td>
<td>PR: CI and permission of graduate advisor. S/U.</td>
<td>Independent study in which the student must have a contract with the instructor to study an area not covered by other courses in the graduate curriculum.</td>
</tr>
<tr>
<td>MMC 6920</td>
<td>Introductory Mass Communications Seminar</td>
<td>3</td>
<td>AS</td>
<td>COM</td>
<td>PR: CC.</td>
<td>Introduction to the aims and methodologies of graduate study in mass communications, its development and relationship to the arts and sciences, and the relationship of the scholarly aspects of media studies to professional media practice; bibliographical resources, and overview of research methods and scholarly style.</td>
</tr>
<tr>
<td>MMC 6936</td>
<td>Selected Topics in Mass Communications</td>
<td>3</td>
<td>AS</td>
<td>COM</td>
<td>PR: CC.</td>
<td>Courses designed to meet current, specific topics of interest to students and instructors.</td>
</tr>
<tr>
<td>MMC 6945</td>
<td>Professional Practicum</td>
<td>3</td>
<td>AS</td>
<td>COM</td>
<td>PR: 12 graduate hours in mass communications and CC. S/U.</td>
<td>Practicum will consist of placement with a media-related organization selected by the student and approved and supervised by the graduate advisor.</td>
</tr>
<tr>
<td>MMC 6950</td>
<td>Applied Research Project</td>
<td>3</td>
<td>AS</td>
<td>COM</td>
<td>PR: CI and permission of graduate advisor. S/U.</td>
<td>Completion of a major applied communication research project under supervision. Topic will be selected according to student’s needs and interests.</td>
</tr>
<tr>
<td>MMC 6971</td>
<td>Thesis: Master’s</td>
<td>2-3</td>
<td>AS</td>
<td>COM</td>
<td>PR: CI and permission of graduate advisor. S/U. Students must take minimum of 6 hours.</td>
<td></td>
</tr>
<tr>
<td>MTG 5317</td>
<td>Topology II</td>
<td>3</td>
<td>AS</td>
<td>MTH</td>
<td>PR: MTG 5316.</td>
<td>The fundamental group; elements of homotopy theory and homology theory.</td>
</tr>
<tr>
<td>MUC 5625</td>
<td>Jazz Composition</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>PR: CI. Required of all composition majors.</td>
<td>Private instruction in original composition.</td>
</tr>
<tr>
<td>MUC 6251</td>
<td>Composition</td>
<td>4</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
<td>Private instruction in original composition. Required of composition majors.</td>
</tr>
<tr>
<td>MUC 6444</td>
<td>Electronic Music/Analog/Digital Systems Research I</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
<td>State-of-the-art compositional and performance applications; new concepts of electronic music synthesis; documentation and critical</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>MUS</td>
<td>Description</td>
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<tr>
<td>MUC 6448</td>
<td>Electronic Music: Computer Music Research</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: MUC 6445 For advanced students already experienced in Electronic Music, this class focuses on creative and research techniques in Computer Music, with special emphasis in multimedia collaboration across disciplines.</td>
<td></td>
</tr>
<tr>
<td>MUC 6626</td>
<td>Jazz Composition</td>
<td>4</td>
<td>TA</td>
<td>MUS</td>
<td>PR: CI. Required of all composition majors. Private instruction in original composition.</td>
<td></td>
</tr>
<tr>
<td>MUC 6930</td>
<td>Seminar In Jazz Compositional Styles</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR. A seminar study of the major compositional figures in jazz. Oriented toward the continuing development of students' own writing ability.</td>
<td></td>
</tr>
<tr>
<td>MUE 6080</td>
<td>Foundations And Principles Of Music Education</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: Acceptance into Music Education Graduate Program or DPR. Investigation of historical, philosophical, and psychological foundations of music education.</td>
<td></td>
</tr>
<tr>
<td>MUE 6097</td>
<td>Music, Medicine, and Myths</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>PR: Graduate standing and upper-level undergraduate with advisor's permission. The course focuses on integration of the body, mind, and emotion in music learning and performing; causes, prevention, and treatment of music-related injury; rehabilitation and effective management of performance anxiety.</td>
<td></td>
</tr>
<tr>
<td>MUE 6116</td>
<td>Advanced Techniques and Research in K-12 General Music</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: Acceptance in the Music Education Graduate Program or DPR. This course focuses on teaching and learning processes in general music education K-12. Students examine research and best practices in the field with the aim of improving their own skills in developing comprehensive musicianship in students.</td>
<td></td>
</tr>
<tr>
<td>MUE 6336</td>
<td>Advanced Techniques and Research in Vocal/Choral Music Education</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: Acceptance in the Music Education Graduate Program or DPR. Course provides for graduate students in music education the opportunity to examine current research related to the teaching of secondary school vocal music, evaluate curricula, music materials, and teaching methods that will enable them to develop a vocal music program that emphasizes musical sensitivity.</td>
<td></td>
</tr>
<tr>
<td>MUE 6347</td>
<td>Advanced Techniques and Research in Instrumental Music Education</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: Acceptance in the Music Education Graduate Program or DPR. This course focuses upon teaching and learning processes in instrumental music, and the stimulation of student thought regarding the variety of roles a music teacher may assume to assist students to become musically literate and aesthetically sensitive.</td>
<td></td>
</tr>
<tr>
<td>MUE 6648</td>
<td>Techniques and Research in Alternate Music Education Methods</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: MUS 6520 An examination on new and innovative models of music instruction including (but not limited to): composition courses; high school general music formats; general arts structures; and, alternative performing ensembles.</td>
<td></td>
</tr>
</tbody>
</table>
| MUE 6906    | Independent Study: Music Education                                          | 1-6     | TA   | MUS | S/U. DPR. Independent study in which students must have a contract with an
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Taught By</th>
<th>Instructor</th>
<th>Description</th>
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<tr>
<td>MUE 6942</td>
<td>Graduate Internship in Music Education</td>
<td>6</td>
<td>TA</td>
<td>MUS</td>
<td>This course is designed to provide the student teaching experience for music education graduate students pursuing an MA - Plan II, leading to certification.</td>
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<tr>
<td>MUE 6971</td>
<td>Thesis: Masters/Eds</td>
<td>2-1</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
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<tr>
<td>MUE 7746</td>
<td>Measurement and Evaluation in Music</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>This course is designed to provide students with a comprehensive overview of traditional and contemporary approaches to the measurement, evaluation, and assessment of musical abilities, activities, and experiences.</td>
</tr>
<tr>
<td>MUE 7786</td>
<td>Qualitative Methods of Music Education</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>This course is designed to acquaint students with foundations, methods, and applications of qualitative research in education and music education.</td>
</tr>
<tr>
<td>MUE 7815</td>
<td>Psychology of Music</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: Acceptance in the Music Education Graduate Program, a graduate level educational psychology course or its equivalent, or DPR.</td>
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<tr>
<td>MUE 7816</td>
<td>Music Cognition</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>A critical examination of theories and research in music cognition in relation to perception and developmental psychology.</td>
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<tr>
<td>MUE 7835</td>
<td>Philosophical and Historical Issues in Music Education</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: Acceptance in the Music Education Graduate Program or CI.</td>
</tr>
<tr>
<td>MUE 7855</td>
<td>International Perspectives in Music Education</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>A critical examination of music education in various nations from social, cultural, political, and philosophical perspectives.</td>
</tr>
<tr>
<td>MUE 7937</td>
<td>Special Topics in Music Education</td>
<td>2-3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: Dept. Approval Required. This course will provide an opportunity to examine selected topics in the research of choral, instrumental, general, and alternative music instruction models.</td>
</tr>
<tr>
<td>MUE 7939</td>
<td>Center for Music Education Research Seminar</td>
<td>1-2</td>
<td>TA</td>
<td>MUS</td>
<td>PR: Admission to Ph.D. Program. Examination of theory and research in music education. Current research in music teaching and learning presented by faculty abd guests. Students develop their dissertation topics, preliminary review of literature, and present their research proposals. May be repeated 4 times for up to 6 credits. S/U Grading.</td>
</tr>
<tr>
<td>MUE 7980</td>
<td>Dissertation</td>
<td>2-1</td>
<td>TA</td>
<td>MUS</td>
<td>PR: Admitted to Candidacy. S/U. DPR.</td>
</tr>
<tr>
<td>MUE 7990</td>
<td>Seminar on Music in Higher Education</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>PR: Dept. Approval Required. The course will examine issues germane to the ways and contexts (liberal arts college, land grant college, research university, conservatory) in which music functions as a discipline in American higher education. It will trace its historical and cultural development.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>MUS</td>
<td>PR: DPR.</td>
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<tr>
<td>MUG 6256</td>
<td>Choral Literature And Conducting I</td>
<td>4</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
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<tr>
<td>MUG 6257</td>
<td>Choral Literature And Conducting II</td>
<td>4</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MUG 6258</td>
<td>Choral Literature And Conducting III</td>
<td>4</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
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<tr>
<td>MUG 6307</td>
<td>Band/Wind Ensemble Conducting</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MUG 6930</td>
<td>Advanced Choral Techniques</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
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<tr>
<td>MUL 6205</td>
<td>Advanced Choral Conducting</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>PR: Dept. Approval Required.</td>
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<tr>
<td>MUL 6375</td>
<td>Twentieth Century Music Literature</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
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<tr>
<td>MUL 6410</td>
<td>Keyboard Repertory I</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MUL 6411</td>
<td>Keyboard Repertory II</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MUL 6505</td>
<td>Symphonic Literature</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MUL 6555</td>
<td>Band/Wind Ensemble Literature</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MUL 6565</td>
<td>Chamber Music Literature</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MUL</td>
<td>6624</td>
<td>Song Literature I</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
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<tr>
<td>MUL</td>
<td>6625</td>
<td>Song Literature II</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
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<tr>
<td>MUL</td>
<td>6656</td>
<td>Choral Literature 1800-present</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
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<tr>
<td>MUL</td>
<td>6671</td>
<td>Opera Literature</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
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<tr>
<td>MUL</td>
<td>6687</td>
<td>Solo Vocal Literature In Oratorio</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
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<tr>
<td>MUN</td>
<td>6145</td>
<td>Wind Ensemble</td>
<td>1</td>
<td>TA</td>
<td>MUS</td>
</tr>
<tr>
<td>MUN</td>
<td>6215</td>
<td>University Orchestra</td>
<td>1</td>
<td>TA</td>
<td>MUS</td>
</tr>
<tr>
<td>MUN</td>
<td>6315</td>
<td>University Singers</td>
<td>1</td>
<td>TA</td>
<td>MUS</td>
</tr>
<tr>
<td>MUN</td>
<td>6345</td>
<td>Chamber Singers</td>
<td>1</td>
<td>TA</td>
<td>MUS</td>
</tr>
<tr>
<td>MUN</td>
<td>6385</td>
<td>University-Community Chorus</td>
<td>1</td>
<td>TA</td>
<td>MUS</td>
</tr>
<tr>
<td>MUN</td>
<td>6416</td>
<td>String Quartet</td>
<td>1</td>
<td>TA</td>
<td>MUS</td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
<td>CR</td>
<td>Lab</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>MUN 6429</td>
<td>Woodwind Quintet</td>
<td>1</td>
<td>TA</td>
<td>MUS PR: DPR.</td>
<td>Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.</td>
</tr>
<tr>
<td>MUN 6435</td>
<td>Brass Choir</td>
<td>1</td>
<td>TA</td>
<td>MUS PR: DPR.</td>
<td>Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.</td>
</tr>
<tr>
<td>MUN 6436</td>
<td>Brass Quintet</td>
<td>1</td>
<td>TA</td>
<td>MUS PR: DPR.</td>
<td>Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.</td>
</tr>
<tr>
<td>MUN 6437</td>
<td>Horn Quartet</td>
<td>1</td>
<td>TA</td>
<td>MUS PR: DPR.</td>
<td>Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.</td>
</tr>
<tr>
<td>MUN 6445</td>
<td>Percussion Ensemble</td>
<td>1</td>
<td>TA</td>
<td>MUS PR: DPR.</td>
<td>Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.</td>
</tr>
<tr>
<td>MUN 6446</td>
<td>Marimba Ensemble</td>
<td>1</td>
<td>TA</td>
<td>MUS PR: DPR.</td>
<td>Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.</td>
</tr>
<tr>
<td>MUN 6455</td>
<td>Piano Ensemble</td>
<td>1</td>
<td>TA</td>
<td>MUS PR: DPR.</td>
<td>Open to all university students with the necessary proficiency in their performing media; study and performance of music for large combination of voices, string, woodwind, brass or percussion instruments.</td>
</tr>
<tr>
<td>MUN 6456</td>
<td>Piano Ensemble</td>
<td>1</td>
<td>TA</td>
<td>MUS PR: DPR.</td>
<td>Open to all university students with the necessary proficiency in their performing media; study and performance of music for large combination of voices, string, woodwind, brass or percussion instruments.</td>
</tr>
<tr>
<td>MUN 6477</td>
<td>Collegium Musicum</td>
<td>1</td>
<td>TA</td>
<td>MUS PR: DPR.</td>
<td>Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Instructor</td>
<td>Dept.</td>
<td>Restrictions</td>
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<tr>
<td>MUN 6715</td>
<td>Jazz Ensemble</td>
<td>1</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MUN 6716</td>
<td>Jazz Chamber Ensemble</td>
<td>1</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MUN 6717</td>
<td>Independent Study</td>
<td>1-4</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MUS 6505</td>
<td>Computer Applications in Music Education</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MUS 6520</td>
<td>Techniques Of Research In Music And Music Education</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MUS 6906</td>
<td>Independent Study</td>
<td>1-1</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR, S/U</td>
</tr>
<tr>
<td>MUS 6910</td>
<td>Directed Research</td>
<td>1-1</td>
<td>TA</td>
<td>MUS</td>
<td>PR: GR. ML, DPR, S/U</td>
</tr>
<tr>
<td>MUS 6971</td>
<td>Thesis: Master’s</td>
<td>2-1</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR, S/U</td>
</tr>
<tr>
<td>MUS 6976</td>
<td>Graduate Recital</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR</td>
</tr>
<tr>
<td>MUT 5051</td>
<td>Graduate Review Of Music Theory</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MUT 6545</td>
<td>Analysis of 18th and 19th Century Music</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: Ci.</td>
</tr>
<tr>
<td>MUT 6586</td>
<td>Critical Analysis-History</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Lecture</td>
<td>Lab</td>
<td>Topic</td>
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<tr>
<td>MUT 6626</td>
<td>Analysis of Twentieth Century Music</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: Cl.</td>
</tr>
<tr>
<td>MUT 6627</td>
<td>Schenkerian Analysis</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
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</tr>
<tr>
<td>MUT 6665</td>
<td>Seminar Jazz Styles And Analysis</td>
<td>2</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MUT 6751</td>
<td>Teaching of Music Theory</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MUT 6760</td>
<td>History of Music Theory</td>
<td>3</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MVB 5251</td>
<td>Applied Trumpet</td>
<td>2-4</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
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<tr>
<td>MVB 5252</td>
<td>Applied French Horn</td>
<td>2-4</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>MVB 5253</td>
<td>Applied Trombone</td>
<td>2-4</td>
<td>TA</td>
<td>MUS</td>
<td>PR: DPR.</td>
</tr>
</tbody>
</table>

An in-depth examination of representative works. Students will learn analytical techniques such as set theory and 12-tons techniques, read scholarly articles, give in-class presentations, and write a research paper to gain an understanding of the theoretical and musical trends of the 20th-century.

A study in theories and analytical methods developed by German theorist Heinrich Schenker. Students are expected to demonstrate their knowledge of these theoretical concepts by analyzing relevant literature, investigating scholarly articles, giving class presentations, and writing a research paper.

A studio course study of the improvised solos of the major innovators in jazz. Oriented toward the continuing development of students' solosing ability.

Comparative study of teaching, techniques, procedures, and materials used in teaching visual and aural theory.

Evolutionary history of the materials of western music including tuning systems, scales, models, tonality, rhythm, counterpoint and harmony; also the exploration of treatises and theorists contributing to the evolution.

Private and class instruction.

Private and class instruction.

Private and class instruction.
<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>MVB 5254</td>
<td>Applied Euphonium</td>
<td>2-4</td>
<td>TA MUS</td>
<td>PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.</td>
</tr>
<tr>
<td>MVB 5255</td>
<td>Applied Tuba</td>
<td>2-4</td>
<td>TA MUS</td>
<td>PR: DPR. Open to senior and advanced undergraduate students who have completed recital requirements, special non-degree seeking students, and students who have a secondary applied music requirement. Private and class instruction.</td>
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<tr>
<td>MVB 6453</td>
<td>Applied Trombone</td>
<td>4</td>
<td>TA MUS</td>
<td>PR: DPR. Necessary competency determined by faculty jury audition. Required registration in major performance ensemble. Required of all applied music majors. Private and class instruction.</td>
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<tr>
<td>MVB 6455</td>
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<td>PR: DPR. Necessary competency determined by faculty jury audition. Required registration in major performance ensemble. Required of all applied music majors. Private and class instruction.</td>
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<td>MVJ 5253</td>
<td>Applied Jazz Guitar Secondary</td>
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<tr>
<td>MVJ 5951</td>
<td>Applied Jazz Performance</td>
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<tr>
<td>MVJ 6460</td>
<td>Applied Jazz Piano Major</td>
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<td>MVJ 6463</td>
<td>Applied Jazz Guitar</td>
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<td>MVJ 6469</td>
<td>Applied Jazz Percussion</td>
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<td>MVJ 6952</td>
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<td>MVK 5251</td>
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<tr>
<td>MVK 6650</td>
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<td>MVK 6651</td>
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<td>MVS 5251</td>
<td>Applied Violin</td>
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<tr>
<td>MVS 5252</td>
<td>Applied Viola</td>
<td>2-4</td>
<td>TA</td>
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<tr>
<td>MVS 5253</td>
<td>Applied Cello</td>
<td>2-4</td>
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<tr>
<td>MVS 5254</td>
<td>Applied Double Bass</td>
<td>2-4</td>
<td>TA</td>
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<tr>
<td>MVS 6451</td>
<td>Applied Violin</td>
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<tr>
<td>MVV 5251</td>
<td>Applied Voice</td>
<td>2-4</td>
<td>TA</td>
<td>MUS</td>
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<tr>
<td>MVW 5251</td>
<td>Applied Flute</td>
<td>2-4</td>
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<tr>
<td>MVW 5252</td>
<td>Applied Oboe</td>
<td>2-4</td>
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<td>Applied Clarinet</td>
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<tr>
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<td>Applied Bassoon</td>
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<tr>
<td>MVW 5255</td>
<td>Applied Saxophone</td>
<td>2-4</td>
<td>TA</td>
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<td>Applied Oboe</td>
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<tr>
<td>MVW 6453</td>
<td>Applied Clarinet</td>
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<td>MUS</td>
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<tr>
<td>MVW 6454</td>
<td>Applied Bassoon</td>
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<tr>
<td>NGR 5151L</td>
<td>Accelerated Fundamentals Clinical</td>
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<tr>
<td>NGR 5580L</td>
<td>Accelerated Integrated Clinical I</td>
<td>4</td>
<td>NU</td>
<td>NUR</td>
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<tr>
<td>NGR 5680L</td>
<td>Accelerated Integrated Clinical II</td>
<td>3-4</td>
<td>NU</td>
<td>NUR</td>
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<tr>
<td>NGR 5871</td>
<td>Informatics in Nursing and Healthcare</td>
<td>3</td>
<td>NU</td>
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<tr>
<td>NGR 602C</td>
<td>Advanced Health Assessment</td>
<td>4</td>
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<td>NGR 6037</td>
<td>Advanced Health Assessment for the Older Adult</td>
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<td>NUR</td>
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<td>NGR 6060</td>
<td>Medical Laboratory Interpretation for the Advanced Practice Nurse</td>
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<td>NGR 6080</td>
<td>Family and Population-Based Health Promotion</td>
<td>3</td>
<td>NU</td>
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<tr>
<td>NGR 6121</td>
<td>Theoretical Foundations</td>
<td>3</td>
<td>NU</td>
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<td>NGR 6140</td>
<td>Pathophysiology for Advanced Practice</td>
<td>4</td>
<td>NU NUR</td>
<td>PR: CI.</td>
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<tr>
<td>NGR 6143</td>
<td>Pathophysiologic Concepts in Acute Care Nursing</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: NGR 6140; NGR 6121; CI.</td>
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<tr>
<td>NGR 6172</td>
<td>Pharmacology for Advanced Nurse Practitioners</td>
<td>4</td>
<td>NU NUR</td>
<td>PR: NGR 6140 with a &quot;B&quot; or higher.</td>
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<td>NGR 6201</td>
<td>Primary Care of Adults I</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: NGR 6140, NGR 6121, NGR 6737, NGR 6800, NGR 6080, NGR 6172, NGR 6002C.</td>
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<tr>
<td>NGR 6202C</td>
<td>Primary Care of Adults II</td>
<td>6</td>
<td>NU NUR</td>
<td>PR: NGR 6002C, NGR 6121, NGR 6800, NGR 6140, NGR 6172, NGR 6737, NGR 6080, NGR 6207.</td>
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<tr>
<td>NGR 6205</td>
<td>Primary Care: Adolescents</td>
<td>2</td>
<td>NU NUR</td>
<td>PR: NGR 6002C, NGR 6140, NGR 6199.</td>
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<tr>
<td>NGR 6205L</td>
<td>Primary Care Practicum: Adolescents and Women</td>
<td>2-3</td>
<td>NU NUR</td>
<td>PR: NGR 6002C, NGR 6140, NGR 6199.</td>
</tr>
<tr>
<td>NGR 6207</td>
<td>Primary Care: Adults</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: NGR 6002C, NGR 6140, NGR 6199.</td>
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<tr>
<td>NGR 6207L</td>
<td>Primary Care Practicum: Adults</td>
<td>2-3</td>
<td>NU NUR</td>
<td>Focus on application of the knowledge gained in the classroom in Primary Care: Adults to the patient/client population between mid-life and older adult. Health screening and management of commonly presenting health problems will structure the clinical experience of this course.</td>
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<tr>
<td>NGR 6215</td>
<td>Primary Care: Adult Health Management</td>
<td>3</td>
<td>NU NUR</td>
<td>Focus on high risk, vulnerable adult patients CLIENTS across the life span with complex, multi-system health problems. The course covers the assessment, management and continuity of care for individuals with these complex, acute and chronic health problems.</td>
</tr>
<tr>
<td>NGR 6220</td>
<td>Pathobiology Of Neoplasia</td>
<td>3</td>
<td>NU NUR</td>
<td>Emphasizes basic concepts of cellular differentiation and the abnormal cytological changes occurring in the pathogenesis of Neoplasia. Also emphasized is the role of the advanced practice nurse in relation to the role of the immune system and diet in oncogenesis, and the epidemiology and pathology of specific types of cancers.</td>
</tr>
<tr>
<td>NGR 6221</td>
<td>Oncology Nursing Concepts</td>
<td>3</td>
<td>NU NUR</td>
<td>Provides advanced oncology nursing content with a focus on nursing management of physical problems resulting from cancer and its treatment. (CI)</td>
</tr>
<tr>
<td>NGR 6222L</td>
<td>Practicum I in Advanced Oncology Nursing Practice</td>
<td>3</td>
<td>NU NUR</td>
<td>Provides clinical experiences in advanced oncology nursing focused on the application of theoretical and conceptual knowledge relevant to adults with cancer or at risk. Clinical assessment is focused on developing assessment skills and documentation.</td>
</tr>
<tr>
<td>NGR 6223L</td>
<td>Practicum II in Advanced Oncology Nursing</td>
<td>3</td>
<td>NU NUR</td>
<td>Clinical experiences in advanced oncology nursing focused on the application of theoretical and conceptual knowledge relevant to adults with cancer or at risk; development of diagnostic skills, clinical management and interdisciplinary collaboration.</td>
</tr>
<tr>
<td>NGR 6224L</td>
<td>Practicum III in Advanced Oncology Nursing Practice</td>
<td>1-9</td>
<td>NU NUR</td>
<td>Clinical experiences in advanced oncology nursing focused on the application of theoretical and conceptual knowledge relevant to adults with cancer or at risk; emphasizes evidence based practice, evaluating outcomes and professional role development.</td>
</tr>
<tr>
<td>NGR 6232</td>
<td>Selected Concepts in the Acutely Ill Adult</td>
<td>3</td>
<td>NU NUR</td>
<td>This course analyzes the multiple needs of the critically ill adult. Focuses on age specific critically ill population. Examines the response to the experience of critical illness.</td>
</tr>
<tr>
<td>NGR 6243</td>
<td>Clinical Management of the Acutely Ill Adult</td>
<td>3</td>
<td>NU NUR</td>
<td>Focuses on advanced therapeutics and clinical management of selected acute health problems of adults. Diagnostic reasoning and intervention</td>
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<tr>
<td>Course Code</td>
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<td>Units</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>NGR 6253L</td>
<td>Gerontology Nursing Practicum I</td>
<td>3-4</td>
<td>NU NUR</td>
<td>Emphasis on functional ability of the older adult, normal biological aging, changes, developmental tasks, psychosocial, cultural and spiritual dimensions. Focuses on health promotion, disease prevention and management of acute and chronic illnesses of culturally diverse older adults.</td>
</tr>
<tr>
<td>NGR 6255</td>
<td>Primary Care of Older Adults</td>
<td>3</td>
<td>NU NUR</td>
<td>Provides in-depth knowledge of: demographic, comparative, and differential aging; geriatric anatomy and physiology; the biological influence on aging psychology; the control of aging sociology; geriatric pharmacology; management of geriatric syndromes; and management of multiple diagnoses.</td>
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<tr>
<td>NGR 6258</td>
<td>Advanced Primary Care of Older Adults</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: NGR 6002C, NGR 6140, CI. Students will apply gerontological theories and assessment techniques in the advanced care of the elderly (1:4 ratio).</td>
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<tr>
<td>NGR 6259</td>
<td>Gerontological Nursing Practicum</td>
<td>1-9</td>
<td>NU NUR</td>
<td>PR: NGR 6255 or NGR 6258. Central concepts of chronic illness and functional ability among the elderly and the implications for advanced nurse practitioners.</td>
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<tr>
<td>NGR 6260</td>
<td>Geriatric Pathophysiology for the Advanced Practice Nurse</td>
<td>1</td>
<td>NU NUR</td>
<td>Focus on theoretical implications and foundations for providing geropsychiatric nursing care for the elderly who have been diagnosed or have potential emotional/mental problems with emphasis of various therapies in a variety of clinical settings. (CI)</td>
</tr>
<tr>
<td>NGR 6283</td>
<td>Geropsychiatric Nursing Practicum</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: NGR 6002C, NGR 6121, NGR 6140, NGR 6140, NGR 6172, NGR 6737, NGR 6800. CR: NGR 6002C (or previous course, 6001). Focus is on primary care of children and adolescents with common acute and behavioral problems. Clinical management, available resources for patients, and the impact of illness on families are highlighted.</td>
</tr>
<tr>
<td>NGR 6285</td>
<td>GeroPharmacology for Advanced Nurse Practitioners</td>
<td>1</td>
<td>NU NUR</td>
<td>Focus is on pharmacokinetic and pharmacodynamic changes unique to the elderly along with the potential adverse drug effects and factors that affect therapeutic decision-making.</td>
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<tr>
<td>NGR 6301</td>
<td>Primary Care of Children &amp; Adolescents I</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: NGR 6080, NGR 6121, NGR 6140, NGR 6172, NGR 6737, NGR 6800. CR: NGR 6002C (or previous course, 6001). Focus is on primary care of children and adolescents with common acute and behavioral problems. Clinical management, available resources for patients, and the impact of illness on families are highlighted.</td>
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<tr>
<td>NGR 6302C</td>
<td>Primary Care of Children and Adolescents II</td>
<td>6</td>
<td>NU NUR</td>
<td>PR: NGR 6002C, NGR 6080, NGR 6121, NGR 6140, NGR 6172, NGR 6305, NGR 6737, NGR 6800. Didactic basis and practical experience for diagnosing and managing chronic health conditions of children and adolescents and health promotion; emphasis on compiling and analyzing data, developing and implementing a plan with individual and family.</td>
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<tr>
<td>NGR 6305</td>
<td>Primary Care: Children</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: NGR 6002C, NGR 6121, NGR 6140, NGR 6199. Focus on the primary health care of children from birth to pre-adolescent. Health maintenance and the management of common acute illnesses are included.</td>
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<tr>
<td>NGR 6305L</td>
<td>Primary Care Practicum: Children</td>
<td>2-3</td>
<td>NU NUR</td>
<td>PR: NGR 6002C, NGR 6121, NGR 6140, NGR 6199. CR: NGR 6305. Application of knowledge gained in the classroom in PC: Children to the patient/client population between birth and pre-adolescent years.</td>
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<tr>
<td>NGR 6343C</td>
<td>Primary Care of Women</td>
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<td>NU NUR</td>
<td>PR: NGR 6002C, NGR 6080, NGR 6140, NGR 6121, NGR 6135, NGR 6172, NGR 6800, NGR 6247 AND NGR 6248C OR NGR 6307 AND NGR 6308C. Management of common episodic and chronic health problems in women with critical analysis to form the foundation for advanced practice intervention and health promotion. Clinical experience focuses on application of the knowledge gained in the didactic.</td>
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<tr>
<td>NGR 6362</td>
<td>Midwifery and Women’s Health Seminar III</td>
<td>1</td>
<td>NU NUR</td>
<td>PR: NGR 6002C, NGR 6140, NGR 6172, NGR 6205, NGR 6402, NGR 6403 and NGR 6455. This course introduces professional midwifery and advanced practice nursing issues such as certification, practice management, and malpractice liability. Intrapartum Complications will be examined.</td>
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<tr>
<td>NGR 6400</td>
<td>Chemistry, Biochemistry and Physics for Nurse Anesthesia</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: Admission into CRNA program and an undergraduate Chemistry course with a grade of B or higher. This course examines the laws and principles of inorganic chemistry, organic chemistry and physics as they apply to pharmacology and the clinical practice of nurse anesthesia. Restricted to majors.</td>
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<tr>
<td>NGR 6404</td>
<td>Anatomy Physiology for Nurse Anesthesia I</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: BSC 2085 and BSC 2086 or equivalent undergraduate Anatomy and Physiology course with a grade of B or higher. This course focuses on human anatomy and physiology and its relevance to the practice of nurse anesthesia. Restricted to majors.</td>
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<tr>
<td>NGR 6420</td>
<td>Foundations &amp; Methods of Nurse Anesthesia Practice</td>
<td>4</td>
<td>NU NUR</td>
<td>PR: NGR6404, NGR6400, NGR6460, NGR6422, GMS6461, NGR6002C, NGR6800, PHC6050. Focuses on the fundamentals of nurse anesthesia practice and techniques. This course also focuses on the development of didactic knowledge for regional anesthesia and advanced nurse anesthesia practice.</td>
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<tr>
<td>NGR 6422</td>
<td>Principles of Nurse Anesthesia through the Lifespan</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: NGR6404, NGR6400, NGR6460, NGR6800, PHC6050. Emphasizes the considerations of nurse anesthesia practice, principles, and techniques for the obstetrical, pediatric and geriatric patient.</td>
</tr>
<tr>
<td>NGR 6423</td>
<td>Principles of Nurse Anesthesia I</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: NGR 6140, NGR 6422, NGR6404, NGR6400, NGR6460, NGR6422, GMS 6451, NGR6002C, PHC6050, NGR6800. Examines basic physiology, pathophysiology and anesthetic management of cardiac, thoracic, and trauma. Evaluation of cardiothoracic systems, emphasis on anesthetic implications and anesthesia management for cardiothoracic surgery will be explored.</td>
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<tr>
<td>NGR 6424</td>
<td>Principles of Nurse Anesthesia II</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: NGR 6423, NGR 6492, NGR 6490 1. Physiology, pathophysiology and anesthetic management and evaluation of orthopedic, neurologic, endocrine, hepatic, urology systems with emphasis on anesthetic implications and anesthesia management for surgery.</td>
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<tr>
<td>NGR 6431</td>
<td>Nurse Anesthesia Clinical Residency I</td>
<td>4</td>
<td>NU NUR</td>
<td>PR: GMS6461, NGR6002C, NGR 6140, NGR 6400, NGR6404, NGR 6420, NGR6422, NGR6423, NGR6460, NGR6492 , NGR6800, PHC6050. This course focuses on clinical application of didactic material from the nurse anesthesia curriculum through novice level practice in the role of a nurse anesthetist.</td>
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<td>Nurse Anesthesia Clinical Residency II</td>
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<td>NU NUR</td>
<td>PR: NGR 6431. CR: NGR 6929. This course focuses on clinical application of didactic material from the nurse anesthesia curriculum</td>
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<tr>
<td>NGR 6433</td>
<td>Nurse Anesthesia Clinical Residency III</td>
<td>4</td>
<td>NUR</td>
<td>PR: NGR 6432. CR: NGR 6929. This course focuses on clinical application of didactic material from the nurse anesthesia curriculum through intermediate level practice in the role of a nurse anesthetist.</td>
</tr>
<tr>
<td>NGR 6434</td>
<td>Nurse Anesthesia Clinical Residency IV</td>
<td>4</td>
<td>NUR</td>
<td>PR: NGR 6002C, NGR 6080, NGR 6121, NGR 6140, NGR 6172, NGR 6737, NGR 6800 AND NGR 6201, NGR 6202C OR NGR 6301 AND NGR 6302C. This course focuses on clinical application of didactic material from the nurse anesthesia curriculum through an advanced level of practice in the role of a nurse anesthetist.</td>
</tr>
<tr>
<td>NGR 6460</td>
<td>Pharmacology for Nurse Anesthesia I</td>
<td>3</td>
<td>NUR</td>
<td>PR: Admission into CRNA Program. This course focuses on the pharmacokinetics, pharmacodynamics and general pharmacological principles of anesthetic drugs and adjunctive agents. Restricted to majors.</td>
</tr>
<tr>
<td>NGR 6491</td>
<td>Nurse Anesthesia Practice Comprehensive</td>
<td>2</td>
<td>NUR</td>
<td>PR: NGR 6433, NGR 7892, NGR 6929. CR: NGR 6434. This course is designed to measure the knowledge base and clinical competency of the nurse anesthesia student.</td>
</tr>
<tr>
<td>NGR 6492</td>
<td>Nurse Anesthesia Role Development</td>
<td>3</td>
<td>NUR</td>
<td>PR: GMS 6461, NGR 6002C, NGR 6140, NGR6400, NGR6404, NGR6422, NGR6460, NGR 6800, PHC 6050. Overview of the professional, ethical, and legal aspects regarding the practice of nurse anesthesia and information about the American Association of Nurse Anesthetists, including its history and the Councils on Accreditation, Certification and Practice.</td>
</tr>
<tr>
<td>NGR 6500</td>
<td>Theoretical Foundations for Advanced Psychiatric Nursing</td>
<td>3</td>
<td>NUR</td>
<td>PR: NGR 6121. Theoretical basis for advanced practice in psychiatric nursing. Focus on selected psychodynamic, neuropsychological, development, and systems models of behavior and their impact for nursing practice.</td>
</tr>
<tr>
<td>NGR 6500L</td>
<td>Psychiatric APN Practicum: Psychiatric Care Outpatient</td>
<td>1-6</td>
<td>NUR</td>
<td>CR: NGR 6500. Clinical experience in advanced psychiatric mental health nursing that focuses on comprehensive mental health assessment, crisis intervention and brief psychotherapy.</td>
</tr>
<tr>
<td>NGR 6501</td>
<td>Psychopathology for Advanced Psychiatric Nursing</td>
<td>3</td>
<td>NUR</td>
<td>In-depth study of psychosocial factors contributing to psychosocial dysfunction, and diagnostic reasoning basis to advanced practice psychiatric health nursing, emphasis on etiology and differential diagnoses.</td>
</tr>
<tr>
<td>NGR 6501L</td>
<td>Psychiatric APN Practicum: Psychiatric Care in the Inpatient Setting</td>
<td>1-4</td>
<td>NUR</td>
<td>PR: NGR 6500, CI. Clinical experience in in-patient settings with selected acute and chronic populations. Emphasis on the role of the psychiatric APN working with individuals, groups and families conducting comprehensive mental health in the inpatient setting.</td>
</tr>
<tr>
<td>NGR 6502</td>
<td>Treatment Modalities for Advanced Psychiatric Nursing</td>
<td>3</td>
<td>NUR</td>
<td>Examination of treatment modalities for advanced practice psychiatric nursing. Focus on theoretical and conceptual foundation for specialty practice with individuals, families, and groups.</td>
</tr>
</tbody>
</table>
| NGR 6503L  | Practicum III: Advanced Psychiatric Mental Health Nursing                  | 3       | NUR           | PR: NGR 6230. Clinical experience in advanced psychiatric mental health nursing that focuses on individual, group, family,
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Hours</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGR 6504</td>
<td>Practicum III: Advanced Psychiatric Mental Health Nursing</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: NGR 6230.</td>
<td>Field experience in a variety of community settings with culturally diverse psychiatric/mental health populations. Emphasis on implementing prevention and intervention strategies with individuals, group, families and communities (1:6 ratio).</td>
</tr>
<tr>
<td>NGR 6538</td>
<td>Psychopharmacology</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: NGR 6140, CI.</td>
<td>Provide advanced knowledge of psychobiological information with the use of psychopharmacological interventions in patients. Focus will be on pharmacokinetics and clinical management including prescription of medications for psychiatric disorders.</td>
</tr>
<tr>
<td>NGR 6650</td>
<td>Occupational Health Nursing I</td>
<td>2</td>
<td>NU NUR</td>
<td>CI.</td>
<td>Primary care of the worker relative to health promotion/risk reduction/acute injuries/chronic conditions, assessment of the workplace and needs of worker aggregates, and planning for health services relative to worker lifestyles and risk factors.</td>
</tr>
<tr>
<td>NGR 6650L</td>
<td>Clinical Experiences in Occupational Health Nursing I</td>
<td>1</td>
<td>NU NUR</td>
<td>CI.</td>
<td>Clinical experiences at selected worksites to apply content from NGR 6650 Occupational Health Nursing with an emphasis on analysis of the workplace and worker aggregates, occupational health nurse(s) roles/functions.</td>
</tr>
<tr>
<td>NGR 6651</td>
<td>Occupational Health Nursing II</td>
<td>2</td>
<td>NU NUR</td>
<td></td>
<td>Focuses on the analysis of clinical strategies (e.g. triage, biological monitoring) relevant to advanced occupational health programs, medical surveillance programs, and worker's compensation managed care.</td>
</tr>
<tr>
<td>NGR 6651L</td>
<td>Clinical Experiences in Occupational Health II</td>
<td>1</td>
<td>NU NUR</td>
<td>CI.</td>
<td>Clinical experiences relative to the application of content in NGR 6650 Occupational Health Nursing II with a focus on workplace assessment utilizing a comprehensive instrument and evaluation of worker's compensation managed care programs.</td>
</tr>
<tr>
<td>NGR 6652</td>
<td>Occupational Health Nursing III</td>
<td>3</td>
<td>NU NUR</td>
<td></td>
<td>Focuses on the prevention of occupational injuries and illnesses; direct care in the occupational setting; disability case management; and health promotion and adult education.</td>
</tr>
<tr>
<td>NGR 6653</td>
<td>Occupational Health Nursing IV</td>
<td>3</td>
<td>NU NUR</td>
<td></td>
<td>Focuses on the management of psychosocial factors in the occupational setting; examples of occupational health and safety programs; environmental health; research; and professional issues related to occupational and environmental health nursing.</td>
</tr>
<tr>
<td>NGR 6673</td>
<td>Epidemiology for Advanced Nursing</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: Graduate standing or instructor permission</td>
<td>This course assists graduate level nurses to identify and describe patterns of disease occurrence and to evaluate potential determinants of</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>NGR 6691</td>
<td>Counseling for the Terminally Ill</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
<td>Provides specialized psychological and psychosocial content with a focus on the principles and techniques for conducting psychosocial counseling with terminally ill patients.</td>
</tr>
<tr>
<td>NGR 6700C</td>
<td>Advanced Practice Nurse Transitions</td>
<td>5</td>
<td>NU</td>
<td>NUR</td>
<td>This is a synthesis course for professional and clinical development. It completes the summative process for students to design and develop their roles as APNs. The clinical portion focuses on the cumulative knowledge gained from previous courses.</td>
</tr>
<tr>
<td>NGR 6700L</td>
<td>APN Transitions Practicum</td>
<td>2-3</td>
<td>NU</td>
<td>NUR</td>
<td>Clinical concentration in the intended area of practice for the graduating Advanced Practice Nurse (APN). Focus on applying integrated knowledge to provide collaborative comprehensive care. By Permit Only.</td>
</tr>
<tr>
<td>NGR 6710</td>
<td>Teaching Strategies in Nursing Education</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
<td>This course focuses on classroom and clinical teaching in nursing, including computer-based learning and distance learning. Evaluation of textbooks, assignment making and construction of learning plans are included.</td>
</tr>
<tr>
<td>NGR 6713</td>
<td>Foundations of Nursing Education</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
<td>This course focuses on the philosophical, theoretical and evidence-based approaches for nursing education programs. Emphasis is on role of the nurse educator and curriculum development.</td>
</tr>
<tr>
<td>NGR 6718</td>
<td>Evaluation Strategies for Nursing Education</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
<td>This course provides an overview of evaluation strategies used in the class, clinical setting and in web-based instruction. Program evaluation models are explored.</td>
</tr>
<tr>
<td>NGR 6723</td>
<td>Leadership and Applied Management in Nursing Healthcare</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
<td>Leadership in management of resources to achieve quality and enhance healthcare outcomes in nursing. Focus on evidence-based practice and patient-care outcomes within the context of an interdisciplinary team.</td>
</tr>
<tr>
<td>NGR 6737</td>
<td>Ethical, Legal, and Policy Issues in Advanced Nursing Practice</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
<td>Emphasizes contemporary ethical, legal, and policy issues related to advanced nursing practice and health care delivery; issues are analyzed at the global, national and local levels; nursing’s role in agenda setting and strategies for health care reform.</td>
</tr>
<tr>
<td>NGR 6749C</td>
<td>Advanced Practice Nurse Transitions</td>
<td>5</td>
<td>NU</td>
<td>NUR</td>
<td>This is a synthesis course for professional and clinical development. It completes the summative process for students to design and develop their roles as APNs. The clinical portion focuses on the cumulative knowledge gained from previous courses.</td>
</tr>
<tr>
<td>NGR 6770C</td>
<td>Introduction to the Clinical Nurse Leader Role</td>
<td>1</td>
<td>NU</td>
<td>NUR</td>
<td>Concepts essential for the students’ development into a Clinical Nurse Leader, focusing on the CNL role, communication, leadership and</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Description</td>
<td></td>
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</tr>
<tr>
<td>NGR 6771L</td>
<td>CNL Clinical Seminar</td>
<td>1</td>
<td>NU, NUR</td>
<td>Exploration and application of the clinical concepts essential to the role of the Clinical Nurse Leader.</td>
<td></td>
</tr>
<tr>
<td>NGR 6773L</td>
<td>CNL Residency</td>
<td>3</td>
<td>NU, NUR</td>
<td>Residency practice in the role of the Clinical Nurse Leader.</td>
<td></td>
</tr>
<tr>
<td>NGR 6777C</td>
<td>Shaping the Practice Environment</td>
<td>1</td>
<td>NU, NUR, PR: NGR 6872C, NGR 6723</td>
<td>Concepts essential to shape the clinical practice environment, including components of a patient centered, safe effective and equitable care environment.</td>
<td></td>
</tr>
<tr>
<td>NGR 6790</td>
<td>Consultation Liaison Nursing</td>
<td>3</td>
<td>NU, NUR</td>
<td>Emphasizes evolution of the consultation/liaison role for advanced nurse practitioners with emphasis on the consultation process in a variety of clinical settings.</td>
<td></td>
</tr>
<tr>
<td>NGR 6800</td>
<td>Nursing Research</td>
<td>3</td>
<td>NU, NUR, CI</td>
<td>Research designs and methods for nursing with primary emphasis on these topics: critique of research studies, researchable problems, research designs, instruments and other data collection methods.</td>
<td></td>
</tr>
<tr>
<td>NGR 6804</td>
<td>Foundations of Clinical Research for Health Professionals</td>
<td>3</td>
<td>NU, NUR</td>
<td>Research designs and methods for health professionals. Emphasis on quantitative approaches to research designs.</td>
<td></td>
</tr>
<tr>
<td>NGR 6821</td>
<td>Applied Analysis for Outcomes Research Using Large Healthcare Databases</td>
<td>3</td>
<td>NU, NUR, PR: Nursing Majors Only</td>
<td>Focus on knowledge discovery in clinical domains by exploring large nursing and healthcare databases for the purposes of outcomes research or quality improvement. Emphasis on theoretical models and methods of analysis, providing experimental computer applications with large healthcare databases.</td>
<td></td>
</tr>
<tr>
<td>NGR 6822</td>
<td>Measurement for Nursing Education and Research</td>
<td>3</td>
<td>NU, NUR, CI</td>
<td>Course purposes are to increase skill in measurement of nursing variables as part of the research process, to enhance ability of nurse educators to identify or develop valid and reliable measurement instruments for evaluation of students, clients and educational programs.</td>
<td></td>
</tr>
<tr>
<td>NGR 6824</td>
<td>Data Analysis for Health Sciences</td>
<td>3</td>
<td>NU, NUR</td>
<td>This course is designed to provide the graduate Student interested in health sciences research with practical experience using SPSS for Windows and Microsoft's Excel programs to manage, organize, analyze and present both primary and secondary data in biophysical sciences.</td>
<td></td>
</tr>
<tr>
<td>NGR 6872C</td>
<td>Concepts in Information Management</td>
<td>1</td>
<td>NU, NUR, PR: NGR 6772C</td>
<td>Concepts essential to examine health information technologies that promote safety, improve quality, and foster consumer centered care and efficiency.</td>
<td></td>
</tr>
</tbody>
</table>
| NGR 6885    | Bioethics                                                                      | 3       | NU, NUR       | Ethical issues related to health and...
<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Credits</th>
<th>Department</th>
<th>Prerequisites</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGR 6898</td>
<td>Microsystems Concepts of Health Care Finance</td>
<td>3</td>
<td>NU NUR</td>
<td></td>
<td>Concepts, language and data about financial and economic elements of patient care in a microsystem; skills to obtain, synthesize and utilize information from health economics and health finance using specialized language, concepts and operating rules.</td>
</tr>
<tr>
<td>NGR 6905</td>
<td>Directed Independent Study</td>
<td>1-6</td>
<td>NU NUR</td>
<td>CI, S/U.</td>
<td>Specialized individualized study determined by students' needs and interests; requires an approved contract with a faculty member. (CI). Restricted to majors; repeatable for credit.</td>
</tr>
<tr>
<td>NGR 6915</td>
<td>Directed Research</td>
<td>1-3</td>
<td>NU NUR</td>
<td>PR: NGR 6800, CI.</td>
<td>Builds on knowledge gained in NGR 6800 and specialty concentration by participating in a research project under the direction of selected faculty. (CI)</td>
</tr>
<tr>
<td>NGR 6929</td>
<td>Clinical Correlational Conferences</td>
<td>1</td>
<td>NU NUR</td>
<td>PR: NGR 6431 or NGR 6432 or NGR 6433 or NGR 6434.</td>
<td>This course is designed to complement each clinical residency; these conferences will discuss clinical experience, morbidity and mortality utilizing current research.</td>
</tr>
<tr>
<td>NGR 6931</td>
<td>Selected Topics</td>
<td>1-4</td>
<td>NU NUR</td>
<td>CI</td>
<td>Seminars for the analysis and discussion of selected issues in nursing of topical concern to student and faculty.</td>
</tr>
<tr>
<td>NGR 6944</td>
<td>Practicum in Acute Care Nursing</td>
<td>1-9</td>
<td>NU NUR</td>
<td>PR: NGR 6143, NGR 6333 or NGR 6232, CI.</td>
<td>Clinical experiences in critical care settings focusing on the role of the advanced practice nurse (1:4 ratio).</td>
</tr>
<tr>
<td>NGR 6947</td>
<td>Practicum in Nursing Education</td>
<td>1-4</td>
<td>NU NUR</td>
<td>PR: NGR 6822, NGR 6710, NGR 6712, CI.</td>
<td>Instructional experiences that utilize educational concepts and instructional strategies in a variety of educational settings in nursing. (CI)</td>
</tr>
<tr>
<td>NGR 6949</td>
<td>Clinical Correlational Conferences</td>
<td>1</td>
<td>NU NUR</td>
<td>PR: NGR 6431 or 6432 or 6433 or 6434.</td>
<td></td>
</tr>
<tr>
<td>NGR 6971</td>
<td>Thesis</td>
<td>1-9</td>
<td>NU NUR</td>
<td>PR: NGR 6800, CI.</td>
<td>Restricted to majors; repeatable for credit.</td>
</tr>
<tr>
<td>NGR 7003</td>
<td>Advanced Health Assessment II</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: A grade of B or higher must have been earned in master’s level course in pathophysiology, pharmacology, and advanced health assessment.</td>
<td>Mastery of the comprehensive physical examination and health history for individuals across the life span. Focus on systematic review, analysis, and documentation within the context of the student’s clinical expertise.</td>
</tr>
<tr>
<td>NGR 7061</td>
<td>Radiology for the Advanced Practice Nurse</td>
<td>1</td>
<td>NU NUR</td>
<td></td>
<td>Basics of X-ray, MRI, CT Scan Interpretation and Nuclear Medicine Studies for the Advanced Practice Nurse.</td>
</tr>
<tr>
<td>NGR 7062</td>
<td>ECG Interpretation for the Advanced Practice Nurse</td>
<td>1</td>
<td>NU NUR</td>
<td></td>
<td>Advanced ECG Interpretation, including 12 lead ECG for the Advanced Practice Nurse.</td>
</tr>
<tr>
<td>NGR 7103</td>
<td>Evidence-Based Practice</td>
<td>3</td>
<td>NU NUR</td>
<td>PR: NGR 7774 or NGR 7766 with a B or higher or Instructor's Permission.</td>
<td>Provides experience in the evaluation, selection and implementation of evidence based practice standards. Qualitative research methods are...</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Type</td>
<td>Description</td>
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<td></td>
</tr>
<tr>
<td>NGR 7123</td>
<td>Theory Development in Nursing</td>
<td>3</td>
<td>NU</td>
<td>PR: Admission to doctoral program or CI. This course focuses on the process and foundations of theory development and theory construction in nursing science. Elements of scientific underpinnings of knowledge development in the discipline are incorporated. The relationship between theory construction and research and methods to generate theories are explored.</td>
<td></td>
</tr>
<tr>
<td>NGR 7124</td>
<td>Advances in Nursing Science</td>
<td>3</td>
<td>NU</td>
<td>Focus on history and philosophy of science: history and development of nursing’s scientific knowledge base and theoretical progress. Emphasis methods of theory building and theory testing through research. Explore progress in middle range theories and areas of high priority for additional research for the discipline.</td>
<td></td>
</tr>
<tr>
<td>NGR 7141</td>
<td>Pathophysiology for Advanced Practice II</td>
<td>3</td>
<td>NU</td>
<td>PR: A grade of B or higher must have been earned in master’s level course in pathophysiology, pharmacology, and advanced health assessment. Core elements of embryologic, genetic, and environmental factors in disease will be presented as well as aspects of immune phenomenon as related to genetic information and research impetus.</td>
<td></td>
</tr>
<tr>
<td>NGR 7176</td>
<td>Pharmacotherapeutics for Advanced Nursing Practice</td>
<td>3</td>
<td>NU</td>
<td>PR: A grade of B or higher must have been earned in master’s level course in pathophysiology, pharmacology, and advanced health assessment. Progressive pharmacotherapeutics for advanced nursing practice. Focus diagnostic reasoning of scientific evidence relating to prescribing and monitoring drugs.</td>
<td></td>
</tr>
<tr>
<td>NGR 7411</td>
<td>Basics for Surgical Assistants</td>
<td>1</td>
<td>NU</td>
<td>Overview and basics for the Advanced Practice Nurse as the surgical assistant.</td>
<td></td>
</tr>
<tr>
<td>NGR 7761</td>
<td>Breast Workshop for the Advanced Practice Nurse</td>
<td>1</td>
<td>NU</td>
<td>Breast assessment techniques and interpretation for Advanced Practice Nurse.</td>
<td></td>
</tr>
<tr>
<td>NGR 7762</td>
<td>Casting and Splinting for the Advanced Practice Nurse</td>
<td>1</td>
<td>NU</td>
<td>Basics of casting and splinting for the Advanced Practice Nurse.</td>
<td></td>
</tr>
<tr>
<td>NGR 7763</td>
<td>Minor Surgical Procedures for the Advanced Practice Nurse</td>
<td>1</td>
<td>NU</td>
<td>Basics of minor surgical procedures for the Advanced Practice Nurse.</td>
<td></td>
</tr>
<tr>
<td>NGR 7764</td>
<td>Neurological Techniques for the Advanced Practice Nurse</td>
<td>1</td>
<td>NU</td>
<td>Basic neurological techniques for the Advanced Practice Nurse.</td>
<td></td>
</tr>
<tr>
<td>NGR 7765</td>
<td>Invasive Medical Procedures for the Advanced Practice Nurse</td>
<td>1</td>
<td>NU</td>
<td>Basics of invasive medical procedures for the Advanced Practice Nurse.</td>
<td></td>
</tr>
<tr>
<td>NGR 7766</td>
<td>Leadership and Systems Analysis</td>
<td>3</td>
<td>NU</td>
<td>This course focuses on understanding theories of change and their application in clinical and educational setting. A leadership skills and organizational theory will be examined.</td>
<td></td>
</tr>
<tr>
<td>NGR 7767</td>
<td>Practice Management</td>
<td>3</td>
<td>NU</td>
<td>This course presents the legal,</td>
<td></td>
</tr>
<tr>
<td>NGR</td>
<td>7811</td>
<td>Concepts in Nursing Practice</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
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<tr>
<td>NGR</td>
<td>7815</td>
<td>Qualitative Research Methods in Nursing</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
</tr>
<tr>
<td>NGR</td>
<td>7816</td>
<td>Research Designs and Methods in Nursing</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
</tr>
<tr>
<td>NGR</td>
<td>7823</td>
<td>Psychometrics and Measurement for Nursing Research</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
</tr>
<tr>
<td>NGR</td>
<td>7841</td>
<td>Statistical Methods in Nursing Research I</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
</tr>
<tr>
<td>NGR</td>
<td>7842</td>
<td>Statistical Methods in Nursing Research II</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
</tr>
<tr>
<td>NGR</td>
<td>7843</td>
<td>Statistical Methods in Nursing Research III</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
</tr>
<tr>
<td>NGR</td>
<td>7881</td>
<td>Ethics in Research and Practice</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
</tr>
<tr>
<td>NGR</td>
<td>7892</td>
<td>Health Policy Issues in Nursing and Health Care</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
</tr>
<tr>
<td>NGR</td>
<td>7915</td>
<td>Advanced Directed Research in Nursing</td>
<td>1-6</td>
<td>NU</td>
<td>NUR</td>
</tr>
<tr>
<td>NGR</td>
<td>7932</td>
<td>Special Topics</td>
<td>1-6</td>
<td>NU</td>
<td>NUR</td>
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1025
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Origin</th>
<th>Prerequisite</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGR 7941</td>
<td>Nursing Research Pro Seminar</td>
<td>1-6</td>
<td>NU</td>
<td>NUR</td>
<td>The Pro Seminar provides experiential opportunities for students to test innovative methods and technologies in a variety of educational or clinical settings. Seminars designed to critique current research in the area.</td>
</tr>
<tr>
<td>NGR 7945</td>
<td>DNP Clinical Residency</td>
<td>1-9</td>
<td>NU</td>
<td>NUR</td>
<td>The DNP for the nurse practitioner includes additional educational preparation and clinical competencies derived from nationally developed core competencies that extend core competencies required for clinical practice of the Master's prepared NP.</td>
</tr>
<tr>
<td>NGR 7951</td>
<td>Scientific Writing - Writing for Publication</td>
<td>3</td>
<td>NU</td>
<td>NUR</td>
<td>This course focuses on the development of a scholarly empirical manuscript or technical report of publishable quality.</td>
</tr>
<tr>
<td>NGR 7974</td>
<td>Evidenced-based Practice Project</td>
<td>1-4</td>
<td>NU</td>
<td>NUR</td>
<td>This course serves as the final capstone project for the Doctorate of Nursing Practice degree and is completed over a minimum of two semesters.</td>
</tr>
<tr>
<td>NGR 7980</td>
<td>Dissertation: Doctoral</td>
<td>2-1</td>
<td>NU</td>
<td>NUR</td>
<td>Directed research and writing of dissertation topic appropriate to the discipline. Restricted to majors; repeatable for credit.</td>
</tr>
<tr>
<td>NGR 7981</td>
<td>Dissertation Proposal Writing</td>
<td>2</td>
<td>NU</td>
<td>NUR</td>
<td>Selected topics pertaining to the dissertation proposal writing process, dissertation research planning and funding, and proposal defense. PR: CI or Ph.D. GS; completion of majority of required course work.</td>
</tr>
<tr>
<td>OCB 6050</td>
<td>Biological Oceanography</td>
<td>3</td>
<td>MS</td>
<td>MSC</td>
<td>Study of life in the oceans, its rates and processes, and its interaction with the physical and chemical environment. Lec.</td>
</tr>
<tr>
<td>OCB 6567</td>
<td>Phytoplankton Ecology</td>
<td>3</td>
<td>MS</td>
<td>MSC</td>
<td>An introduction to the physiology and ecology of marine phytoplankton. Emphasis will be on those variables and interactions that regulate photosynthesis, production, nutrient kinetics and regeneration, growth, spatial distribution, losses, and succession.</td>
</tr>
<tr>
<td>OCB 6646</td>
<td>Marine Zoogeography</td>
<td>3</td>
<td>MS</td>
<td>MSC</td>
<td>The geographical distribution of animals in the marine environments of the world including the major habitats of the benthic and pelagic realms. Studies of the relationships between distribution and evolutionary patterns.</td>
</tr>
<tr>
<td>OCB 6666</td>
<td>Ecological Physiology</td>
<td>3</td>
<td>MS</td>
<td>MSC</td>
<td>The study of those physiological mechanisms that enable organisms to live in their environment, and deal with changes in the environment. Coursework is focused on aquatic ecosystems. Topics include osmotic and ionic regulation, nitrogen excretion, feeding and digestion, respiration, temperature, and energetics. Lab separate.</td>
</tr>
<tr>
<td>OCB 6671L</td>
<td>Methods in Biological</td>
<td>1</td>
<td>MS</td>
<td>MSC</td>
<td>To acquaint students with field and</td>
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</tbody>
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1026
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>Type</th>
<th>Requirements</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCB 6931C</td>
<td>Special Topics in Ichthyology</td>
<td>1-3</td>
<td>MS</td>
<td>MSC</td>
<td>Laboratory equipment and techniques currently used in Biological Oceanography. Emphasis will be on field problems, especially those requiring research at sea. Presentation and discussion of ichthyological topics from the primary literature. The objectives of this course are: 1) to review and discuss the primary literature on ichthyological topics, both current and historical; 2) to provide a forum in which students can develop discussion skills; 3) to identify, through examination of the literature, areas of needed research; 4) to provide means by which graduate students can receive formal course instruction in a non-lecture format.</td>
</tr>
<tr>
<td>OCC 6050</td>
<td>Chemical Oceanography</td>
<td>3</td>
<td>MS</td>
<td>MSC</td>
<td>The ocean as a chemical system, including composition, physical-chemical aspects, role of nutrients, trace metals, interaction between bottom and overlying water, organic matter, and stable and radioactive isotopes. Lec</td>
</tr>
<tr>
<td>OCC 6057</td>
<td>Marine Pollution</td>
<td>3</td>
<td>MS</td>
<td>MSC</td>
<td>Marine pollutant sources, reservoirs, transport processes, and dynamics. Topics include heavy metals, chlorinated hydrocarbons, radioactivity, petroleum, pathogens, and thermal pollution including functional and physiological responses of marine organisms.</td>
</tr>
<tr>
<td>OCC 6057L</td>
<td>Methods in Chemical Oceanography</td>
<td>1</td>
<td>MS</td>
<td>MSC</td>
<td>An intensive study of the use and limitations of field and laboratory equipment that is a standard part of chemical oceanographic research into the behavior of dissolved and particulate constituents in seawater.</td>
</tr>
<tr>
<td>OCC 6111C</td>
<td>Applications of Gas Chromatography and Mass Spectrometry in Marine Science</td>
<td>3</td>
<td>MS</td>
<td>MSC</td>
<td>Analytical techniques of high resolution gas chromatography and combined gas chromatography-mass spectrometry are applied to problems in Marine Science. Theoretical aspects of the techniques are covered in lectures, while detailed experimental procedures are taught and practiced in the laboratory.</td>
</tr>
<tr>
<td>OCC 6216</td>
<td>Marine Organic Chemistry</td>
<td>3</td>
<td>MS</td>
<td>MSC</td>
<td>Distribution and biogeochemical cycling of organic matter in the oceans. Topics include carbohydrates, proteins, lipids, humics, pheromones, interaction with trace metals, isotopic fractionation, microbial alterations, and biochemical tracers.</td>
</tr>
<tr>
<td>OCC 6418</td>
<td>Petroleum Geochemistry</td>
<td>3</td>
<td>MS</td>
<td>MSC</td>
<td>An investigation of the geochemical aspects of petroleum generation, migration, accumulation, and maturation. Additional topics include the composition of petroleum, the use of molecular biomarkers to investigate petrochemical and geochemical processes, and petroleum prospecting.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit Hours</td>
<td>Unit Type</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>OCE 6908</td>
<td>Independent Study</td>
<td>1-10</td>
<td>MS MSC S/U</td>
<td>PR: CI.</td>
<td>Independent study in which students must have a contract with an instructor.</td>
</tr>
<tr>
<td>OCE 6934</td>
<td>Selected Topics in Oceanography</td>
<td>1-3</td>
<td>MS MSC S/U</td>
<td>PR: CI.</td>
<td>Special topics in Biological, Chemical, Geological, and Physical Oceanography.</td>
</tr>
<tr>
<td>OCE 6939</td>
<td>Graduate Seminar in Oceanography</td>
<td>1</td>
<td>MS MSC S/U</td>
<td>PR: GS. S/U.</td>
<td></td>
</tr>
<tr>
<td>OCE 6971</td>
<td>Thesis: Master’s</td>
<td>2-10</td>
<td>MS MSC S/U</td>
<td>PR: CC, GR, ML. S/U.</td>
<td></td>
</tr>
<tr>
<td>OCE 6972</td>
<td>Directed Research</td>
<td>1-1</td>
<td>MS MSC S/U</td>
<td>PR: GR. ML. S/U.</td>
<td></td>
</tr>
<tr>
<td>OCE 7910</td>
<td>Directed Research</td>
<td>1-1</td>
<td>MS MSC S/U</td>
<td>PR: GR. Ph.D. level, CI. S/U</td>
<td></td>
</tr>
<tr>
<td>OCE 7980</td>
<td>Dissertation: Doctoral</td>
<td>2-1</td>
<td>MS MSC S/U</td>
<td>PR: Admission to Candidacy, CC. S/U</td>
<td>Marine geology including plate tectonics; coastal, shelf and pelagic sedimentation; geochemical cycling; and sedimentary history of the ocean basins. Lec</td>
</tr>
<tr>
<td>OCG 6051</td>
<td>Geological Oceanography</td>
<td>3</td>
<td>MS MSC S/U</td>
<td>PR: GS or CI.</td>
<td>Description and application of the modern techniques used to investigate Marine Geology and Geophysics.</td>
</tr>
<tr>
<td>OCG 6075</td>
<td>Methods in Geological Oceanography</td>
<td>1</td>
<td>MS MSC S/U</td>
<td>PR: OCG 6051 or CI.</td>
<td>An overview of the Plate Tectonic theory, including such topics as: geometry of Plate Tectonics, tectonics on a sphere, past plate motions, seismology, oceanic gravity, geochronology, heat flow, oceanic lithosphere, ridges, transforms, trenches, oceanic islands, and continental lithosphere.</td>
</tr>
<tr>
<td>OCG 6080</td>
<td>Plate Tectonics</td>
<td>3</td>
<td>MS MSC S/U</td>
<td>PR: GS or CI.</td>
<td>Analysis of tectonic, structural and stratigraphic development and general geologic history of the major types of continental margins. Includes interpretation of seismic data.</td>
</tr>
<tr>
<td>OCG 6086</td>
<td>Geology of Continental Margins</td>
<td>3</td>
<td>MS MSC S/U</td>
<td>PR: B.S. in Geology, OCG 6051, or CI.</td>
<td>Study of seismic reflection data for the purpose of determining structural and sedimentological development, facies distribution, and general geological history of stratigraphic packages. Course includes fundamentals of seismic reflection and depositional sequence/seismic facies analyses.</td>
</tr>
<tr>
<td>OCG 6356C</td>
<td>Stratigraphic Interpretation of Seismic Data</td>
<td>3</td>
<td>MS MSC S/U</td>
<td>PR: B.S. in Geology, OCG 6051, or CI.</td>
<td>General survey course of the mineralogy, chemical composition, physical properties and origin of marine sediments. Topics include the transport, deposition, and burial diagenesis of organic matter and carbonate, aluminosilicate and silica minerals. Theoretical and practical aspects of x-ray diffraction.</td>
</tr>
<tr>
<td>OCG 6453</td>
<td>Geochemistry Marine Sediments</td>
<td>3</td>
<td>MS MSC S/U</td>
<td>PR: BA in Chemistry or Geology or CI.</td>
<td>Study of stable and radioactive isotope variations in the marine environment and the use of these variations as tracers and in applications.</td>
</tr>
<tr>
<td>OCG 6455</td>
<td>Marine Isotope Geochemistry</td>
<td>3</td>
<td>MS MSC S/U</td>
<td>PR: Chemical Oceanography or CI.</td>
<td>Study of stable and radioactive isotope variations in the marine environment and the use of these variations as tracers and in applications.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>Requirement(s)</td>
<td>Description</td>
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<tr>
<td>OCG 6551C</td>
<td>Scanning Electron Microscopy: Theory and Technique</td>
<td>4</td>
<td>MS</td>
<td>MSC</td>
<td>Theory and practical application of the scanning electron microscope and the energy dispersive X-ray analyzer. Emphasis is on independent operation of the instruments, preparation techniques for specimens, and interpretation of results.</td>
</tr>
<tr>
<td>OCG 6556C</td>
<td>Marine Micropaleontology</td>
<td>3</td>
<td>MS</td>
<td>MSC</td>
<td>Introduction to the microscopic marine fauna and flora found in the fossil sedimentary record. Emphasis is placed on the ecology, paleoecology, paleontology, and biostratigraphic record of calcareous and siliceous microfossils.</td>
</tr>
<tr>
<td>OCG 6664</td>
<td>Paleoeceanography</td>
<td>3</td>
<td>MS</td>
<td>MSC</td>
<td>The study of the development of the ocean system through geologic history, including tectonic framework, sea level history, paleoecology, paleocirculation within the ocean basins, and the evolution of marine biota.</td>
</tr>
<tr>
<td>OCG 6666</td>
<td>Carbonate Depositional Systems</td>
<td>3</td>
<td>MS</td>
<td>MSC</td>
<td>In-depth presentation of production, transport, and accumulation of carbonate sediments on platforms and shelves. Characteristics of carbonate sediment type, primary environment controls, and relationships to surrounding facies will be presented. Available to non-majors.</td>
</tr>
<tr>
<td>OCG 6668</td>
<td>Evolution and Ecology of Reefs</td>
<td>3</td>
<td>MS</td>
<td>MSC</td>
<td>Advanced course in ecology and evolution of reef communities. Topics include environmental controls on reef development, basic components of modern reef communities, and how those components have changed through geologic time.</td>
</tr>
<tr>
<td>OCP 6050</td>
<td>Physical Oceanography</td>
<td>3</td>
<td>MS</td>
<td>MSC</td>
<td>The world ocean including its morphology, physical properties, currents, waves, tides, heat and water budgets, and related topics. Lec.</td>
</tr>
<tr>
<td>ORI 5930</td>
<td>Topics in Performance Genres</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>Variable topics course.</td>
</tr>
<tr>
<td>ORI 6018</td>
<td>Performance Art</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>Explores historical, theoretical, and critical perspectives on performance art in the US.</td>
</tr>
<tr>
<td>ORI 6020</td>
<td>Performing Social Resistance</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>Explores performance as a site of and means for creating social resistance and change.</td>
</tr>
<tr>
<td>ORI 6107</td>
<td>Texts in Performance</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>Explores contemporary literary texts through dramatic analysis, live performance, adaptation and staging strategies.</td>
</tr>
<tr>
<td>ORI 6250</td>
<td>Performance and Technology</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>Explores the relationship between live and mediated performance, the use of media technologies in performance, and the place of live performance in a Western mediated art.</td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
<td>AS</td>
<td>SPE</td>
<td>PR:</td>
<td>Description</td>
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<tr>
<td>ORI</td>
<td>6435 Performance as Cultural Study</td>
<td>3</td>
<td>SPE</td>
<td>GS.</td>
<td>Impact of performance and performance forms as cultural communication. The course examines literary, festive, religious, political and social performance in dialogue with culture.</td>
</tr>
<tr>
<td>ORI</td>
<td>6456 Performance Theory</td>
<td>3</td>
<td>SPE</td>
<td>PR: Graduate Standing.</td>
<td>A survey of modern and contemporary approaches to performance as constitutive of identity, verbal art, communication, and culture.</td>
</tr>
<tr>
<td>ORI</td>
<td>6506 Performance Criticism</td>
<td>3</td>
<td>SPE</td>
<td>PR: Graduate Standing.</td>
<td>Focuses on the development and honing of critical skills employed in response to performance. These skills can be applied to a multitude of acts and texts.</td>
</tr>
<tr>
<td>ORI</td>
<td>6930 Communication Aesthetics</td>
<td>3</td>
<td>SPE</td>
<td></td>
<td>This course examines the historical evolution of the aesthetic dimension of communication as performance in terms of major concepts and theorists from Plato to the present.</td>
</tr>
<tr>
<td>ORI</td>
<td>7930 Seminar in Performance Studies</td>
<td>3</td>
<td>SPE</td>
<td>GS.</td>
<td>Variable topics course.</td>
</tr>
<tr>
<td>PAD</td>
<td>5035 Issues in Public Administration and Public Policy</td>
<td>3</td>
<td>PAD</td>
<td>Sr. &amp; GS only.</td>
<td>Selected issues and topics in Public Administration and Public Policy.</td>
</tr>
<tr>
<td>PAD</td>
<td>5044 Environment of Public Administration</td>
<td>3</td>
<td>PAD</td>
<td></td>
<td>Examination of the legal, political, and ethical environment in which public managers work.</td>
</tr>
<tr>
<td>PAD</td>
<td>5333 Concepts and Issues in Public Planning</td>
<td>3</td>
<td>PAD</td>
<td>PR: URP 4050 or URP 6056, GS or Sr.</td>
<td>Analysis of basic concepts, issues, and strategies of planning, policy determination, collection of information, and decision-making.</td>
</tr>
<tr>
<td>PAD</td>
<td>5605 Administrative Law and Regulation</td>
<td>3</td>
<td>PAD</td>
<td></td>
<td>An examination of the constitutional and statutory base and limitations of the administrative process, administrative adjudication, rule-making, and the judicial review of such actions. An examination of the Constitutional and statutory base and limitations of the administrative process, administrative adjudication, rule-making, and the judicial review of such actions. Attention is also directed to regulatory commissions, their functions, powers, management and relationship with other branches of government.</td>
</tr>
<tr>
<td>PAD</td>
<td>5700 Research Methods in Public Administration</td>
<td>3</td>
<td>PAD</td>
<td>PR: MPA, GCPM, and GCNM majors only.</td>
<td>Research design; skills in public agencies. Must be prepared to demonstrate proficiency in EXCEL, Access, and other relevant software programs.</td>
</tr>
<tr>
<td>PAD</td>
<td>5807 Urban and Local Government Administration</td>
<td>3</td>
<td>PAD</td>
<td>GS or Sr.</td>
<td>Analysis of the role of the administrator at the municipal level, the division of functions, policy formation, alternative governmental structures, effects on the administrative process.</td>
</tr>
<tr>
<td>PAD</td>
<td>5836 Comparative Public Administration</td>
<td>3</td>
<td>PAD</td>
<td>GS or Sr.</td>
<td>How organizations and managers perform within a particular environment, potential impact of innovation, and how service is accomplished in a variety of socio-</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Area of Focus</td>
<td>Pre-Requisites</td>
<td>Description</td>
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<tr>
<td>PAD 6041</td>
<td>Ethics and Public Service</td>
<td>3</td>
<td>AS</td>
<td>PAD PR: Completion of all MPA core courses and five electives. Must be taken in last semester of coursework.</td>
<td>The purpose of this course is to provide students with an understanding of the ethical dimensions of public service, with particular attention focused on the role, duties and responsibilities of the public administrator. Additionally, the course seeks to help students develop awareness, skill, and value framework to act ethically in their public service and management roles.</td>
</tr>
<tr>
<td>PAD 6056</td>
<td>Practice of Public Management</td>
<td>3</td>
<td>AS</td>
<td>PAD GS.</td>
<td>An integrative course applying the skills, knowledge, and values taught in the core curriculum and applied to public issues or problems.</td>
</tr>
<tr>
<td>PAD 6060</td>
<td>Public Administration Theory</td>
<td>3</td>
<td>AS</td>
<td>PAD GS.</td>
<td>Examination of major theoretical and practical developments in public administration with focus on organization theory and current research trends in the field.</td>
</tr>
<tr>
<td>PAD 6105</td>
<td>Public Organizations and Change</td>
<td>3</td>
<td>AS</td>
<td>PAD GS.</td>
<td>In-depth coverage of organizational theory and focus with special attention to issues and problems of organizational change and reform in the public sector.</td>
</tr>
<tr>
<td>PAD 6134</td>
<td>Project Management</td>
<td>3</td>
<td>AS</td>
<td>PAD GS.</td>
<td>Course is designed to introduce students to the concepts, theories, principles, and practices in project management, as well as to the use of project management software.</td>
</tr>
<tr>
<td>PAD 6146</td>
<td>Nonprofit Management and Leadership</td>
<td>3</td>
<td>AS</td>
<td>PAD GS.</td>
<td>Role and importance of third-sector organizations in American society; unique problems of nonprofit administration, role of leadership in nonprofit organizations.</td>
</tr>
<tr>
<td>PAD 6207</td>
<td>Public Financial Administration</td>
<td>3</td>
<td>AS</td>
<td>PAD GS.</td>
<td>Examination of the fiscal organization of federal, state, and local governments. Current problems in budgeting, revenue, and indebtedness are considered.</td>
</tr>
<tr>
<td>PAD 6208</td>
<td>Financial Oversight for Nonprofit Organizations</td>
<td>3</td>
<td>AS</td>
<td>PAD GS.</td>
<td>Introduce the non-financial manger to financial information used to make decisions for nonprofit organizations. Students will learn how to use the principles of financial management to make operating and capital budgeting decisions and to analyze long-term financial options.</td>
</tr>
<tr>
<td>PAD 6222</td>
<td>Issues in Florida--Budgeting and Finance</td>
<td>3</td>
<td>AS</td>
<td>PAD GS.</td>
<td>Selected issues in public financial management and budgeting related to state agencies or local governments in Florida.</td>
</tr>
<tr>
<td>PAD 6227</td>
<td>Public Budgeting</td>
<td>3</td>
<td>AS</td>
<td>PAD GS.</td>
<td>Development, authorization, execution, and assessment of government budgets. Topics include current trends and issues in budget theory and practice, as well as reform efforts.</td>
</tr>
<tr>
<td>PAD 6275</td>
<td>Political Economy for Public Managers</td>
<td>3</td>
<td>AS</td>
<td>PAD PR: Graduate status or CI, PAD 5700 and PAD 6703 are recommended.</td>
<td>Introduces students to the fundamental concepts, theories, principles and tools used in public sector managerial economics. Students will be using economic tools and strategies to manage the economic environments.</td>
</tr>
<tr>
<td>Course ID</td>
<td>Course Title</td>
<td>Units</td>
<td>Type</td>
<td>Description</td>
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</tr>
<tr>
<td>PAD 6307</td>
<td>Policy Analysis, Implementation, and Program Evaluation</td>
<td>3</td>
<td>AS</td>
<td>Discusses concepts and applying economic tools and techniques to address common issues faced by public managers.</td>
<td></td>
</tr>
<tr>
<td>PAD 6335</td>
<td>Strategic Planning for Public and Nonprofit Organizations</td>
<td>3</td>
<td>AS</td>
<td>Emphasizes methods of strategic planning as tools to lead, strengthen, and develop public and nonprofit organizations.</td>
<td></td>
</tr>
<tr>
<td>PAD 6336</td>
<td>Community Development Programs and Strategies</td>
<td>3</td>
<td>AS</td>
<td>Discusses community development principles and practices in historical and contemporary perspectives, federal, state and local initiatives, physical, social, and economic approaches to community development.</td>
<td></td>
</tr>
<tr>
<td>PAD 6338</td>
<td>Urban Land Use and Policy Administration</td>
<td>3</td>
<td>AS</td>
<td>Focuses on the political, economic, and legal environment of urban land development.</td>
<td></td>
</tr>
<tr>
<td>PAD 6339</td>
<td>Housing and Public Policy</td>
<td>3</td>
<td>AS</td>
<td>Examines public policies affecting the spatial distribution of urban land activities, overt and covert rationales of such policies; zoning; subdivision regulations; building codes, and other urban land use control measures.</td>
<td></td>
</tr>
<tr>
<td>PAD 6355</td>
<td>Urban Growth Management</td>
<td>3</td>
<td>AS</td>
<td>Examines the political economy of controlling the growth and development of human settlements, regulatory and non-regulatory techniques of growth management, and the evolution of growth management practices in the U.S.</td>
<td></td>
</tr>
<tr>
<td>PAD 6417</td>
<td>Human Resources Management</td>
<td>3</td>
<td>AS</td>
<td>A study of the major functions in public personnel, including recruiting, selection, testing, training, and development, and employee and human relations in the public service.</td>
<td></td>
</tr>
<tr>
<td>PAD 6427</td>
<td>Public Sector Labor Relations</td>
<td>3</td>
<td>AS</td>
<td>Introduction to the historical, legal, political and procedural aspects of collective bargaining and labor relations in the public sector organizations. Addresses methods for resolving conflicts and grievances.</td>
<td></td>
</tr>
<tr>
<td>PAD 6703</td>
<td>Quantitative Aids for Public Managers</td>
<td>3</td>
<td>AS</td>
<td>Techniques, models, to analyze managerial/policy problems. Descriptive, inferential, associational statistics; evaluate/make recommendations/alternative policy/decisions.</td>
<td></td>
</tr>
<tr>
<td>PAD 6710</td>
<td>Public Information Management</td>
<td>3</td>
<td>AS</td>
<td>Intro to policy issues related to managing public info. by non-technical public &amp; nonprofit managers. Non-tech. manager’s role with strategic tech. planning, process re-engineering, appl. dev., data</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
<td>Credits</td>
<td>Type</td>
<td>Prerequisites</td>
<td>Notes</td>
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<tr>
<td>PAD</td>
<td>Independent Study</td>
<td>1-3</td>
<td>AS</td>
<td>PAD</td>
<td>PR: Cl. S/U. A flexible format for conceptual or theoretical studies in public administration.</td>
</tr>
<tr>
<td>PAD</td>
<td>Problem Report</td>
<td>3</td>
<td>AS</td>
<td>PAD</td>
<td>Majors only. Analysis of a significant administrative or policy problem facing a public agency or manager.</td>
</tr>
<tr>
<td>PAD</td>
<td>Directed Research</td>
<td>1-3</td>
<td>AS</td>
<td>PAD</td>
<td>PR: Cl. S/U. A flexible format for structured field research in Public Administration.</td>
</tr>
<tr>
<td>PAD</td>
<td>Selected Topics in Public Administration</td>
<td>1-3</td>
<td>AS</td>
<td>PAD</td>
<td>A flexible format to offer specialized courses not available within the regular curriculum.</td>
</tr>
<tr>
<td>PAD</td>
<td>Internship in Public Administration</td>
<td>2-6</td>
<td>AS</td>
<td>PAD</td>
<td>PR: Cl. Majors only. S/U Structured learning and work experience in a public agency or non-profit organization.</td>
</tr>
<tr>
<td>PCB</td>
<td>Developmental Mechanisms</td>
<td>3</td>
<td>AS</td>
<td>BCM</td>
<td>PR: ZOO 4695. Topics in modern developmental biology to be covered in lecture and through readings so as to gain a detailed understanding of cellular and molecular mechanisms of differentiation and pattern formation in various eukaryotic species for majors/non-majors</td>
</tr>
<tr>
<td>PCB</td>
<td>Limnology</td>
<td>3</td>
<td>AS</td>
<td>BIN</td>
<td>PR: PCB 3043 and CHM 2210 and MAC 1105 or higher-level MAC course or STA 2023 and PHY 2053. CP: CHM 2211. An introduction to the physical, chemical, and biological nature of fresh-water environments. Lecture only.</td>
</tr>
<tr>
<td>PCB</td>
<td>Limnology Laboratory</td>
<td>1</td>
<td>AS</td>
<td>BIN</td>
<td>PR: Cl. CP: PCB 5307. Laboratory portion of Limnology. Laboratory and field experience in the area of aquatic ecology.</td>
</tr>
<tr>
<td>PCB</td>
<td>Behavioral Ecology</td>
<td>3</td>
<td>AS</td>
<td>BIN</td>
<td>PR: PCB 3043 and PCB 3063 or PCB 4674 and CHM 2210 and MAC 1105 or higher-level MAC course or STA 2023. CP: CHM 2211. An emphasis on the evolutionary mechanisms that influence an organisms behavioral responses to environmental events. The theoretical framework is presented and analyzed. Lecture only.</td>
</tr>
<tr>
<td>PCB</td>
<td>Molecular Genetics</td>
<td>3</td>
<td>AS</td>
<td>BCM</td>
<td>PR: PCB 3063, Cl. Detailed examination of DNA, RNA and protein synthesis; the effects of mutations on proteins, cellular control; selected aspects of viral, bacterial, and fungal genetics.</td>
</tr>
<tr>
<td>PCB</td>
<td>Molecular Phlogenetics</td>
<td>3</td>
<td>AS</td>
<td>BCM</td>
<td>PR: PCB 3063. Provides a theoretical (lecture) and practical (computer lab) framework to allow students to carry out phylogenetic analysis using molecular data. Majors or nonmajors.</td>
</tr>
<tr>
<td>PCB</td>
<td>Advanced Cell Biology</td>
<td>4</td>
<td>AS</td>
<td>BCM</td>
<td>PR: Cl. Detailed examination of the structure, function and molecular biology of eukaryotic cells.</td>
</tr>
<tr>
<td>PCB</td>
<td>Cancer Biology I</td>
<td>4</td>
<td>AS</td>
<td>BCM</td>
<td>An introduction to the basics of molecular oncology. Topics will include cytoplasmic and nuclear oncogenes, cell cycle control, apoptosis, tumor suppressor genes and cancer drug discovery.</td>
</tr>
<tr>
<td>PCB</td>
<td>Cancer Biology II</td>
<td>4</td>
<td>AS</td>
<td>BCM</td>
<td>A continuation of Cancer Biology I. Topics will include a comprehensive review of immunology as it relates to...</td>
</tr>
</tbody>
</table>

**Notes:**
- AS: Audit
- PR: Pre-requisite
- Cl: Co-requisite
- S/U: Satisfactory/Unsatisfactory
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
<th>AS</th>
<th>BCM</th>
<th>Prerequisite</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB 6236</td>
<td>Advanced Immunology</td>
<td>4</td>
<td>AS</td>
<td>BCM</td>
<td>Pr: Cl.</td>
<td>Discussion of the basic immune reaction, nature of antigenicity; basic immunological techniques and their use in biological research and the medical sciences. Lec/Lab.</td>
</tr>
<tr>
<td>PCB 6275</td>
<td>Cell Signaling</td>
<td>3</td>
<td>AS</td>
<td>BCM</td>
<td></td>
<td>A detailed examination of the cellular, biochemical, and molecular mechanism involved in signal transduction in various eukaryotic organism with emphasis on reviewing recent experimental evidence.</td>
</tr>
<tr>
<td>PCB 6365C</td>
<td>Physiological Ecology</td>
<td>4</td>
<td>AS</td>
<td>BIN</td>
<td>Pr: Cl.</td>
<td>Effect of environmental factors on animal function at the cellular and organ system level with emphasis on control and mechanism.</td>
</tr>
<tr>
<td>PCB 6405</td>
<td>Chemical Ecology</td>
<td>3</td>
<td>AS</td>
<td>BIN</td>
<td>Pr: PCB 3043 and CHM 2211.</td>
<td>A broad introduction to the biochemistry of plant and animal interactions. Emphasis on the roles of secondary metabolites such as alkaloids, flavonoids, and terpenes in the complex animal/animal, animal/plant, plant/plant, and plant/microorganism interactions occurring in natural, terrestrial, and aquatic environments.</td>
</tr>
<tr>
<td>PCB 6426C</td>
<td>Population Biology</td>
<td>3</td>
<td>AS</td>
<td>BIN</td>
<td>Pr: GS, Cl.</td>
<td>Introduction to population dynamics with emphasis on the ecological components of growth, competition, and predation.</td>
</tr>
<tr>
<td>PCB 6447</td>
<td>Community Ecology</td>
<td>3</td>
<td>AS</td>
<td>BIN</td>
<td>Pr: Cl.</td>
<td>In-depth examination of community ecology with emphasis on diversity, stability, trophic structure and the mechanisms which affect how communities are structured.</td>
</tr>
<tr>
<td>PCB 6455</td>
<td>Statistical Ecology</td>
<td>3</td>
<td>AS</td>
<td>BIN</td>
<td>Pr: Cl.</td>
<td>Introduction to exploratory data analysis in ecology. Techniques for dealing with encountered data are emphasized.</td>
</tr>
<tr>
<td>PCB 6456C</td>
<td>Biometry</td>
<td>4</td>
<td>AS</td>
<td>BIN</td>
<td>Pr: MAC 2241 and MAC 2242, GS.</td>
<td>An introduction to statistical procedures for research in biological sciences. Experimental design, analysis of data, and presentation of results are emphasized. Lec/Dis.</td>
</tr>
<tr>
<td>PCB 6458</td>
<td>Biometry II</td>
<td>3</td>
<td>AS</td>
<td>BIN</td>
<td>Pr: PCB 6456C.</td>
<td>Fundamental concepts in the design of experiments for biological research. Factorial experiments, multiple regression analyses, analyses of covariance and SAS computer programs are emphasized. Lec/Lab.</td>
</tr>
<tr>
<td>PCB 6910</td>
<td>Cancer Lab Rotations</td>
<td>1-3</td>
<td>AS</td>
<td>BCM</td>
<td>Pr: Cl.</td>
<td>This course is designed to help the students choose a compatible Major Professor and allow students to develop necessary technical skills. It is graded on a satisfactory (pass) or unsatisfactory (fail) basis.</td>
</tr>
<tr>
<td>PCB 6920</td>
<td>Advances in Cell and Molecular Biology</td>
<td>1</td>
<td>AS</td>
<td>BCM</td>
<td>Pr: PCB 6107 or Cl.</td>
<td>A journal club in which graduate students present and discuss research publications from the preceding twelve months in the fields of molecular and cellular biology.</td>
</tr>
<tr>
<td>PCB 6930</td>
<td>Current Topics in Oncology</td>
<td>2</td>
<td>AS</td>
<td>BCM</td>
<td></td>
<td>Renowned speakers from outside the USF Community will give weekly seminars on topics in oncology.</td>
</tr>
<tr>
<td>PCB 6931</td>
<td>Advanced in Cancer Biology Research</td>
<td>2</td>
<td>AS</td>
<td>BCM</td>
<td>Participants will meet weekly with the speakers and discuss the current state of the art.</td>
<td></td>
</tr>
<tr>
<td>PCB 6933</td>
<td>Seminar In Ecology</td>
<td>1-3</td>
<td>AS</td>
<td>BIN</td>
<td>PR: Cl.</td>
<td>A detailed examination of topics in ecology pertaining to individual organisms, populations, communities and/or ecosystems.</td>
</tr>
<tr>
<td>PET 6003</td>
<td>Theories &amp; Models of Health &amp; Physical Activity</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>This course covers the origin and application of theory in the general health and physical activity domains. Emphasis will be placed on learning the theoretical constructs and applied uses of classic and contemporary theories in health behaviors.</td>
<td></td>
</tr>
<tr>
<td>PET 6081</td>
<td>Lifespan Fitness</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>The course is designed to assist students in developing an understanding of how fitness habits and recommendations change over a lifetime.</td>
<td></td>
</tr>
<tr>
<td>PET 6085</td>
<td>Body Composition: Assessment and Management</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>This course covers advanced principles of body composition assessment and management. The role of physical activity and medical intervention will be considered.</td>
<td></td>
</tr>
<tr>
<td>PET 6205</td>
<td>Psycho-Sociological Aspects of Human Movement</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>DPR.</td>
<td>Psychological and sociological implications of movement to historical and contemporary society. Emphasis on concept, role of movement in society, and values and attitudes.</td>
</tr>
<tr>
<td>PET 6216</td>
<td>Sport Psychology</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>This course is designed to provide students with an understanding of the theoretical structure that underlies psychology applied to sport. There will be a particular emphasis on psychological concerns that confront coaches, educators, and athletes.</td>
<td></td>
</tr>
<tr>
<td>PET 6235</td>
<td>Motor Learning</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>PR: Department Approval/Permission of Instructor.</td>
<td>This course deals with motor learning research as it relates to exercise science. Emphasis will be placed upon normal developmental patterns and behaviors and motor learning principles throughout the life span.</td>
</tr>
<tr>
<td>PET 6256</td>
<td>Sport in Society: Contemporary Issues</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>PR: Graduate Standing.</td>
<td>This course is a study of organized sport in contemporary society. Issues such as race, social class, gender, politics, religion, economics, media, physical disabilities, sexual orientation, and ethics as they relate to sports will be studied. This course is a study of organized sport in contemporary society. Issues such as race, social class, gender, politics, religion, economics, media, physical disabilities, sexual orientation, and ethics as they relate to sports will be studied.</td>
</tr>
<tr>
<td>PET 6312</td>
<td>Applied Biomechanics</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>PR: Department Approval/Permission of</td>
<td>The course involves the integration of advanced kinesiological foundations</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Type</td>
<td>Type</td>
<td>PR/Pre-Reqs</td>
<td>Description</td>
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<tr>
<td>PET 6356</td>
<td>Advanced Exercise Physiology</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>PR: PET 3351 (or equivalent) and Department Approval/Permission of Instructor.</td>
<td>The course will address advanced principles of basic and applied exercise physiology. Cardiovascular and respiratory physiology and physiological responses of these systems to acute and chronic exercise will be discussed, as well as thermal stress.</td>
</tr>
<tr>
<td>PET 6358</td>
<td>Developmental Exercise Physiology</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>PR: PET 3351 (or equivalent) and Department Approval/Permission of Instructor.</td>
<td>The course covers normal growth and physiological development in children and adolescents with an emphasis on the changes in physiological adaptations with exercise as a result of maturation.</td>
</tr>
<tr>
<td>PET 6367</td>
<td>Sports Nutrition and Exercise Metabolism</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td></td>
<td>This course covers selected topics regarding exercise metabolism and sports nutrition. Some of the topics to be covered include: bioenergetics; protein, fat and carbohydrate metabolism during exercise; sports supplements designed to improve strength.</td>
</tr>
<tr>
<td>PET 6388</td>
<td>Physical Activity, Health, and Disease</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td></td>
<td>This course focuses on the study of how physical activity is related to chronic diseases. Epidemiological techniques will be examined using physical activity as a factor in the cause of disease. The physiological basis will be examined.</td>
</tr>
<tr>
<td>PET 6389</td>
<td>Fitness Assessment and Prescription</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td></td>
<td>This course covers advanced principles of physiological fitness assessment. Topics to be covered include the assessment and prescription of: aerobic capacity, anaerobic capacity, muscular strength, and muscular endurance.</td>
</tr>
<tr>
<td>PET 6396C</td>
<td>Specialized Study in Biokinetcs of Human Movement</td>
<td>1-4</td>
<td>ED</td>
<td>EDP</td>
<td>PR: Cl. DPR.</td>
<td>Will provide in-depth study in specific areas related to neurological, physiological, and mechanical principles of human development.</td>
</tr>
<tr>
<td>PET 6419</td>
<td>Clinical Supervision In Physical Education</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>PR: Florida certificate in physical education, 3 years teaching experience in physical education, principal's recommendation. Cl. DPR.</td>
<td>Provides specialized knowledge and skills for effective supervision of interns in physical education including observation and feedback techniques and communication skills.</td>
</tr>
<tr>
<td>PET 6425</td>
<td>Curriculum and Instructional Process in Physical Education</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>PR: Cl.</td>
<td>Will provide in-depth study of the structure of subject matter, theoretical curriculum models, styles of teaching, and investigation of the nature of the learner as these relate to teaching physical education. Fieldwork may be required.</td>
</tr>
<tr>
<td>PET 6443</td>
<td>Instructional Design and Content: Games</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td></td>
<td>The purpose of this course is to help students plan and implement effective game content and instruction in K-12 physical education programs based on current research and best practice.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>Text Area</td>
<td>Description</td>
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</tr>
<tr>
<td>PET 6444</td>
<td>Instructional Design and Content: Dance and Gymnastics</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>The purpose of this course is to help students plan and implement effective dance and gymnastics content in K-12 movement education/physical education programs based on current research and best practice.</td>
<td></td>
</tr>
<tr>
<td>PET 6496</td>
<td>Specialized Study In Curriculum And Instructional Process In Physical Education</td>
<td>1-4</td>
<td>ED</td>
<td>EDP</td>
<td>Will provide in-depth study in specific areas related to the teaching-learning process of physical education.</td>
<td></td>
</tr>
<tr>
<td>PET 6516</td>
<td>Learner Assessment in Physical Education</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>This course is designed to help teachers assess student learning in pre/K-12 physical activity settings and to conduct program evaluation in physical activity settings.</td>
<td></td>
</tr>
<tr>
<td>PET 6525L</td>
<td>Laboratory Techniques in Exercise Science</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>The course covers laboratory applications as they relate to exercise science. Emphasis will be placed upon laboratory experiences in biomechanics and exercise physiology involving equipment setup, data collection, data acquisition, and data analysis.</td>
<td></td>
</tr>
<tr>
<td>PET 6535C</td>
<td>Professional Assessment</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>Personal assessment of current trends and knowledge in the professional literature. Development of competencies in research review, written and oral communication skills.</td>
<td></td>
</tr>
<tr>
<td>PET 6625</td>
<td>Topics in Sports Medicine</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>This course covers selected topics regarding the science and medicine of sports participation. Areas covered include the medical supervision of the athlete, special populations, general medical conditions, environmental concerns, and sports nutrition.</td>
<td></td>
</tr>
<tr>
<td>PET 6645</td>
<td>Physical Education for Individuals with Disabilities</td>
<td>4</td>
<td>ED</td>
<td>EDP</td>
<td>This course is concerned with the motor development and physical fitness of individuals with mental and motor related disabling conditions. Study includes psycho-educational characteristics; planning, conducting, and evaluating individualized programs of physical education; and review of relevant literature. Clinical fieldwork is required.</td>
<td></td>
</tr>
<tr>
<td>PET 6695C</td>
<td>Physical Education for the Handicapped Practicum</td>
<td>2-4</td>
<td>ED</td>
<td>EDP</td>
<td>School or treatment center-based experience providing evaluation and instructional services. Seminars are conducted to discuss professional literature, teaching strategies, and curriculum organization and evaluation.</td>
<td></td>
</tr>
<tr>
<td>PET 6706</td>
<td>Analysis of Research in Physical Education</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>This course is designed to help teachers better understand the process of conducting classroom research. The course provides a set of guidelines for reading research and sharing perspectives based on studying original research in physical education.</td>
<td></td>
</tr>
</tbody>
</table>
| PET 6716    | Analysis of Teaching in Physical Education                                   | 3       | ED   | EDP       | The purpose of this course is to study teaching behaviors in physical activity settings. It includes a review of
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
<th>Department</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PET</td>
<td>Independent Study: Professional Physical Education</td>
<td>1-6</td>
<td>ED</td>
<td>EDP</td>
<td>Independent study. Students must have a contract with an instructor.</td>
</tr>
<tr>
<td>PET</td>
<td>Research Project in Physical Education</td>
<td>1-4</td>
<td>ED</td>
<td>EDP</td>
<td>In-depth research study of selected topics concerning human movement. Topics will vary according to needs and interests of student.</td>
</tr>
<tr>
<td>PET</td>
<td>Thesis: Physical Education</td>
<td>3</td>
<td>ED</td>
<td>EDP</td>
<td>This course will provide the student with experience in research related to the disciplines of physical education and exercise science. Restricted to Graduate Program Majors only and repeatable for up to 6 credit hours.</td>
</tr>
<tr>
<td>PGY</td>
<td>Art Photography III</td>
<td>4</td>
<td>TA</td>
<td>ART</td>
<td>Advanced work in photography and related media leading to development of personal/expressive statements.</td>
</tr>
<tr>
<td>PHC</td>
<td>Special Topics</td>
<td>1-3</td>
<td>PH</td>
<td>PHC</td>
<td>Provides students the opportunity to learn about the multiple ways to view controversial topics in public health. It covers current public health topics including biomedical issues, social and behavioral factors, and environmental issues.</td>
</tr>
<tr>
<td>PHC</td>
<td>Epidemiology</td>
<td>3</td>
<td>PH</td>
<td>EPB</td>
<td>Study of epidemiological methods to evaluate the patterns and determinants of health and diseases in populations.</td>
</tr>
<tr>
<td>PHC</td>
<td>Infectious Disease Epidemiology</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>The course help students to understand epidemiological patterns, etiology and risk factors of infectious diseases as they occur in populations, rather than in individual patients. Familiarity with epidemiological terminology and biostatistics is required.</td>
</tr>
<tr>
<td>PHC</td>
<td>Epidemiology Methods I</td>
<td>3</td>
<td>PH</td>
<td>EPB</td>
<td>This course is designed to cover the important concepts in epidemiology and their application in epidemiological research. Emphasis on measures and quantitative techniques, proper interpretation and explanation of quantative measures and results.</td>
</tr>
<tr>
<td>PHC</td>
<td>Epidemiology Methods II</td>
<td>3</td>
<td>PH</td>
<td>EPB</td>
<td>This course will cover methods and practices, principles and concepts in epidemiology research. It will provide training in implementing appropriate study design, analyzing results and presenting research findings to a wide variety of audiences.</td>
</tr>
<tr>
<td>PHC</td>
<td>Epidemiology Methods III</td>
<td>3</td>
<td>PH</td>
<td>EPB</td>
<td>This course will increase the scope, expand upon and detail material presented in Epidemiology Methods I and Epidemiology Methods II. This course will focus on in-depth design of cohort, case-control and cross-sectional study.</td>
</tr>
<tr>
<td>PHC</td>
<td>6017</td>
<td>Design and Conduct of Clinical Trials</td>
<td>3</td>
<td>PH</td>
<td>EPB</td>
</tr>
<tr>
<td>PHC</td>
<td>6050</td>
<td>Biostatistics I</td>
<td>3</td>
<td>PH</td>
<td>EPB</td>
</tr>
<tr>
<td>PHC</td>
<td>6051</td>
<td>Biostatistics II</td>
<td>3</td>
<td>PH</td>
<td>EPB</td>
</tr>
<tr>
<td>PHC</td>
<td>6057</td>
<td>Biostatistical Inference I</td>
<td>3</td>
<td>PH</td>
<td>EPB</td>
</tr>
<tr>
<td>PHC</td>
<td>6060</td>
<td>Biostatistical Case Studies and Consulting I</td>
<td>3</td>
<td>PH</td>
<td>EPB</td>
</tr>
<tr>
<td>PHC</td>
<td>6061</td>
<td>Biostatistical Case Studies and Consulting II</td>
<td>3</td>
<td>PH</td>
<td>EPB</td>
</tr>
<tr>
<td>PHC</td>
<td>6074</td>
<td>Epidemiology of Diseases of Major Public Health Importance</td>
<td>3</td>
<td>PH</td>
<td>EPB</td>
</tr>
<tr>
<td>PHC</td>
<td>6075</td>
<td>Cancer Epidemiology</td>
<td>3</td>
<td>PH</td>
<td>EPB</td>
</tr>
<tr>
<td>PHC</td>
<td>6076</td>
<td>Cardiovascular Disease</td>
<td>3</td>
<td>PH</td>
<td>EPB</td>
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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Department</th>
<th>Prerequisites</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>PHC 6102</td>
<td>Principles of Health Policy and Management</td>
<td>3</td>
<td>PH HPM PR</td>
<td>Cl.</td>
<td>General principles of planning, management, evaluation, and behavior of public and private health care organizations at the local, state, and national levels.</td>
</tr>
<tr>
<td>PHC 6104</td>
<td>Management of Public Health Programs</td>
<td>3</td>
<td>PH HPM PR</td>
<td>Cl.</td>
<td>Application of principles and methods for organization and management of government and non-government public health programs.</td>
</tr>
<tr>
<td>PHC 6106</td>
<td>Global Health Program Development and Administration</td>
<td>3</td>
<td>PH EPB PR</td>
<td>Cl.</td>
<td>Program Development and Administration is one of four foundation courses for the concentration in Global Health. As a foundation course, its primary role is to provide students with a solid knowledge base in managing global health programs and projects that will serve them in their field experiences and in any one of the seven focus areas available within the global health concentration.</td>
</tr>
<tr>
<td>PHC 6110</td>
<td>International Health and Health Care Systems</td>
<td>3</td>
<td>PH HPM PR</td>
<td>Cl.</td>
<td>Study of global health problems and trends, translated to needs and demands; socio-economic and political impact on health delivery; prevailing international systems compared to U.S. system; the role of international health agencies.</td>
</tr>
<tr>
<td>PHC 6111</td>
<td>Global Primary Health Care Strategies</td>
<td>3</td>
<td>PH HPM PR</td>
<td>Cl.</td>
<td>Addresses the rationale, planning and implementation of primary health care programs from an international perspective. Emphasis is given to primary care as an integral part of a health care system and an essential component of public health.</td>
</tr>
<tr>
<td>PHC 6114</td>
<td>Health Insurance and Managed Care</td>
<td>2</td>
<td>PH HPM PR</td>
<td>Cl.</td>
<td>Financing, operations, and regulatory environment of health insurance and managed care, including principles, models, organization, management functions, public policies, and impact on cost, quality and access in communities.</td>
</tr>
<tr>
<td>PHC 6115</td>
<td>Global Health Principles and Contemporary Issues</td>
<td>3</td>
<td>PH EPB PR</td>
<td></td>
<td>This course introduces students to the global context of public health and its dimensions particular to international settings; examines major themes and policies in global health; and analyzes health problems and varying responses globally.</td>
</tr>
<tr>
<td>PHC 6116</td>
<td>International Health Education</td>
<td>3</td>
<td>PH CFH PR</td>
<td>Graduate Status.</td>
<td>This travel abroad course compares the practice and venues of health education as they occur in another country with those in the United States. Specific course location varies. Focus is on comparative assessment of individual and community health education needs, program planning, implementation, and evaluation, coordination and administration of programs, resource management.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Department</td>
<td>Prerequisites</td>
<td>Course Description</td>
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<tr>
<td>PHC 6120</td>
<td>Community Partnerships and Advocacy</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>Designed to familiarize students with key aspects of developing partnerships among private and public sector organizations for the purposes of assessing and improving the health of communities. Particular skills include coalition development, developing a constituency/partnerships, advocacy, team building, and leadership.</td>
</tr>
<tr>
<td>PHC 6146</td>
<td>Health Services Planning and Evaluation</td>
<td>3</td>
<td>PH</td>
<td>HPM</td>
<td>Study of health services planning concepts/methods, and evaluation, with an emphasis on facilities and manpower planning, providing an in-depth orientation to information requirements for health planning, and methods to cover gaps of information.</td>
</tr>
<tr>
<td>PHC 6147</td>
<td>Managing Quality in Health Care</td>
<td>2</td>
<td>PH</td>
<td>HPM</td>
<td>Study of methods and tools for managing quality in health facilities, physician practices, managed care and public health; including developments in quality assurance and improvement, utilization review, risk management, and patient satisfaction.</td>
</tr>
<tr>
<td>PHC 6148</td>
<td>Strategic Planning and Health Care Marketing</td>
<td>3</td>
<td>PH</td>
<td>HPM</td>
<td>The course reviews the fundamental steps in the strategic planning process and marketing approaches for health care organizations. The textbook and exercises emphasize non-profit organizations.</td>
</tr>
<tr>
<td>PHC 6150</td>
<td>Health Policy Analysis</td>
<td>3</td>
<td>PH</td>
<td>HPM</td>
<td>A detailed study of policies, policy making, and policy analysis in health services and their relationship to health planning, management, and health care delivery.</td>
</tr>
<tr>
<td>PHC 6151</td>
<td>Health Policy and Politics</td>
<td>3</td>
<td>PH</td>
<td>HPM</td>
<td>This course will examine the role of federal, state, and local government in health care organization, delivery, and financing in the United States and other comparable industrial nations.</td>
</tr>
<tr>
<td>PHC 6160</td>
<td>Health Care Financial Management</td>
<td>3</td>
<td>PH</td>
<td>HPM</td>
<td>An introduction to the application of financial management practices in health care organizations, cost behavior analysis, working capital management, financial statement analysis, and capital decision making.</td>
</tr>
<tr>
<td>PHC 6161</td>
<td>Health Care Finance and Costing</td>
<td>4</td>
<td>PH</td>
<td>HPM</td>
<td>PR: PHC 6102 and ACG 6025 or CI. Uses lectures, cases and online learning activities to develop and apply skills in finance and costing required in health care management.</td>
</tr>
<tr>
<td>PHC 6180</td>
<td>Health Services Management</td>
<td>3</td>
<td>PH</td>
<td>HPM</td>
<td>PR: PHC 6102 and undergraduate accounting course or CI. Advanced study of specific topics in health care organization management including the managerial process, organizational theory, resource utilization and control, and human resource management.</td>
</tr>
<tr>
<td>PHC 6181</td>
<td>Organizational Behavior in Health Services</td>
<td>3</td>
<td>PH</td>
<td>HPM</td>
<td>PR: PHC 6102 or CI. Investigates the impact that individuals, groups, and structure</td>
</tr>
</tbody>
</table>
have on behavior within organizations. The application of such knowledge is used toward advancing the effectiveness of health care and related organizations. Special consideration is given to human resource applications. Case studies and other exercises are used.

<table>
<thead>
<tr>
<th>PHC</th>
<th>6183</th>
<th>Overview of United States and International Emergency/Disaster Management</th>
<th>3</th>
<th>PH</th>
<th>EOH</th>
<th>Public Health and other professionals will be given an overview of the disaster management process. Provides terms, definitions, and concepts of emergency management from a local, national, and international perspective.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHC</td>
<td>6184</td>
<td>Emergency/Disaster Recovery</td>
<td>3</td>
<td>PH</td>
<td>EOH</td>
<td>PR: PHC 6183. The content of this course is designed to expose the concepts of: 1) recovery models used by the United States and International operations, 2) recovery planning and response to a disaster environment, especially in terms of major disaster incidents, 3) broadening and enhancing the understanding of roles and responsibilities, and 4) the importance to the overall recovery effort. In addition to the United States and international focus, the course also addresses the coordination and problem solving aspects of disaster operations.</td>
</tr>
<tr>
<td>PHC</td>
<td>6185</td>
<td>Emergency/Disaster Preparedness and Planning</td>
<td>3</td>
<td>PH</td>
<td>EOH</td>
<td>PR: PHC 6183. Emergency Preparedness and Planning provides an overview to preparedness strategies, emergency planning and assessment of hazards and resources. This course provides intermediate level direction and builds upon planning concepts learned in Overview of United States and International Emergency Management. Studies include in-depth planning and analytical framework, hazard/vulnerability analysis, and management.</td>
</tr>
<tr>
<td>PHC</td>
<td>6186</td>
<td>Public Health Emergencies in Large Populations (PHLEP)</td>
<td>3</td>
<td>PH</td>
<td>EOH</td>
<td>To develop or improve the skills of persons interested in providing emergency health services in humanitarian emergencies. The course is divided into two parts: 1) meeting health needs large populations and 2) the humanitarian and ethical issues of refugees and displaced people. Topics covered include food and nutrition, water and sanitation, providing health services, reproductive health, control of communicable diseases, humanitarian law, human rights, ethics, and the geopolitical issues related to population displacement particularly from conflict.</td>
</tr>
<tr>
<td>PHC</td>
<td>6190</td>
<td>Public Health Database Management</td>
<td>3</td>
<td>PH</td>
<td>EPB</td>
<td>PR: PHC 6701. This course focuses on the creation of databases with applications to public health and clinical research; data entry and database management and</td>
</tr>
<tr>
<td>PHC</td>
<td>6191</td>
<td>Quantitative Analysis in Health Services</td>
<td>3</td>
<td>PH</td>
<td>HPM</td>
<td>PR: PHC 6050, PHC 6102 and QMB 6305 or CI.</td>
</tr>
<tr>
<td>PHC</td>
<td>6193</td>
<td>Qualitative Methods in Community Health Research</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td></td>
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<tr>
<td>PHC</td>
<td>6195</td>
<td>Public Health Data, Information and Decision Making</td>
<td>3</td>
<td>PH</td>
<td>HPM</td>
<td>PR: PHC 6050.</td>
</tr>
<tr>
<td>PHC</td>
<td>6196</td>
<td>Information Systems in Health Care Management</td>
<td>3</td>
<td>PH</td>
<td>HPM</td>
<td>PR: PHC 6050 or CI.</td>
</tr>
<tr>
<td>PHC</td>
<td>6197</td>
<td>Community Health Data Sources and Technology</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td></td>
</tr>
<tr>
<td>PHC</td>
<td>6230</td>
<td>Foundations of Humanitarian Assistance</td>
<td>3</td>
<td>PH</td>
<td>PHC</td>
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<tr>
<td>PHC</td>
<td>6231</td>
<td>Organizing Emergency Humanitarian Actions</td>
<td>3</td>
<td>PH</td>
<td>PHC</td>
<td>PR: PHC 6230.</td>
</tr>
<tr>
<td>PHC</td>
<td>6232</td>
<td>From Emergency to Development and Prevention</td>
<td>3</td>
<td>PH</td>
<td>PHC</td>
<td>PR: PHC 6231.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>PHC 6233</td>
<td>Current Challenges in the Humanitarian Field</td>
<td>3</td>
<td>PH PHC</td>
<td>PR: PHC 6232. This course will review: leadership issues, advocacy, neutrality and impartiality, the media, prisoner visitations, torture, demobilization and decommissioning of combatants, expatriates, peace-keeping to peace-building, sovereignty, and reconstruction.</td>
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<tr>
<td>PHC 6251</td>
<td>Disease Surveillance and Monitoring</td>
<td>3</td>
<td>PH CFH</td>
<td>A review of epidemiological principles and methods used in the development and practice of disease and infection surveillance, prevention and control for public health in general and in the context of the hospital setting in particular. Basic epidemiological concepts will be focused in communicable diseases, nosocomial infections, environmental exposures, and emerging diseases. PR: Biostatistics Epidemiology, or CI.</td>
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<tr>
<td>PHC 6301</td>
<td>Water Pollution and Treatment</td>
<td>3</td>
<td>PH EOH</td>
<td>PR: CI. A study of treatment technologies for water and wastewater. Emphasis is given to treatment technologies appropriate for developing countries.</td>
<td></td>
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</tr>
<tr>
<td>PHC 6303</td>
<td>Community Air Pollution</td>
<td>3</td>
<td>PH EOH</td>
<td>PR: CHM 3610C or CI. A study of air pollutants. Emphasis is given to sources and control technologies as well as health effects and environmental impact.</td>
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<tr>
<td>PHC 6304</td>
<td>Environmental Health Microbiology</td>
<td>3</td>
<td>PH EOH</td>
<td>PR: MCB 3010C or CI. Techniques for isolation and enumeration of microorganisms of health significance from food and aquatic sources.</td>
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<tr>
<td>PHC 6305</td>
<td>Environmental Analytical Laboratory</td>
<td>4</td>
<td>PH EOH</td>
<td>PR: CI. Techniques used for quantitative sampling and analysis of air, water, and soil contaminants.</td>
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<tr>
<td>PHC 6306</td>
<td>Radiation Health Principles</td>
<td>2</td>
<td>PH EOH</td>
<td>PR: CI. An analysis of the basic concepts of radiation and the protection of individuals and population groups from ionizing and non-ionizing radiation as well as establishing relationships between radiation exposure and biological damage.</td>
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<tr>
<td>PHC 6310</td>
<td>Environmental Occupational Toxicology</td>
<td>3</td>
<td>PH EOH</td>
<td>PR: CI. A study of the nature of industrial and environmental toxins and toxic by-products, generated and distributed, leading to disease, disability, or death, and the control measures available. Lecture and appropriate laboratory methods are used.</td>
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<tr>
<td>PHC 6312</td>
<td>Environmental Fate of Chemical Releases</td>
<td>3</td>
<td>PH EOH</td>
<td>PR: CHM 2046, PHY 2054, MAC 2312 or CI. Provides an understanding of the environmental and physico-chemical factors involved in the transport, transformation, and fate of compounds released to the environment. Material covered includes sources of chemical releases as well as the factors affecting the distribution and transformation of chemicals. Routes of exposure and accumulation by humans and other organisms will also be evaluated.</td>
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<tr>
<td>PHC 6313</td>
<td>Indoor Environmental Quality</td>
<td>2</td>
<td>PH EOH</td>
<td>Students will learn the importance of maintaining acceptable indoor environmental quality in occupational and residential settings. The course</td>
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<tr>
<td>Course Code</td>
<td>Title</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Credits Required</td>
<td>Description</td>
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<tr>
<td>PHC 6314</td>
<td>Infection Control Program Design</td>
<td>3</td>
<td>PH EOH</td>
<td>PR: CI.</td>
<td>This course will review educational program design for health care workers, instructional methods, personnel and financial resource management, role of Infection Control (IC) personnel, development of goals, mission statement, action plans for IC, evaluation of programs, communication with administration, physicians and care givers.</td>
<td></td>
</tr>
<tr>
<td>PHC 6351</td>
<td>Occupational Medicine for Health Professionals</td>
<td>3</td>
<td>PH EOH</td>
<td>Cl.</td>
<td>Designed to enhance the skills of select health professionals in identifying, evaluating and charting a course of action for medical conditions resulting from occupational exposures and hazards.</td>
<td></td>
</tr>
<tr>
<td>PHC 6353</td>
<td>Environmental Risk Assessment</td>
<td>2</td>
<td>PH EOH</td>
<td>PR: CI.</td>
<td>Designed to provide training for students to develop the skills necessary to identify, characterize, quantify, and manage human health and ecological risks for the protection of human health and the environment.</td>
<td></td>
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<tr>
<td>PHC 6354</td>
<td>Safety and Health Administration</td>
<td>2</td>
<td>PH EOH</td>
<td></td>
<td>A study of techniques and administrative practices which are instrumental in the initiation and maintenance of programs and procedures that are geared to prevent and reduce work related injuries, illnesses, and discomfort.</td>
<td></td>
</tr>
<tr>
<td>PHC 6356</td>
<td>Industrial Hygiene</td>
<td>2</td>
<td>PH EOH</td>
<td>PR: CI.</td>
<td>A study of the recognition, evaluation, and control of the workplace affecting the health of employees.</td>
<td></td>
</tr>
<tr>
<td>PHC 6357</td>
<td>Environmental and Occupational Health</td>
<td>3</td>
<td>PH EOH</td>
<td>PR: CI.</td>
<td>The study of major environmental and occupational factors that contribute to development of health problems in industrialized and developed countries.</td>
<td></td>
</tr>
<tr>
<td>PHC 6358C</td>
<td>Industrial Hygiene--Physical Agents</td>
<td>2</td>
<td>PH EOH</td>
<td>PR: PHC 6356 and 1 year college physics or CI.</td>
<td>Recognition, evaluation, and control of physical agents in the workplace. Laboratory exercises and field surveys will be conducted in addition to class lectures. Lec/Lab.</td>
<td></td>
</tr>
<tr>
<td>PHC 6359</td>
<td>Xenobiotic Metabolism in Environmental and Occupational Health</td>
<td>3</td>
<td>PH EOH</td>
<td></td>
<td>Study of enzymes involved in biotransformation of foreign compounds important in environmental and occupational health.</td>
<td></td>
</tr>
<tr>
<td>PHC 6360</td>
<td>Safety Management Principles and Practices</td>
<td>2</td>
<td>PH EOH</td>
<td>PR: CI.</td>
<td>A study of safety management as it relates to hazard identification, accident investigation and training, enabling the safety manager to reduce costs to business, industry, and government.</td>
<td></td>
</tr>
<tr>
<td>PHC 6361</td>
<td>Industrial Ergonomics</td>
<td>2</td>
<td>PH EOH</td>
<td>PR: PHC 6360 or CI.</td>
<td>Systems logic and methodology for</td>
<td></td>
</tr>
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</table>

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| PHC 6362 | Industrial Ventilation | 2 | PH | EOH | PR: PHC 6356 or CI. | Basic principles of fluid mechanics and exhaust ventilation are employed in the design and evaluation of the performance of industrial ventilation systems. |
| PHC 6364 | Industrial Hygiene Aspects of Plant Operations | 2 | PH | EOH | PR: PHC 6356 or CI. | Field visits to industrial plants will be conducted so as to familiarize students without prior experience to the health hazards associated with various processes and the methods of control employed to prevent excessive exposures. |
| PHC 6365C | Analytical Methods in Industrial Hygiene I | 2 | PH | EOH | PR: PHC 6356 or CI. | Analytical measuring methodologies and instruments employed in evaluating exposure to chemical agents are described and detailed. Hands-on laboratory exercises permit full familiarization in the calibration and use of these instruments. Problem solving sessions result in the development of a routine for the proper handling of laboratory data. |
| PHC 6366C | Analytical Methods in Industrial Hygiene II | 2 | PH | EOH | PR: PHC 6356 or CI. | Analytical measuring methodologies and instruments employed in evaluating exposure to physical agents are described and detailed. Hands-on laboratory exercises permit full familiarization in the calibration and use of these instruments. Problem solving sessions result in the development of a routine for the proper handling of laboratory data. |
| PHC 6367 | Control Aspects of Industrial Hygiene | 2 | PH | EOH | PR: PHC 6356, PHC 6358. | This course maps out the framework for industrial hygiene controls with an emphasis on engineering controls, administrative controls and personal protection. It is the capstone course for industrial hygiene students, who will apply their knowledge of hazard evaluation to the appropriate selection of controls. |
| PHC 6369 | Industrial Toxicology | 2 | PH | EOH | | This course will focus on specific industries, industrial processes and the chemicals that worker’s may be potentially exposed to, and their impact on Public Health. The Standard Industrial Classification (SIC) division structure will be used to identify industries that have been studied by NIOSH or other agencies. For each industry identified, chemical hazards, exposure routes, toxicology effects, and monitoring methods will be discussed emphasizing the need for a multidisciplinary approach in providing information aimed at reducing worker exposures to industrial toxicants. |
| PHC 6370 | Biological and Surface | 2 | PH | EOH | PR: CHM 2200, CHM | This public health course will provide |
| PHC   | 6371   | Air Dispersion Modeling for Regulatory Compliance | 3 | PH | EOH | A study of air pollution meteorology (atmospheric energy balance, inversions and winds), micrometeorology (atmospheric fluid mechanics, turbulence, winds, stability classes, convective boundary layer) and atmospheric diffusion (different theories, Gaussian plume equation, air quality models, atmospheric removal processes), supported by a computer laboratory. |
| PHC   | 6373   | Protecting Public Health: Bioterrorism/Biodefense | 3 | PH | EOH | The theoretical, historical and contemporary issues associated with public health protection and safety. This includes quarantine, health and safety management, homeland security, and the history of biological warfare. |
| PHC   | 6400   | Maltreated Children and Their Families | 3 | PH | CFH | This course will identify and analyze public health policy and research issues specific to the area of child maltreatment. |
| PHC   | 6401   | Homelessness: Implications for Behavioral Healthcare | 3 | PH | CFH | A study of the structural, personal, treatment, and sociopolitical issues related to homelessness. Causes of homelessness from structural and personal factors are explored. Quantitative and qualitative data are reviewed to examine the experience of homelessness, pathways into homelessness including mental health, substance abuse, and violence/trauma. A special focus will be on the research conducted by the instructors on services for homeless families and the prevention of homelessness among individuals with severe mental illness. |
| PHC   | 6410   | Social And Behavioral Sciences Applied to Health | 3 | PH | CFH | A review of the conceptual, empirical, and theoretical contributions of the Social and Behavioral Sciences as they contribute to an understanding of health and illness. |
| PHC   | 6411   | Introduction to Social Marketing for Public Health | 3 | PH | CFH | This course is designed to analyze the components and applications of social marketing for public health: theoretical foundations; research methods; strategy development; program design and implementation, materials pretesting, and ethics. |
| PHC   | 6412   | Health Disparities, Diversity and Cultural Compete | 4 | PH | CFH | This course is designed to explore health disparities in the U.S. and multi-level strategies to reduce those disparities. Discussions will focus on a
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<tr>
<th>PHC</th>
<th>6413</th>
<th>Family and Community Violence in Public Health</th>
<th>3</th>
<th>PH</th>
<th>CFH</th>
<th>The objective of this course will be to identify and to focus on the most serious policy and research issues which are specific to the field of family violence. The course will cover theory, research, and applied programs in community settings.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHC</td>
<td>6414</td>
<td>Adolescent Health</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>The purpose of this course is to provide an overview of adolescent health issues and trends. With this primary aim, the objectives are organized around the knowledge of health assessment and interventions with adolescents and the skills needed for effective teaching methodologies to enhance health provider communication with adolescents. This course is not restricted to Public Health graduate students.</td>
</tr>
<tr>
<td>PHC</td>
<td>6418</td>
<td>Public Health and Aging</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>A study of specific health promotion and disease prevention strategies for older adults in the context of community health, immunizations, nutrition, exercise, and stress management. Also management for chronic disease, delay of disabilities, and types of long term care deliver and settings are examined.</td>
</tr>
<tr>
<td>PHC</td>
<td>6419</td>
<td>Global Issues in Community and Family Health</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>This course provides an overview of current public health issues and problems affecting communities and families around the world. A comparative approach is taken to highlight similarities and differences across countries at variable levels of socioeconomic development. Problems are addressed in terms of etiology, impact and intervention strategies. Reg. Permit Required. CI.</td>
</tr>
<tr>
<td>PHC</td>
<td>6420</td>
<td>Health Care Law, Regulation and Ethics</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>This is a survey course of the most significant issues in health care law. Core topics include licensure, malpractice, reproductive issues, the right to die, and managed care. Students will develop and understanding of substantive law, legal decision making, and the relationship between health care law and ethics. Graduate students from other departments may take the course.</td>
</tr>
<tr>
<td>PHC</td>
<td>6421</td>
<td>Public Health Law and Ethics</td>
<td>3</td>
<td>PH</td>
<td>HPM</td>
<td>PR: PHC 6102 recommended. This course provides students with an overview of major ethical and legal concepts. The course considers the role of the legal system in resolving public health problems through the legislature, the courts, and administrative agencies.</td>
</tr>
</tbody>
</table>
| PHC  | 6422 | Environmental Health Law                      | 3 | PH | EOH | PR: EOH 6357. Review and analysis of Federal and State laws and regulations in relation to the pollution, regulation and
<table>
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<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Pre-requisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHC 6430</td>
<td>Health Economics I</td>
<td>3</td>
<td>PH HPM</td>
<td>PR: ECO 2023 or equiv. and CI. Microeconomic analysis of the structure of the health care industry and economic incentives facing physicians, patients, and hospitals.</td>
</tr>
<tr>
<td>PHC 6433</td>
<td>Health Economics II</td>
<td>3</td>
<td>PH HPM</td>
<td>PR: PHC 6430 or CI. Second of a two part sequence surveying various applications of economic principles and methods to current issues in public health. Emphasis on efficiency goals of health care policy and the use of economic analysis in the design of such policy.</td>
</tr>
<tr>
<td>PHC 6435</td>
<td>Perspectives on Health Insurance</td>
<td>3</td>
<td>PH HPM</td>
<td>PR: Undergraduate Microeconomics, PHC 6430 or CI. Presents an overview of major health insurance issues, including demand, supply, employment based coverage, the uninsured, government sponsored programs, managed care, and national health. The analysis will be based on microeconomic tools and is intended for management or policy oriented students with an interest in health insurance and managed care.</td>
</tr>
<tr>
<td>PHC 6441</td>
<td>Social Determinants of Health</td>
<td>3</td>
<td>PH CFH</td>
<td>PR: PHC 6410. The course provides students with a basic understanding of our society’s most pervasive social disparities in health status and prepares students to evaluate underlying theories and promising interventions related to social determinants of health.</td>
</tr>
<tr>
<td>PHC 6442</td>
<td>Global Health Applications in the Field</td>
<td>3</td>
<td>PH EPB</td>
<td>This course prepares students for fieldwork in the global public health arena. A comparative approach is taken to highlight similarities and differences across countries at variable levels of socioeconomic development.</td>
</tr>
<tr>
<td>PHC 6500</td>
<td>Theoretical and Behavioral Basis for Health Education</td>
<td>4</td>
<td>PH CFH</td>
<td>PR: PHC 6410. Assessment of and current methodologies related to understanding and influencing psychosocial, cultural, and situational factors in voluntary behavior change process; theories of health behavior.</td>
</tr>
<tr>
<td>PHC 6505</td>
<td>Program Planning in Community Health</td>
<td>3</td>
<td>PH CFH</td>
<td>PR: PHC 6500 or CI. This course is designed to prepare students to analyze the planning and development process for community health programs. The PRECEDE-PROCEED model and intervention Mapping will be used as the primary planning frameworks.</td>
</tr>
<tr>
<td>PHC 6506</td>
<td>Program Planning Methods in Community Health</td>
<td>3</td>
<td>PH CFH</td>
<td>PR: PHC 6500 or CI. This course is designed to prepare students to analyze the planning and development process for community health programs. The PRECEDE-PROCEED model and intervention Mapping will be used as the primary planning frameworks.</td>
</tr>
<tr>
<td>PHC 6507</td>
<td>Health Education Methods</td>
<td>3</td>
<td>PH CFH</td>
<td>PR: PHC 6500 or CI. Prepares students to analyze and incorporate effective content and process in health education program delivery. Course not restricted to health education majors.</td>
</tr>
<tr>
<td>Code</td>
<td>Course Name</td>
<td>Units</td>
<td>Type</td>
<td>Description</td>
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<tr>
<td>PHC 6508</td>
<td>Case Studies in Health Education</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
</tr>
<tr>
<td>PHC 6510</td>
<td>Exotic and Emerging Infectious Diseases</td>
<td>3</td>
<td>PH</td>
<td>EOH</td>
</tr>
<tr>
<td>PHC 6511</td>
<td>Public Health Immunology</td>
<td>3</td>
<td>PH</td>
<td>EOH</td>
</tr>
<tr>
<td>PHC 6512</td>
<td>Vectors of Human Disease</td>
<td>3</td>
<td>PH</td>
<td>EOH</td>
</tr>
<tr>
<td>PHC 6513</td>
<td>Public Health Parasitology</td>
<td>3</td>
<td>PH</td>
<td>EOH</td>
</tr>
<tr>
<td>PHC 6514</td>
<td>Infectious Disease Control in Developing Countries</td>
<td>3</td>
<td>PH</td>
<td>EOH</td>
</tr>
<tr>
<td>PHC 6517</td>
<td>Infectious Disease Prevention Strategies</td>
<td>3</td>
<td>PH</td>
<td>EOH</td>
</tr>
<tr>
<td>PHC 6521</td>
<td>Public Health Nutrition</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
</tr>
<tr>
<td>PHC 6522</td>
<td>The Biological Role of Nutrition in Health</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
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<tr>
<td>PHC 6523</td>
<td>Policies and Practices in Maternal and Child Nutrition</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Type</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHC 6524</td>
<td>Public Health Nutrition for the Adult and Aging Population</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>PR: PHC 6521, PHC 6522, or CI. Study of policies and practices of nutrition in health promotion and disease prevention in adults. Focus on issues concerned with risk identification, nutrition interventions and outcome evaluations.</td>
</tr>
<tr>
<td>PHC 6526</td>
<td>Nutrition Assessment of Individuals and Communities</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>PR: PHC 6521, PHC 6522, or CI. Comparative study of anthropometric, biochemical, dietary, clinical and socioeconomic indicators of nutritional status including the differential use of these indicators for individuals and communities.</td>
</tr>
<tr>
<td>PHC 6527</td>
<td>Case Studies in Public Health Nutrition</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>PR: CI. Capstone course intended to provide a unifying opportunity to utilize concepts, principles and skills learned from other public health nutrition courses.</td>
</tr>
<tr>
<td>PHC 6530</td>
<td>Issues and Concepts in Maternal and Child Health</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>PR: CI. The purpose of this course is to provide for the foundation of Maternal and Child health for students who will be concentrating in this area, or as an overview for non-majors.</td>
</tr>
<tr>
<td>PHC 6531</td>
<td>Health Programs for Children with Special Needs</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>PR: CI. A study of causative factors, characteristics, care needs and programs for handicapped children with emphasis on health and health care issues.</td>
</tr>
<tr>
<td>PHC 6532</td>
<td>Women’s Health Issues in Public Health</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>PR: CI. A public health orientation of women’s health needs with their impact on society, family, and children.</td>
</tr>
<tr>
<td>PHC 6533</td>
<td>Health Program Development and Change Process</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>PR: CI. A study of approaches to program development, implementation and management of change process in maternal and child health.</td>
</tr>
<tr>
<td>PHC 6534</td>
<td>Cultural Competency in Children’s Mental Health</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>PR: Graduate Status. The course will explore the need of cultural competence in provision of mental health services in a multicultural society. The course will examine culture and ethnicity, multiculturalism, and intercultural communication. The course will define cultural competence from the perspective of the current different approaches to the concept, and examine cultural competence at both mental health systems and service provision levels. Case studies of how cultural competence is implemented by different mental health organizations will be examined.</td>
</tr>
<tr>
<td>PHC 6535</td>
<td>International Maternal and Child Health</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>PR: CI. The course examines current priorities for improving the health of mothers and children in developing countries. The emphasis is on understanding MCH issues within the larger context of primary health care and sociocultural factors which influence behavior.</td>
</tr>
<tr>
<td>PHC 6536</td>
<td>Population and Development</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
<td>PR: PHC 6410 or CI. Population information and development.</td>
</tr>
<tr>
<td>PHC</td>
<td>6537</td>
<td>Case Studies in MCH Programs, Policies and Research</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
</tr>
<tr>
<td>PHC</td>
<td>6540</td>
<td>Public Mental Health</td>
<td>3</td>
<td>PH</td>
<td>HPM</td>
</tr>
<tr>
<td>PHC</td>
<td>6541</td>
<td>Public Mental Health Administration</td>
<td>3</td>
<td>PH</td>
<td>HPM</td>
</tr>
<tr>
<td>PHC</td>
<td>6543</td>
<td>Foundations in Behavioral Health Systems</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
</tr>
<tr>
<td>PHC</td>
<td>6544</td>
<td>Children's Mental Health Services</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
</tr>
<tr>
<td>PHC</td>
<td>6545</td>
<td>Evaluation in Mental Health</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
</tr>
<tr>
<td>PHC</td>
<td>6547</td>
<td>Case Management in Community Mental Health</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
</tr>
<tr>
<td>PHC</td>
<td>6548</td>
<td>Grant Writing in Mental Health</td>
<td>3</td>
<td>PH</td>
<td>CFH</td>
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<tr>
<td>Code</td>
<td>Title</td>
<td>Credits</td>
<td>Coreq</td>
<td>Prerequisite</td>
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<tr>
<td>PHC 6549</td>
<td>HIV and Mental Health</td>
<td>3</td>
<td>PH</td>
<td>CFH, PR: Graduate Status</td>
<td></td>
</tr>
<tr>
<td>PHC 6550</td>
<td>Community-Based Prevention in Behavioral Health</td>
<td>3</td>
<td>PH</td>
<td>CFH, PR: Graduate Status</td>
<td></td>
</tr>
<tr>
<td>PHC 6560</td>
<td>The Public Health Laboratory System</td>
<td>3</td>
<td>PH</td>
<td>HPM</td>
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<tr>
<td>PHC 6562</td>
<td>Microbiology for Healthcare Workers</td>
<td>3</td>
<td>PH</td>
<td>CFH, PR: BSC 2010, BSC 2011, CHM 2046, or CI.</td>
<td></td>
</tr>
<tr>
<td>PHC 6580</td>
<td>Prevention and Control of Unintentional Injuries</td>
<td>3</td>
<td>PH</td>
<td>CFH, PR: Cl.</td>
<td></td>
</tr>
<tr>
<td>PHC 6590</td>
<td>Reproductive Health Trends And Issues</td>
<td>3</td>
<td>PH</td>
<td>CFH, PR: Cl.</td>
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</tbody>
</table>

This course will provide students with an interdisciplinary understanding of HIV/AIDS, focusing primarily on behavioral health and ethical issues. Students will study the unique contributions to prevention and treatment that both mental healthcare workers and theories can make to persons affected by HIV.

This web-based course is a graduate course in Behavioral Health within the Department of Community and Family Health. It is designed to provide the graduate student with an overview and understanding of the significant issues and trends in community & family behavioral health with an emphasis on behavioral health promotion and disease prevention. Major areas are: 1) overview of promotion and prevention in the United States; 2) systems delivery; 3) programs and Policies; 4) and selected at-risk populations.

This course deals with the roles of the public health laboratory in the Public Health System and thus familiarizes the student with the types, functions and interactions of Public Health Laboratories.

An overview of contemporary microbiology, with emphasis on the significance of microorganisms in the environment and clinical disease. The structure, physiology, molecular genetics, taxonomy, immunological and clinical aspects, and public health implications of microorganisms will be covered.

Prepares students to critically analyze the nature, magnitude and intervention strategies of unintentional injuries and propose new directions for prevention and control. Not restricted to public health majors.

Provides understanding of reproductive factors in Health and Disease and its impact on community, family, and individual quality of life, and to apply current advances in FP
<p>| PHC   | 6591 | Reproductive and Perinatal Epidemiology | 3 | PH | EPB | PR: PHC 6000, PHC 6050 or CI. | This course is an introduction to reproductive/perinatal epidemiology and its application in Maternal and Child Health. It examines perinatal &amp; family planning issues and emphasizes factors that affect reproductive, pregnancy and infant health outcomes. |
| PHC   | 6700 | Research Methods in Epidemiology | 3 | PH | EPB | PR: PHC 6000, PHC 6050 and CI. | Planning, execution, analysis and intervention of epidemiological studies. |
| PHC   | 6701 | Computer Applications for Public Health Researchers | 3 | PH | EPB | PR: CI. | Course covers essential computer-based techniques for a public health researcher; data entry, editing, management, subsample selection, and data encryption for confidentiality are all covered. SAS is used extensively. Course open to all graduate students. |
| PHC   | 6705 | Formative Research Methods in Social Marketing | 3 | PH | CFH | PR: Introduction to Social Marketing | This course is designed to familiarize students with the basic principles and techniques in conducting formative research for social marketing program development. The major topics covered include: principles of formative research design, qualitative data collection methods, interviewing techniques, qualitative data analysis, survey design, pretesting, and implementation, ethical principles and protection of human subjects. |
| PHC   | 6706 | Focus Group Research Strategies | 3 | PH | CFH | | This course is an intensive overview of focus group procedures in the public health environment. Attention will be placed on question development, moderator skills, analysis strategies and planning critical logistical details of focus group interviews, and analyzing results of focus group interviews. The course will examine unique methodological characteristics of focus group interviews, identify emerging trends, and explore areas of appropriate and inappropriate use. |
| PHC   | 6708 | Evaluation Methods in Community Health | 3 | PH | CFH | PR: PHC 6505 or CI. | This course will cover contextual issues surrounding evaluation, evaluation designs and methodological issues, steps involved in conducting an evaluation, communicating the results, and ensuring that evaluation findings are used by intended users. |
| PHC   | 6712 | Air Pollution Research Seminar | 1 | PH | CFH | | This seminar course is designed to facilitate communication, sharpen research skills in the context of air pollution monitoring and modeling. |
| PHC   | 6715 | Research Foundations in Public Health | 3 | PH | CFH | PR: PHC 6000 and PHC 6050. | Course covers foundations of research for understanding and evaluating public health research; plus how to plan and conduct research with minimal assistance. |
| PHC | 6760 | Health Program Evaluation | 3 | PH | HPM | PR: PHC 6430, PHC 6180, and PHC 6151 or CI. | The course develops the skills needed to evaluate health and medical care programs. Emphasis is given to research design, determination of qualitative and quantitative criteria, measurement techniques, and interpretation of findings. |
| PHC | 6761 | Global Health Assessment Strategies | 3 | PH | EPB | PR: PHC 6430 | This course provides a systematic approach for the assessment of public health interventions in low resource countries by providing tools and skills to collect, retrieve, manage, assemble, analyze and communicate information at the community level. |
| PHC | 6907 | Independent Study: Public Health | 1-6 | PH | PHC | PR: CI. S/U. | Independent study determined by the student's needs and interests. |
| PHC | 6930 | Public Health Seminar | 1-3 | PH | PHC | PR: Graduate Standing. S/U. | Interaction of faculty, students and select health professionals in relation to public health issues and research. |
| PHC | 6931 | Advanced Seminar In Social &amp; Behavioral Sciences Applied To Health | 3 | PH | CFH | PR: CI. | The course overviews the use of social science theory and methods in health problem analysis and program design. For students with appropriate background. |
| PHC | 6934 | Selected Topics in Public Health | 1-6 | PH | PHC | PR: CI. | The content of this course will be governed by student demand and instructor interest. |
| PHC | 6936 | Public Health Capstone | 3 | PH | PHC | PR: Students need to have completed all College-wide core courses and at least 75% of their required concentration courses. | The capstone course is designed to provide a culminating highly interactive experience for students and to allow for the synthesis and application of public health core disciplines in situations simulating the actual practice of public health. |
| PHC | 6945 | Supervised Field Experience | 1-2 | PH | PHC | PR: CI. S/U only. | Internship in a public health agency or setting. Application of administrative, program, and/or research models now employed in government and private public health organizations. |
| PHC | 6977 | Special Project: MPH | 3 | PH | PHC | PR: CI. S/U. | In-depth study of a selected issue in public health. A topic will be selected according to student's needs and interests. |
| PHC | 7001 | Practical Issues in Epidemiology | 3 | PH | EPB | PR: PHC 6000. | Provides an understanding of the everyday tasks faced by an epidemiologist working in the field from hypothesis generation to writing up of study findings. Required for Ph.D. students; elective for all other graduate students. |
| PHC | 7008 | Neuroepidemiology | 3 | PH | EPB | PR: PHC 6000, PHC 6050. | This course provides an overview of the epidemiology of selected neurologic diseases. Particular emphasis is placed on how methodologic problems apply to the epidemiologic study of a variety of neurologic diseases. |
| PHC | 7015 | Epidemiologic Study Design and Protocol | 3 | PH | EPB | PR: PHC 6000, PHC 6700, PHC 6051 and CI. | The course will provide the student with the opportunity to acquire |</p>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Course Description</th>
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<tbody>
<tr>
<td>PHC 7018</td>
<td>Environmental Epidemiology</td>
<td>3</td>
<td>PH EPB</td>
<td>PR: PHC 6000 and CI. This course will consider the relationship between environmental (non-occupational) factors and the occurrence of disease in human populations, including the chemical and physical extrinsic agents to which humans are exposed.</td>
</tr>
<tr>
<td>PHC 7019</td>
<td>Occupational Epidemiology</td>
<td>3</td>
<td>PH EPB</td>
<td>PR: PHC 6000 and CI. Examines the existing epidemiologic data pertaining to the health effects of specific occupational exposures and the epidemiologic methods involved in the conduct of occupational studies.</td>
</tr>
<tr>
<td>PHC 7028</td>
<td>Advanced Clinical Trials</td>
<td>4</td>
<td>PH EPB</td>
<td>PR: PHC 6000, PHC 6050, PHC 6700, PHC 6701, PHC 6017. The many facets of clinical trials will be covered including study design, ethics, monitoring, and analysis. Real datasets will be used to provide the student with the opportunity to learn database management and data analysis using SAS.</td>
</tr>
<tr>
<td>PHC 7053</td>
<td>Generalized Linear Models</td>
<td>3</td>
<td>PH EPB</td>
<td>PR: PHC 7058 The course provides an in-depth coverage of the theory of generalized linear models with application in public health. Topics covered are numerical algorithms, exponential family, modeling checking, logistic regression, loglinear models, estimating equations.</td>
</tr>
<tr>
<td>PHC 7054</td>
<td>Advanced Biostatistical Methods</td>
<td>3</td>
<td>PH EPB</td>
<td>PR: CI This course introduces students to both theoretical and practical problems in specialized advanced topics in Biostatistics. Alternate topics include Applied Multivariate Statistics, Nonparametric Methods, Spatial Statistics in Health Sciences and Advanced Sampling Design. Students can take this course repeatedly.</td>
</tr>
<tr>
<td>PHC 7055</td>
<td>Biostatistical Computing</td>
<td>3</td>
<td>PH EPB</td>
<td>PR: STA 6447 and PHC 7058, or CI. This course provides a broad foundation in modern biostatistical computing methods relevant to public health research. It prepares Ph.D. students with advanced computing skills for dissertation research. Topics include algorithms in matrix algebra, Newton Raphson, Fisher's scoring, the EM algorithm, bootstrap, random number generation, Monte Carlo Markov Chain, and data augmentation.</td>
</tr>
<tr>
<td>PHC 7056</td>
<td>Longitudinal Data Analysis</td>
<td>3</td>
<td>PH EPB</td>
<td>PR: PHC 7058 and PHC 7053 or CI. This course is a discussion of recent development of methods for analysis of longitudinal data. Covered topics include generalized estimating equations, mixed effects models, hierarchal models.</td>
</tr>
<tr>
<td>PHC 7058</td>
<td>Biostatistical Inference II</td>
<td>3</td>
<td>PH EPB</td>
<td>PR: STA 6447 or CI. This course covers the foundation of biostatistical inference, required for biostatistic program. Topics include likelihood theory, modern Bayes theories, and other modern topics.</td>
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<td>PHC</td>
<td>7059</td>
<td>Advanced Survival Data Analysis</td>
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<td>PHC</td>
<td>7067</td>
<td>Probability Models</td>
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<td>PHC</td>
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<td>Policy and Practice in Community and Family Health</td>
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<td>PHC</td>
<td>7317</td>
<td>Risk Communication in Public Health</td>
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<td>7368</td>
<td>Aerosol Technology in Industrial Hygiene</td>
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<td>Theoretical Foundations Community and Family Health</td>
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<td>PHC</td>
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<td>Family Systems and Public Health</td>
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<td>Applied Research Methods in Community and Family Health</td>
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<td>Case Studies in the Quantitative Analysis of Public Health Data</td>
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<td>Specialized Study in Public Health</td>
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<td>PHC</td>
<td>Directed Research</td>
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<tr>
<td>PHC</td>
<td>Advanced Interdisciplinary Seminar in Public Health</td>
<td>1-3</td>
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<td>PHC</td>
<td>Writing for Scholarly Publication in Health Science</td>
<td>3</td>
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<td>PHC</td>
<td>Special Topics In Public Health</td>
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<tr>
<td>PHC</td>
<td>Seminar in Health Care Outcomes Measurement</td>
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<td>PHC</td>
<td>Advanced Seminar in Grant-Writing</td>
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<td>PH</td>
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<td>PHH</td>
<td>Continental Philosophy I: Phenomenology to Hermeneutics</td>
<td>3</td>
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<td>PHH 6266</td>
<td>Continental Philosophy II: Political Theory and Continental Social Theory</td>
<td>3</td>
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<td>PHH 6267</td>
<td>Continental Philosophy III: From Structuralism to Deconstructionism</td>
<td>3</td>
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<td>PHH 6938</td>
<td>Seminar in the History of Philosophy</td>
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<td>Symbolic Logic</td>
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<td>Philosophy of Language</td>
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<td>PHI 5913</td>
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<td>PHI 5934</td>
<td>Selected Topics</td>
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<td>PHI 6105</td>
<td>Seminar in Logic</td>
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<td>AS</td>
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<tr>
<td>PHI 6155</td>
<td>Modal Logic</td>
<td>3</td>
<td>AS</td>
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<tr>
<td>PHI 6305</td>
<td>Seminar in Epistemology</td>
<td>3</td>
<td>AS</td>
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<td>PHI 6405</td>
<td>Seminar in the Philosophy of Natural Science</td>
<td>3</td>
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<td>PHI 6425</td>
<td>Seminar in the Philosophy of Social Science</td>
<td>3</td>
<td>AS</td>
<td>PHI</td>
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<tr>
<td>PHI 6506</td>
<td>Seminar in Metaphysics</td>
<td>3</td>
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</table>

1059
| PHI 6605 | Seminar in Ethics | 3 | AS | PHI | PR: GS and Cl. | Advanced study of the problems of moral philosophy. |
| PHI 6634 | Seminar in Biomedical Ethics | 3 | AS | PHI | A focused examination of a particular topic in biomedical ethics such as clinical bioethics, healthcare organizational ethics, philosophy of medicine, medical ethics and law, or medical ethics and conflict resolution. |
| PHI 6665 | Metaethics | 3 | AS | PHI | PR: PHI 2600 or Cl or GS. | A study of alternative theories of metaethics including emotivism, moral point of view, supererogate virtue theory. |
| PHI 6706 | Seminar in the Philosophy of Religion | 3 | AS | PHI | PR: GS or Cl. | An analysis of fundamental religious concepts in terms of contemporary philosophy. Seminar format. |
| PHI 6808 | Seminar in Aesthetics | 3 | AS | PHI | PR: GS or Cl. | An analysis of fundamental special problems of aesthetics; value, perception, communication, technique, context. Seminar format. |
| PHI 6908 | Directed Research | 1-19 | AS | PHI | PR: GR. ML. S/U. |  |
| PHI 6934 | Selected Topics | 1-3 | AS | PHI | PR: GS and Cl. | Selected topics according to the needs of the student. Approval slip from instructor required. |
| PHI 6945 | Graduate Instruction Methods | 1-3 | AS | PHI | S/U. | Special course to be used primarily for the training of teaching assistants. |
| PHM 5125 | Topics in Feminist Philosophy | 3 | AS | PHI | A study of recent feminist philosophical approaches to epistemology, aesthetics and political philosophy. May also be taken for credit in Women’s Studies. |
| PHM 5126 | Social Issues in Biomedical Ethics | 3 | AS | PHI | An examination of the social and political issues arising from rapid changes in medicine and technology. Topics covered may include social issues related to the just distribution of health care, reproductive technologies, HIV and AIDS, eugenics, genetic testing, and maternal-fetal relations. |
| PHM 6105 | Seminar in Social Philosophy | 3 | AS | PHI | PR: Cl. | A detailed study of the philosophical theories of society, class societies (Capitalism), advanced technocracy (all types). Seminar format. |
| PHM 6305 | Seminar in Political Philosophy | 3 | AS | PHI | PR: GS or Cl. | An examination of the main political philosophies. Seminar format. |
| PHM 6406 | Seminar in the Philosophy of Law | 3 | AS | PHI | PR: GS or Cl. | A study of the metaphysical, ethical, and epistemological bases of law. Seminar format. |
| PHM 6506 | Seminar in the Philosophy of History | 3 | AS | PHI | PR: GS or Cl. | The analysis of language and logic of historical explanation, historical idealism, historical materialism, positivism, and historical sociology. Seminar format. |
| PHM 6646 | Seminar in Development Ethics | 3 | AS | PHI | This course presents and critically examines the major ethical theories |  |
related to both national and international development institutions, policies, and practices. Open to all graduate students.

### PHP 6005 Plato 3 AS PHI PR: GS or CI.
A systematic study of Plato’s dialogues.

### PHP 6015 Aristotle 3 AS PHI PR: GS or CI.
A systematic study of Aristotle’s philosophy.

### PHP 6415 Kant 3 AS PHI PR: GS. CR: Computer Applications.
A survey of Kant’s critical philosophy, emphasizing transcendental epistemology and Kant’s critique of metaphysics. This course is open to graduate students (majors and non-majors). Prior knowledge of the history of philosophy is required, in particular of early-modern philosophy.

### PHT 5021 Professional Issues I 2 ME PHT
Foundations of systems thinking, decision making, professional expression, responsibility, and accountability (including legal/ethical concepts), culture and argumentation for the roles of the physical therapist in administration, consultation, critical inquiry, education and patient/client management. Restricted to majors.

### PHT 5022 Professional Issues II 2 ME PHT
An introduction to critical injury and educator roles and responsibilities; explores the concepts of decision-making, evaluation of research, theories of learning, research and clinical pathways. Restricted to majors.

### PHT 5023 Professional Issues III 3 ME PHT
Focus on legal, ethical, and professional responsibility and accountability of the physical therapist. Learners will further develop their abilities to make legal and ethical decisions. The class will examine state laws governing the practice of physical therapy and other health care services. Restricted to majors.

### PHT 5171C Foundational Science I 3 ME PHT
Introduction to the peripheral neuromuscular, skeletal, integumentary, and circulatory systems in normal and pathological states. Includes the anatomy and physiology of bones, joints, skin, nerves, and blood vessels, as well as the response of these tissues to injury and their potential for healing. Restricted to majors.

### PHT 5172C Foundational Science II 1 ME PHT
Emphasis on physiology of the peripheral sensorimotor and cardiopulmonary systems. Restricted to majors.

### PHT 5173C Foundational Science III 2 ME PHT
Emphasis on physiology of the peripheral sensorimotor and cardiopulmonary systems. Restricted to majors.

### PHT 5184 Movement Science I 2 ME PHT
A basic introduction to movement science and its foundational principles from four different perspectives:
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Gen Ed</th>
<th>Department</th>
<th>Prerequisites</th>
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<tr>
<td>PHT 5185</td>
<td>Movement Science II</td>
<td>3</td>
<td>ME</td>
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<td>PR: PHT 5184</td>
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<td>PHT 5271</td>
<td>Patient/Client Management I</td>
<td>3</td>
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<td>PHT 5272</td>
<td>Patient/Client Management II</td>
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<td>ME</td>
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<tr>
<td>PHT 5273</td>
<td>Patient/Client Management III</td>
<td>3</td>
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<tr>
<td>PHT 5275C</td>
<td>Physical Therapy Science I</td>
<td>4</td>
<td>ME</td>
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<tr>
<td>PHT 5276C</td>
<td>Physical Therapy Science II</td>
<td>4</td>
<td>ME</td>
<td>PHT</td>
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<tr>
<td>PHT 5277C</td>
<td>Physical Therapy Science III</td>
<td>3</td>
<td>ME</td>
<td>PHT</td>
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</tbody>
</table>

biomechanics; kinesiology; exercise physiology; and motor control, learning and development. Restricted to majors. Repeatable for 2 cr.

Elaboration of movement science principles with emphasis on biomechanics, kinesiology, functional anatomy, exercise physiology, histopathology, motor control and connective tissue properties. Restricted to majors. Repeatable for 3 cr.

Foundational principles of histology, pathology, histopathology, applied biomechanics, pharmacology and clinical medicine are introduced and applied to the physical therapy management of individuals with musculoskeletal disorders involving the limbs. Restricted to majors.

Application of principles of patient/client management to patients with cardiopulmonary disease or dysfunction and diabetes in order to identify and write plans of care for related movement dysfunction. Restricted to majors.

Learners apply principles of patient/client management to patients with progressive, non-progressive diseases and injuries of the nervous system. Restricted to majors.

Introduction to physical therapy skills in examination, evaluation, and diagnosis for clients with uncomplicated musculoskeletal impairments involving the extremities. Emphasis on obtaining a history and performing physical therapy tests and measures leading to a differential diagnosis by application of principles of movement. Restricted to majors.

Introduction to physical therapy skills used in examination, evaluation, diagnosis of and intervention for clients with activity limitations associated with cardiovascular, hematological, or pulmonary disorders. Major emphasis on selecting, justifying, administering, and interpreting physiological responses to physical agents and therapeutic exercises. Restricted to majors.

Examination, evaluation, diagnosis, and intervention for movement-related problems secondary to impairments of the nervous system. Contemporary theories of motor development, motor learning and motor control will be introduced. Student knowledge will be demonstrated with clinical problem-
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Hours</th>
<th>Prepraable Credit</th>
<th>Credit Hours</th>
<th>Course Description</th>
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<td>PHT 5283C</td>
<td>Physical Therapy Procedures</td>
<td>3</td>
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<td>Introduction to selected physical therapy interventions, obtaining a patient history, and conducting a systems screen. Restricted to majors. Repeatable for 3 cr.</td>
</tr>
<tr>
<td>PHT 5316</td>
<td>Medical Management I</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td>Introduction to medical diagnostics, pharmacological principles, and common orthopedic surgical procedures as components of medical management including repair of bone and soft tissue. Restricted to majors. Repeatable for 1 cr.</td>
</tr>
<tr>
<td>PHT 5380</td>
<td>Medical Management II</td>
<td>1</td>
<td>0</td>
<td>PR: PHT 5316</td>
<td></td>
<td>Seminar on the medical and surgical management; epidemiology; pathophysiology; pharmacology of injuries and diseases of the cardiopulmonary system including repair and regeneration. Restricted to majors. Repeatable for 1 cr.</td>
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<tr>
<td>PHT 5822</td>
<td>Clinical Education I</td>
<td>3</td>
<td>0</td>
<td></td>
<td></td>
<td>Initial clinical practice experience for the development of patient care skills. The course is graded Satisfactory/Unsatisfactory. Restricted to majors.</td>
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<tr>
<td>PHT 5906</td>
<td>Directed Independent Study</td>
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<td>0</td>
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<td></td>
<td>Directed independent stud, content to be decided. Restricted to majors.</td>
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<tr>
<td>PHT 5934</td>
<td>Special Topics I</td>
<td>1-1</td>
<td>0</td>
<td></td>
<td></td>
<td>Exploration of physical therapy practice issues. Topics may vary each semester the course is offered. A seminar and/or lab course. Restricted to majors. Not repeatable for credit.</td>
</tr>
<tr>
<td>PHT 5960</td>
<td>Clinical Proficiency and Problem Solving I</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td>Practicum for patient/client management of individuals with musculoskeletal related movement disorders complemented by direct patient care learning. Restricted to majors. Repeatable for 1 credit.</td>
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<tr>
<td>PHT 5961</td>
<td>Clinical Proficiency and Problem Solving II</td>
<td>1</td>
<td>0</td>
<td>PR: PHT 5960</td>
<td></td>
<td>Practicum for the synthesis of skills, knowledge, and values for management of individuals with cardiopulmonary and endocrine related movement disorders complemented by direct patient care learning. Restricted to majors. Repeatable for 1 credit hour.</td>
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<tr>
<td>PHT 6015</td>
<td>Orientation to Physical Therapy</td>
<td>var.</td>
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<td>Concepts of a profession, the physical therapy profession, and the roles of the physical therapist are applied to the practice of physical therapy and its professional organization. The Guide to Physical Therapy Practice is introduced.</td>
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<td>PHT 6174</td>
<td>Movement Science I - DPT</td>
<td>var.</td>
<td>0</td>
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<td></td>
<td>A basic introduction to movement science and its foundational principles from four different perspectives: biomechanics; kinesiology; exercise physiology; and motor control, learning and development. Restricted to majors.</td>
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<tr>
<td>PHT 6178</td>
<td>Movement Science II - DPT</td>
<td>var.</td>
<td>0</td>
<td></td>
<td></td>
<td>Elaboration of movement science principles with emphasis on biomechanics, kinesiology, functional science, and applied perspectives.</td>
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<td>Course Code</td>
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<td>Prerequisite</td>
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<tr>
<td>PHT 6186</td>
<td>Movement Science III</td>
<td>4</td>
<td>ME</td>
<td>PHT 5184, PHT 5185</td>
<td>Integration of movement science concepts (biomechanics; kinesiology; functional anatomy; motor control, learning and development; and exercise physiology) to planning interventions for complex movement disorders. Restricted to majors. Repeatable for 4 cr.</td>
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<tr>
<td>PHT 6284C</td>
<td>Scientific and Professional Foundations of Physical Therapy I</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>Introduction to theoretical foundation and clinical practice of physical therapy interventions. Restricted to majors.</td>
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<tr>
<td>PHT 6285C</td>
<td>Scientific and Professional Foundations of Physical Therapy II</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>Theoretical foundations and clinical practice of examination skills with emphasis on performing physical therapy tests and measures as listed in the Guide to Physical Therapist Practice. Restricted to majors.</td>
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<tr>
<td>PHT 6313</td>
<td>Medical Management III</td>
<td>1</td>
<td>ME</td>
<td>PHT 5380</td>
<td>Seminar on the medical and surgical management; epidemiology; pathophysiology; pharmacology, and repair of common injuries to and diseases of the nervous system across the life span. Restricted to majors. Repeatable for 1 credit hour.</td>
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<tr>
<td>PHT 6341</td>
<td>Medical Management II</td>
<td>1</td>
<td>ME</td>
<td>PHT 6313</td>
<td>Seminar on the medical and surgical management; epidemiology; pathophysiology, and pharmacology of complex multisystem disorders and movement disorders across the life span. Restricted to majors. Repeatable for 1 credit hour.</td>
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<tr>
<td>PHT 6352</td>
<td>Pharmacology for Healthcare Professionals</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>This course is designed to provide a basic understanding of drug absorption, distribution, metabolism, and excretion, effects on the body and side effects or toxicity.</td>
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<tr>
<td>PHT 6391C</td>
<td>Foundational Science IV</td>
<td>2</td>
<td>ME</td>
<td>PHT</td>
<td>Application of the movement sciences to examination, evaluation, diagnosis, intervention, and prevention of movement dysfunction related to the musculoskeletal, cardiopulmonary, and neuromuscular systems. Restricted to majors.</td>
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<tr>
<td>PHT 6392C</td>
<td>Foundational Science V</td>
<td>1</td>
<td>ME</td>
<td>PHT</td>
<td>Application of the behavioral foundational sciences (sociology, psychology, human development) and biopsychosocial model to each of the roles of the physical therapist. Restricted to majors.</td>
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<tr>
<td>PHT 6521</td>
<td>Professional Issues IV</td>
<td>3</td>
<td>ME</td>
<td>PHT</td>
<td>Focuses on the administrative role of the physical therapist. Includes formulation of budgets, policies, procedures, reimbursement, legal concepts of risk management and malpractice, and the ethical concept of pro bono service and the APTA judicial process. Restricted to majors.</td>
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<tr>
<td>PHT 6522</td>
<td>Professional Issues V</td>
<td>2</td>
<td>ME</td>
<td>PHT</td>
<td>Development of a strategic plan for professional growth which reflects commitment to all roles of the</td>
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<td>Course Code</td>
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<td>Offered</td>
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<td>PHT 6606</td>
<td>Critical Inquiry I</td>
<td>3</td>
<td>ME</td>
<td>PHT Introduction to critical inquiry skills of the physical therapist with successful preparation of an in-depth literature review on a selected topic in musculoskeletal or cardiopulmonary movement disorders. Restricted to majors. Repeatable for 3 credits.</td>
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<tr>
<td>PHT 6731</td>
<td>Patient/Client Management IV</td>
<td>3</td>
<td>ME</td>
<td>PHT Learners adapt principles of patient/client management to identify and state movement dysfunctions and to write plans of care. Restricted to majors.</td>
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<tr>
<td>PHT 6732</td>
<td>Advanced Patient/Client Management II</td>
<td>2</td>
<td>ME</td>
<td>PHT Learners adapt principles of patient/client management to lifestyle and socioeconomic issues in order to identify dysfunctions that can be addressed by the physical therapist. Restricted to majors.</td>
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<tr>
<td>PHT 6735C</td>
<td>Physical Therapy Science IV</td>
<td>4</td>
<td>ME</td>
<td>PHT The role of the physical therapist in ameliorating activity limitations and participation restrictions encountered by people with physical impairments. Emphasis will be placed on the physical therapy assessment and intervention procedures intended to identify and minimize physical disabilities occurring secondary to traumatic, acquired or congenital amputation and disorders of the spine. Restricted to majors.</td>
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<tr>
<td>PHT 6736C</td>
<td>Advanced Physical Therapy Science II</td>
<td>2</td>
<td>ME</td>
<td>PHT Focus on the physical therapist in ameliorating activity limitations and participation restrictions encountered by people with irreversible physical impairments. Emphasis on the physical therapy assessment and intervention procedures to identify and minimize physical disabilities occurring secondary to complex, multi-system disorders. Restricted to majors.</td>
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<tr>
<td>PHT 6841</td>
<td>Clinical Education I - DPT</td>
<td>Var</td>
<td>ME</td>
<td>PHT Initial full-time clinical practice experience for the development of patient care skills.</td>
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<tr>
<td>PHT 6863</td>
<td>Longitudinal Clinical Experience II</td>
<td>Var</td>
<td>ME</td>
<td>PHT Continuation of the initial clinical practice experience for the development of patient care skills. Students will be supervised in one center for the spring term. The course is graded Satisfactory/Unsatisfactory.</td>
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<tr>
<td>PHT 6935</td>
<td>Special Topics II</td>
<td>1-1</td>
<td>ME</td>
<td>PHT Analysis of issues related to the education, critical inquiry, administration, and/or consultant roles of the physical therapist. Topics in this seminar may vary each semester. Restricted to majors. Not repeatable for credit.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>Proficiency</td>
<td>Description</td>
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<tr>
<td>PHT 6962</td>
<td>Clinical Proficiency and Problem Solving III</td>
<td>1</td>
<td>ME</td>
<td>PHT</td>
<td>Practicum for the synthesis of skills, knowledge, and values required for the management of individuals with neuromuscular related movement disorders complemented by direct patient care learning. Restricted to majors. Repeatable for 1 credit hour.</td>
<td></td>
</tr>
<tr>
<td>PHT 6963</td>
<td>Clinical Proficiency and Problem Solving IV</td>
<td>1</td>
<td>ME</td>
<td>PHT</td>
<td>Practicum for the synthesis of skills, knowledge, and values management of individuals with complex movement and multisystem disorders complemented by direct patient care learning. Restricted to majors. Repeatable for 1 credit hour.</td>
<td></td>
</tr>
<tr>
<td>PHT 7151</td>
<td>Health Promotion and Wellness</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>Prepares students for practice as primary care providers in direct access environments with a focus on identification of health risk factors and interventions to promote wellness in individuals and populations. Restricted to majors.</td>
<td></td>
</tr>
<tr>
<td>PHT 7264C</td>
<td>Clinical Problem Solving I - DPT</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>Intro to clinical problem solving in physical therapy following a normative model for professional practice across the lifespan utilizing musculoskeletal, neuromuscular, cardiopulmonary, and integumentary preferred practice patterns.</td>
<td></td>
</tr>
<tr>
<td>PHT 7265C</td>
<td>Clinical Problem Solving II - DPT</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>A continuation of clinical problem solving in physical therapy following a normative model for professional practice across the lifespan utilizing musculoskeletal, neuromuscular, cardiopulmonary, and integumentary preferred practice patterns.</td>
<td></td>
</tr>
<tr>
<td>PHT 7328</td>
<td>Pediatric Physical Therapy</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>This course is designed to provide the student the opportunity for hands on physical therapy examination and intervention skill development with the pediatric patient population. Group discussion of issues impacting care of this population is included.</td>
<td></td>
</tr>
<tr>
<td>PHT 7402</td>
<td>Psychosocial Aspects of PT Practice</td>
<td>3</td>
<td>ME</td>
<td>PHT</td>
<td>Utilization of behavioral foundational sciences and the biopsychosocial model and their contribution to patient/client management and understanding organizational behavior. Restricted to majors. Repeatable for 3 credit hours.</td>
<td></td>
</tr>
<tr>
<td>PHT 7421</td>
<td>Professional Issues I - DPT</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>Focus on the consultant and educator roles of the physical therapist. Restricted to majors.</td>
<td></td>
</tr>
<tr>
<td>PHT 7507</td>
<td>Medical Spanish for Physical Therapists</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>Students will learn basic Spanish skills with an emphasis on communicating across cultures in a health care setting. The course is designed for non-speakers of Spanish as well as those with limited Spanish -speaking skills</td>
<td></td>
</tr>
<tr>
<td>PHT 7531</td>
<td>Professional Issues II - DPT</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>Focus on legal, ethical, &amp; professional responsibility and accountability of the physical therapist. Students further develop their abilities to make legal and ethical decisions.</td>
<td></td>
</tr>
<tr>
<td>PHT 7551</td>
<td>Principles of Health</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>General principles of planning.</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Credits</td>
<td>Type</td>
<td>Grade</td>
<td>Description</td>
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<tr>
<td>PHT 7607</td>
<td>Critical Inquiry I - DPT</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>Introduction to the critical inquiry role of the physical therapist. Course involves the successful preparation of an in-depth review of the literature and evidence related to a selected movement disorder topic.</td>
<td></td>
</tr>
<tr>
<td>PHT 7617</td>
<td>Critical Inquiry II</td>
<td>2</td>
<td>ME</td>
<td>PHT</td>
<td>Course involves the preparation of a patient case report related to movement disorders secondary to a neuromuscular or complex multi-system problem. Restricted to majors. Repeatable for 2 credits.</td>
<td></td>
</tr>
<tr>
<td>PHT 7618</td>
<td>Critical Inquiry III</td>
<td>3</td>
<td>ME</td>
<td>PHT</td>
<td>Development, implementation, and presentation of a capstone investigative project. Restricted to majors. Repeatable for 3 credits.</td>
<td></td>
</tr>
<tr>
<td>PHT 7626</td>
<td>Critical Inquiry II</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>Course involves the successful preparation of a case report of a person with a movement disorder. Topic must be approved by course instructor. Restricted to majors.</td>
<td></td>
</tr>
<tr>
<td>PHT 7640</td>
<td>Biostatistics I</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>After completing this course, the student should be able to apply basic descriptive and inferential techniques in her/his research endeavors and be able to read statistically oriented public health research articles with greater understanding.</td>
<td></td>
</tr>
<tr>
<td>PHT 7817</td>
<td>Critical Education II</td>
<td>6</td>
<td>ME</td>
<td>PHT</td>
<td>Intermediate clinical education to develop skills in inpatient physical therapy centers. Satisfactory/Unsatisfactory grade. Restricted to majors. Repeatable for 6 credit hours.</td>
<td></td>
</tr>
<tr>
<td>PHT 7842</td>
<td>Clinical Education II - DPT</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>8-week clinical experience that takes place in one center. Course is graded Satisfactory/Unsatisfactory.</td>
<td></td>
</tr>
<tr>
<td>PHT 7864</td>
<td>Integrated Clinical Experience I</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>Clinical practice experience for all components of patient client management. Students will spend the fall term in one center. The course is graded Satisfactory/Unsatisfactory.</td>
<td></td>
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<tr>
<td>PHT 7866</td>
<td>Integrated Clinical Experience II</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>Clinical practice experience for all components of patient client management. Students will spend the fall term in one center and the spring term in another. The course is graded Satisfactory/Unsatisfactory.</td>
<td></td>
</tr>
<tr>
<td>PHT 7906</td>
<td>Independent Study</td>
<td>1-3</td>
<td>ME</td>
<td>PHT</td>
<td>A seminar and/or lab course for small groups of students or independent study for individual students to address areas of special interest in physical therapy. Restricted to majors. Not repeatable for credit.</td>
<td></td>
</tr>
<tr>
<td>PHT 7907</td>
<td>Physical Therapy Elective</td>
<td>var</td>
<td>ME</td>
<td>PHT</td>
<td>A special topics course for small groups of students to address a specific area of special interest or advanced practice in physical therapy.</td>
<td></td>
</tr>
<tr>
<td>PHT 7936</td>
<td>Special Topics III</td>
<td>1-10</td>
<td>ME</td>
<td>PHT</td>
<td>Analysis of issues related to physical therapy as a component of the health care system. Topics in this seminar</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Requirements</td>
<td>Notes</td>
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<tr>
<td>PHT 8179</td>
<td>Movement Science III - DPT</td>
<td>Var</td>
<td>ME PHT</td>
<td>Motion analysis of movement related disorders performed and presented by small groups. Restricted to majors.</td>
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<tr>
<td>PHT 8266</td>
<td>Clinical Problem Solving III - DPT</td>
<td>Var</td>
<td>ME PHT</td>
<td>A culmination of clinical problem solving in physical therapy following a normative model for professional practice. Focus is on student development and presentation of a case-based educational module incorporating all aspects of professional practice.</td>
<td></td>
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<tr>
<td>PHT 8504</td>
<td>Service Learning</td>
<td>Var</td>
<td>ME PHT</td>
<td>In small groups, students plan and implement a program to meet the needs of an underserved population(s). Restricted to majors.</td>
<td></td>
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<tr>
<td>PHT 8550</td>
<td>Professional Issues III - DPT</td>
<td>Var</td>
<td>ME PHT</td>
<td>The administrative role of the physical therapist is viewed through current issues in the profession. Students prepare a strategic plan for professional growth reflecting commitment to all 5 roles of the physical therapist &amp; leadership responsibilities.</td>
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<tr>
<td>PHT 8628</td>
<td>Critical Inquiry III - DPT</td>
<td>Var</td>
<td>ME PHT</td>
<td>Development, implementation, and presentation of a capstone study. Restricted to majors.</td>
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<tr>
<td>PHT 8702</td>
<td>Advanced Prosthetics and Orthotics</td>
<td>Var</td>
<td>ME PHT</td>
<td>An advanced practice seminar in which students explore special topics in prosthetic and Orthotic devices and physical therapy management of patients/clients who use prosthetic and Orthotic devices.</td>
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<tr>
<td>PHT 8724</td>
<td>Anatomical Basis of Physical Therapy and Rehabilitation</td>
<td>Var</td>
<td>ME PHT</td>
<td>In depth study of a selected joint complex of both the musculoskeletal system in both anatomic and clinical contexts with particular emphasis on the intricate relationship of this system to other functional entities of human body.</td>
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<tr>
<td>PHT 8843</td>
<td>Clinical Education III - DPT</td>
<td>Var</td>
<td>ME PHT</td>
<td>Final 16-week clinical experience that takes place in a comprehensive center or cluster of centers. Course is graded Satisfactory/Unsatisfactory.</td>
<td></td>
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<tr>
<td>PHY 5720C</td>
<td>Electronics for Research</td>
<td>3</td>
<td>AS PHY</td>
<td>A rigorous introduction to the fundamentals of analog and digital electronics. Theoretical circuit analysis and weekly labs introduce practical use of diodes, transistors, analog and digital Ics, breadboarding techniques and electronics test instrumentation. Spring Semester.</td>
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</tr>
<tr>
<td>PHY 5937</td>
<td>Selected Topics in Physics</td>
<td>1-4</td>
<td>AS PHY</td>
<td>Each topic is a course in directed study under the supervision of a faculty member.</td>
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<tr>
<td>PHY 6246</td>
<td>Classical Mechanics</td>
<td>3</td>
<td>AS PHY</td>
<td>PR: PHY 4222 or CI. Fall Semester. Dynamics of particles and systems of particles, Lagrange's equation, central forces, rigid body dynamics.</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>PHY 6347</td>
<td>Applied Electromagnetic Theory</td>
<td>3</td>
<td>AS</td>
<td>PHY 6346 or Cl.</td>
<td>Second semester of sequence PHY 6346, PHY 6347. Electromagnetic waves, wave guides and resonant cavities, diffraction, relativistic-particle kinematics and dynamics, plasmas and magnetohydrodynamics.</td>
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</tr>
<tr>
<td>PHY 6446</td>
<td>Lasers and Applications</td>
<td>3</td>
<td>AS</td>
<td>PHY 4324 and PHY 4604 or Cl.</td>
<td>Optical modes, optical resonator theory, gain saturation, theory of laser oscillators, specific laser systems, Q-switching and mode-locking, optical waveguides.</td>
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<tr>
<td>PHY 6447</td>
<td>Physics of Lightwave Devices and Applications</td>
<td>3</td>
<td>AS</td>
<td>PHY 6446 or Cl.</td>
<td>Nonlinear optics including optical phase conjugation, second harmonic and sum frequency generation, and stimulated Raman scattering. Selected applications of lasers and nonlinear optics.</td>
<td></td>
</tr>
<tr>
<td>PHY 6536</td>
<td>Statistical Mechanics</td>
<td>3</td>
<td>AS</td>
<td>PHY 5624 or Cl.</td>
<td>Kinetic theory, configuration and phase space. Boltzmann theorem, Liouville theorem, ensemble theory, quantum statistics.</td>
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<tr>
<td>PHY 6645</td>
<td>Quantum Mechanics I</td>
<td>3</td>
<td>AS</td>
<td>PHY 4604 or Cl.</td>
<td>Hilbert space, continuous spectrum, matrix and wave mechanics, quantum dynamics, symmetries, angular momentum, perturbation methods</td>
<td></td>
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<tr>
<td>PHY 6646</td>
<td>Applied Quantum Mechanics</td>
<td>3</td>
<td>AS</td>
<td>PHY 6645 or Cl.</td>
<td>Approximation and perturbation methods, hydrogen fine structure, scattering, identical particles, second quantization, Dirac equation.</td>
<td></td>
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<tr>
<td>PHY 6753</td>
<td>Measurement and Instrumentation</td>
<td>3</td>
<td>AS</td>
<td>PHY 4744 or PHY 5720 or Cl.</td>
<td>Measurement, signals and noise; analog/digital conversion; data communication; digital signal processing. Weekly labs for LabVIEW programming, instrument control and data acquisition through RS232 and GPIB interface.</td>
<td></td>
</tr>
<tr>
<td>PHY 6909</td>
<td>Independent Study</td>
<td>1-1.9</td>
<td>AS</td>
<td>Cl.</td>
<td>Independent study in which student must have a contract with an instructor.</td>
<td></td>
</tr>
<tr>
<td>PHY 6911</td>
<td>Directed Research</td>
<td>1-1.9</td>
<td>AS</td>
<td>GS.</td>
<td>An individual investigation of a research topic under the supervision of an instructor.</td>
<td></td>
</tr>
<tr>
<td>PHY 6935</td>
<td>Graduate Seminar</td>
<td>1</td>
<td>AS</td>
<td>Cl. All Physics graduate students are expected to enroll in this course at least once.</td>
<td></td>
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<tr>
<td>PHY 6938</td>
<td>Selected Topics in Physics</td>
<td>1-1.0</td>
<td>AS</td>
<td>Cl.</td>
<td>Each topic is a course in directed study under the supervision of a faculty member.</td>
<td></td>
</tr>
<tr>
<td>PHY 6940</td>
<td>Supervised Teaching</td>
<td>3</td>
<td>AS</td>
<td>Dept. Approval Required.</td>
<td>Laboratory teaching under the direction of a Physics Department faculty member.</td>
<td></td>
</tr>
<tr>
<td>PHY 6971</td>
<td>Thesis: Master's</td>
<td>2-1.9</td>
<td>AS</td>
<td>Cl.</td>
<td>Laboratorie teaching under the direction of a Physics Department faculty member.</td>
<td></td>
</tr>
<tr>
<td>PHY 7910</td>
<td>Directed Research</td>
<td>1-9</td>
<td>AS</td>
<td>Graduate Ph.D. level</td>
<td>Applications of mathematical techniques to classical and modern physics. Vector spaces including Hilbert space, orthogonal functions, generalized functions, Fourier.</td>
<td></td>
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<tr>
<td>PHZ 5115</td>
<td>Methods of Theoretical Physics I</td>
<td>3</td>
<td>AS</td>
<td>MAP 2302 or Cl.</td>
<td>Applications of mathematical techniques to classical and modern physics. Vector spaces including Hilbert space, orthogonal functions, generalized functions, Fourier.</td>
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<tr>
<td>Course Code</td>
<td>Title</td>
<td>Credits</td>
<td>Department</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>PHZ 5116</td>
<td>Methods of Theoretical Physics II</td>
<td>3</td>
<td>AS PHY</td>
<td>PR: MAP 2302 or CI.</td>
<td>Applications of mathematical techniques to classical and modern physics. Selected topics in complex analysis, differential and integral equations, numerical methods, and probability theory.</td>
<td></td>
</tr>
<tr>
<td>PHZ 5156C</td>
<td>Computational Physics I</td>
<td>3</td>
<td>AS PHY</td>
<td>PR: COP 5016 or CI.</td>
<td>C programming applied to real science and engineering problems. Data analysis, numerical algorithms, modeling, parallel computation. Subjects selected from current research may include neurobiology, quantum magnetism, chaos, finance, materials science.</td>
<td></td>
</tr>
<tr>
<td>PHZ 5304</td>
<td>Nuclear Physics</td>
<td>3</td>
<td>AS PHY</td>
<td>PR: PHY 4604 or CI.</td>
<td>Nuclear forces, nuclear models, nuclear structure, decay, nuclear reactions, and high energy physics.</td>
<td></td>
</tr>
<tr>
<td>PHZ 5405</td>
<td>Solid State Physics I</td>
<td>3</td>
<td>AS PHY</td>
<td>PR: PHY 3101, MAP 2302, CI.</td>
<td>Crystal structure, x-ray and electron diffraction, mechanical and thermal properties of solids, electrical and magnetic properties of metals, band theory of metals, insulators, and semiconductors. First semester of sequence PHZ 5405, PHZ 6426.</td>
<td></td>
</tr>
<tr>
<td>PHZ 6136</td>
<td>Physical Applications of Group Theory</td>
<td>3</td>
<td>AS PHY</td>
<td>PR: Cl.</td>
<td>Matrices, symmetry elements and point groups, reducible and irreducible representations, molecular vibrations, selection rules, rotation groups and atomic levels, molecular orbitals and electronic energies, space groups and spectra of crystals, crystal field theory and symmetry.</td>
<td></td>
</tr>
<tr>
<td>PHZ 6204</td>
<td>Atomic and Molecular Spectra I</td>
<td>3</td>
<td>AS PHY</td>
<td>PR: PHY 4604 or CI.</td>
<td>Hydrogen atom, one electron systems, central field and vector models, perturbations, Zeeman and Stark effect, hyperfine structure, atomic structure calculations; diatomic spectra, rotational and vibration analysis, intensities, temperatures from spectra, isotope effects.</td>
<td></td>
</tr>
<tr>
<td>PHZ 6205</td>
<td>Atomic And Molecular Spectra II</td>
<td>3</td>
<td>AS PHY</td>
<td>PR: PHZ 6204 or CI.</td>
<td>Electronic transitions in diatomic molecules, Hund’s coupling schemes, electron configuration and valence, astrophysical applications, predisassociation, normal modes of polyatomic molecules, Raman and IR spectra, rotation-vibration interaction, microwave spectra, thermodynamic properties, stellar atmospheres.</td>
<td></td>
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<tr>
<td>PHZ 6426</td>
<td>Solid State Physics II</td>
<td>3</td>
<td>AS PHY</td>
<td>PR: PHZ 5405 or CI.</td>
<td>Optical, electrical and magnetic properties of insulators, superconductivity, imperfections in solids. Second semester of sequence PHZ 5405, PHZ 6426.</td>
<td></td>
</tr>
<tr>
<td>POS 5155</td>
<td>Issues in Urban Government and Politics</td>
<td>3</td>
<td>AS POL</td>
<td></td>
<td>Selected issues and topics in Urban Government and politics.</td>
<td></td>
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<tr>
<td>POS</td>
<td>Course Description</td>
<td>Units</td>
<td>AS</td>
<td>Type</td>
<td>Prerequisite</td>
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<tr>
<td>POS 5159</td>
<td>Urban Policy Analysis</td>
<td>3</td>
<td>AS</td>
<td>PAD</td>
<td></td>
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<tr>
<td>POS 6045</td>
<td>Seminar in American Government &amp; Politics</td>
<td>3</td>
<td>AS</td>
<td>POL</td>
<td>Sr./GS.</td>
<td></td>
</tr>
<tr>
<td>POS 6127</td>
<td>Issues in State Government and Politics</td>
<td>3</td>
<td>AS</td>
<td>POL</td>
<td>GS.</td>
<td></td>
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<tr>
<td>POS 6157</td>
<td>Seminar in Urban Government and Politics</td>
<td>3</td>
<td>AS</td>
<td>POL</td>
<td></td>
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<tr>
<td>POS 6415</td>
<td>The American Presidency</td>
<td>3</td>
<td>AS</td>
<td>POL</td>
<td>GS.</td>
<td></td>
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<tr>
<td>POS 6427</td>
<td>The Legislative Process</td>
<td>3</td>
<td>AS</td>
<td>POL</td>
<td>GS.</td>
<td></td>
</tr>
<tr>
<td>POS 6455</td>
<td>Political Parties and Interest Groups</td>
<td>3</td>
<td>AS</td>
<td>POL</td>
<td>GS.</td>
<td></td>
</tr>
<tr>
<td>POS 6607</td>
<td>Constitutional Law</td>
<td>3</td>
<td>AS</td>
<td>POL</td>
<td>PR: GS.</td>
<td></td>
</tr>
<tr>
<td>POS 6698</td>
<td>Seminar in Law and Politics</td>
<td>3</td>
<td>AS</td>
<td>POL</td>
<td>PR: GS.</td>
<td></td>
</tr>
<tr>
<td>POS 6735</td>
<td>Foundations of Political Inquiry</td>
<td>3</td>
<td>AS</td>
<td>POL</td>
<td></td>
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<tr>
<td>POS 6736</td>
<td>Political Research Methods</td>
<td>3</td>
<td>AS</td>
<td>POL</td>
<td>PR: POS 3713 or equiv.</td>
<td></td>
</tr>
<tr>
<td>POS 6909</td>
<td>Independent Study</td>
<td>1-3</td>
<td>AS</td>
<td>POL</td>
<td>PR: 3.0 in Political Science, CC. S/U.</td>
<td></td>
</tr>
<tr>
<td>POS 6919</td>
<td>Directed Research</td>
<td>1-3</td>
<td>AS</td>
<td>POL</td>
<td>PR: GR. ML. S/U.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Pre-Requisites</td>
<td>Description</td>
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<tr>
<td>POS 6933</td>
<td>Selected Topics in Political Science</td>
<td>3</td>
<td>AS POL</td>
<td>Selected topics, issues, and problems in political science.</td>
<td></td>
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</tr>
<tr>
<td>POS 6942</td>
<td>Field Work in Political Science</td>
<td>1-3</td>
<td>AS POL PR: 3.0 in Political Science and GS.</td>
<td>Application of research models now employed in governmental agencies, including development of a structured research proposal.</td>
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<tr>
<td>POS 6971</td>
<td>Thesis: Master’s</td>
<td>2-1.9</td>
<td>AS POL PR: CC. S/U.</td>
<td>Provides students who are capable of independent work with the opportunity to explore advanced problems of political theory.</td>
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</tr>
<tr>
<td>POT 6007</td>
<td>Seminar in Political Theory</td>
<td>3</td>
<td>AS POL PR: GS.</td>
<td>Survey of research and theories of personality, including its relationship to the development of normal and abnormal behavior.</td>
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<tr>
<td>PPE 6058</td>
<td>Personality</td>
<td>3</td>
<td>AS PSY</td>
<td>Courses in research strategies, design and analysis, and measurement theory in psychological experimentation. Inferential statistics, anova, correlation methods, and interpretation.</td>
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<tr>
<td>PSB 6056</td>
<td>Physiological Psychology</td>
<td>3</td>
<td>AS PSY PR: Admission to graduate program in Psychology or Cl.</td>
<td>Survey of data and research methods in Behavioral Neuroscience. Basic learning theories and CNS function in behavior, and disorders associated with CNS dysfunction will be covered.</td>
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<tr>
<td>PSY 6217</td>
<td>Research Methods and Measurement</td>
<td>2-4</td>
<td>AS PSY PR: Cl.</td>
<td>A review of the history of modern psychology with emphasis on the major systematic approaches that have influenced the current structure of psychology. Persisting polarities and common underlying issues are studied in various historical contexts.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 6605C</td>
<td>History and Systems of Psychology</td>
<td>2</td>
<td>AS PSY PR: Admission to graduate program in Psychology or Cl.</td>
<td>An advanced reading program of selected topics in Psychology under the supervision of a Psychology faculty member. The reading program is designed to meet the individual requirements and interest of graduate students in Psychology, with selected topics chosen by the student in close collaboration with a faculty member.</td>
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<tr>
<td>PSY 6907</td>
<td>Independent Study</td>
<td>1-1.9</td>
<td>AS PSY PR: Majors only. S/U.</td>
<td>Ethical issues and professional</td>
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<tr>
<td>Code</td>
<td>Title</td>
<td>Credits</td>
<td>Type</td>
<td>Department</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>PUP</td>
<td>Public Policy and Health Care</td>
<td>3</td>
<td>AS</td>
<td>POL</td>
<td></td>
<td>Examination of public policy from a theoretical and practical decision. Analysis will be presented in terms of their usefulness in designing policy.</td>
</tr>
<tr>
<td>PUP</td>
<td>Seminar in Public Policy</td>
<td>3</td>
<td>AS</td>
<td>POL</td>
<td></td>
<td>The course is designed to act as a &quot;bridge&quot; between undergraduate and graduate public relations and advertising education, and between professional communication practices and strategic communication scholarship.</td>
</tr>
<tr>
<td>PUR</td>
<td>Strategic Communication Campaigns</td>
<td>3</td>
<td>AS</td>
<td>COM</td>
<td>PR: CC.</td>
<td>The focus is on the theoretical basis of public relations and advertising as a management function. These theories are applied to strategic communication management. Nonmajors allowed with necessary prerequisites. Not repeatable for credit.</td>
</tr>
<tr>
<td>QMB</td>
<td>Managerial Decision Analysis</td>
<td>2</td>
<td>BU</td>
<td>MBA</td>
<td></td>
<td>A study of the general concepts of interval estimation, hypothesis testing, correlation and multiple regression with an emphasis on applications, concepts and interpretation of results.</td>
</tr>
<tr>
<td>QMB</td>
<td>Applied Business Forecasting</td>
<td>3</td>
<td>BU</td>
<td>QMB</td>
<td>PR: QMB 6305 or equiv., CC.</td>
<td>Logic and application of quantitative forecasting, techniques to problems in business.</td>
</tr>
<tr>
<td>QMB</td>
<td>Applied Linear Statistical Models</td>
<td>3</td>
<td>BU</td>
<td>QMB</td>
<td>PR: QMB 6305 or equiv., CC.</td>
<td>A study of multivariate data analysis techniques and their applications to problems and systems in business.</td>
</tr>
<tr>
<td>QMB</td>
<td>Operations Management and Quality Enhancement</td>
<td>2</td>
<td>BU</td>
<td>MBA</td>
<td>PR: GS and college algebra.</td>
<td>Principles of managing manufacturing and service organizations. Topics include: competitive use of operations, comprehensive manufacturing strategies, production system design, material requirements planning, JIT systems, quality management, statistical process control, and project management.</td>
</tr>
<tr>
<td>QMB</td>
<td>Introduction to Research Methods</td>
<td>3</td>
<td>BU</td>
<td>QMB</td>
<td>PR: CC.</td>
<td>A course in research strategies, design, analysis, and measurement for business research.</td>
</tr>
<tr>
<td>QMB</td>
<td>Applied Multivariate Statistical Methods</td>
<td>3</td>
<td>BU</td>
<td>QMB</td>
<td>PR: CC.</td>
<td>A course in research analysis and measurement focusing on multivariate statistical analysis techniques.</td>
</tr>
<tr>
<td>RCS</td>
<td>Rehabilitation Counseling: Concepts</td>
<td>3</td>
<td>BC</td>
<td>REH</td>
<td>PR: CC.</td>
<td>Introduction to the profession of Rehabilitation Counseling and current professional problems in the practice of psychology.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>REH</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>RCS 5080</td>
<td>Medical Aspects of Disability</td>
<td>3</td>
<td>BC</td>
<td>REH</td>
<td>PR: RCS 5780 or CP.</td>
<td>A survey of medical conditions and disabilities encountered by rehabilitation and mental health counselors. Examines the relationship of client handicaps, physical and mental, to rehabilitation and mental health programming.</td>
</tr>
<tr>
<td>RCS 5780</td>
<td>Legal, Ethical, Professional Standards and Issues in Counseling</td>
<td>3</td>
<td>BC</td>
<td>REH</td>
<td>PR: CC.</td>
<td>An overview of all aspects of professional functioning including history, roles, organizational structures, ethics, standards and credentialing. Contemporary and developing issues in the field of professional counseling will also be addressed.</td>
</tr>
<tr>
<td>RCS 5905</td>
<td>Directed Studies</td>
<td>1-4</td>
<td>BC</td>
<td>REH</td>
<td>PR: CI.</td>
<td>Supervised rehabilitation studies under the direction of a faculty member.</td>
</tr>
<tr>
<td>RCS 6220</td>
<td>Individual Evaluation and Assessment</td>
<td>3</td>
<td>BC</td>
<td>REH</td>
<td>PR: RCS 5080, RCS 5780, RCS 6440.</td>
<td>Examines assessment procedures utilized in rehabilitation and mental health counseling settings and critical issues in the evaluation of people who are mentally and physically disabled.</td>
</tr>
<tr>
<td>RCS 6301</td>
<td>Career and Lifestyle Assessment</td>
<td>3</td>
<td>BC</td>
<td>REH</td>
<td>PR: RCS 5080, RCS 5035, MHS 5020, RCS 6470, RCS 6440.</td>
<td>Career development, lifestyle, and related factors with special emphasis on the needs of individuals with disabilities. Includes job placement and a survey of work requirements in different occupations and how these relate to functional limitations.</td>
</tr>
<tr>
<td>RCS 6407</td>
<td>Counseling Theories and Practice</td>
<td>3</td>
<td>BC</td>
<td>REH</td>
<td>PR: MHS 5020, RCS 5035, RCS 5080, RCS 6440.</td>
<td>An extension and intensification of the rehabilitation and mental health counseling skills developed in RCS 5404. Includes the study of counseling theories and their contribution to successful counseling and rehabilitation practice.</td>
</tr>
<tr>
<td>RCS 6408</td>
<td>Diagnosis and Treatment of Psychopathology</td>
<td>3</td>
<td>BC</td>
<td>REH</td>
<td>PR: MHS 5020, RCS 6440, RCS 5080, RCS 5035. Majors Only.</td>
<td>Psychopathology as applied to psychotherapy and case management in mental health, addictions, and other rehabilitation settings.</td>
</tr>
<tr>
<td>RCS 6409</td>
<td>Counseling in Community Settings</td>
<td>3</td>
<td>BC</td>
<td>REH</td>
<td>PR: MHS 5020.</td>
<td>Course is designed to acquaint students with profession of counseling, varied settings in which rehabilitation, mental health counselors, and marriage &amp; family therapists work, pattern of service delivery, &amp; future trends in the profession. Majors only.</td>
</tr>
<tr>
<td>RCS 6440</td>
<td>Social and Cultural Foundations of Counseling</td>
<td>3</td>
<td>BC</td>
<td>REH</td>
<td>PR: RCS 5780 or CC.</td>
<td>Counseling issues in a multicultural and diverse society. Special emphasis on psychosocial adjustment and counseling for individuals with physical and mental disabilities.</td>
</tr>
<tr>
<td>RCS 6459</td>
<td>Professional Skills for Counseling</td>
<td>3</td>
<td>BC</td>
<td>REH</td>
<td>PR: RCS 5450 or CI.</td>
<td>The course will be a more in depth</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Co-requisites</td>
<td>Description</td>
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<tr>
<td>RCS 6476</td>
<td>Human Sexuality Counseling</td>
<td>3</td>
<td>BC REH</td>
<td>Course is designed to introduce students &amp; mental health professionals to the diverse nature and construct of human sexuality. The curriculum meets the Florida Statute 491 licensure requirement as a contact area in “human sexuality theories”. Majors only.</td>
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<tr>
<td>RCS 6510</td>
<td>Group Theories and Practice</td>
<td>3</td>
<td>BC REH</td>
<td>Theoretical and empirical issues in group counseling are examined in the context of an ongoing group. Emphasis is on application to rehabilitation and mental health counseling.</td>
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<tr>
<td>RCS 6740</td>
<td>Research and Program Evaluation</td>
<td>3</td>
<td>BC REH</td>
<td>Training in the evaluation and utilization of available research studies and the development of research skills. An individual research project is required.</td>
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</tr>
<tr>
<td>RCS 6803</td>
<td>Practicum in Counseling</td>
<td>3</td>
<td>BC REH</td>
<td>Field work experience in rehabilitation mental health counseling.</td>
<td></td>
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</tr>
<tr>
<td>RCS 6825</td>
<td>Internship</td>
<td>3</td>
<td>BC REH</td>
<td>Student placement in an approved intern setting for a minimum of 600 hours of supervised experience.</td>
<td></td>
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</tr>
<tr>
<td>RCS 6906</td>
<td>Independent Study</td>
<td>1-4</td>
<td>BC REH</td>
<td>Independent study where the student must have a contract with a faculty member.</td>
<td></td>
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</tr>
<tr>
<td>RCS 6930</td>
<td>Seminar in Rehabilitation Counseling</td>
<td>1-4</td>
<td>BC REH</td>
<td>Selected issues and problems in rehabilitation counseling with subject and scope to be determined by instructor.</td>
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<tr>
<td>RCS 6970</td>
<td>Thesis: Master’s</td>
<td>2-1</td>
<td>BC REH</td>
<td>Selected issues and problems in rehabilitation counseling with subject and scope to be determined by instructor.</td>
<td></td>
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<tr>
<td>RED 6116</td>
<td>Current Trends in Elementary Reading Instruction</td>
<td>3</td>
<td>ED EDE</td>
<td>Approaches, materials, and procedures in Elementary Reading instruction, with emphasis on pertinent research.</td>
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<tr>
<td>RED 6247</td>
<td>District and School Level Supervision in Literacy</td>
<td>3</td>
<td>ED EDR</td>
<td>District and School Level Supervision in Literacy familiarizes students with issues related to the organization and monitoring of elementary and secondary reading programs at the school and district levels, with an emphasis on the former.</td>
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<tr>
<td>RED 6365</td>
<td>Reading In Secondary And Higher Education</td>
<td>3</td>
<td>ED EDR</td>
<td>Designed for student and inservice teachers with appropriate B.A. degrees. Content covers secondary, community college, and university levels. Organization permits student to work on applications to individual levels and disciplines. Research paper required.</td>
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<tr>
<td>RED 6449</td>
<td>Literacy and Technology</td>
<td>3</td>
<td>ED EDR</td>
<td>Literacy and Technology focuses on technology as a tool for literacy instruction. Throughout the course, students will preview and evaluate literacy-related software and</td>
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<tr>
<td>RED</td>
<td>6514 The Reading Process in the Elementary Grades</td>
<td>3</td>
<td>ED</td>
<td>EDE</td>
<td>Prepares students in the foundations of literacy including learning principles, teaching and assessment strategies for providing literacy instruction to emergent, novice, transitional, and accomplished readers and writers in the elementary grades.</td>
<td></td>
</tr>
<tr>
<td>RED</td>
<td>6516 Corrective Reading in the Classroom</td>
<td>3</td>
<td>ED</td>
<td>EDR</td>
<td>PR: RED 4310 or CI. Use of diagnostic and prescriptive procedures with individual and group reading instruction.</td>
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</tr>
<tr>
<td>RED</td>
<td>6540 Assessment in Literacy</td>
<td>3</td>
<td>ED</td>
<td>EDR</td>
<td>PR: LAE 6315, RED 6544, RED 6545, RED 6747. RED 6540 is a three credit graduate level course which focuses on methods of analysis of children’s literacy and strategies for promoting language, reading and writing development. Authentic literacy assessment in classroom and other instructional environments, informal assessment and diagnosis, and standardized tests will be utilized in evaluation of the multiple factors in reading, writing and language process and problems.</td>
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<tr>
<td>RED</td>
<td>6544 Cognition, Comprehension, and Content Area Reading: Remediation of Reading</td>
<td>3</td>
<td>ED</td>
<td>EDR</td>
<td>In-depth study of reading comprehension. Emphasis is placed on discussion of the concepts of cognition and learning, metacognition and comprehension of text included in the reading process. Process in the reading/writing, connection, specific reading strategies, and procedures for comprehension of text in the content areas are presented.</td>
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<tr>
<td>RED</td>
<td>6545 Issues in Vocabulary and Word Study</td>
<td>3</td>
<td>ED</td>
<td>EDR</td>
<td>The purpose of this course is to provide students with an understanding of current theory and research about reading and writing vocabulary instruction and the interactive causes of literacy disabilities.</td>
<td></td>
</tr>
<tr>
<td>RED</td>
<td>6749 History and Models of Reading: Prevention and Intervention of Reading Difficulties</td>
<td>3</td>
<td>ED</td>
<td>EDR</td>
<td>History and Models of Reading: Prevention and Intervention of Reading Difficulties reintroduces students to literacy through the historical and scientific research perspective.</td>
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</tr>
<tr>
<td>RED</td>
<td>6786 Teacher Research Methods in Reading</td>
<td>3</td>
<td>ED</td>
<td>EDR</td>
<td>PR: EDF 6481, RED 6747, RED 6545, RED 6544, RED 6247, RED 6449. Teacher Research Methods in Reading familiarizes students with the application of classroom action research methodologies in literacy. Course content is directed toward developing understandings of the need for teacher research and a mindset for becoming a teacher researcher. Students will develop a knowledge base in quantitative, qualitative, case study, and portfolio-based research methodologies for teachers.</td>
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<tr>
<td>RED</td>
<td>6846</td>
<td>Practicum in Reading</td>
<td>3</td>
<td>ED</td>
<td>EDR</td>
<td>PR: RED 6747, RED 6545, RED 6544, RED 6540, or CI.</td>
</tr>
<tr>
<td>RED</td>
<td>6906</td>
<td>Independent Study: Reading Education</td>
<td>1-6</td>
<td>ED</td>
<td>EDR</td>
<td>S/U.</td>
</tr>
<tr>
<td>RED</td>
<td>6971</td>
<td>Thesis: Masters/Educational Specialist</td>
<td>2-19</td>
<td>ED</td>
<td>EDR</td>
<td></td>
</tr>
<tr>
<td>RED</td>
<td>7048</td>
<td>Reading as a Symbolic Process</td>
<td>3</td>
<td>ED</td>
<td>EDR</td>
<td>PR: RED 6116 or RED 6365, GS or DPR.</td>
</tr>
<tr>
<td>RED</td>
<td>7742</td>
<td>Research in Vocabulary and Word Study</td>
<td>3</td>
<td>ED</td>
<td>EDR</td>
<td>PR: Advanced graduate status: Masters level coursework in reading or related field.</td>
</tr>
<tr>
<td>RED</td>
<td>7745</td>
<td>Research in Reading Instruction</td>
<td>3</td>
<td>ED</td>
<td>EDR</td>
<td>PR: RED 6116 or RED 6365, GS or DPR.</td>
</tr>
<tr>
<td>RED</td>
<td>7910</td>
<td>Directed Research in Reading/Language Arts</td>
<td>1-9</td>
<td>ED</td>
<td>EDR</td>
<td>PR: Advanced graduate standing.</td>
</tr>
<tr>
<td>RED</td>
<td>7938</td>
<td>Advanced Graduate Seminar</td>
<td>1-3</td>
<td>ED</td>
<td>EDR</td>
<td>PR: Enrollment in at least 3 hours is required for each doctoral student.</td>
</tr>
<tr>
<td>RED</td>
<td>7980</td>
<td>Dissertation: Doctoral</td>
<td>2-30</td>
<td>ED</td>
<td>EDR</td>
<td>Admission to Candidacy.</td>
</tr>
<tr>
<td>REL</td>
<td>6035</td>
<td>Theory and Method in Religious Studies</td>
<td>4</td>
<td>AS</td>
<td>REL</td>
<td>PR: GS in the Department of Religious Studies.</td>
</tr>
<tr>
<td>REL</td>
<td>6126</td>
<td>Religion in America</td>
<td>3</td>
<td>AS</td>
<td>REL</td>
<td></td>
</tr>
<tr>
<td>REL</td>
<td>6143</td>
<td>Religion, Culture, and Society</td>
<td>3</td>
<td>AS</td>
<td>REL</td>
<td></td>
</tr>
<tr>
<td>REL</td>
<td>6175</td>
<td>Religion, Ethics and Public Policy</td>
<td>3</td>
<td>AS</td>
<td>REL</td>
<td></td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Variable</td>
<td>Offered</td>
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<tr>
<td>REL 6178</td>
<td>Comparative Religious Ethics</td>
<td>3</td>
<td>AS</td>
<td>REL</td>
<td>This seminar explores key issues and the diverse methodological approaches to the comparative study of religious ethics, including history of religions, social scientific, philosophical and theological approaches.</td>
<td></td>
</tr>
<tr>
<td>REL 6182</td>
<td>Faith and Reason in Western Religious Ethics</td>
<td>3</td>
<td>AS</td>
<td>REL</td>
<td>A seminar course examining the history of Western thinking about morality and its relation to religion. Concepts including faith, reason, right and wrong, values, virtue, duty, obligation, rights, and justice are explored in light of theories about the nature of morality.</td>
<td></td>
</tr>
<tr>
<td>REL 6195</td>
<td>Religion and Modernization</td>
<td>3</td>
<td>AS</td>
<td>REL</td>
<td>This course will explore the unique characteristics of modern and post-modern civilization, with special attention given to the secularizing effects of modern science, technology, economics, and politics on the world’s religions and their various responses to these factors.</td>
<td></td>
</tr>
<tr>
<td>REL 6285</td>
<td>Studies in Biblical Archaeology</td>
<td>3</td>
<td>AS</td>
<td>REL</td>
<td>A study of various problems in Biblical Archaeology including excavation techniques, principles of interpretation, problems in correlation of the text of the Bible and specific finds, chronology, reconstruction of culture from archaeological evidence, and others.</td>
<td></td>
</tr>
<tr>
<td>REL 6327</td>
<td>Seminar: Ancient Religions and Literatures</td>
<td>3</td>
<td>AS</td>
<td>REL</td>
<td>A research seminar in some aspect of ancient religion and literature: Hebrew Bible, New Testament, Mithraism, Mystic Religions, Pseudepigrapha, and others taught in translation.</td>
<td></td>
</tr>
<tr>
<td>REL 6328</td>
<td>Religion and Culture of the West</td>
<td>3</td>
<td>AS</td>
<td>REL</td>
<td>Examines some of the most important religious literature of the Western world -- Jewish, Christian, and Islamic -- attempting to understand each classical expression within its own historical and cultural context.</td>
<td></td>
</tr>
<tr>
<td>REL 6617</td>
<td>The History of Judaism: The Formative Age</td>
<td>3</td>
<td>AS</td>
<td>REL PR: REL 3602</td>
<td>The history of how the Judaism that predominated from the first century to the present took shape in the first six centuries AD.</td>
<td></td>
</tr>
<tr>
<td>REL 6906</td>
<td>Independent Study</td>
<td>1-3</td>
<td>AS</td>
<td>REL PR: GS, ML</td>
<td>Independent study in which the student must have a contract with the instructor.</td>
<td></td>
</tr>
<tr>
<td>REL 6911</td>
<td>Directed Research</td>
<td>1-3</td>
<td>AS</td>
<td>REL PR: GS, ML Majors only</td>
<td>Individual guidance in concentrated reading in a carefully delimited area of religious studies research skills.</td>
<td></td>
</tr>
<tr>
<td>REL 6938</td>
<td>Special Topics in Religious Studies</td>
<td>2-4</td>
<td>AS</td>
<td>REL PR: GS</td>
<td>Open to non-majors. Variable titles offered on topics of special interest.</td>
<td></td>
</tr>
<tr>
<td>REL 6940</td>
<td>Graduate Instruction Methods</td>
<td>1-4</td>
<td>AS</td>
<td>REL Var. S/U.</td>
<td>Offered primarily for the supervision of Graduate Teaching Assistants.</td>
<td></td>
</tr>
</tbody>
</table>

Possible religious and theoretical foundations for a normative ethics of social change.
<p>| REL | 6971 | Thesis: Master's | 2-19 | AS | REL | PR: GR. ML, majors only. S/U |
| SCE | 5325 | Methods of Middle Grades Science Education | 3 | ED | EDN | PR: 18 sem hrs in science, meeting FL content standards for mid grades general science. Prepare 5-9 sci teachers to tch sci skills, content; interrelationship, applications of sci as a human endeavor; nature of sci; instructional methods; nature scientific inquiry; development of sci process skills; integration of subj areas; &amp; assessment. |
| SCE | 5337 | Methods of Secondary Science Education | 3 | ED | EDN | Course concentrates on goals, subject matter teaching strategies for high school curricula; assessment and using data to improve student achievement; and development pedagogical content knowledge as it pertains to the teaching and learning of science. |
| SCE | 5564 | Reading and Communication in Science Education | 3 | ED | EDN | This course prepares secondary science teachers to teach literacy practices in science. It includes methods for selecting appropriate reading and language approaches. Communication in science and functional aspects of scientific literacy are examined. |
| SCE | 5937 | Selected Topics in Science Education | 1-4 | ED | EDN |
| SCE | 6115 | Trends in Science Instruction | 3 | ED | EDE | PR: SCE 4310 |
| SCE | 6347 | Methods for Interpretive &amp; Transformative Standards Based Education | 3 | ED | EDN | Current theories from research in brain physiology, cognitive psychology and science education explaining how humans of all ages learn to make meaning from experiences are translated into practice to bridge the gap between information and understanding. |
| SCE | 6444 | Community Resources for Environmental Education | 3 | ED | EDN | Identify, access, and acquire community resources (media; business/industry); prof. natural science, engineering and social science societies; government and non-government agencies; civic groups, universities) to incorporate into learning opportunities for diverse audiences at all school levels. |</p>
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Type</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCE 6645</td>
<td>Mathematics and Science Education Policy, Change, and School Improvement</td>
<td>3</td>
<td>ED</td>
<td>EDN</td>
<td>PR: EDF 7655 or Advanced GS. May also be taken as MAE 6738. DPR. Knowledge, skills, and strategies are developed to become a facilitator of change for mathematics and science school improvement. Original change initiatives are designed and implemented.</td>
</tr>
<tr>
<td>SCE 6646</td>
<td>Environmental Site Explorations</td>
<td>3</td>
<td>ED</td>
<td>EDN</td>
<td>On-site experiences at informal science institutions (ISI) provide first hand opportunity to construct a holistic view of informal education industry, its organization, career paths, management concerns, niches, nature and relationships among programs.</td>
</tr>
<tr>
<td>SCE 6736</td>
<td>Research Implications for Teaching Pre-College Mathematics and Science</td>
<td>3</td>
<td>ED</td>
<td>EDN</td>
<td>Generates new perspectives on research by comparing research techniques in mathematics, natural sciences, and mathematics and science education, and by matching mathematics, science and technology questions to appropriate research paradigms.</td>
</tr>
<tr>
<td>SCE 6744</td>
<td>Survey Update of Environmental Research Management Policies</td>
<td>3</td>
<td>ED</td>
<td>EDN</td>
<td>Current &amp; future scientific research topics of long term importance are explored providing an integrated update in science. Complex connections among the various natural, math, &amp; social science; agriculture; psychology; &amp; engineering are emphasized.</td>
</tr>
<tr>
<td>SCE 6865</td>
<td>Technology: Solving Societal Problems</td>
<td>3</td>
<td>ED</td>
<td>EDN</td>
<td>PR: Advanced GS or DPR. May also be taken as MAE 6737. Specific examples of mathematics/science/technology/society interaction are provided for integration into school-based mathematics and natural science courses.</td>
</tr>
<tr>
<td>SCE 6866</td>
<td>Understanding Mathematics, Science, and Technology: Human Enterprises</td>
<td>3</td>
<td>ED</td>
<td>EDN</td>
<td>PR: Advanced GS or DPR. May also be taken as MAE 6735. Science, mathematics, and technology are presented as one multifaceted, dynamic, human-made enterprise responding to the human search for an understanding of the realities of the world. Different “Ways of Knowing” are compared.</td>
</tr>
<tr>
<td>SCE 6906</td>
<td>Independent Study in Science Education</td>
<td>1-6</td>
<td>ED</td>
<td>EDN</td>
<td>Independent Study in which students must have a contract with the instructor. Rpt. S/U</td>
</tr>
<tr>
<td>SCE 6938</td>
<td>Topics in Science Education: Field Practicum</td>
<td>3</td>
<td>ED</td>
<td>EDN</td>
<td>PR: Admission into a graduate initial certification program in science education, and at least 9 hours of SCE (Science Education) courses. Course must be taken at least one semester before final internship. This seminar provides teacher candidates with opportunities to interact with peers, public school faculty and university faculty regarding classroom and related school-based experiences. This course is restricted to science education majors.</td>
</tr>
<tr>
<td>SCE 6947</td>
<td>Internship</td>
<td>6</td>
<td>ED</td>
<td>EDN</td>
<td>PR: CI. Provides students with an extended school-based experience, under the guidance of a cooperating teacher and university supervisor, for a full semester at or near the end of their graduate program. Open to graduate degree candidates only. S/U (PR: CI)</td>
</tr>
<tr>
<td>SCE 7697</td>
<td>Socioscientific Issues in Science Education</td>
<td>3</td>
<td>ED</td>
<td>EDN</td>
<td>The purpose of this course is to</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Credits</td>
<td>PR:</td>
<td>Description</td>
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</tr>
<tr>
<td>SCE 7910</td>
<td>Directed Research in Science Education</td>
<td>1-9</td>
<td>ED</td>
<td>EDN</td>
<td>This course permits a doctoral student to conduct advanced research and to pursue specific areas of interest with a faculty member as supervisor. A contract is required with the faculty member. S/U.</td>
</tr>
<tr>
<td>SCE 7980</td>
<td>Dissertation</td>
<td>2-3</td>
<td>ED</td>
<td>EDN</td>
<td>Provides students with knowledge of the history, philosophy, organization and structure of Student Affairs, Student Affairs functions and professional competencies, and legal and ethical issues.</td>
</tr>
<tr>
<td>SDS 6042</td>
<td>Introduction of Student Affairs</td>
<td>3</td>
<td>ED</td>
<td>EDG</td>
<td>Study of guidance theories and practices in selected foreign countries as compared with the American guidance model. Evaluation of foreign guidance through critical analysis of primary sources. For example: guidance philosophy and practice in countries of the Soviet Bloc, Western Europe, and Latin America.</td>
</tr>
<tr>
<td>SDS 6050</td>
<td>Comparative Guidance and Counseling</td>
<td>3</td>
<td>ED</td>
<td>EDG</td>
<td>Study of student personnel services in institutions of higher education. Identification of the needs of students and of the ways to respond to meet these needs. Survey of service units on a campus in terms of structure, organization, funding, etc.</td>
</tr>
<tr>
<td>SDS 6411</td>
<td>Introduction to Student Personnel Work in Higher Education</td>
<td>2</td>
<td>ED</td>
<td>EDG</td>
<td>Experiential study of group structures, group dynamics, methodology, and leadership models applicable to counseling in the elementary schools. Skill building through supervised practicum in leading groups of elementary school children.</td>
</tr>
<tr>
<td>SDS 6501</td>
<td>Group Theory and Practicum: Children</td>
<td>4</td>
<td>ED</td>
<td>EDG</td>
<td>The purpose of this course is to provide an overview of the history, fundamental concepts, and organization of financial aid administration. The role of financial aid in enrollment management will be addressed.</td>
</tr>
<tr>
<td>SDS 6621</td>
<td>Financial Aid Administration</td>
<td>2</td>
<td>ED</td>
<td>EDG</td>
<td>Provides students with an understanding of the changing demographics, environmental and developmental issues facing college students.</td>
</tr>
<tr>
<td>SDS 6624</td>
<td>Ecology of Campus Life</td>
<td>3</td>
<td>ED</td>
<td>EDF</td>
<td>Review of major auxiliary functions in Student Affairs. Includes strategic and operational issues in planning for and operating auxiliary facilities and technological innovations.</td>
</tr>
<tr>
<td>SDS 6641</td>
<td>Student Affairs Auxiliary Functions</td>
<td>3</td>
<td>ED</td>
<td>EDF</td>
<td>An in-depth study of student development theories including those in the areas of cognitive, psychosocial and typology theories. Students will provide students with an interactive forum to review, analyze, evaluate and discuss topics related to the role of socioscientific issues in science education.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>Core</td>
<td>Course Description</td>
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<tr>
<td>SDS 6701</td>
<td>Issues in Diversity</td>
<td>2</td>
<td>ED</td>
<td>EDF</td>
<td>PR: Admission to CSA or CI graduate Program</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Addresses individual and organizational issues of multiculturalism and diversity in higher education.</td>
</tr>
<tr>
<td>SDS 6703</td>
<td>The Law and Student Affairs</td>
<td>3</td>
<td>ED</td>
<td>EDF</td>
<td>PR: SDS6042, SDS6624, SDS6520, EDF6165</td>
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<td></td>
<td>This course for graduate students in College Student Affairs will focus on the legal context associated with the duties of the student affairs professional. The focus will be on an understanding of constitutional, statutory, and contract law.</td>
</tr>
<tr>
<td>SDS 6801</td>
<td>Practicum in Counseling Children</td>
<td>4</td>
<td>ED</td>
<td>EDG</td>
<td>S/U.</td>
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<tr>
<td></td>
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<td></td>
<td>Supervised counseling experiences for integration of knowledge and skills gained in didactic study. Focus is on working with elementary age children, parent and teachers.</td>
</tr>
<tr>
<td>SDS 6820</td>
<td>Internship in School Counseling</td>
<td>3-6</td>
<td>ED</td>
<td>EDG</td>
<td>PR: All required MHS courses. S/U.</td>
</tr>
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<td>Field experience involving one semester of full-time participation or two semesters of part-time participation in all guidance related activities in an elementary or secondary school; classroom guidance; individual and group counseling; assessment/evaluation; staffing; record keeping; etc.</td>
</tr>
<tr>
<td>SDS 7640</td>
<td>Student Affairs Administration</td>
<td>4</td>
<td>ED</td>
<td>EDF</td>
<td>PR: Acceptance to Student Affairs Administration Doctoral Program &amp; SDS 6042 or CI.</td>
</tr>
<tr>
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<td>Leadership, management and organizational models, perspectives and issues in administration of Student Affairs will be studied.</td>
</tr>
<tr>
<td>SDS 7642</td>
<td>Advanced Seminar in Student Affairs</td>
<td>1-4</td>
<td>ED</td>
<td>EDF</td>
<td>PR: Acceptance to Student Affairs Administration Doctoral Program or CI</td>
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<td></td>
<td>This seminar will nurture students' creativity and enhance their appreciation for scholarly academic work and effective administrative practice in Student Affairs. Issues and trends in Student Affairs will also be studied.</td>
</tr>
<tr>
<td>SDS 7643</td>
<td>Advanced Student Development Theories</td>
<td>4</td>
<td>ED</td>
<td>EDF</td>
<td>PR: SDS 6645 or equivalent and acceptance to Student Affairs Administration Doctoral Program or CI.</td>
</tr>
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<td></td>
<td>Contemporary theories of college student development will be examined in the categories of psychosocial, cognitive-structural, and typology. Research, case analysis, and assessment instruments will be studied in translating theoretical models into programmatic interventions in Student Affairs.</td>
</tr>
<tr>
<td>SDS 7644</td>
<td>Enrollment Management</td>
<td>4</td>
<td>ED</td>
<td>EDF</td>
<td>PR: Acceptance to Student Affairs Administration Doctoral Program or CI</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Introduction to and overview of a multi-faceted process of enrollment management in higher education. The breadth of theory, models, and principles that contribute to the field of enrollment management will be explored.</td>
</tr>
<tr>
<td>SDS 7830</td>
<td>Advanced Internship in Counselor Education</td>
<td>2-8</td>
<td>ED</td>
<td>EDG</td>
<td>S/U.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Supervised field experiences in an approved agency, educational institution, or industrial setting: counseling, consulting, supervision, applied research, administration, and evaluation of counseling/guidance services.</td>
</tr>
<tr>
<td>SDS 7945</td>
<td>Advanced Internship in</td>
<td>1-</td>
<td>ED</td>
<td>EDF</td>
<td>PR: Acceptance to</td>
</tr>
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<td></td>
<td>Supervised field experiences in an education setting.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Type</th>
<th>Type</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDS 7980</td>
<td>Dissertation</td>
<td>2-4</td>
<td>ED</td>
<td>EDF</td>
<td>PR: Admitted to Candidacy</td>
<td>approved functional area of Student Affairs in an institution of higher education that will involve administrative functions, applied research and program evaluation.</td>
</tr>
<tr>
<td>SED 6943</td>
<td>Graduate Instruction Methods</td>
<td>1-4</td>
<td>AS</td>
<td>SPE</td>
<td>S/U only.</td>
<td>Special course to be used primarily for the training of teaching assistants. Var. Rpt. To a total of 4 credits.</td>
</tr>
<tr>
<td>SLA 7910</td>
<td>Directed Research in Second Language Acquisition/ Instructional Technology</td>
<td>1-6</td>
<td>ED</td>
<td>EDI</td>
<td>PR: Cl.</td>
<td>This course permits a doctoral student to conduct advanced research and to pursue specific areas of interest with a faculty member as supervisor. A contract is required with the faculty member. S/U.</td>
</tr>
<tr>
<td>SLA 7911</td>
<td>Second Language Acquisition Research Laboratory</td>
<td>1-4</td>
<td>ED</td>
<td>EDI</td>
<td></td>
<td>This course, offered every semester, provides students with a variety of research tools and directed research experiences that eventually lead to production of publishable materials. Classes are conducted as seminars with instructor and students sharing leadership role. S/U.</td>
</tr>
<tr>
<td>SLA 7938</td>
<td>Advanced Seminar in Second Language Acquisition</td>
<td>3</td>
<td>ED</td>
<td>EDI</td>
<td></td>
<td>This doctoral level seminar examines in depth the theory and research in the field of Second Language Acquisition. It builds upon the information and concepts presented in introductory SLA theory courses allowing students to more deeply and carefully explore selected topics.</td>
</tr>
<tr>
<td>SLA 7980</td>
<td>Dissertation</td>
<td>2-1</td>
<td>ED</td>
<td>EDX</td>
<td>PR: Admission to Candidacy.</td>
<td></td>
</tr>
<tr>
<td>SOP 6068</td>
<td>Personality and Social Psychology</td>
<td>3</td>
<td>AS</td>
<td>PSY</td>
<td>PR: Bachelors Degree in Psychology or related discipline.</td>
<td>This course is a survey of modern personality and social psychology. It will examine how personal attributes and social situations influence human behavior. Major contemporary theories of how personality and social variables individually and collectively affect human feelings, thoughts and actions will be presented.</td>
</tr>
<tr>
<td>SOP 7609</td>
<td>Graduate Seminar in Social-Organizational Psychology</td>
<td>1-3</td>
<td>AS</td>
<td>PSY</td>
<td>PR: Cl.</td>
<td>Seminars on topics, such as social psychology, job stress, and decision making.</td>
</tr>
<tr>
<td>SOW 5930C</td>
<td>Selected Topics in Social Work</td>
<td>1-4</td>
<td>BC</td>
<td>SOK</td>
<td>PR: CC.</td>
<td>Restricted to Social Work majors, both graduate and undergraduate; other by School permission. Course is taken as an elective. Various title course will selectively expand specific social work content areas.</td>
</tr>
<tr>
<td>SOW 6105</td>
<td>Foundations in Human Behavior</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>PR: CC.</td>
<td>Introduces a systems perspective on understanding the relationships inherent in human growth and development. Special emphasis is placed on issues involving minorities, women, the disabled, various family forms, and sexual preference.</td>
</tr>
<tr>
<td>SOW 6114</td>
<td>Individual Growth and Development Theory</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>PR: CC.</td>
<td>This course presents various theoretical perspectives in individual growth and development commonly</td>
</tr>
<tr>
<td>SOW</td>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Type</td>
<td>Core</td>
<td>Prerequisites</td>
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<tr>
<td>SOW</td>
<td>6124</td>
<td>Theoretical Perspectives on Mental Dysfunctioning</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>PR: CC. Majors only.</td>
</tr>
<tr>
<td>SOW</td>
<td>6126</td>
<td>Theoretical Perspectives on Physical Dysfunctioning</td>
<td>2</td>
<td>BC</td>
<td>SOK</td>
<td>PR: CC. Majors only.</td>
</tr>
<tr>
<td>SOW</td>
<td>6235</td>
<td>Foundations of Social Welfare Policy</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>PR: CC.</td>
</tr>
<tr>
<td>SOW</td>
<td>6305</td>
<td>Fundamentals of Social Work Practice</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>PR: CC.</td>
</tr>
<tr>
<td>SOW</td>
<td>6342</td>
<td>Individual, Family and Group Treatment I</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>PR: CC.</td>
</tr>
<tr>
<td>SOW</td>
<td>6348</td>
<td>Clinical Practice Perspectives on Race and Culture</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>PR: CC.</td>
</tr>
<tr>
<td>SOW</td>
<td>6362</td>
<td>Individual, Family and Group Treatment II</td>
<td>4</td>
<td>BC</td>
<td>SOK</td>
<td>PR: CC.</td>
</tr>
<tr>
<td>SOW</td>
<td>6368</td>
<td>Individual, Family and Group Treatment III</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>PR: CC.</td>
</tr>
<tr>
<td>SOW</td>
<td>6375</td>
<td>Macro Practice Seminar</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>PR: CC, SOW 6426, SOW 6368, SOW 6535.</td>
</tr>
</tbody>
</table>

This third course in the behavior sequence focuses on mental and emotional disorders. Content includes broad classifications of mental and behavioral disorders and their biopsychological disorders and implications of social work practice in dealing with these disorders.

This fourth course in the behavior sequence focuses on physical disorders and implications of social work practice in the area of long-term protracted chronic illnesses and the ensuing psychosocial disabilities.

Examines historical antecedents of social welfare as an institution and current state of social welfare programs in America. Emphasis is placed on understanding social, economic, and political forces that shape policies and programs.

Presents various methods of policy analysis with emphasis on distinctions among legislative, administrative, and judicial policy. Examines roles and responsibilities of the professional practitioner in the policy process.

Describes full range of social work interventions, from micro to macro. Historical development of practice methods and survey of current techniques.

Application of clinical practice to work with individuals. Psychosocial model is emphasized. Professional laboratory develops skills in practice.

Theories for clinical practice, with emphasis on the psychosocial model. Explores basic skills for clinical practice.

Emphasizes selection of techniques in the psychosocial model of treatment. Primary focus on family, couple, and parent-child problems. Course includes skill practice lab sessions.

Focus on psychosocial model of group treatment. Comparison with individual and family modality.

Studies facets of organizational environment in which clinical practice takes place; develops skills in various macro practice functions of the agency, such as supervision, program operations, and interagency relations.

This is the first of four research methods courses intended to introduce students to the various...
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Type</th>
<th>CR Credit</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOW 6425</td>
<td>Clinical Research</td>
<td>2</td>
<td>BC</td>
<td>SOK</td>
<td>This is the second in a series of four required research courses. It focuses on the design and implementation of evaluation studies in social work.</td>
</tr>
<tr>
<td>SOW 6426</td>
<td>Field Research I</td>
<td>1</td>
<td>BC</td>
<td>SOK</td>
<td>This is the third in a series of four research courses. It provides the structure for supervision of graduate research projects. GS in Social Work only.</td>
</tr>
<tr>
<td>SOW 6427</td>
<td>Field Research II</td>
<td>1</td>
<td>BC</td>
<td>SOK</td>
<td>This is the fourth and final research course. It provides the mechanism for supervision of the graduate research project. GS in Social Work only.</td>
</tr>
<tr>
<td>SOW 6438</td>
<td>Evaluation of Clinical Practice in Diverse Setting</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>Course builds on foundation content of SOW 6405. Program evaluation, single subject/system design, and statistical and qualitative concepts are discussed in order to facilitate the use of empirical and evidence based interventions in social work practice. PR: Must be admitted to the graduate Masters of Social Work program. This course is restricted to majors only. CR: Undergraduate degree.</td>
</tr>
<tr>
<td>SOW 6534</td>
<td>Field Instruction I</td>
<td>4</td>
<td>BC</td>
<td>SOK</td>
<td>Supervised field instruction in a social service agency, consisting of 20 hours per week, plus a 3-hour practice seminar. PR: CC. S/U.</td>
</tr>
<tr>
<td>SOW 6535</td>
<td>Field Instruction II</td>
<td>4</td>
<td>BC</td>
<td>SOK</td>
<td>Supervised field instruction in a social service agency, consisting of 32 hours per week, plus a 2-hour practice seminar. PR: CC. S/U.</td>
</tr>
<tr>
<td>SOW 6536</td>
<td>Field Instruction III</td>
<td>2-4</td>
<td>BC</td>
<td>SOK</td>
<td>Supervised field instruction in a social service agency, consisting of 20 hours per week, plus a 2-hour practice seminar. Includes integrative paper or exam. PR: CC. S/U.</td>
</tr>
<tr>
<td>SOW 6553</td>
<td>Field Instruction Sequence IA: Part-Time</td>
<td>2</td>
<td>BC</td>
<td>SOK</td>
<td>This is the first of a series of seven field instruction courses designed to provide students with opportunities to develop beginning clinical social work competency in applying knowledge to practice situations. PR: SOW 6114, SOW 6348. CR: SOW 6124.</td>
</tr>
<tr>
<td>SOW 6554</td>
<td>Field Instruction Sequence III: Part-Time</td>
<td>1</td>
<td>BC</td>
<td>SOK</td>
<td>This course is the second of seven sequential courses. Each consists of 10-15 hours per week (150 hours total) of agency field learning taught by an agency field instructor with a one-hour practice seminar taught by a University-based instructor. PR: SOW 6553. S/U.</td>
</tr>
<tr>
<td>SOW 6555</td>
<td>Field Instruction Sequence IIA: Part-Time</td>
<td>2</td>
<td>BC</td>
<td>SOK</td>
<td>This course is the third of seven sequential courses. Each consists of 10-15 hours per week of agency field taught by an agency field instructor on a one-hour practice seminar taught by a University-based instructor. PR: SOW 6554.</td>
</tr>
<tr>
<td>SOW 6556</td>
<td>Field Instruction Sequence IIB: Part-Time</td>
<td>2</td>
<td>BC</td>
<td>SOK</td>
<td>This course is the fourth of seven sequential courses. Each consists of 10-15 hours per week of agency field taught by an agency field instructor on a one-hour practice seminar taught by a University-based instructor. PR: SOW 6555.</td>
</tr>
<tr>
<td>SOW 6557</td>
<td>Field Instruction Sequence IIC: Part-Time</td>
<td>2</td>
<td>BC</td>
<td>SOK</td>
<td>This course is the fifth of seven sequential courses. Each consists of 10-15 hours per week of agency field</td>
</tr>
<tr>
<td>CR</td>
<td>Course Description</td>
<td>Credits</td>
<td>Type</td>
<td>Instructor</td>
<td>Notes</td>
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<tr>
<td>SOW</td>
<td>Field Instruction Sequence IIIA: Part-Time</td>
<td>2</td>
<td>BC</td>
<td>SOK</td>
<td>PR: SOW 6557. This course is the sixth of seven sequential courses. Each consists of 10-15 hours per week of agency field taught by an agency field instructor on a one-hour practice seminar taught by a University-based instructor.</td>
</tr>
<tr>
<td>SOW</td>
<td>Field Instruction Sequence IIIB: Part-Time</td>
<td>2</td>
<td>BC</td>
<td>SOK</td>
<td>PR: SOW 6558. This course is the last of seven sequential courses. Each consists of 10-15 hours per week of agency field learning taught by an agency field instructor on a one-hour practice seminar taught by a University-based instructor.</td>
</tr>
<tr>
<td>SOW</td>
<td>Independent Study</td>
<td>1-3</td>
<td>BC</td>
<td>SOK</td>
<td>PR: Admission to MSW program, CC. A reading program in selected topics under supervision of a faculty member. A formal contract must be approved by School Director.</td>
</tr>
<tr>
<td>SOW</td>
<td>Selected Topics in Social Work</td>
<td>1-4</td>
<td>BC</td>
<td>SOK</td>
<td>PR: CC. Restricted to MSW students; others by School permission.</td>
</tr>
<tr>
<td>SOW</td>
<td>Advanced Statistics in Social Work Research</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>PR: Must be admitted to the graduate Ph.D. social work program. This course is restricted to majors only. SOW 6405 or equivalent. CR: MSW.</td>
</tr>
<tr>
<td>SOW</td>
<td>Evaluation of Social Work Practice/Program Evaluation</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>Prepares students in the development of research skills to conduct social work practice and program evaluation. Emphasis placed on the integration of knowledge from previous courses. Ethical considerations will also be examined. Ph.D. Majors only.</td>
</tr>
<tr>
<td>SOW</td>
<td>Foundations of Social Work Research Methods</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>PR: Must be admitted to the graduate Ph.D. social work program. This course is restricted to majors only. CR: MSW.</td>
</tr>
<tr>
<td>SOW</td>
<td>Theoretical Perspectives in Social Work Research</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>PR: Must be admitted to the graduate Ph.D. social work program. This course is restricted to majors only. CR: MSW. Systems theory will be presented as a theoretical base for developing testable hypotheses to produce empirical knowledge for the social work profession. Students will demonstrate the ability to conceptualize research topics in terms of existing theory.</td>
</tr>
<tr>
<td>SOW</td>
<td>Qualitative Research Methods in Social Work</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>PR: Must be admitted to the graduate Ph.D. social work program. This course is restricted to majors only. CR: MSW. The course will assist the doctoral student to better understand and become equipped to fulfill a role as social work researcher. The course will consider the theoretical, scientific, and political issues related to qualitative research.</td>
</tr>
<tr>
<td>SOW</td>
<td>Quantitative Methods in Social Work Research</td>
<td>3</td>
<td>BC</td>
<td>SOK</td>
<td>PR: Must be admitted to the graduate Ph.D. social work program. This course provides the student with a broad overview of Quantitative Methods of use to those during...</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Prerequisites</td>
<td>Notes</td>
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<tr>
<td>SOW 7616</td>
<td>Advanced Clinical Practice with Complex Problems</td>
<td>3</td>
<td>BC SOK</td>
<td>This course is restricted to majors only. CR: MSW. Challenges the participants to access and utilize the most advanced evidence based knowledge to assess and recommend intervention for complex social problems. PR: Ph.D. Majors only.</td>
<td></td>
</tr>
<tr>
<td>SOW 7776</td>
<td>The Social Work Educator in the University</td>
<td>3</td>
<td>BC SOK</td>
<td>Further critical thinking about the role of the social work educator in the university. The doctoral candidate will be equipped to fulfill this role, consider issues related to university governance as well as social work ed. PR: majors only; Ph.D. stdt.</td>
<td></td>
</tr>
<tr>
<td>SOW 7919</td>
<td>Directed Studies in Social Work Research</td>
<td>3</td>
<td>BC SOK</td>
<td>This course prepares students to identify a research topic, review existing literature and formulate a research question or hypothesis as the basis of the dissertation. Students will learn to prepare a scholarly manuscript to submit for publication.</td>
<td></td>
</tr>
<tr>
<td>SOW 7980</td>
<td>Dissertation Hours</td>
<td>2-4</td>
<td>BC SOK</td>
<td>Dissertation hours</td>
<td></td>
</tr>
<tr>
<td>SOW 7981</td>
<td>Proposal Writing I</td>
<td>3</td>
<td>BC SOK</td>
<td>Guides doctoral students in preparing a dissertation proposal to be presented to the committee for final approval. The process will be explored from concept formation through the preparation of a detailed written proposal. PR: Ph.D. Majors only.</td>
<td></td>
</tr>
<tr>
<td>SOW 7982</td>
<td>Proposal Writing II</td>
<td>3</td>
<td>BC SOK</td>
<td>Guides doctoral students in preparing a dissertation proposal to be presented to the committee for final approval. The process will be explored from concept formation through the preparation of a detailed written proposal. PR: Ph.D. Majors Only.</td>
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<tr>
<td>SPA 5132</td>
<td>Instrumentation</td>
<td>3</td>
<td>BC CSD</td>
<td>Instruction in the use of clinical and laboratory instrumentation. Emphasis placed on electronic circuitry, signal generation, filtering, and calibration. Hands-on experience with equipment typically used in clinical auditory research will be provided. PR: SPA 5120, SPA 6930, SPA 5506.</td>
<td></td>
</tr>
<tr>
<td>SPA 5133C</td>
<td>Speech Science Instrumentation</td>
<td>3</td>
<td>BC CSD</td>
<td>Underlying principles and laboratory exercises in the use of audio recording, acoustic analysis, and clinical instrumentation. PR: DPR or SPA 3011 or equivalent.</td>
<td></td>
</tr>
<tr>
<td>SPA 5153</td>
<td>Quantitative Problem</td>
<td>3</td>
<td>BC CSD</td>
<td>Covers fundamental mathematical</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Categories</td>
<td>Corequisites</td>
<td>Description</td>
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<tr>
<td>SPA 5204</td>
<td>Advanced Clinical Phonology</td>
<td>3</td>
<td>BC, CSD</td>
<td>PR: DPR.</td>
<td>The principles of generative phonology will be applied to the assessment and treatment of phonological disorders. Emphasis is placed on making a child’s phonology more functional for communication purposes.</td>
</tr>
<tr>
<td>SPA 5303</td>
<td>Auditory Anatomy and Physiology</td>
<td>3</td>
<td>BC, CSD</td>
<td>PR: DPR.</td>
<td>Provide a comprehensive understanding of the physiological acoustics of the auditory periphery, neuroanatomy and electrophysiology of the central auditory system, and psychoacoustic principles as they relate to clinical audiologic measurement paradigms.</td>
</tr>
<tr>
<td>SPA 5312</td>
<td>Peripheral and Central Auditory Tests</td>
<td>4</td>
<td>BC, CSD</td>
<td>PR: DPR.</td>
<td>The study of behavioral and electrophysiologic clinical tests designed to assess the functions of the peripheral and the central auditory system. Tests that incorporate non-speech stimuli and those that utilize speech stimuli will be included.</td>
</tr>
<tr>
<td>SPA 5403</td>
<td>Language-Learning in the School-Age Years</td>
<td>3</td>
<td>BC, CSD</td>
<td>PR: SPA 4201 and DPR.</td>
<td>Metalinguistic and metacognitive development are linked to the interactional demands of classroom and clinical discourse; observational tools are applied to evaluation and intervention planning.</td>
</tr>
<tr>
<td>SPA 5506</td>
<td>Speech-Language Pathology and Audiology Practicum</td>
<td>1-8</td>
<td>BC, CSD</td>
<td>PR: DPR.</td>
<td>Participation in speech-language pathoogy and audiology practicum in the University Communication Disorders Center and selected field settings.</td>
</tr>
<tr>
<td>SPA 5552</td>
<td>Diagnostic Principles and Practices</td>
<td>3</td>
<td>BC, CSD</td>
<td>PR: Admission to the graduate program or DPR.</td>
<td>The administration, evaluation, and reporting of diagnostic tests and procedures used in assessment of speech and language disorders.</td>
</tr>
<tr>
<td>SPA 6102</td>
<td>Neuroanatomy for Speech and Hearing</td>
<td>3</td>
<td>BC, CSD</td>
<td>PR: SPA 3101.</td>
<td>Neuroanatomical and neurophysiological principles, structures and functions that subserve speech, hearing, language, and cognition are studied. A case-based approach illustrates the behavioral manifestations of neuropathologies. Majors only.</td>
</tr>
<tr>
<td>SPA 6106</td>
<td>Neurological Correlates of Language</td>
<td>3</td>
<td>BC, CSD</td>
<td>PR: DPR.</td>
<td>Review of the anatomy and physiology of the nervous system. Discuss neurological correlates of receptive and expressive language in verbal and non-verbal transmission and feedback.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Exclusions/Prerequisites</td>
<td>Description</td>
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<tr>
<td>SPA 6211</td>
<td>Advanced Vocal Disorders</td>
<td>3</td>
<td>BC, CSD</td>
<td>Students will be familiarized with perceptual, physiological, psychological, and behavioral processes involved in voice production, and apply this knowledge to assessment and treatment of voice disorders. Restricted to majors and may not be repeated.</td>
<td></td>
</tr>
<tr>
<td>SPA 6225</td>
<td>Advanced Fluency Disorders</td>
<td>3</td>
<td>BC, CSD</td>
<td>This course covers characteristics of people who stutter, the morphology of stuttering in children and adults, motor and linguistic processes of normal speech, theories of causes of stuttering, and methods for evaluating and treating stuttering.</td>
<td></td>
</tr>
<tr>
<td>SPA 6232</td>
<td>Neuromotor Communication Disorders</td>
<td>3</td>
<td>BC, CSD, PR: DPR</td>
<td>A study of the medical, physical, occupational, speech, language, and hearing problems of the neuro-motorically impaired client. Therapy techniques are reviewed and evaluated.</td>
<td></td>
</tr>
<tr>
<td>SPA 6245</td>
<td>Craniofacial Communication Disorders</td>
<td>3</td>
<td>BC, CSD, PR: DPR</td>
<td>An in-depth study of speech, language, and hearing problems associated with cleft lip and cleft palate and other craniofacial dysmorphologies. Consideration is given to the multidisciplinary approach to therapy and rehabilitation.</td>
<td></td>
</tr>
<tr>
<td>SPA 6311</td>
<td>Medical Audiology</td>
<td>3</td>
<td>BC, CSD, PR: SPA 5120, Advanced Hearing Science, Clinic Lab I</td>
<td>Anatomy &amp; patho-physiology of the auditory system, medical genetics, congenital &amp; acquired ear diseases, disorders of balance, &amp; tinnitus. These areas will be related to audiology test results; diagnostic imaging, medical &amp; surgical treatments.</td>
<td></td>
</tr>
<tr>
<td>SPA 6314</td>
<td>Electrophysiology</td>
<td>3</td>
<td>BC, CSD, PR: SPA 5303 and SPA 5312 or DPR</td>
<td>This course focuses on the auditory brainstem response (ABR) as an essential diagnostic and screening tool. The course follows a combined lecture/laboratory mode with weekly class meetings and weekly laboratory exercise.</td>
<td></td>
</tr>
<tr>
<td>SPA 6316</td>
<td>Vestibular Evaluation and Treatment</td>
<td>3</td>
<td>BC, CSD, PR: SPA 5303 and SPA 5312 or DPR</td>
<td>Principles and clinical practices of assessing the peripheral and central components of the human vestibular system using electrical recordings of induced and spontaneous nystagmus.</td>
<td></td>
</tr>
<tr>
<td>SPA 6324</td>
<td>Aural Rehabilitation: Children</td>
<td>3</td>
<td>BC, CSD, PR: DPR</td>
<td>Provide information and strategies for aural habilitation intervention with hearing impaired children. Includes techniques of speech reading, auditory training, and language for hearing impaired.</td>
<td></td>
</tr>
<tr>
<td>SPA 6326</td>
<td>Curriculum Procedures and Materials for the Hearing Impaired</td>
<td>3</td>
<td>BC, CSD, PR: Major in Aural Rehabilitation or DPR</td>
<td>Curricular adaptation, methods, techniques, and organization necessary for teaching the hearing impaired.</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Department</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>SPA 6329</td>
<td>Educational Audiology</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>Provides information on consulting and collaborating with speech pathologists, teachers, and others about the relationship of hearing loss to the development of psychosocial, communicative, cognitive, physical, academic, and vocational skills of a child.</td>
</tr>
<tr>
<td>SPA 6340</td>
<td>Principles of Amplification I</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>Provide information and training concerning the design and measurement of the modern hearing aid. The history of hearing aids, types of hearing aids, hearing aid components, measurement and modification of hearing aid response, and earmold acoustics.</td>
</tr>
<tr>
<td>SPA 6341</td>
<td>Principles of Amplification II</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>The general goal of this second of three hearing aid courses is to provide information and training related to the assessment, selection, fitting, verification, and validation processes associated with the modern hearing aid.</td>
</tr>
<tr>
<td>SPA 6349</td>
<td>Advanced Study of Sensory Aids for Hearing Impaired</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>This course is designed to supplement and expand on previous coursework through a discussion of advanced technical, clinical, and professional issues related to the design, measurement, and fitting of sensory aids.</td>
</tr>
<tr>
<td>SPA 6354</td>
<td>Hearing Conservation</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>An investigation of the hazardous properties of noise and their effects upon the human auditory systems; hearing conservation programs in industry; and the extra-aural effects and control of community noises.</td>
</tr>
<tr>
<td>SPA 6392</td>
<td>Profession of Audiology</td>
<td>2</td>
<td>BC</td>
<td>CSD</td>
<td>Acquaint students with a basic understanding of the profession of Audiology. Topics covered include: Historical underpinnings, scope of practice, ethics, legal issues, evidence-based practice, professional organizations, and current issues.</td>
</tr>
<tr>
<td>SPA 6401</td>
<td>Pediatric Language Disorders</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>An examination of the pre-verbal and language skills of the infant and preschool child, and of the Speech-Language Pathologist's role in the diagnosis, treatment, and as parent-trainer for these children.</td>
</tr>
<tr>
<td>SPA 6404</td>
<td>Language Learning Disabilities</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>Examination of research and clinical literature pertaining to causes and effects of atypical language and literacy learning and developmental frameworks for integrated intervention in oral and written language.</td>
</tr>
<tr>
<td>SPA 6410</td>
<td>Aphasia and Related Disorders</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>Consideration of the neurological and psychological aspects of aphasia and related disorders as they relate to communication disorders. Specific language therapy approaches are discussed and evaluated.</td>
</tr>
<tr>
<td>SPA 6413</td>
<td>Augmentative and Alternative</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>This course details the in-depth assessment and treatment of impaired.</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credits</td>
<td>Mode</td>
<td>Core</td>
<td>Title</td>
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<tr>
<td>SPA 6417</td>
<td>Communication + Cognition in Traumatic Brain Injury</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>PR: Permission of Instructor</td>
</tr>
<tr>
<td>SPA 6421</td>
<td>Language for the Hearing Impaired</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>PR: SPA 3030, SPA 3310, SPA 4363, and DPR.</td>
</tr>
<tr>
<td>SPA 6422</td>
<td>Speech Perception and Production for the Hearing Impaired</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>PR: SPA 3310, SPA 3311 or CC.</td>
</tr>
<tr>
<td>SPA 6473</td>
<td>Multicultural Differences in Language</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>PR: CI.</td>
</tr>
<tr>
<td>SPA 6505</td>
<td>Practicum</td>
<td>1-1</td>
<td>BC</td>
<td>CSD</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>SPA 6553</td>
<td>Advanced Differential Diagnosis and Treatment Planning</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>SPA 6564</td>
<td>Seminar in Aging, Cognition, and Communication</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td></td>
</tr>
<tr>
<td>SPA 6565</td>
<td>Seminar in Dysphagia</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>PR: SPA 6410 or permission of instructor.</td>
</tr>
<tr>
<td>SPA 6571</td>
<td>Ethical Practice Issues in Communication Sciences and Disorders</td>
<td>1-2</td>
<td>BC</td>
<td>CSD</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Lecture</td>
<td>Clinic</td>
<td>CSD</td>
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<tr>
<td>SPA 6675</td>
<td>Reading for the Hearing Impaired</td>
<td>2</td>
<td>BC</td>
<td>CSD</td>
<td>PR: RED 4310 and DPR.</td>
</tr>
<tr>
<td>SPA 6676</td>
<td>Speech Perception and Sensorineural Hearing Loss</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>PR: SPA 3310, SPA 3030.</td>
</tr>
<tr>
<td>SPA 6805</td>
<td>Research Procedures in Communication Sciences and Disorders</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>SPA 6906</td>
<td>Independent Study</td>
<td>1-1</td>
<td>BC</td>
<td>CSD</td>
<td>PR: DPR. S/U grading only.</td>
</tr>
<tr>
<td>SPA 6910</td>
<td>Directed Research</td>
<td>1-1</td>
<td>BC</td>
<td>CSD</td>
<td>PR: GR. ML, DPR. S/U grading only.</td>
</tr>
<tr>
<td>SPA 6930</td>
<td>Selected Topics</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>SPA 6971</td>
<td>Thesis: Master’s</td>
<td>2-1</td>
<td>BC</td>
<td>CSD</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>SPA 7150</td>
<td>Advanced Speech Science</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>PR: SPA 3011 or equivalent; SPA 5150L;</td>
</tr>
<tr>
<td>SPA 7346</td>
<td>Cochlear Implants</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>PR: SPA 5303, SPA 5120, SPA 5506,</td>
</tr>
<tr>
<td>SPA 7415</td>
<td>Neurolinguistic Theories of Language</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>PR: SPA 6410, SPA 6232 and DPR.</td>
</tr>
<tr>
<td>SPA 7834</td>
<td>Audiology Doctoral Project Seminar</td>
<td>1</td>
<td>BC</td>
<td>CSD</td>
<td>PR: SPA 6805 or equivalent.</td>
</tr>
<tr>
<td>SPA 7931</td>
<td>Seminar in Communication Sciences and Disorders</td>
<td>3</td>
<td>BC</td>
<td>CSD</td>
<td>PR: DPR.</td>
</tr>
<tr>
<td>SPC 5238</td>
<td>Topics in Rhetorical Analysis</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>Introduces a variety of critical</td>
</tr>
</tbody>
</table>

Techniques and materials for teaching reading to children with auditory disorders. Evaluation and analysis of contemporary programs and methods.

Overview of the acoustics of speech and theories of speech perception. Speech perception in listeners with normal and impaired hearing. The role of speech audiometry in clinical assessment of speech perception abilities and central auditory processing.

Advanced research and experimental design techniques employed in clinical and laboratory settings in speech-language pathology and audiology.

Independent study in which students must have a contract with an instructor.

A reading program of topics in speech pathology and/or audiology conducted under the supervision of a faculty member.

Advanced study of the acoustics, production, and perception of normal and disordered speech.

Introduction to cochlear implants (CIs) and their use as a treatment for severe-to-profound hearing loss in adults and children. Not restricted to majors or repeatable for credit.

Neurolinguistic theories as appropriate to the discipline are presented and discussed in relationship to language development and disorders. Information from linguistics, psycho-linguistics, artificial intelligence, neuroanatomy, and other sciences are applied to Language Science.

A forum for discussion of progress and resolution of problems/questions related to the Audiology Doctoral Project (ADP). Restricted to AuD majors; repeatable for credit.

Addresses the central research and clinical issues related to the diagnosis and treatment of communication disorders. Content of seminars varies with instructor’s expertise.


Introduces a variety of critical perspectives applied to rhetoric in
<p>| | | | | |</p>
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>SPC</td>
<td>5930</td>
<td>Topics in Discourse</td>
<td>3</td>
<td>AS</td>
</tr>
<tr>
<td>SPC</td>
<td>6214</td>
<td>Ethnography of Communication</td>
<td>3</td>
<td>AS</td>
</tr>
<tr>
<td>SPC</td>
<td>6231</td>
<td>Survey of Rhetorical Theory</td>
<td>3</td>
<td>AS</td>
</tr>
<tr>
<td>SPC</td>
<td>6236</td>
<td>Contemporary Rhetorical Theory</td>
<td>3</td>
<td>AS</td>
</tr>
<tr>
<td>SPC</td>
<td>6391</td>
<td>Interpersonal Communication</td>
<td>3</td>
<td>AS</td>
</tr>
<tr>
<td>SPC</td>
<td>6432</td>
<td>Family Communication</td>
<td>3</td>
<td>AS</td>
</tr>
<tr>
<td>SPC</td>
<td>6545</td>
<td>Persuasion</td>
<td>3</td>
<td>AS</td>
</tr>
<tr>
<td>SPC</td>
<td>6645</td>
<td>Rhetoric in Society</td>
<td>3</td>
<td>AS</td>
</tr>
<tr>
<td>SPC</td>
<td>6682</td>
<td>Rhetorical Criticism</td>
<td>3</td>
<td>AS</td>
</tr>
<tr>
<td>SPC</td>
<td>6726</td>
<td>Communication in Close Relationships</td>
<td>3</td>
<td>AS</td>
</tr>
<tr>
<td>SPC</td>
<td>6728</td>
<td>Communicating Grief, Loss, and Illness</td>
<td>3</td>
<td>AS</td>
</tr>
<tr>
<td>SPC</td>
<td>6903</td>
<td>Directed Readings</td>
<td>1-4</td>
<td>AS</td>
</tr>
<tr>
<td>SPC</td>
<td>6913</td>
<td>Directed Research</td>
<td>1-19</td>
<td>AS</td>
</tr>
<tr>
<td>SPC</td>
<td>6934</td>
<td>Selected Topics in Communication</td>
<td>1-4</td>
<td>AS</td>
</tr>
<tr>
<td>SPC</td>
<td>6935</td>
<td>Pro Seminar in Communication</td>
<td>1-3</td>
<td>AS</td>
</tr>
<tr>
<td>SPC</td>
<td>6971</td>
<td>Thesis: Master’s</td>
<td>2-1</td>
<td>AS</td>
</tr>
</tbody>
</table>

Specialized contexts. Topics vary depending upon interest of students and faculty.

Variable topics course.

Explores ethnography as an approach to conducting research and a means of theorizing about human communication.

Historical development of rhetorical theory from Plato to contemporary theorists with emphasis upon the evolution of trends and concepts in rhetorical theory.

Basic texts in 20th century rhetorical theory. Readings may vary.

Study of theory and research related to interpersonal communication.

This course examines the family in terms of the patterns of interaction through which meanings are produced. Family communication concepts and theories will be introduced as they relate to diverse family forms and experiences.

Study of contemporary theories and research in persuasion.

Examination of ways in which rhetoric reflects and molds social processes, including social integration and/or alienation; social roles and identity construction; institutions and movements; ideology and social change.

The study of theoretical perspectives in rhetorical criticism. The application of criticism to selected rhetorical situations.

Interpersonal and intersubjective processes involved in the development of close personal relationships. Includes studies and personal experiences that cut across historical, therapeutic, spiritual, philosophical, literary, and cinematic perspectives.

How illness and loss disrupt our stories of self and relationships and lead to construction of new stories, also cultural patterns of stories. Topics include critical illness and relationships, dying, bodies, emotions, caregiving, aging, and divorce.

Reading and discussion of current books, articles, and papers in communication theory and research.

Reading and discussion of current books, articles, and papers in communication theory and research.

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Reading and discussion of current books, articles, and papers in communication theory and research.

Reading and discussion of current books, articles, and papers in communication theory and research.

Reading and discussion of current books, articles, and papers in communication theory and research.

Reading and discussion of current books, articles, and papers in communication theory and research.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Type</th>
<th>Sequence</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPC 7900</td>
<td>Doctoral Research Tutorial</td>
<td>1-3</td>
<td>AS</td>
<td>SPE</td>
<td>PR: Admitted to doctoral program.</td>
<td>Advanced directed research.</td>
</tr>
<tr>
<td>SPC 7930</td>
<td>Seminar in Rhetorical Studies</td>
<td>3</td>
<td>AS</td>
<td>SPE</td>
<td>PR: GS.</td>
<td>Variable topics course.</td>
</tr>
<tr>
<td>SPC 7980</td>
<td>Dissertation: Doctoral</td>
<td>2-1</td>
<td>AS</td>
<td>SPE</td>
<td>PR: Admission to candidacy.</td>
<td>Advanced readings and discussions dealing with Spanish American civilization and culture, including a study of social, artistic and political trends. Text and discussion in Spanish.</td>
</tr>
<tr>
<td>SPN 5525</td>
<td>Modern Spanish American Civilization</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: SPN 3520 or equivalent or graduate standing.</td>
<td>Advanced readings and discussions dealing with Spanish American civilization and culture, including a study of social, artistic and political trends. Text and discussion in Spanish.</td>
</tr>
<tr>
<td>SPN 5567</td>
<td>Modern Spanish Civilization</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: SPN 3500 or equivalent or graduate standing.</td>
<td>Advanced readings and discussions dealing with contemporary Spanish civilization and culture, including a study of recent social, artistic and political trends. Texts and discussions in Spanish.</td>
</tr>
<tr>
<td>SPN 6795</td>
<td>Phonology and Dialectology</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: SPN 3300.</td>
<td>A study of the Spanish sound system.</td>
</tr>
<tr>
<td>SPN 6845</td>
<td>History of the Spanish Language</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td></td>
<td>Traces the development of Spanish from its Latin origins to the present.</td>
</tr>
<tr>
<td>SPN 6940</td>
<td>Graduate Instruction Methods</td>
<td>1-3</td>
<td>AS</td>
<td>WLE</td>
<td>S/U.</td>
<td>Special course to be used primarily for the training of teaching assistants.</td>
</tr>
<tr>
<td>SPS 6101</td>
<td>Child and Adolescent Behavior Disorders</td>
<td>4</td>
<td>ED</td>
<td>EDF</td>
<td></td>
<td>Theoretical and empirical identification and understanding of children and adolescents with behavior disorders. Treatment issues as they relate to school psychological services.</td>
</tr>
<tr>
<td>SPS 6196</td>
<td>Assessment of Child and Adolescent Personality</td>
<td>4</td>
<td>ED</td>
<td>EDF</td>
<td></td>
<td>Conceptualizations of personality and personality assessment; perspectives of disturbed and disturbing behavior, and personality assessment measures.</td>
</tr>
<tr>
<td>SPS 6197</td>
<td>Psychoeducational Diagnosis and Prescription I</td>
<td>4</td>
<td>ED</td>
<td>EDF</td>
<td>PR: Acceptance to graduate program in School Psychology.</td>
<td>Content covers comprehensive diagnosis and prescription in school psychology, including critical reviews of relevant research literatures, the professional-client relationship, interviewing, client histories, pluralistic psychoeducational assessment, assessment of educational environments, synthesis and dissemination of diagnostic data, and referral procedures. Appropriate field experiences will be provided. This course must be taken during two consecutive semesters, and the grade will be awarded at the end of the sequence.</td>
</tr>
<tr>
<td>SPS 6198</td>
<td>Psychoeducational Diagnosis and Prescription II</td>
<td>4</td>
<td>ED</td>
<td>EDF</td>
<td>PR: Acceptance to graduate program in School Psychology.</td>
<td>Content covers comprehensive diagnosis and prescription in school psychology, including critical reviews of relevant research literatures, the professional-client relationship, interviewing, client histories, pluralistic psychoeducational assessment, assessment of educational environments, synthesis and dissemination of diagnostic data, and referral procedures. Appropriate field experiences will be provided.</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credits</td>
<td>Corequisites</td>
<td>Notes</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SPS 6700C</td>
<td>Psychoeducational Interventions With Children and Adolescents I</td>
<td>4 ED</td>
<td>EDF</td>
<td>This course must be taken during two consecutive semesters, and the grade will be awarded at the end of the sequence.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPS 6701C</td>
<td>Psychoeducational Interventions With Children and Adolescents II</td>
<td>4 ED</td>
<td>EDF</td>
<td>Content covers psychoeducational interventions for school-referred children and adolescents specific to school psychological services. This is an integrated sequence of courses addressing educational and psychological (direct and indirect) interventions with topics also including consultative service delivery, the acceptability of classroom strategies, classroom and behavior management, and the synthesis of assessment data into effective interventions all within the referral context. Appropriate field experiences will be required for Intervention I and Intervention II; therefore, concurrent enrollment in the Intervention Practicum course for these two courses only is required.</td>
<td></td>
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</tr>
<tr>
<td>SPS 6702C</td>
<td>Psychoeducational Interventions With Children and Adolescents III</td>
<td>4 ED</td>
<td>EDF</td>
<td>Content covers psychoeducational interventions for school-referred children and adolescents specific to school psychological services. This is an integrated sequence of courses addressing educational and psychological (direct and indirect) interventions with topics also including consultative service delivery, the acceptability of classroom strategies, classroom and behavior management, and the synthesis of assessment data into effective interventions all within the referral context. Appropriate field experiences will be required for Intervention I and Intervention II; therefore, concurrent enrollment in the Intervention Practicum course for these two courses only is required.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| SPS 6806  | Developmental Bases of Diverse Behaviors  | 4 ED    | EDF          | This course deals with some of the major social and educational policy
<p>| SPS | 6936 | Graduate Seminar in School Psychology | 1-3 | ED | EDF | PR: Cl. | Seminars to explore current matters of professional concern in school psychology, such as trends, problems, legal and ethical issues, and empirical bases of techniques. |
| SPS | 6940 | Practicum in Psychoeducational Interventions | 1-4 | ED | EDF | PR: Concurrent enrollment in Psychoeducational Interventions with Children and Adolescents - I or II (SPS 6700C or SPS 6701C), or DPR. | Course provides practical experiences and implementation of skills discussed and acquired in the intervention courses within settings relevant to school psychology. |
| SPS | 6941 | Practicum in Psychoeducational Interventions | 1-4 | ED | EDF | PR: Concurrent enrollment in Psychoeducational Interventions with Children and Adolescents - I or II (SPS 6700C or SPS 6701C), or DPR. | Course provides practical experiences and implementation of skills discussed and acquired in the intervention courses within settings relevant to school psychology. |
| SPS | 6947 | Internship | 1-9 | ED | EDF | Open to School Psychology graduate degree candidates only. | Involves field-based, supervised experience of 1,500 (minimum) clock hours at the Educational Specialist level and 2,000 (minimum) clock hours at the Doctoral level. |
| SPS | 7090 | Supervision Processes in School Psychology | 4 | ED | EDF | | |
| SPS | 7199 | Advanced Psychoeducational Assessment | 2-4 | ED | EDF | PR: SPS 6197/6198 or DPR. | Advanced topics and techniques in the comprehensive assessment of children and adolescents typically referred for school psychological services. |
| SPS | 7205 | Advanced Consultation Processes in School Psychology | 2-4 | ED | EDF | PR: EDF 6166, or DPR. | Advanced topics and techniques in consultation processes for advanced school psychologists. |
| SPS | 7700 | Advanced Psychoeducational Interventions | 2-4 | ED | EDF | PR: SPS 6700C/SPS 6701C and SPS 6940/SPS 6941, or DPR. | Advanced topics and techniques in psychoeducational interventions for children and adolescents referred for school psychological services. |
| SPS | 7701 | Advanced Child and Adolescent Psychotherapy | 2-4 | ED | EDF | PR: SPS 6702C, or DPR. | Covers advanced topics and techniques in child and adolescent psychotherapy relevant to school psychological services. |
| SPS | 7910 | Directed Research in School Psychology | 1-9 | ED | EDF | PR: Cl. | A doctoral research experience supervised by a faculty member. |
| SPS | 7936 | Advanced Seminar in School Psychology | 1-3 | ED | EDF | | Exploration of current issues and trends in school psychology, as it relates to research and professional practice, and the history and systems of education and psychology. |
| SPS | 7980 | Dissertation | 2-30 | ED | EDF | PR: Admission to Candidacy. | |
| SPW | 5135 | Colonial Spanish American Literature | 3 | AS | WLE | PR: SPW 4131. | Introduction to Colonial Spanish American Literature from the discovery through the Romantic Period. |
| SPW | 5355 | Spanish American | 3 | AS | WLE | PR: SPW 4131. | Major writers of all genres. Emphasis |</p>
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Format</th>
<th>WLE</th>
<th>PR:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPW 5388</td>
<td>Golden Age Poetry and Drama</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: SPW 4100.</td>
<td>Lope de Vega, Alarcon, Tirso, Calderon, and others.</td>
</tr>
<tr>
<td>SPW 5405</td>
<td>Medieval Literature</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: SPW 4100 or equiv.</td>
<td>Course gives an in-depth study of principal works and authors of the period such as El Poema de Mio Cid, Libro de Buen Amor, and La Celestina.</td>
</tr>
<tr>
<td>SPW 5605</td>
<td>Cervantes</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td></td>
<td>Cervantes’ masterpiece Don Quijote de la Mancha.</td>
</tr>
<tr>
<td>SPW 5725</td>
<td>Generation of 1898</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: SPW 4101.</td>
<td>The major figures of the period and their main followers.</td>
</tr>
<tr>
<td>SPW 5934</td>
<td>Selected Topics</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: Upper-level or GS.</td>
<td>Study of an author, movement, or theme.</td>
</tr>
<tr>
<td>SPW 6427</td>
<td>Golden Age Novel</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td></td>
<td>Realistic prose-fiction of the Renaissance and Golden Age.</td>
</tr>
<tr>
<td>SPW 6485</td>
<td>Post Civil War Literature</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: SPW 4101.</td>
<td>The drama and novel since 1936.</td>
</tr>
<tr>
<td>SPW 6775</td>
<td>Caribbean Literature</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: SPW 4131</td>
<td>Emphasis on contemporary Cuban and Puerto Rican literature.</td>
</tr>
<tr>
<td>SPW 6936</td>
<td>Graduate Seminar</td>
<td>3</td>
<td>AS</td>
<td>WLE</td>
<td>PR: CC.</td>
<td>Topics vary.</td>
</tr>
<tr>
<td>SPW 6971</td>
<td>Thesis: Master’s</td>
<td>2-1.9</td>
<td>AS</td>
<td>WLE</td>
<td>PR: CC. S/U.</td>
<td>Social studies curriculum, methods of instruction and social, philosophical and psychological foundations are examined. Students are expected to plan and present instructional plan(s) appropriate to middle and secondary school levels demonstrating command of the course content.</td>
</tr>
<tr>
<td>SSE 5331</td>
<td>Foundations, Curriculum &amp; Instruction of Social Science Education</td>
<td>3</td>
<td>ED</td>
<td>EDI</td>
<td></td>
<td>Social studies methods and strategies are examined with an emphasis on the secondary school environment. The teaching profession, school settings, and current issues are examined. Students are expected to plan and present instructional plan(s) appropriate to senior high school demonstrating command of the course content.</td>
</tr>
<tr>
<td>SSE 5332</td>
<td>Methods &amp; Strategies in Social Science Education</td>
<td>3</td>
<td>ED</td>
<td>EDI</td>
<td></td>
<td>Social studies methods and strategies are examined with an emphasis on the secondary school environment. The teaching profession, school settings, and current issues are examined. Students are expected to plan and present instructional plan(s) appropriate to senior high school demonstrating command of the course content.</td>
</tr>
<tr>
<td>SSE 5641</td>
<td>Reading and Basic Skills in the Content Area</td>
<td>3</td>
<td>ED</td>
<td>EDI</td>
<td></td>
<td>Reading skills and the other basic skills as applied to the social studies are examined. Students are expected to plan and present instructional plan(s) appropriate to the social studies classroom demonstrating command of the course content. Fieldwork in a middle school is required.</td>
</tr>
<tr>
<td>SSE 5644</td>
<td>Economic Decision-Making for Teachers</td>
<td>3</td>
<td>ED</td>
<td>EDW</td>
<td>PR: Admission to College of Education or DPR.</td>
<td>Provides teachers (K-12) with content related to the operation of businesses in a market economy. Teachers analyze economic/business concepts from the perspective of individuals currently operating businesses in the Tampa Bay area. Focus of the</td>
</tr>
<tr>
<td>SSE</td>
<td>5946</td>
<td>Practicum in Social Science Education</td>
<td>3</td>
<td>ED</td>
<td>EDI</td>
<td>PR: SSE 5331.</td>
</tr>
<tr>
<td>SSE</td>
<td>6617</td>
<td>Trends in K-6 Social Science Education</td>
<td>3</td>
<td>ED</td>
<td>EDE</td>
<td>PR: Dual Track or MAT Admission.</td>
</tr>
<tr>
<td>SSE</td>
<td>6636</td>
<td>Trends in Secondary Social Science Education</td>
<td>3</td>
<td>ED</td>
<td>EDW</td>
<td>PR: SSE 4333, SSE 4334, SSE 4335.</td>
</tr>
<tr>
<td>SSE</td>
<td>6906</td>
<td>Independent Study in Social Sciences Education</td>
<td>1-6</td>
<td>ED</td>
<td>EDW</td>
<td></td>
</tr>
<tr>
<td>SSE</td>
<td>6932</td>
<td>Selected Topics in Social Science Education</td>
<td>3</td>
<td>ED</td>
<td>EDI</td>
<td>PR: Admission to Masters</td>
</tr>
<tr>
<td>SSE</td>
<td>6947</td>
<td>Internship</td>
<td>6</td>
<td>ED</td>
<td>EDI</td>
<td>PR: CI.</td>
</tr>
<tr>
<td>SSE</td>
<td>7700</td>
<td>Social Science Curriculum and Instruction Issues</td>
<td>4</td>
<td>ED</td>
<td>EDI</td>
<td>PR: Admittance to the Social Science Ph.D. program.</td>
</tr>
<tr>
<td>SSE</td>
<td>7710</td>
<td>Research in Social Science Education</td>
<td>4</td>
<td>ED</td>
<td>EDI</td>
<td>PR: Admittance to the Social Science Ph.D. program.</td>
</tr>
<tr>
<td>SSE</td>
<td>7720</td>
<td>Social Science Education Technological Innovations</td>
<td>4</td>
<td>ED</td>
<td>EDI</td>
<td>PR: Admittance to the Social Science Ph.D. program.</td>
</tr>
<tr>
<td>SSE</td>
<td>7730</td>
<td>Philosophy of Social Science Education</td>
<td>4</td>
<td>ED</td>
<td>EDI</td>
<td>PR: Admittance to the Social Science Ph.D. program.</td>
</tr>
<tr>
<td>SSE</td>
<td>7740</td>
<td>History of the Social Studies Since 1880</td>
<td>4</td>
<td>ED</td>
<td>EDI</td>
<td>PR: Admission to Doctoral Program in C&amp;I with an emphasis in SSE. This course is a historical investigation of the development of the secondary school history/social studies curriculum, including questions related to objectives, content, and methods of instruction.</td>
</tr>
<tr>
<td>SSE</td>
<td>7910</td>
<td>Directed Research in Social Sciences Education</td>
<td>1-9</td>
<td>ED</td>
<td>EDW</td>
<td>PR: CI</td>
</tr>
<tr>
<td>SSE</td>
<td>7945</td>
<td>Applied Research in Social Science Education</td>
<td>2</td>
<td>ED</td>
<td>EDI</td>
<td>PR: Admittance to the Social Science Ph.D. program.</td>
</tr>
<tr>
<td>STA</td>
<td>5166</td>
<td>Statistical Methods I</td>
<td>3</td>
<td>AS</td>
<td>MTH</td>
<td>PR: STA 4321 or CI.</td>
</tr>
<tr>
<td>STA</td>
<td>5326</td>
<td>Mathematical Statistics I</td>
<td>3</td>
<td>AS</td>
<td>MTH</td>
<td>PR: STA 5446.</td>
</tr>
<tr>
<td>STA</td>
<td>5446</td>
<td>Probability Theory I</td>
<td>3</td>
<td>AS</td>
<td>MTH</td>
<td>PR: STA 4442 and MAA 4212 or CI.</td>
</tr>
<tr>
<td>STA</td>
<td>5526</td>
<td>Non-Parametric Statistics</td>
<td>3</td>
<td>AS</td>
<td>MTH</td>
<td>PR: STA 5326 or CC.</td>
</tr>
<tr>
<td>STA</td>
<td>6206</td>
<td>Stochastic Processes</td>
<td>4</td>
<td>AS</td>
<td>MTH</td>
<td>PR: STA 5446.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Department</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>STA 6208</td>
<td>Linear Statistical Models</td>
<td>3</td>
<td>AS MTH</td>
<td>PR: STA 5167 or STA 5326 or CI.</td>
<td>processes with a countable state space, birth and death processes, branching processes, introduction to Brownian motion.</td>
<td></td>
</tr>
<tr>
<td>STA 6447</td>
<td>Probability Theory II</td>
<td>3</td>
<td>AS MTH</td>
<td>PR: STA 5446 and MAA 5306 or CI.</td>
<td>Characteristic functions, central limit theorem, martingale inequalities and convergence theorems, optional stopping, ergodic theorems and applications.</td>
<td></td>
</tr>
<tr>
<td>STA 6746</td>
<td>Multivariate Analysis</td>
<td>3</td>
<td>AS MTH</td>
<td>PR: STA 5326 or CI.</td>
<td>Multivariate normal distribution; its properties and inference; matrix random variables; multiple and partial correlation; discriminant analysis, principle components and factor analysis; multivariate ANOVA; analysis of covariance; applications using computers.</td>
<td></td>
</tr>
<tr>
<td>SYA 6126</td>
<td>Contemporary Sociological Theory</td>
<td>3</td>
<td>AS SOC</td>
<td>PR: Undergraduate course in sociological theory or CI</td>
<td>Emphasizes logical and conceptual dimensions of theory and theory construction.</td>
<td></td>
</tr>
<tr>
<td>SYA 6205</td>
<td>Social Construction of Reality</td>
<td>3</td>
<td>AS SPE</td>
<td>PR: Graduate Standing.</td>
<td>Evolution of the concept of social construction; emphasizes the consequences of understanding lived experiences and discursive representations as social constructions. Topics include depression, child abuse, masculinity/femininity, and sexual harassment.</td>
<td></td>
</tr>
<tr>
<td>SYA 6305</td>
<td>Methods of Research</td>
<td>3</td>
<td>AS SOC</td>
<td>PR: Undergraduate course in sociological research methods or CI</td>
<td>Logic and practice of research; problems of observation and data collection, data processing, and evaluation.</td>
<td></td>
</tr>
<tr>
<td>SYA 6315</td>
<td>Qualitative Research Methods</td>
<td>3</td>
<td>AS SOC</td>
<td>PR: Undergraduate course in sociological research methods or CI</td>
<td>Designed to introduce students to qualitative research methods, such as participant observation and intensive interviewing that require the researcher to get close to the social situation of interest.</td>
<td></td>
</tr>
<tr>
<td>SYA 6316</td>
<td>Ethnography</td>
<td>3</td>
<td>AS SOC</td>
<td>PR: Graduate Standing or CI.</td>
<td>Examines the theoretical and practical issues in ethnographic research and various styles of ethnography. Provides hands-on training in ethnographic data collection and qualitative data analysis.</td>
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</tr>
<tr>
<td>SYA 6405</td>
<td>Sociological Statistics</td>
<td>3</td>
<td>AS SOC</td>
<td>PR: Undergraduate statistics course or CI.</td>
<td>Logic and application of parametric and nonparametric statistical analysis for sociological data.</td>
<td></td>
</tr>
<tr>
<td>SYA 6437</td>
<td>SPSS and Social Research</td>
<td>3</td>
<td>AS SOC</td>
<td>PR: Research Methods and Statistics.</td>
<td>Provides students with practical experience using SPSS (Statistical Package for the Social Sciences).</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Units</td>
<td>Prerequisites</td>
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<tr>
<td>SYA 6505</td>
<td>The Communication of Sociology</td>
<td>1-3</td>
<td>AS</td>
<td>SOC</td>
<td>Introduces students to measurement of sociological variables, data processing, and various parametric and nonparametric data analysis procedures.</td>
<td></td>
</tr>
<tr>
<td>SYA 6909</td>
<td>Independent Study</td>
<td>1-1</td>
<td>AS</td>
<td>SOC, 1-3</td>
<td>Designed to help students define and formalize more effective efforts at communicating sociology.</td>
<td></td>
</tr>
<tr>
<td>SYA 6912</td>
<td>Directed Research</td>
<td>1-1</td>
<td>AS</td>
<td>SOC, 1-3</td>
<td>Independent study in which student must have a contract with an instructor.</td>
<td></td>
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<tr>
<td>SYA 6933</td>
<td>Special Topics-Sociology</td>
<td>3</td>
<td>AS</td>
<td>SOC, 1-3</td>
<td>Content varies according to interests of students and instructor.</td>
<td></td>
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<tr>
<td>SYA 6940</td>
<td>Internship</td>
<td>1-6</td>
<td>AS</td>
<td>SOC, 1-3</td>
<td>Designed for students wishing to develop practical sociological skills and apply sociological knowledge to questions of practical concern. Internship experiences include those in basic and applied research, community organization, and public policy.</td>
<td></td>
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<tr>
<td>SYA 6971</td>
<td>Thesis: Master's</td>
<td>2-1</td>
<td>AS</td>
<td>SOC, 1-3</td>
<td>Provides training in the field of urban and community sociology. Focuses on the field's early theoretical foundations, &quot;classic&quot; research, and contemporary debates. Concentrates on the U.S., although some cross-cultural comparisons will be offered.</td>
<td></td>
</tr>
<tr>
<td>SYD 6605</td>
<td>City and Community</td>
<td>3</td>
<td>AS</td>
<td>SOC, 1-3</td>
<td>Provides a key link for future teaching sociologists, assisting them to make the switch from consumers to educators of the sociological perspective. Places equal emphasis on theoretical and practical issues surrounding teaching sociology.</td>
<td></td>
</tr>
<tr>
<td>SYD 6706</td>
<td>Race and Ethnicity</td>
<td>3</td>
<td>AS</td>
<td>SOC, 1-3</td>
<td>Introduces historical development of race, social construction of racial and ethnic identities, race-class-gender interrelationships, and various issues of immigration. Exploration of theories used to explain racial and ethnic inequality today.</td>
<td></td>
</tr>
<tr>
<td>SYG 6936</td>
<td>Seminar in Teaching Sociology</td>
<td>3</td>
<td>AS</td>
<td>SOC, 1-3</td>
<td>Provides a key link for future teaching sociologists, assisting them to make the switch from consumers to educators of the sociological perspective. Places equal emphasis on theoretical and practical issues surrounding teaching sociology.</td>
<td></td>
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<tr>
<td>SYO 5365</td>
<td>Industrial Sociology</td>
<td>3</td>
<td>AS</td>
<td>SOC</td>
<td>Theory of interpersonal relations and interaction in the modern family. Analysis of functions and roles.</td>
<td></td>
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<tr>
<td>SYO 6125</td>
<td>Family Analysis</td>
<td>3</td>
<td>AS</td>
<td>SOC, 1-3</td>
<td>Sociological analysis of the institution of education. Primary attention directed toward class, race, and gender inequalities and educational transformations.</td>
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<tr>
<td>SYO 6255</td>
<td>Seminar in Sociology of Education</td>
<td>3</td>
<td>AS</td>
<td>SOC, 1-3</td>
<td>Survey of core concepts and current research in the sociology of health and illness: social correlates of disease, health care utilization, physician-patient relations, medical compliance, and illness behavior.</td>
<td></td>
</tr>
<tr>
<td>SYO 6406</td>
<td>Sociology of Health and Illness</td>
<td>3</td>
<td>AS</td>
<td>SOC, 1-3</td>
<td>Organizational theory, bureaucratic models, authority, power.</td>
<td></td>
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<tr>
<td>SYO 6545</td>
<td>Complex Organizations</td>
<td>3</td>
<td>AS</td>
<td>SOC, 1-3</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Prerequisites</td>
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<tr>
<td>SYO 7435</td>
<td>Sociology of Disability in Urban Society</td>
<td>3</td>
<td>AS SOC</td>
<td>This course critically evaluates current controversies over the utility of a variety of theoretical perspectives and research methods in understanding the lived experience of disability in 21st century urban society.</td>
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<tr>
<td>SYP 6008</td>
<td>Social Problems, Identity, and Community</td>
<td>3</td>
<td>AS SOC</td>
<td>An examination of social problems using social constructionist theoretical perspectives. Topics focus on how meaning is created within historically, culturally, and politically situated communities.</td>
<td></td>
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<tr>
<td>SYP 6016</td>
<td>Emotions in Everyday Life</td>
<td>3</td>
<td>AS SOC</td>
<td>Explores the role of emotions in the everyday lives of individuals, within the micro-social contexts of identities, interactions, and social relationships.</td>
<td></td>
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</tr>
<tr>
<td>SYP 6357</td>
<td>Comparative Social Movements</td>
<td>3</td>
<td>AS SOC</td>
<td>Provides an overview of the various theoretical perspectives used to explain the emergence, growth, strategies and success of social movements in contemporary America and in other countries.</td>
<td></td>
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</tr>
<tr>
<td>SYP 6425</td>
<td>Sociology of Consumer Culture</td>
<td>3</td>
<td>AS SOC</td>
<td>This course critically examines the key theories and analyses of American consumerism with special attention to inequalities of race, class, and gender.</td>
<td></td>
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</tr>
<tr>
<td>SYP 6515</td>
<td>Sociology of Deviance</td>
<td>3</td>
<td>AS SOC</td>
<td>Develops knowledge of traditional theories of deviance as well as critiques them. Through development of alternative perspectives, challenges constructions of deviance and the mechanisms of power.</td>
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<tr>
<td>TAX 5015</td>
<td>Federal Taxation of Business Entities</td>
<td>3</td>
<td>BU ACC</td>
<td>Tax issues encountered by small businesses. Includes tax planning, capital formation and preservation, tax compliance and tax alternatives.</td>
<td></td>
<td></td>
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<tr>
<td>TAX 6005</td>
<td>Advanced Partnership Taxation</td>
<td>3</td>
<td>BU ACC</td>
<td>A study of advanced income tax problems involving partnerships, including organization, operation, distributions, liquidations, basis, family partnerships, and sales and exchanges. The planning and business aspects of partnerships are emphasized.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAX 6016</td>
<td>Advanced Corporate Taxation I</td>
<td>3</td>
<td>BU ACC</td>
<td>This is the first of two sequential courses on Advanced Corporate Taxation. This course studies advanced income tax problems involving corporations, including organization, operation, distribution, and liquidation. Topics include &quot;S&quot; Corporations, collapsible corporations, personal holding companies, accumulation of earnings, and acquisition and disposition of corporations. The planning and business aspects of corporate transactions are emphasized.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAX 6025</td>
<td>Advanced Corporate Taxation II</td>
<td>3</td>
<td>BU ACC</td>
<td>This is the second of two sequential courses on Advanced Corporate Taxation.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Department</td>
<td>Prerequisites</td>
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<tr>
<td>TAX 6065</td>
<td>Contemporary Issues In Taxation</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: TAX 4001 and TAX 5015 or equivalent and admission to MAcc program. CR: ACG 6453.</td>
<td>A study of contemporary issues in taxation with an emphasis on related computer research. Current tax issues in the areas of corporations or partnerships will be explored when appropriate, along with related tax planning techniques.</td>
<td></td>
</tr>
<tr>
<td>TAX 6134</td>
<td>Advanced Corporate Taxation</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: TAX 4001 and TAX 5015</td>
<td>A study of advanced income tax problems involving corporations, including organization, operation, distributions, liquidations, consolidated corporate tax returns, and taxation of foreign corporations and foreign source income.</td>
<td></td>
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<tr>
<td>TAX 6445</td>
<td>Estate Planning</td>
<td>3</td>
<td>BU ACC</td>
<td>PR: TAX 4001.</td>
<td>This course covers the basics of estate, gift, and trust taxation and introduces the student to tax planning techniques to minimize the tax-burden on inter-generation transfers of wealth.</td>
<td></td>
</tr>
<tr>
<td>THE 5909</td>
<td>Directed Studies</td>
<td>1-6</td>
<td>TA TAR</td>
<td>PR: Cl and CC.</td>
<td>Independent studies in the various areas of Theatre. Course of study and credits must be assigned prior to registration.</td>
<td></td>
</tr>
<tr>
<td>THE 5931</td>
<td>Selected Topics In Theatre</td>
<td>1-8</td>
<td>TA TAR</td>
<td>PR: Cl.</td>
<td>The content of the course will be governed by the student demand and instructor interest. May be lecture or class discussion or studio format.</td>
<td></td>
</tr>
<tr>
<td>THE 6175</td>
<td>New British Theatre and Drama</td>
<td>3</td>
<td>TA TAR</td>
<td>PR: Graduate standing or Cl.</td>
<td>A study of contemporary theatrical practice and key dramatic texts in the British Isles. Departmental permit required of majors and non-majors.</td>
<td></td>
</tr>
<tr>
<td>THE 6720</td>
<td>Drama in Elementary School</td>
<td>3</td>
<td>TA EDD</td>
<td></td>
<td>Methods of using theatre and drama activities in elementary school, including use of drama and theatre for interdisciplinary, integrated projects. Available to majors and non-majors, no extra laboratory sections.</td>
<td></td>
</tr>
<tr>
<td>THE 6736</td>
<td>Methods of Directing the High School Play</td>
<td>3</td>
<td>TA EDD</td>
<td></td>
<td>Directing the high school play including script selection, analysis and interpretation, audition and casting procedures, composition, picturization, staging movement, rhythm and pacing, pantomimic dramatization, organizing and conducting rehearsals.</td>
<td></td>
</tr>
<tr>
<td>THE 6930</td>
<td>Selected Topics in the Teaching of Theatre</td>
<td>3</td>
<td>TA EDD</td>
<td>PR: Open only to students who have completed all other graduate level Theatre Education courses. S/U.</td>
<td>Investigation of topics related to theatre teaching of special interest to the student. Topics will be selected by the student and approved by the graduate advisor.</td>
<td></td>
</tr>
<tr>
<td>TSL 5085</td>
<td>ESOL I - Theory and Practice of Teaching English Language</td>
<td>3</td>
<td>ED EDX</td>
<td></td>
<td>This course is for undergraduate degree holding, preprofessional (preservice) teachers to learn about</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Corequisites</td>
<td>Prerequisites</td>
<td>Description</td>
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<tr>
<td>TSL 5086</td>
<td>ESOL II-Secondary Language &amp; Literacy Acquisition in Children &amp; Adolescents</td>
<td>3</td>
<td>ED EDX</td>
<td>PR: FLE 5430.</td>
<td>This course is designed to provide students with a critical understanding of instructional delivery which caters for the linguistic and literacy needs of minority / heritage communities.</td>
<td></td>
</tr>
<tr>
<td>TSL 5242</td>
<td>ESOL III-Language Principles, Acquisition &amp; Assessment for English Language Learners</td>
<td>3</td>
<td>ED EDX</td>
<td>PR: FLE 5431.</td>
<td>This course provides an overview of the components of language, linking them to methods and techniques of providing comprehensible instruction to LEP students.</td>
<td></td>
</tr>
<tr>
<td>TSL 5325</td>
<td>ESOL Strategies for Content Area Teachers</td>
<td>3</td>
<td>ED EDX</td>
<td></td>
<td>Course designed for public school teachers working with limited English Proficient (foreign) students in the classroom. The new ESOL requirements specify that this course be offered to content area teachers and to ESOL teachers.</td>
<td></td>
</tr>
<tr>
<td>TSL 5371</td>
<td>Methods of Teaching English As A Second Language</td>
<td>3</td>
<td>AS WLE</td>
<td></td>
<td>Analysis of the methods of teaching English pronunciation and structure to speakers of other languages.</td>
<td></td>
</tr>
<tr>
<td>TSL 5372</td>
<td>ESOL Curriculum and Instruction</td>
<td>3</td>
<td>AS WLE</td>
<td></td>
<td>Analysis of the methods of teaching English pronunciation and structure to speakers of other languages.</td>
<td></td>
</tr>
<tr>
<td>TSL 5440</td>
<td>Language Testing</td>
<td>3</td>
<td>AS WLE</td>
<td>PR: TSL 5371.</td>
<td>Lecture course on testing English as a second/foreign language.</td>
<td></td>
</tr>
<tr>
<td>TSL 5525</td>
<td>Cross-Cultural Issues in ESL</td>
<td>3</td>
<td>AS WLE</td>
<td>PR: LIN 5700.</td>
<td>Lecture course on cultural issues in Teaching English as a Second/Foreign language.</td>
<td></td>
</tr>
<tr>
<td>TSL 5940</td>
<td>ESOL Practicum</td>
<td>1-3</td>
<td>ED EDX</td>
<td>PR: FLE 5345 and FLE 5145. Must be taken in the semester prior to final internship.</td>
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<tr>
<td>TSL 6253</td>
<td>Applied Linguistics for Teaching ESOL</td>
<td>3</td>
<td>ED EDX</td>
<td></td>
<td>Course is designed to prepare participants with linguistic concepts &amp; issues relevant to the field of applied linguistics 7 second language teaching. Course will survey sub-fields of linguistics (phonetics, phonology, morphology, semantics, and syntax).</td>
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</tr>
<tr>
<td>TSL 6700</td>
<td>ESOL for School Psychologists and School Counselors</td>
<td>3</td>
<td>ED EDX</td>
<td></td>
<td>Prepare school psychologists &amp; school counselors to provide services for Eng language learners in their schools. Provides them with current research and guidance in the areas of program development, legislative mandates, and learner characteristics.</td>
<td></td>
</tr>
<tr>
<td>TSL 6945</td>
<td>Internship</td>
<td>1-6</td>
<td>AS WLE</td>
<td>PR: TSL 5371 and TSL 5372. S/U.</td>
<td>Required of all candidates for the M.A. degree in TESL. Supervised teaching of English as a second language to non-native speakers at appropriate levels and settings.</td>
<td></td>
</tr>
<tr>
<td>TTE 5205</td>
<td>Traffic Systems Engineering</td>
<td>3</td>
<td>EN EGX</td>
<td>PR: TTE 4004 or equivalent.</td>
<td>Traffic models, intersection analysis, capacity analysis, data methods collection, parking studies, volume and speed studies, freeway management, and advanced technologies.</td>
<td></td>
</tr>
<tr>
<td>TTE 5501</td>
<td>Transportation Planning and Economics</td>
<td>3</td>
<td>EN EGX</td>
<td>PR: College Algebra &amp; Cl.</td>
<td>Fundamentals of urban transportation planning: trip generation, trip distribution, modal...</td>
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<tr>
<td>Course Code</td>
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<td>Credits</td>
<td>Department</td>
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<tr>
<td>TTE 6270</td>
<td>Intelligent Transportation Systems</td>
<td>3</td>
<td>EN EGX</td>
<td>PR: TTE 5205.</td>
<td>ITS architecture design and evaluation, simulation and modeling, advanced traffic management systems, traveler information systems, vehicle control systems, commercial vehicle operations, public transportation systems, and telecommunications.</td>
<td></td>
</tr>
<tr>
<td>TTE 6315</td>
<td>Transportation Safety</td>
<td>3</td>
<td>EN EGX</td>
<td>PR: TTE 5205.</td>
<td>Transportation safety studies, accident data analysis, traffic safety control devices, special population regimen safety, highway conflict studies, accident reconstruction, and tort and liability issues.</td>
<td></td>
</tr>
<tr>
<td>TTE 6505</td>
<td>Discrete Choice Models of Travel Behavior</td>
<td>3</td>
<td>EN EGX</td>
<td>PR: TTE 5501.</td>
<td>Theories of travel behavior; multinomial logit and nested logit models of mode choices, destination choice, and car ownership. Theory and application to travel forecasting.</td>
<td></td>
</tr>
<tr>
<td>TTE 6507</td>
<td>Travel Demand Modeling</td>
<td>3</td>
<td>EN EGX</td>
<td>PR: TTE 5501.</td>
<td>Statistical modeling of travel demand forecasting; emphasis on trip generation and trip chaining.</td>
<td></td>
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<tr>
<td>TTE 6651</td>
<td>Public Transportation</td>
<td>3</td>
<td>EN EGX</td>
<td></td>
<td>Planning, design and operation of public transportation systems; costs and productivity of transit; impacts of transit on travel behavior and urban form; ridership forecasting; public transportation policy analysis.</td>
<td></td>
</tr>
<tr>
<td>TTE 6655</td>
<td>Transportation and Land Use</td>
<td>3</td>
<td>EN EGX</td>
<td></td>
<td>Relationships between transportation and land use, coordinated transportation and land use planning, theory of urban development, urban sprawl, integrated transportation and land use models, transportation friendly urban design, and accessibility.</td>
<td></td>
</tr>
<tr>
<td>TTE 6835</td>
<td>Pavement Design</td>
<td>3</td>
<td>EN EGX</td>
<td>PR: TTE 4005 or equivalent.</td>
<td>Analysis of flexible and rigid pavements, equivalent single wheel loads, pavement material and their properties, pavement evaluation, reliability, flexible and rigid pavement design, overlay design, pavement life-cycle cost analysis.</td>
<td></td>
</tr>
<tr>
<td>TTE 6837</td>
<td>Pavement Management Systems</td>
<td>3</td>
<td>EN EGX</td>
<td>PR: TTE 4005 or equivalent.</td>
<td>Review of flexible and rigid pavement design, overlay design; pavement evaluation, pavement network delineation, condition prediction models, pavement maintenance and rehabilitation, pavement management techniques, life-cycle analysis.</td>
<td></td>
</tr>
<tr>
<td>TTE 6930</td>
<td>Graduate Transportation Seminar</td>
<td>1</td>
<td>EN EGX</td>
<td>PR: Majors only. S/U.</td>
<td>Seminars, presentations, and discussions of contemporary transportation issues.</td>
<td></td>
</tr>
<tr>
<td>URP 6056</td>
<td>City and Regional Planning</td>
<td>3</td>
<td>AS POL</td>
<td>GS.</td>
<td>A review of goals, objectives, and interrelationships between regional and city planning; intergovernmental and policy issues. Cross-listed with Political Science.</td>
<td></td>
</tr>
<tr>
<td>URP 6100</td>
<td>Planning Theory and History</td>
<td>3</td>
<td>AS GPY</td>
<td></td>
<td>The course is designed acquaint the student with major trends in the</td>
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<tr>
<td>Course Code</td>
<td>Title</td>
<td>Credits</td>
<td>Units</td>
<td>Prerequisites</td>
<td>Corequisites</td>
<td>Description</td>
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<tr>
<td>URP 6115</td>
<td>Planning, policy and politics</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td></td>
<td>Introduction to politics, government and policy making for planning students. Part of the required core for the URP program.</td>
</tr>
<tr>
<td>URP 6232</td>
<td>Research Methods for Urban and Research Planning</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td></td>
<td>The course is designed to introduce students to strategies for designing research and the appropriate methods for collecting urban and regional planning data; familiarize students with social research and evaluation methods used in planning.</td>
</tr>
<tr>
<td>URP 6930</td>
<td>Special Topics in Urban and Regional Planning</td>
<td>3</td>
<td>AS</td>
<td>GPY</td>
<td></td>
<td>Topical issues in the study of Urban and Regional Planning. Content will vary each semester. It is repeatable for credit. There are no limits on the number of times a student can take courses listed under this title.</td>
</tr>
<tr>
<td>URP 6940</td>
<td>Internship in Urban and Regional Planning</td>
<td>3-6</td>
<td>AS</td>
<td>GPY</td>
<td></td>
<td>Students will gain practical experience in planning, working on projects with local planning agencies and firms. Course is restricted to URP masters students, and can be repeated for up to 6 credits.</td>
</tr>
<tr>
<td>WST 5308</td>
<td>Feminist Spirituality</td>
<td>3</td>
<td>AS</td>
<td>WST</td>
<td></td>
<td>Open to non-majors. Focuses on the many voices of contemporary feminist spirituality, emerging from women’s experiences in diverse religious, ethnic and cultural traditions, and representing a range of theoretical perspectives from biblical feminism to goddess worship and wicca.</td>
</tr>
<tr>
<td>WST 5825</td>
<td>Internship in Women’s Studies</td>
<td>3</td>
<td>AS</td>
<td>WST</td>
<td></td>
<td>Student placement in approved intern setting for a minimum of 150 hours of supervised experience. S/U. Department Approval Required.</td>
</tr>
<tr>
<td>WST 5934</td>
<td>Selected Topics</td>
<td>1-4</td>
<td>AS</td>
<td>WST</td>
<td></td>
<td>Study of current research methods and scholarship on women from a multidisciplinary perspective.</td>
</tr>
<tr>
<td>WST 5940</td>
<td>Internship in Women’s Studies</td>
<td>3-6</td>
<td>AS</td>
<td>WST</td>
<td></td>
<td>Student placement in an approved intern setting for a minimum of 240 hours of supervised experience. S/U only.</td>
</tr>
<tr>
<td>WST 6001</td>
<td>Feminist Research and Methodology</td>
<td>3</td>
<td>AS</td>
<td>WST</td>
<td></td>
<td>To develop a more comprehensive understanding of the situation of women in society and to develop a theoretical basis for integrating this knowledge into the student’s graduate course of study. Available to non-majors.</td>
</tr>
<tr>
<td>WST 6002</td>
<td>Feminist Scholarship and Pedagogy</td>
<td>3</td>
<td>AS</td>
<td>WST</td>
<td></td>
<td>Introduces students to techniques of feminist teaching and scholarly writing. Covers issues of professionalism, an overview of contemporary scholarly issues in feminist studies, and basic feminist pedagogy. Department Approval Required.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Attendance</td>
<td>Department</td>
<td>Description</td>
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<tr>
<td>WST 6406</td>
<td>Women of Color: Activism and Social Change</td>
<td>3</td>
<td>AS</td>
<td>WST</td>
<td>Intensive reading and discussion of the participation of women of color in contemporary and reformist activities.</td>
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<tr>
<td>WST 6560</td>
<td>Advanced Feminist Theory</td>
<td>3</td>
<td>AS</td>
<td>WST</td>
<td>An in-depth exploration of current issues and debates in Feminist Theories. Topics may include: representation, essentialism, authority structures, subjectivity, identity and difference. Department Approval Required.</td>
<td></td>
</tr>
<tr>
<td>WST 6562</td>
<td>Body Politics</td>
<td>3</td>
<td>AS</td>
<td>WST</td>
<td>An in-depth feminist exploration of how the body is produced, inscribed, replicated, and often disciplined as a result of various powers at work.</td>
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<tr>
<td>WST 6705</td>
<td>Women and Policy</td>
<td>3</td>
<td>AS</td>
<td>WST</td>
<td>Examination of policy areas such as employment, violence, welfare which have a significant impact on women. The aim is to achieve a deeper understanding of the way in which gender functions as a category of analysis in policy decision, and also examines and critiques the area from which policy is produced.</td>
<td></td>
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<tr>
<td>WST 6900</td>
<td>Directed Readings</td>
<td>1-3</td>
<td>AS</td>
<td>WST</td>
<td>PR: Cl. Supervised program of intensive readings of an interdisciplinary nature focusing on women. Student must have contract with instructor.</td>
<td></td>
</tr>
<tr>
<td>WST 6910</td>
<td>Directed Research</td>
<td>1-3</td>
<td>AS</td>
<td>WST</td>
<td>PR: CC and signed contract. S/U. Provide graduate students with research experience in areas of specific interest utilizing feminist perspectives and research methods.</td>
<td></td>
</tr>
<tr>
<td>WST 6936</td>
<td>Selected Topics in Women's Studies</td>
<td>3</td>
<td>AS</td>
<td>WST</td>
<td>Content varies according to scholarship focus of students and instructor. Repeatable-- content and instructor will vary.</td>
<td></td>
</tr>
<tr>
<td>ZOO 5456</td>
<td>Ichthyology</td>
<td>3</td>
<td>AS</td>
<td>BIN</td>
<td>PR: Senior or GS in Biology; ZOO 2701C, CI. PCB 4674 is suggested. Evolution, systematics, structure, behavior, physiology, and ecology of fishes.</td>
<td></td>
</tr>
<tr>
<td>ZOO 5456L</td>
<td>Ichthyology Lab</td>
<td>1</td>
<td>AS</td>
<td>BIN</td>
<td>CR/PR: ZOO 5456 Laboratory portion of Ichthyology relating to evolution, systematics, structure, behavior, physiology and ecology of fishes.</td>
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</tr>
<tr>
<td>ZOO 5463C</td>
<td>Herpetology</td>
<td>4</td>
<td>AS</td>
<td>BIN</td>
<td>PR: Cl. Major aspects of amphibian and reptilian biology emphasizing fossil history, evolutionary morphology, sensory physiology, life history and reproductive behavior. Lec.-lab. Field trip.</td>
<td></td>
</tr>
<tr>
<td>ZOO 6455</td>
<td>Advances in Ichthyology</td>
<td>1</td>
<td>AS</td>
<td>BIN</td>
<td>PR: Cl. This course discusses current topics in Ichthyology. Readings are taken from the primary literature. The course is restricted to graduate students with a background in ichthyology.</td>
<td></td>
</tr>
</tbody>
</table>