New Graduate Degree Program Proposal Information Form

New Degree Program Proposals require the completion of this form as well as the following items. Make certain to you match your proposal form with the data you provide below. Routing is below; For USF-Tampa, one copy is emailed to chinescobb@grad.usf.edu and a paper copy is sent to the Graduate School in BEH 304.

☐ proposal and supporting tables, following the template posted online at: http://www.acad.usf.edu/Administrative+Areas/new_degree.htm

☐ A letter from the College Dean indicating how the College will provide all the resources needed to support the new program (this may be scanned and emailed)

☐ Copies of the faculty vita

PROGRAM INFORMATION

Degree (e.g. M.A., M.U.R.P., D.P.T., Ph.D., etc.)
Program (a.k.a. Major) Name (Biology, Public Health, etc.)
CIP (Classification of Instructional Programs) Code
Are any other graduate programs at USF offered under this CIP code?
   If Yes, list them

USF Institution (USF-Tampa, USF-SM, USF-Poly, USFST)
College
Department
Proposed Effective Date for first admissions
Program Description (provide a brief description of the program)

Major Research Areas (keywords used for the search engine)

Admission Deadlines:

Will the Program’s Admission Deadlines be the same as the University’s? ☑ Yes ☐ No

If no, what are the Program’s Admission Deadlines? (may not be later without approval)

University Deadlines for domestic students and international students living in the U.S. are:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Domestic Deadline</th>
<th>International Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>February 15</td>
<td>n/a</td>
</tr>
<tr>
<td>Spring</td>
<td>October 15</td>
<td>n/a</td>
</tr>
<tr>
<td>Summer</td>
<td>February 15</td>
<td>February 15</td>
</tr>
</tbody>
</table>

University Deadlines for international students living outside the U.S. are:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Domestic Deadline</th>
<th>International Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>January 2</td>
<td>n/a</td>
</tr>
<tr>
<td>Spring</td>
<td>June 1</td>
<td>n/a</td>
</tr>
<tr>
<td>Summer</td>
<td>January 2</td>
<td>January 2</td>
</tr>
</tbody>
</table>

If admission applications are only accepted in one semester, put “none” in the other semester boxes.
ADMISSION REQUIREMENTS

University Minimums:

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

2. Submission of a GRE/GMAT score is required unless specifically waived by the University.

   DOES THIS PROGRAM REQUIRE A HIGHER MINIMUM GPA?  [ ] Yes  [ ] No

   If yes, what is the minimum required:

   DOES THIS PROGRAM REQUIRE A GRE?  [ ] Yes  [ ] No
   if yes, list the score requirements (using percentiles for each component) – e.g. Verbal 32%, Quantitative 44%, AW 4
   GRE – Verbal
   GRE – Quantitative
   GRE – Analytical

   DOES THIS PROGRAM REQUIRE OTHER TESTS?  [ ] Yes  [ ] No

   If yes, list the tests and required scores

   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/

   DOES THIS PROGRAM REQUIRE ANY OF THE FOLLOWING? If Yes, explain requirements.

   Interviews / Auditions?  [ ] Yes  [ ] No
   Personal Statement  [ ] Yes  [ ] No  A 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.

   Writing Sample  [ ] Yes  [ ] No
   Other  [ ] Yes  [ ] No  The student may provide a portfolio demonstrating prior work that focuses on sustainability of populations

For Assistance Contact:  www.grad.usf.edu  813-974-4239  chinescobb@grad.usf.edu  9/4/09
DEGREE PROGRAM REQUIREMENTS (*Curriculum*)

<table>
<thead>
<tr>
<th>Total Hours Required</th>
<th>33</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Requirements</td>
<td></td>
</tr>
<tr>
<td>IDS 6xxx</td>
<td>Interdisciplinary Seminar in Global Sustainability (3)</td>
</tr>
<tr>
<td>PHC 6934</td>
<td>Public Health Topics in Global Sustainability (3)</td>
</tr>
<tr>
<td>GEB 6930</td>
<td>Special Topics in Management and Sustainability (3)</td>
</tr>
<tr>
<td>IDS 6xxx</td>
<td>Internship (6)</td>
</tr>
</tbody>
</table>

Focus Area**:
- ANG 6469 Foundations of Medical Anthropology (3)
- PHC 6301 Water Pollution and Treatment (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.

Elective Requirements
- None

Comprehensive / Qualifying Exam Requirements
- N/A

Thesis/Dissertation hour requirements
- N/A (Project)

Thesis/Dissertation requirements
- N/A

Other requirements (e.g. Internship)
- IDS 6xxx Project (3)

*Make certain hours total to the minimum hours required for the program*

Routing:
- Department
- College Curriculum Committee
- College Dean / Assoc Dean
- Graduate School / Institutional Graduate Studies Office
- Graduate/Faculty Council
- AAMC
- ACE/BOT
- BOG (only if Doctorate)
New Graduate Degree Program Continued...

<table>
<thead>
<tr>
<th>FULL PLAN APPROVAL*</th>
<th>M.A. Degree in <strong>Global Sustainability</strong> with a focus in <strong>Water</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Signature</td>
</tr>
<tr>
<td>Faculty Name and Email</td>
<td></td>
</tr>
<tr>
<td>Dept. Chair</td>
<td></td>
</tr>
<tr>
<td>College Committee Chair</td>
<td></td>
</tr>
<tr>
<td>College Dean/designee</td>
<td></td>
</tr>
<tr>
<td>Concurrence Verification (GECC) USF TPA USF SM USF POLY USF STPT</td>
<td></td>
</tr>
<tr>
<td>Graduate Council (GC) Chair/designee</td>
<td></td>
</tr>
<tr>
<td>Graduate School Dean/designee</td>
<td></td>
</tr>
</tbody>
</table>

For Graduate School Notation Only:

| System AAMC | □ Approve □ Disapprove |
| BOT/ACE Workgroup | □ Approve □ Disapprove |
| BOT | □ Approve □ Disapprove |
| BOG | □ Approve □ Disapprove |
Florida Board of Governors

Request to Offer a New Degree Program

University of South Florida

Name of College or School: Interdisciplinary

Academic Specialty or Field: Masters of Arts in Global Sustainability

(Include Proposed CIP Code): IDS

The submission of this proposal constitutes a commitment by the university that, if the proposal is approved, the necessary financial resources and the criteria for establishing new programs have been met prior to the initiation of the program.

Date Approved by the University Board of Trustees: Date

Signature of Chair, Board of Trustees: Date

President: Date

Vice President for Academic Affairs: Date

Provide headcount (HC) and full-time equivalent (FTE) student estimates of majors for Years 1 through 5. HC and FTE estimates should be identical to those in Table 1. Indicate the program costs for the first and the fifth years of implementation as shown in the appropriate columns in Table 2. Calculate an Educational and General (E&G) cost per FTE for Years 1 and 5 (Total E&G divided by FTE).

<table>
<thead>
<tr>
<th>Implementation Timeframe</th>
<th>Projected Student Enrollment (From Table 1)</th>
<th>Projected Program Costs (From Table 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HC</td>
<td>FTE</td>
</tr>
<tr>
<td>Year 1</td>
<td>20</td>
<td>20.62</td>
</tr>
<tr>
<td>Year 2</td>
<td>20</td>
<td>20.83</td>
</tr>
<tr>
<td>Year 3</td>
<td>25</td>
<td>25.84</td>
</tr>
<tr>
<td>Year 4</td>
<td>25</td>
<td>25.82</td>
</tr>
<tr>
<td>Year 5</td>
<td>25</td>
<td>25.8</td>
</tr>
</tbody>
</table>

Note: This outline and the questions pertaining to each section must be reproduced within the body of the proposal to ensure that all sections have been satisfactorily addressed.
INTRODUCTION

I. Program Description and Relationship to System-Level Goals

A. Briefly describe within a few paragraphs the degree program under consideration, including (a) level; (b) emphases, including concentrations, tracks, or specializations; (c) total number of credit hours; and (d) overall purpose, including examples of employment or education opportunities that may be available to program graduates.

The proposed Master of Arts in Global Sustainability will initially prepare students to address complex regional, national, and global challenges related to water and sustainability and the ability to innovate in diverse cultural, geographic, and demographic contexts. The program will allow for the integration of various disciplines such as basic, natural, and social sciences, engineering, health, economics, governance and policy, and issues of diversity. The total number of credit hours is 33 with the majority of coursework being offered online. The focus of the inaugural curriculum is on water.

The target student population for this program includes working professionals in for-profit and non-for-profit agencies and other settings that are focusing on sustainability and “green” issues; students who wish to learn problem solving skills and utilize critical thinking to advance sustainability in developed and developing nations; and students who wish to pursue policy change and perform advocacy functions to advance sustainability. This is not a Master of Science degree that trains students as discipline-specific scientists in science, technology, engineering, or math (STEM) fields but a multidisciplinary Master of Arts degree that prepares students to be leaders in working as team members to enhance global sustainability.

There will be many opportunities for employment of students who receive this degree. Kaplan’s new College Guide’s top 10 “hot green careers” (www.kaplan.edu) are in environmental design and engineering, hydrology, solar energy, and transportation system planning — all key strengths of the University of South Florida. The “green economy” is already big business (“Growing ‘Green' Jobs Is a Long-Term Task, Advocates Say,” The New York Times, Aug. 14, 2009). The new Green Collar Jobs report (www.ases.org/greenjobs) from the nonprofit American Solar Energy Society and Management Information Services, a Washington D.C. economic research firm, documents that the renewable energy and energy efficiency industries represented more than 9 million jobs and $1,045 billion in U.S. revenue in 2007.

The renewable energy industry grew three times as fast as the U.S. economy, with the solar thermal, photovoltaic, biodiesel, and ethanol sectors leading the way, each with 25%+ annual revenue growth. By 2030, they forecast as many as 37 million jobs from renewable energy and energy efficiency. There will also be many opportunities educationally for advanced degrees in related fields such as public health, public policy, and engineering in addition to the option of dual degrees and incorporation for some students of placement in the Peace Corps.
B. Describe how the proposed program is consistent with the current State University System (SUS) Strategic Planning Goals. Identify which goals the program will directly support and which goals the program will indirectly support. (See the SUS Strategic Plan at http://www.flbog.org/StrategicResources/)

This program meets the economic development goals of the SUS Strategic Plan with its focus on Healthy Communities; Integrated Interdisciplinary Inquiry; Global Literacy and Impact; Research and Innovation; and Community Engagement. The goals that are directly supported include Access to and production of degrees; Building world-class academic programs and research capacity; Meeting statewide professional and workforce needs; and Meeting community needs and fulfilling unique institutional responsibilities. As stated earlier, this degree program addresses economic and community needs and will allow for the development of a world-class educational effort in global sustainability. There will be practice and research opportunities for students throughout the program and the ability to interact with experts statewide, nationally, and internationally.

Institutional and State Level Accountability

II. Need and Demand

A. Need: Describe national, state, and/or local data that support the need for more people to be prepared in this program at this level. Reference national, state, and/or local plans or reports that support the need for this program and requests for the proposed program which have emanated from a perceived need by agencies or industries in your service area. Cite any specific need for research and service that the program would fulfill.

As stated earlier, there is a clear need for this degree. The recent collapse of the economy and the ongoing collapse of the environment have created remarkable new opportunities for the University of South Florida to prepare students for careers in novel and developing industries that aim to rebuild simultaneously the market and the planet (“Doing the Recovery Right,” The Nation, Jan. 28, 2009). So called “green collar” or sustainability jobs, in which professionals solve problems in energy use and transportation, are emerging in practically every commercial, governmental, and nonprofit sector—with job titles such as sustainability officer, sustainable design professional, resource manager, and energy engineer (“What Is a Green-Collar Job, Exactly?”, Time Magazine, May 26, 2008; “Greening the Rustbelt”, The Economist, Aug. 13, 2009). Numerous other examples can be found at www.greenjobs.com, www.sustainablebusiness.com, and www.ecojobs.com. The 2009 Kaplan College Guide’s top 10 “hot green careers” (www.kaplan.edu) are in environmental design and engineering, hydrology, solar energy, and transportation system planning — all key strengths of the University of South Florida.

Management Information Services, a Washington D.C. economic research firm, documents that the renewable energy and energy efficiency industries represented more than 9 million jobs and $1,045 billion in U.S. revenue in 2007. The renewable energy industry grew three times as fast as the U.S. economy, with the solar thermal, photovoltaic, biodiesel, and ethanol sectors leading the way, each with 25%+ annual revenue growth. By 2030, they forecast as many as 37 million jobs from renewable energy and energy efficiency.

While community colleges are taking the lead in training green-collar job workers (“Community Colleges Are Key to ‘Green’ Jobs, Activist Says,” *The Chronicle of Higher Education*, 55(10):A20, 2008), only a small number of universities provide the kind of higher education needed to train students to take leadership roles in the Green Economy (“Green Degrees in Bloom,” *Newsweek*, Aug. 12, 2009; “College Students Are Flocking to Sustainability Degrees, Careers,” *USA Today*, Aug. 3, 2009; “Green Degrees: An Environmental Education Can Lead to a Variety of Career Options, *Black Enterprise*, Nov., 2008). Currently in Florida, no schools offer a post-baccalaureate degree in global sustainability. With its unique strengths in research on water, coastal environments, and globalization, the University of South Florida is poised to make a significant contribution to training students for the new Green Economy with a Master of Arts degree in Global Sustainability.

With regards to Florida, The Pew Charitable Trust (www.pewtrusts.org) reports that the state’s clean energy economy grew 7.9 percent between 1998 and 2007. Florida was among the top 10 for jobs in America’s clean energy economy – and the only state in the nation with its own cap-and-trade policy, helping to create market demand for clean energy generation (southflorida.bizjournals.com). The Pew’s definition of green jobs runs the gamut and includes engineers, plumbers, administrative assistants, construction workers, machine setters, marketing consultants, teachers, and many others with annual incomes ranging from $21,000 to $111,000. For several of the higher paying jobs, a Master of Arts degree in global sustainability would be very desirable.

Last June, Governor Crist signed into law a bill enacting several new energy and climate change policies (southflorida.bizjournals.com). These included the Florida Climate Protection Act, which authorizes the Florida Department of Environmental Protection to develop an electric-utility greenhouse gas cap-and-trade program. The Governor repeatedly has expressed his support of sustainability, especially preserving safe water supplies, which is the initial focus of our degree program.

Florida is clearly on the cutting edge of the green industry and sustainability. Several USF professors are working on sustainability projects and have received national and state funding to pursue these endeavors.

**B. Demand: Describe data that support the assumption that students will enroll in the proposed program. Include descriptions of surveys or other communications with prospective students.**
Students at the University of South Florida have consistently requested a degree in sustainability. The students have a keen interest in a “green” society as is evidenced by their organized effort last year to introduce a “green” fee at USF. This fee would be paid by the students and they were asking for no state funds.

Students in several of the environmental organizations at USF and members of the Graduate and Professional Student Council were surveyed in September online and in person to address if they would be interested in this program and why, what employment opportunities they would pursue with this degree, and what changes if any they would make to the existing curriculum structure. Several students were positive about the degree program, especially those students from Architecture. Students made a clear point that they hoped classes would include opportunities to interact with other students—such as through Elluminate and the coursework did not follow a complete online model which it will not.

Students at the University of South Florida have been actively engaged in ‘green’ efforts for several years. There are several environmental organizations and efforts continue for approval from the state to charge a “green” fee that students would pay to enhance sustainability on the USF campus.

C. If similar programs (either private or public) exist in the state, identify the institution(s) and geographic location(s). Summarize the outcome(s) of any communication with such programs with regard to the potential impact on their enrollment and opportunities for possible collaboration (instruction and research). Provide data that support the need for an additional program.

The University of Florida (UF) offers the Bachelor of Science in Sustainability and the Built Environment in the College of Design, Construction and Planning (http://www.dcp.ufl.edu/sustainability/bachelor). The degree is a four-year, 120-credit hour program of which 48 hours are required courses including a 6-credit hour capstone course, and 21 hours of approved electives. There are two tracks. The first is a general degree program accessible to students at either the sophomore or junior levels. The second track is for students interested in a combined bachelor’s and master’s degree. The combined degree is structured as a 4+1 program leading to a Master of Arts in Urban and Regional Planning. The UF also has an undergraduate certificate in sustainability.

The University of Miami offers an interdisciplinary undergraduate minor in “Global Perspectives on Sustainability”. This 19 semester hour program “introduces students to the foundations of environmental sustainability and its complexities, with an emphasis on the approaches taken by people living under different geographic and economic conditions.” (http://www.miami.muohio.edu/academics/majorsminors/minors/globalperspectives.cfm)

St. Petersburg College offers a Bachelors in Sustainability Management.

The College of Social Science at Florida State University (FSU) offers a “Global Pathways Certificate,” which is advertised as “an interdisciplinary concentration in
Environmental Studies that provides an in-depth understanding of the social and institutional context of contemporary environmental concerns” ([http://global.fsu.edu/students/certificate/certificate.htm](http://global.fsu.edu/students/certificate/certificate.htm)). In addition, the FSU College of Law offers a concentration in Environmental and Land Use law ([http://www.law.fsu.edu/academic_programs/environmental/index.html](http://www.law.fsu.edu/academic_programs/environmental/index.html)).

Florida Atlantic University offers a certificate in Environmental Studies.

The University of Florida offers a MS and Masters of Engineering degrees with a specialization in water resources planning and management. It is a 30-hour completely on-line program that includes courses on: water resources planning, decision support systems, water resources infrastructure, water flow, and economics. For more information: [http://www.ufedge.ufl.edu](http://www.ufedge.ufl.edu).

In June of 2009, the University of Florida was awarded nearly $1 million from the MacArthur Foundation for a new master’s program in sustainable development, building on UF’s strengths in tropical conservation and international development. The program does not yet exist and will be administered jointly by the Center for Latin American Studies and the Center for African Studies.

As can be seen from the preceding information we are proposing a unique Master of Arts degree in global sustainability with a concentration in water that is not found in the state of Florida. In addition, students completing our degree have the opportunity to also receive our existing graduate certificate in water, health and sustainability.

D. Use Table 1 (A for undergraduate and B for graduate) to categorize projected student headcount (HC) and Full Time Equivalents (FTE) according to primary sources. Generally undergraduate FTE will be calculated as 40 credit hours per year and graduate FTE will be calculated as 32 credit hours per year. Describe the rationale underlying enrollment projections. If, initially, students within the institution are expected to change majors to enroll in the proposed program, describe the shifts from disciplines that will likely occur.

We anticipate that our student body will be comprised of a mixture of domestic (both residents and non-resident) and international students. These will be fulltime students who will be able to participate in a residency period at the University of South Florida and an internship at the conclusion of the program for at least one semester.

Due to the residency requirements of the program we anticipate the enrollment of 20 students each year in the first two years and then increasing to 25 students per year thereafter. Students will enter the program as a cohort thereby creating a specialized program for these students.

E. Indicate what steps will be taken to achieve a diverse student body in this program, and identify any minority groups that will be favorably or unfavorably impacted. The university’s Equal Opportunity Officer should read this section and then sign and date in the area below.
We will advertise this program broadly throughout Florida in all publications, including those that focus on diversity. This will include Diverse Issues in Higher Education (formerly Issues in Higher Education) [http://www.diverseeducation.com/index.asp](http://www.diverseeducation.com/index.asp) and Hispanic Outlook Magazine [http://www.hispanicoutlook.com/](http://www.hispanicoutlook.com/). We also will utilize the Voice of Hispanic Higher Education magazine. For international and domestic students we will advertise in the International Educator magazine, the Chronicle of Higher Education, and the Connections magazine through EducationUSA.

We will utilize our existing marketing and recruitment strategies through professional associations and conferences and other mediums and venues to work as partners with the Colleges and the Office of International Affairs to promote the program. We will utilize the Hispanic Association of Colleges and Universities, Florida/Georgia Louis Stokes Alliance for Minority Participation, Society of Women Engineers, National McNair Scholars Research Conference, the American Biomedical Research Conference for Minority Students, and the Southern Regional Education Board meetings and programs. We also will advertise greatly at the annual NAFSA: Association of International Educators conference. We will reach out especially to our partnering international institutions including Ocean and Nankai Universities (marine science) in China, Exeter University (environmental science and coast sustainability program) in the United Kingdom, University of Ghana-Cape Coast Africa (fisheries), and as the program matures the City of Knowledge in Panama, the University of San Francisco in Quito-Ecuador to partner with the Galapagos Island Research Center, and possibly the University of Havana in Cuba.

---

III. Budget

A. Use Table 2 to display projected costs and associated funding sources for Year 1 and Year 5 of program operation. Use Table 3 to show how existing Education & General funds will be shifted to support the new program in Year 1. In narrative form, summarize the contents of both tables, identifying the source of both current and new resources to be devoted to the proposed program. (Data for Year 1 and Year 5 reflect snapshots in time rather than cumulative costs.)

The revenue for the program will consist of student tuition and program fees. We anticipate that approximately one-half of the first year cohort will be domestic students and one-half will be international students. Program fees include technology fees, residency, study abroad costs, etc. and will amount to approximately $10,000 per student. Expenditures for the program include instructional and program costs, an advisor to be housed in the Graduate School, marketing and recruitment costs, operating costs, and carry forward funds. This has been totaled at $580,000. We will be pursuing sponsorships.
to assist with their tuition and program costs. Other support will be provided by the Graduate School, E-campus, and the School of Global Sustainability. It is predicted that the new Director of the School of Sustainability will have day-to-day responsibility for the program. Colleges and departments will receive the FTE generated by these students in their respective courses.

B. If other programs will be impacted by a reallocation of resources for the proposed program, identify the program and provide a justification for reallocating resources. Specifically address the potential negative impacts that implementation of the proposed program will have on related undergraduate programs (i.e., shift in faculty effort, reallocation of instructional resources, reduced enrollment rates, greater use of adjunct faculty and teaching assistants). Explain what steps will be taken to mitigate any such impacts. Also, discuss the potential positive impacts that the proposed program might have on related undergraduate programs (i.e., increased undergraduate research opportunities, improved quality of instruction associated with cutting-edge research, improved labs and library resources).

We believe this program will not have an impact on reallocation of resources but will enhance undergraduate education and research by serving as a mechanism for students to continue their studies at USF through graduate education. Undergraduate students could have opportunities to participate with the students in this program in the development of sustainability projects.

C. Describe other potential impacts on related programs or departments (e.g., increased need for general education or common prerequisite courses, or increased need for required or elective courses outside of the proposed major).

There should be no impacts on related programs or departments. We are incorporating several of the existing Water, Health, and Sustainability courses utilized in the certificate program and will provide support to those faculty ($5,000 per course) who will be developing online versions of courses. We are requesting the hiring of one student advisor in the Graduate School. Twenty to twenty-five additional students per year should not place undue burden on departments in terms of faculty commitment nor budget.

D. Describe what steps have been taken to obtain information regarding resources (financial and in-kind) available outside the institution (businesses, industrial organizations, governmental entities, etc.). Describe the external resources that appear to be available to support the proposed program.

We have explored several grant opportunities to assist with the funding of this degree program. We will be able to submit to the MacArthur Foundation for funding in addition to several federal agencies (National Science Foundation) for support of students. We also will be in communication with several industries that recently have put forth green initiatives. These include SweetBay and Lykes.
IV. Projected Benefit of the Program to the University, Local Community, and State

A. Use information from Table 1, Table 2, and the supporting narrative for “Need and Demand” to prepare a concise statement that describes the projected benefit to the university, local community, and the state if the program is implemented. The projected benefits can be both quantitative and qualitative in nature, but there needs to be a clear distinction made between the two in the narrative.

There will be immense benefit to USF with the development of this program. Issues pertaining to water and global sustainability are being addressed throughout several universities nationally and internationally and there are many courses at USF that contain a focus or sub-focus on sustainability. However this program is unique in that it directly focuses on water whereas other noted programs (Arizona State University) are broad and some (University of Florida) focus on development issues. Also, the majority of programs researched were at the undergraduate and/or certificate level whereas this is a graduate program with the potential of growing into dual degree programs with other disciplines (public health, engineering, business), developing a research track leading to a Master of Science degree, and/or developing a track whereby students will be able to participate in the Masters International Programs in the Colleges of Public Health and Engineering that involves a 2 year commitment to serving in the Peace Corps. A special feature of our program is the ability of our students to not only receive the degree but also the graduate certificate in Water, Health, and Sustainability. The graduates from this degree program will clearly benefit the State of Florida, the nation, and the world due to their ability to enhance sustainability. A recent report from the Council of Graduate Schools clearly showed that the majority of domestic students stay and work in the state where they received their master’s degree.

V. Access and Articulation – Bachelor’s Degrees Only-N/A

A. If the total number of credit hours to earn a degree exceeds 120, provide a justification for an exception to the policy of a 120 maximum and submit a request to the BOG for an exception along with notification of the program’s approval. (See criteria in BOG Regulation 6C-8.014)

Insert response here.

B. List program prerequisites and provide assurance that they are the same as the approved common prerequisites for other such degree programs within the SUS (see Common Prerequisite Manual http://www.facts.org). The courses in the Common Prerequisite Counseling Manual are intended to be those that are required of both native and transfer students prior to entrance to the major program, not simply lower-level courses that are required prior to graduation. The common prerequisites and substitute courses are mandatory for all institution programs listed, and must be approved by the Articulation Coordinating Committee (ACC). This requirement includes those programs designated as “limited access.”
If the proposed prerequisites are not listed in the Manual, provide a rationale for a request for exception to the policy of common prerequisites. NOTE: Typically, all lower-division courses required for admission into the major will be considered prerequisites. The curriculum can require lower-division courses that are not prerequisites for admission into the major, as long as those courses are built into the curriculum for the upper-level 60 credit hours. If there are already common prerequisites for other degree programs with the same proposed CIP, every effort must be made to utilize the previously approved prerequisites instead of recommending an additional “track” of prerequisites for that CIP. Additional tracks may not be approved by the ACC, thereby holding up the full approval of the degree program. Programs will not be entered into the State University System Inventory until any exceptions to the approved common prerequisites are approved by the ACC.

Insert response here.

C. If the university intends to seek formal Limited Access status for the proposed program, provide a rationale that includes an analysis of diversity issues with respect to such a designation. Explain how the university will ensure that community college transfer students are not disadvantaged by the Limited Access status. NOTE: The policy and criteria for Limited Access are identified in BOG Regulation 6C-8.013. Submit the Limited Access Program Request form along with this document.

Insert response here.

D. If the proposed program is an AS-to-BS capstone, ensure that it adheres to the guidelines approved by the Articulation Coordinating Committee for such programs, as set forth in Rule 6A-10.024 (see Statewide Articulation Manual http://www.facts.org). List the prerequisites, if any, including the specific AS degrees which may transfer into the program.

Insert response here.
INSTITUTIONAL READINESS

VI. Related Institutional Mission and Strength

A. Describe how the goals of the proposed program relate to the institutional mission statement as contained in the SUS Strategic Plan and the University Strategic Plan.

The Masters of Arts program in Global Sustainability at the University of South Florida trains students to become leaders in studying and creating sustainable, healthy communities throughout the world. Graduates of the program are creative scholar scientists and scholar activists who address complex human-environmental problems in sustainability by integrating social, economic, and environmental variables in a holistic and interdisciplinary way. They have the intellectual skills for critical thinking and problem solving that interconnect local and global scales. They have the technical skills to construct positive policy and advocacy plans for clean energy and sustainable urban systems. They have the management skills to lead others in developing sustainable solutions to problems involving land, water, and air resources. Graduates come from or move into careers in higher education and informal science education; local, state, and federal government and intergovernmental institutions; international non-governmental and not-for-profit organizations; and consultancies for business, industry, utilities, and regulatory and compliance agencies.

The initial goals of the Master of Arts in Global Sustainability Program are for students to develop a comprehensive understanding of issues pertaining to global sustainability and water so that they may develop innovative solutions that will enhance the health and welfare of populations throughout the world. These goals directly relate to the missions of the SUS Strategic Plan and the University Strategic Plan through excellence in education and meeting economic needs of the State of Florida. Also, this program directly relates to the mission of USF which includes 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; and, most importantly, to design and build sustainable, healthy communities embracing innovation to build a community of learners together with significant and sustainable university-community partnerships and collaborations. This program is interdisciplinary involving several academic disciplines and will capture the expertise of faculty throughout the world. The focus on global issues and sustainability directly align with the strategic plan of USF. The inaugural concentration focus is on water with later concentrations developed on other major sustainability issues such as the designed environment. We anticipate that this degree program will be inclusive and holistic and eventually involve the STEM sciences, the social sciences, the humanities, arts, and health.
B. Describe how the proposed program specifically relates to existing institutional strengths, such as programs of emphasis, other academic programs, and/or institutes and centers.

USF’s strategic plan is clearly focused on global initiatives of which this program emanates. Utilizing existing expertise in various disciplines including anthropology, public health, business, and engineering, students will be able to develop innovative solutions to water issues and global sustainability.

This program will interface with several partnering universities and draw on the expertise of our new global initiatives which include a united effort to bring together international functions at USF through USF World and the further development of Offices of Sustainability and Community Engagement. Our Office of International Affairs will be directly involved with the program, especially in terms of international student recruitment. The Graduate School will house the program due to its interdisciplinary nature and the Director of the School of Sustainability will have day to day responsibility for the operation of program and interaction with students. The Office of Sustainability will be directly involved in terms of providing students resources and potential faculty exchanges and our Office of Community Engagement will be instrumental in establishing links with internship sites and potential projects. The students will have the opportunity to work with the Office of Sustainability on several conferences and activities such as the Going Green Expo and statewide Sustainability Conference.

C. Provide a narrative of the planning process leading up to submission of this proposal. Include a chronology (table) of activities, listing both university personnel directly involved and external individuals who participated in planning. Provide a timetable of events necessary for the implementation of the proposed program.

See Table Below.

The planning process has been extensive and has largely involved Drs. Whiteford, Liller, and Wells and the SGS Advisory Committee in addition to discussions and several meetings with Department Chairpersons, Associate Deans, Deans, Faculty, and the Faculty Senate. Sustainability has been a major strategic emphasis of USF for several years and there have been a multitude of meetings throughout the years focused on this topic within departments, colleges, and at the University level. Discussions began to become much more formalized in August as the Provost put forth his vision for a School of Global Sustainability and a graduate degree within the School on August 14th, 2009 at the annual Council of Deans Retreat. He charged Drs. Whiteford and Liller to lead the process. Since that time we have had several meetings with the Provost along with the parties above during the proposal development process. Planning was also coordinated with Dr. Kathleen Moore in terms of the contributions of E-campus.
### Planning Process

<table>
<thead>
<tr>
<th>Date</th>
<th>Participants</th>
<th>Planning Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/18/09</td>
<td>Linda Whiteford, Kathleen Moore, Karen Liller</td>
<td>Planning meeting</td>
</tr>
<tr>
<td>8/20/09</td>
<td>Christian Wells, Karen Liller</td>
<td>Planning meeting to discuss proposed program and the Office of Sustainability</td>
</tr>
<tr>
<td>8/21/09</td>
<td>Linda Whiteford, Karen Liller</td>
<td>Planning meeting</td>
</tr>
<tr>
<td>8/26/09</td>
<td>Linda Whiteford, Karen Liller</td>
<td>Program Development meeting</td>
</tr>
<tr>
<td>8/28/09</td>
<td>Carol Hines-Cobb, Rick Pollenz, Karen Liller</td>
<td>Proposal planning meeting</td>
</tr>
<tr>
<td>8/28/09</td>
<td>Linda Whiteford, David Jacobson, James Mihelcic, Christian Wells, Sharon</td>
<td>Program Proposal Development and Office of Sustainability meeting</td>
</tr>
<tr>
<td></td>
<td>Hanna West, Boo Kwa, Bill Hogarth, Karen Liller</td>
<td></td>
</tr>
<tr>
<td>9/4/09</td>
<td>Linda Whiteford, Christian Wells, Karen Liller</td>
<td>Continued program development</td>
</tr>
<tr>
<td>9/4/09</td>
<td>Linda Whiteford, Christian Wells, Karen Liller, Provost Wilcox</td>
<td>Discussion of Degree Program and School of Global Sustainability</td>
</tr>
<tr>
<td>9/9/09</td>
<td>Linda Whiteford, Karen Liller, Christian Wells, Provost Wilcox</td>
<td>Discussion with Faculty Senate Executive Committee of the SGS and MA Program</td>
</tr>
<tr>
<td>9/11/09</td>
<td>Karen Liller, Associate Deans, Course Instructors</td>
<td>Discussion about course conversions and overall degree</td>
</tr>
<tr>
<td>9/14/09</td>
<td>Karen Liller, Linda Whiteford, Provost Wilcox, Deans</td>
<td>Discussion with Deans about the Program and School of Global Sustainability</td>
</tr>
<tr>
<td>9/15/09</td>
<td>Karen Liller, Linda Whiteford, Steve Permuth, Art Shapiro</td>
<td>Discussion of SGS and MA proposal to be discussed at the upcoming Faculty Senate meeting</td>
</tr>
<tr>
<td>9/16/09</td>
<td>Karen Liller, Linda Whiteford, Eric Eisenberg, Department Chairs</td>
<td>Discussion about the MA proposal and SGS including curricular suggestions.</td>
</tr>
<tr>
<td>9/21/09</td>
<td>Karen Liller, Linda Whiteford, Deans</td>
<td>Presentation of program and SGS to Academic Deans</td>
</tr>
<tr>
<td>9/21/09</td>
<td>Karen Liller, Provost</td>
<td>Discussion of Program Budget and Admission Requirements</td>
</tr>
<tr>
<td>9/22/09</td>
<td>Karen Liller</td>
<td>Finalize Program Proposal for submission</td>
</tr>
</tbody>
</table>

### Events Leading to Implementation

<table>
<thead>
<tr>
<th>Date</th>
<th>Implementation Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2009</td>
<td>Program planning and development</td>
</tr>
<tr>
<td>September 23, 2009</td>
<td>Submission to Graduate Council Curriculum Committee</td>
</tr>
<tr>
<td>October 5, 2009</td>
<td>Graduate Council Curriculum Committee Review</td>
</tr>
<tr>
<td>October 19, 2009</td>
<td>Graduate Council Review</td>
</tr>
<tr>
<td>October 26, 2009</td>
<td>Academic Affairs Management Council Review</td>
</tr>
<tr>
<td>October 28, 2009</td>
<td>Submission to the Academic Campus Environment (ACE) Workgroup</td>
</tr>
<tr>
<td>November 19, 2009</td>
<td>Review by the ACE Workgroup</td>
</tr>
<tr>
<td>December 3, 2009</td>
<td>Review by the Board of Trustees (BOT)</td>
</tr>
<tr>
<td>Spring 2010</td>
<td>Implementation of program</td>
</tr>
</tbody>
</table>
VII. Program Quality Indicators - Reviews and Accreditation

A. Identify program reviews, accreditation visits, or internal reviews for any university degree programs related to the proposed program, especially any within the same academic unit. List all recommendations and summarize the institution's progress in implementing the recommendations. N/A

VIII. Curriculum

A. Describe the specific expected student learning outcomes associated with the proposed program. If a bachelor’s degree program, include a web link to the Academic Learning Compact or include the document itself as an appendix.

The specific learning outcomes for the Master of Arts in Global Sustainability:

1. Develop a thorough understanding of the environmental, economical, historical, health, and engineering issues that relate to global sustainability.
2. Develop program development and leadership skills that will allow for the development of innovative solutions related to sustainability in developed and developing nations.
3. Determine the efficacy of present and future measures to enhance sustainability.
4. Develop an innovative master’s project that will show direct benefits related to sustainability of targeted populations.

B. Describe the admission standards and graduation requirements for the program.

This program will follow USF Admission Standards in that a minimum of 3.0 GPA will be required for entrance. 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/.

The GRE will not be required. We also will require a 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. The student may provide a portfolio demonstrating prior work that focuses on sustainability of populations.

C. Describe the curricular framework for the proposed program, including number of credit hours and composition of required core courses, restricted electives, unrestricted electives, thesis requirements, and dissertation requirements. Identify the total numbers of semester credit hours for the degree.

Curriculum—33 semester hours

There are four core courses for the degree program. These courses provide students an overall understanding of global sustainability including environmental, historical, humanities, culture, engineering, health and other overarching components along with practical experience (internship).

**IDS 6xxx Interdisciplinary Seminar in Global Sustainability**
**PHC 6934 Public Health Topics in Global Sustainability**
**GEB 6930 Special Topics in Management and Sustainability**
**IDS 6xxx Required Internship**

Curriculum Schedule:

**Summer Semester:** Required Two-Three Week Residency of the full semester course at USF or other location (dependent on the student body):

IDS 6xxx Interdisciplinary Seminar in Global Sustainability (3) (Core)

**Fall and Spring Semester Courses** (21 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHC 6934</td>
<td>Public Health Topics in Global Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>GEB 6930</td>
<td>Special Topics in Management and Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>ANG 6469</td>
<td>Foundations of Medical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>PHC 6301</td>
<td>Water Pollution and Treatment</td>
<td>3</td>
</tr>
<tr>
<td>ENV 6666</td>
<td>Aquatic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>EVR 6216</td>
<td>Advances in Water Quality Policy and Management</td>
<td>3</td>
</tr>
<tr>
<td>GEO 6286</td>
<td>Advances in Water Resources</td>
<td>3</td>
</tr>
</tbody>
</table>

**Other courses in global sustainability may be substituted for the proposed non-core concentration courses as approved by the program director.**

**Spring/Summer Semesters:** Required Internship (at USF or Partnering Institution): The internship will be preceded with several online learning sessions focused on preparation for and how to achieve internship success.

IDS 6xxx Internship (6) (Core)
Final Summer Semester: Required Sustainability Project (3 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDS 6xxx</td>
<td>Interdisciplinary Seminar in Global Sustainability</td>
<td>(3)</td>
</tr>
</tbody>
</table>

**D. Provide a sequenced course of study for all majors, concentrations, or areas of emphasis within the proposed program.**

The initial emphasis of this program is on water and global sustainability. The courses will follow the sequence as shown above and will be offered on alternative calendars in the summer, fall, and spring semesters to allow flexibility for the student so that he/she can complete the program within one year and spend a greater portion time on the development of the culminating project. During the first summer the required residency seminar will be offered. Between the following fall and spring semesters, students will be able to complete coursework and the final summer will be reserved for the internship and completion of the special project. All courses except the interdisciplinary seminar will be fully online. The seminar will be taught live on the Tampa Campus but will utilize the technology of Elluminate so that students throughout the world can participate. However students will be required to physically meet together in one location for a set period of time, most likely two weeks.

USF will arrange housing for the students during this period. Podcasts will also be developed for the lectures and incorporated into ITunes University. This assistance will be provided through our E-Campus. E-Campus will also assist with the conversion of courses into online formats. The internship modules will be developed through the expertise of faculty, E-Campus, the Office of International Affairs, and the Graduate School. Each student will be assigned a faculty director who will oversee the sustainability project. Students will formally present their projects and be able to physically meet again as a cohort for at least one week for this experience. Thirty-three semester hours are required and entail 495 contact hours.

**E. Provide a one- or two-sentence description of each required or elective course.**

**Core:**

- **IDS 6xxx Interdisciplinary Seminar in Global Sustainability (3 credit hours)**
  
  For the inaugural curriculum, this interdisciplinary course will feature leading experts in the field to discuss issues pertaining to global sustainability and water with an emphasis on determinants and potential solutions for global sustainability. We will include information on a broad array of topics related to water (including geological information) and broader information focused upon ethics, social sciences and humanities, and historical and cultural influences on sustainability.

- **PHC 6934 Public Health Topics in Global Sustainability (3 credit hours)**

  This core course introduces students to the interface between public health and global sustainability and will be built upon current issues and trends.

- **GEB 6930 Special Topics in Management and Sustainability (3 credit hours)**

  This core course is designed to focus on those economic and management issues
that affect sustainability in developed and developing nations.

**IDS 6xxx Internship (6 credit hours)**
Required domestic or international internship of all Master of Arts in Global Sustainability students.

**Concentration Focus:**

ANG 6469 Foundations of Medical Anthropology (3)
“Selected Topics in Medical Anthropology” (3) – Current topical issues in Medical Anthropology. This course will focus on culture and water-related issues.

PHC 6301 Water Pollution and Treatment (3)
A study of treatment technologies for water and wastewater. Emphasis is given to treatment technologies appropriate for developing countries. PR: CI.

ENV 6666 Aquatic Chemistry (3)
An introduction to the form, structure, and chemical activities of the important processes essential to treatment of domestic and industrial wastewater. PR: CI.

EVR 6216 Advances in Water Quality Policy and Management (3)
Conceptual structure and practical implementation of U.S. watershed-based water quality regulations and policies. Practical application of scientific information and quantitative methods in management/policy decisions for water quality protection. PR: Graduate standing in EVR, ENV, GEO, GLY, GPY, PCB or PHC; or consent of instructor.

GEO 6286 Advances in Water Resources (3)
Water resources policies are viewed from theoretical and practical perspectives focusing on management strategies in different physical and human environments. PR: GS in Geography or CI.

IDS 6xxx-Sustainability Project (3)
Required project for all Master of Arts in Global Sustainability students that will focus on innovative solutions to sustainability issues. The project will be supervised by the project director.

**F.** For degree programs in the science and technology disciplines, discuss how industry-driven competencies were identified and incorporated into the curriculum and identify if any industry advisory council exists to provide input for curriculum development and student assessment. N/A

**G.** For all programs, list the specialized accreditation agencies and learned societies that would be concerned with the proposed program. Will the university seek accreditation for the program if it is available? If not, why? Provide a brief timeline for seeking accreditation, if appropriate. N/A

Revised 4/4/07

16
H. For doctoral programs, list the accreditation agencies and learned societies that would be concerned with corresponding bachelor’s or master’s programs associated with the proposed program. Are the programs accredited? If not, why? N/A

I. Briefly describe the anticipated delivery system for the proposed program (e.g., traditional delivery on main campus; traditional delivery at branch campuses or centers; or nontraditional delivery such as distance or distributed learning, self-paced instruction, or external degree programs). If the proposed delivery system will require specialized services or greater than normal financial support, include projected costs in Table 2. Provide a narrative describing the feasibility of delivering the proposed program through collaboration with other universities, both public and private. Cite specific queries made of other institutions with respect to shared courses, distance/distributed learning technologies, and joint-use facilities for research or internships.

The delivery mechanism of this program will be mostly online except for the initial interdisciplinary seminar. However, international students will be able to participate due to our use of Elluminate which will allow them to join the other students in each live lecture presentation delivered on the Tampa campus. Other courses will be offered online (and with Elluminate when appropriate) through modules and this will be coordinated with the faculty and their colleges. We will work directly with our E-campus and provide faculty stipend support in spring, 2010 to develop the courses into online formats. In terms of the internships, we have working relationships with the partnering institutions and will work with them to determine internship opportunities for students.

Students will be enrolled in the program as a cohort and will be able to communicate with one another through a Blackboard Organization site. We will also use this site to post announcements and materials that directly relate to the program.

The inaugural concentration for the MA in Global Sustainability will be focused on water however we fully anticipate that additional concentrations will be created to grow the degree program. We anticipate future concentrations in the designed environment and other sustainability focus areas. Also, we may develop a Master of Science in Global Sustainability in the future.

IX. Faculty Participation

A. Use Table 4 to identify existing and anticipated ranked (not visiting or adjunct) faculty who will participate in the proposed program through Year 5. Include (a) faculty code associated with the source of funding for the position; (b) name; (c) highest degree held; (d) academic discipline or specialization; (e) contract status (tenure, tenure-earning, or multi-year annual [MYA]); (f) contract length in months; and (g) percent of annual effort that will be directed toward the proposed program (instruction, advising, supervising internships and practica, and supervising thesis or dissertation hours).
B. Use Table 2 to display the costs and associated funding resources for existing and anticipated ranked faculty (as identified in Table 2). Costs for visiting and adjunct faculty should be included in the category of Other Personnel Services (OPS). Provide a narrative summarizing projected costs and funding sources.

C. Provide the number of master's theses and/or doctoral dissertations directed, and the number and type of professional publications for each existing faculty member (do not include information for visiting or adjunct faculty).

<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Theses</th>
<th>Dissertations</th>
<th>Professional Publications Including all Peer-Reviewed and Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linda Whiteford</td>
<td>30+</td>
<td>34</td>
<td>100+</td>
</tr>
<tr>
<td>Karen Liller</td>
<td>10</td>
<td>21</td>
<td>100+</td>
</tr>
<tr>
<td>Christian Wells</td>
<td>5</td>
<td>3</td>
<td>100+</td>
</tr>
<tr>
<td>Graham Tobin</td>
<td>26</td>
<td>5</td>
<td>100+</td>
</tr>
<tr>
<td>Ricardo Izurieta</td>
<td>1</td>
<td>3</td>
<td>50+</td>
</tr>
<tr>
<td>Daniel Yeh</td>
<td>6</td>
<td>6</td>
<td>50+</td>
</tr>
<tr>
<td>Maya Trotz</td>
<td>2</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Nancy Romero-Daza</td>
<td>15</td>
<td>14</td>
<td>50+</td>
</tr>
<tr>
<td>Kamal Alsharif</td>
<td>5</td>
<td>-</td>
<td>30+</td>
</tr>
<tr>
<td>Sharon Hanna-West</td>
<td>2</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

D. Provide evidence that the academic unit(s) associated with this new degree have been productive in teaching, research, and service. Such evidence may include trends over time for average course load, FTE productivity, student HC in major or service courses, degrees granted, external funding attracted, and qualitative indicators of excellence.

The academic units affiliated with this degree have been very productive and interdisciplinary. The Colleges of Arts and Sciences, Public Health, Engineering, and Business lead in research dollars (apart from the College of Medicine) and produce the most doctoral and masters graduates. Out of 288 doctoral degrees granted at USF in 2008/2009, 136 (47.2%) were granted in these Colleges. In terms of Masters degrees, in 2008/2009 2,079 were awarded of which 1,059 (51%) were awarded in these Colleges. These Colleges also graduate students in a timely fashion. The trends over the last three years have been positive in Anthropology, Geography/Environmental Science Policy, Public Health, Engineering, and Business. The Colleges represent over 40% of the student headcount and over 50% of student FTE per year.

X. Non-Faculty Resources

A. Describe library resources currently available to implement and/or sustain the proposed program through Year 5. Provide the total number of volumes and serials available in this discipline and related fields. List major journals that are available to the university's students. Include a signed statement from the Library Director that this subsection and subsection B have been reviewed and approved for all doctoral level proposals.
The USF Libraries provide access to more than 2 million volumes and an extensive collection of electronic resources including approximately 25,156 e-journal subscriptions, 736 aggregator databases, 256,306 e-books, and 826,000 digital images. In addition, students have access to over 65,000 audio/visual materials including videos, CDs, and DVDs.

<table>
<thead>
<tr>
<th>SELECT MONOGRAPH HOLDINGS</th>
<th>Total</th>
<th>Tampa</th>
<th>St. Pete</th>
<th>PolyT</th>
<th>Hlt</th>
<th>Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Sustainability (inc. Environmental Policy &amp; Economic Development, Sustainable Development)</td>
<td>2,377</td>
<td>1,479</td>
<td>426</td>
<td>6</td>
<td>0</td>
<td>466</td>
</tr>
<tr>
<td>Water General</td>
<td>4,578</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water -- Hydrology</td>
<td>1,502</td>
<td>107</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>128</td>
</tr>
<tr>
<td>Water -- Resources/supply</td>
<td>2,086</td>
<td>213</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>213</td>
</tr>
<tr>
<td>Water -- Chemistry</td>
<td>245</td>
<td>56</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>Public Health General</td>
<td>978</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public health -- Global/world health</td>
<td>142</td>
<td>34</td>
<td>0</td>
<td>15</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Public health -- Infectious diseases</td>
<td>361</td>
<td>83</td>
<td>0</td>
<td>128</td>
<td>165</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SELECT JOURNAL HOLDINGS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Sustainability (inc. Environmental Policy &amp; Economic Development, Sustainable Development)</td>
<td>41</td>
</tr>
<tr>
<td>Water General</td>
<td>398</td>
</tr>
<tr>
<td>Groundwater</td>
<td>10</td>
</tr>
<tr>
<td>Public Health General</td>
<td>84</td>
</tr>
<tr>
<td>Environmental Pollution</td>
<td>54</td>
</tr>
<tr>
<td>Environmental Protection</td>
<td>25</td>
</tr>
<tr>
<td>Environmental Technology</td>
<td>29</td>
</tr>
</tbody>
</table>

**USF Libraries - Geography, Engineering, and Public Health Databases**

- Academic Search Premier
- ACS Publications
- Algology, Mycology & Protozoology Abstracts (Microbiology C)
- Applied Science & Technology Full Text
- ASCE Research Library
- Bacteriology Abstracts
- CINAHL
- Civil Engineering Abstracts
- Compendex
- Corrosion Abstracts
- EIS, digests of environmental impact statement
- Environmental Engineering Abstracts
- Environmental Issues & Policy
- Environmental Sciences & Pollution Management
- GEOBASE
- GEOREF
See Appendix 1 for a listing of journals online and print that focus on sustainability and water resource issues, including engineering and environmental technology.

Describe additional library resources that are needed to implement and/or sustain the program through Year 5. Include projected costs of additional library resources in Table 3.

Library Dean ______________________ Date _______________________

B. Describe classroom, teaching laboratory, research laboratory, office, and other types of space that are necessary and currently available to implement the proposed program through Year 5.

Only one or two classrooms should be needed at this time and these will be provided by the Graduate School and School of Global Sustainability.

C. Describe additional classroom, teaching laboratory, research laboratory, office, and other space needed to implement and/or maintain the proposed program through Year 5. Include any projected Instruction and Research (I&R) costs of additional space in Table 2. Do not include costs for new construction because that information should be provided in response to X (J) below. N/A

D. Describe specialized equipment that is currently available to implement the proposed program through Year 5. Focus primarily on instructional and research requirements. N/A.

E. Describe additional specialized equipment that will be needed to implement and/or sustain the proposed program through Year 5. Include projected costs of additional equipment in Table 2. N/A

F. Describe any additional special categories of resources needed to implement the program through Year 5 (access to proprietary research facilities, specialized services, extended travel, etc.). Include projected costs of special resources in Table 2. N/A

G. Describe fellowships, scholarships, and graduate assistantships to be allocated to the proposed program through Year 5. Include the projected costs in Table 2.

We will make a concerted effort to locate scholarships for students to assist with their program costs. The School of Global Sustainability is developing an external advisory committee that will include industry sponsors whom we hope will provide funding and support to the students in the MA program.
H. Describe currently available sites for internship and practicum experiences, if appropriate to the program. Describe plans to seek more sites in Years 1 through 5.

There are several current sites for internship related to water and global sustainability. Our international partners are able to provide several opportunities within their facilities. As for sites for students doing their internships in Florida there are many opportunities. These sites will be coordinated with the respective Colleges (Public Health, Arts and Sciences, Business, and Engineering) and the School of Sustainability based on the interests of the students in terms of project focus and targeted population. A few examples include Health Departments and Environmental Health Agencies, Water Management Districts, Center for Urban Transportation and Research at USF, Tampa Electric, Solar Companies, Construction Firms, Florida Power, Disney, Earth First, Clean Energy Research Center, Office of Sustainability at USF, USF Water Institute, Office of Community Engagement at USF, Patel Center at USF, International Oceanographic Institute within the College of Marine Sciences, Sweet Bay, and Lykes.


We will continue to pursue internship sites throughout Years 1 through 5 by working with our international partners and especially of Office of Sustainability that will be instrumental in securing not only internship sites but faculty exchanges.

I. If a new capital expenditure for instructional or research space is required, indicate where this item appears on the university's fixed capital outlay priority list. Table 2 includes only Instruction and Research (I&R) costs. If non-I&R costs, such as indirect costs affecting libraries and student services, are expected to increase as a result of the program, describe and estimate those expenses in narrative form below. It is expected that high enrollment programs in particular would necessitate increased costs in non-I&R activities. N/A
<table>
<thead>
<tr>
<th>Source of Students (Non-duplicated headcount in any given year)*</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HC</td>
<td>FTE</td>
<td>HC</td>
<td>FTE</td>
<td>HC</td>
</tr>
<tr>
<td>Upper-level students who are transferring from other majors within the university**</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Students who initially entered the university as FTIC students and who are progressing from the lower to the upper level***</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Florida community college transfers to the upper level***</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Transfers to the upper level from other Florida colleges and universities***</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Transfers from out of state colleges and universities***</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other (Explain)***</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>** Totals</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

* List projected annual headcount of enrolled students majoring in the program.
** If numbers appear in this category, they should go DOWN in later years.
*** Do not include individuals counted in any PRIOR CATEGORY in a given COLUMN.
<table>
<thead>
<tr>
<th>Source of Students</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HC</td>
<td>FTE</td>
<td>HC</td>
<td>FTE</td>
<td>HC</td>
</tr>
<tr>
<td>Individuals drawn from agencies/industries in your service area (e.g., older returning students)</td>
<td>2</td>
<td>2.1</td>
<td>2</td>
<td>2.1</td>
<td>2</td>
</tr>
<tr>
<td>Students who transfer from other graduate programs within the university**</td>
<td>1</td>
<td>1.03</td>
<td>1</td>
<td>1.03</td>
<td>1</td>
</tr>
<tr>
<td>Individuals who have recently graduated from preceding degree programs at this university</td>
<td>11</td>
<td>11.3</td>
<td>7</td>
<td>7.3</td>
<td>9</td>
</tr>
<tr>
<td>Individuals who graduated from preceding degree programs at other Florida public universities</td>
<td>1</td>
<td>1.03</td>
<td>3</td>
<td>3.1</td>
<td>3</td>
</tr>
<tr>
<td>Individuals who graduated from preceding degree programs at non-public Florida institutions</td>
<td>5</td>
<td>5.16</td>
<td>7</td>
<td>7.3</td>
<td>10</td>
</tr>
<tr>
<td>Additional in-state residents***</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Additional out-of-state residents***</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Additional foreign residents***</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other (Explain)***</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>20</td>
<td>20.62</td>
<td>20</td>
<td>20.83</td>
<td>25</td>
</tr>
</tbody>
</table>

* List projected yearly cumulative ENROLLMENTS instead of admissions
** If numbers appear in this category, they should go DOWN in later years.
*** Do not include individuals counted in any PRIOR category in a given COLUMN.
### TABLE 2

**PROJECTED COSTS AND FUNDING SOURCES**

<table>
<thead>
<tr>
<th>Instruction &amp; Research Costs (non-cumulative)</th>
<th>Year 1</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Funding Source</td>
<td>Subtotal E&amp;G and C&amp;G</td>
</tr>
<tr>
<td></td>
<td>Reallocated Base* (E&amp;G)</td>
<td>Enrollment Growth (E&amp;G)</td>
</tr>
<tr>
<td>Faculty Salaries and Benefits</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A &amp; P Salaries and Benefits</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>USPS Salaries and Benefits</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other Personnel Services</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Assistantships &amp; Fellowships</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Library</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Expenses</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Operating Capital Outlay</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Special Categories</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

*Identify reallocation sources in Table 3.

**Includes recurring E&G funded costs ("reallocated base," "enrollment growth," and "other new recurring") from Years 1-4 that continue into Year 5.

***Identify if non-recurring.

**Faculty and Staff Summary**

<table>
<thead>
<tr>
<th>Total Positions (person-years)</th>
<th>Year 1</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A &amp; P</td>
<td>58,500</td>
<td>58,500</td>
</tr>
<tr>
<td>USPS</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Calculated Cost per Student FTE**

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total E&amp;G Funding</td>
<td>$580,000</td>
<td>$580,000</td>
</tr>
<tr>
<td>Annual Student FTE</td>
<td>20.62</td>
<td>25.78</td>
</tr>
<tr>
<td>E&amp;G Cost per FTE</td>
<td>$28,128</td>
<td>$22,498</td>
</tr>
</tbody>
</table>

Worksheet Table 2 Budget
<table>
<thead>
<tr>
<th>Program and/or E&amp;G account from which current funds will be reallocated during Year 1</th>
<th>Base before reallocation</th>
<th>Amount to be reallocated</th>
<th>Base after reallocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>555-555 World exploration fund (example)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

**Totals** | $0 | $0 | $0 |
<table>
<thead>
<tr>
<th>Faculty Code</th>
<th>Faculty Name or &quot;New Hire&quot;</th>
<th>Rank</th>
<th>Academic Discipline or Speciality</th>
<th>Contract Status</th>
<th>Initial Date for Participation in Program</th>
<th>Mos. Contract Year 1</th>
<th>FTE Year 1</th>
<th>% Effort for Prg. Year 1</th>
<th>PY Year 1</th>
<th>Mos. Contract Year 5</th>
<th>FTE Year 5</th>
<th>% Effort for Prg. Year 5</th>
<th>PY Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Linda Whiteford, PhD</td>
<td>Professor</td>
<td>Anthropology</td>
<td>Tenured</td>
<td>Spring, 2010</td>
<td>12</td>
<td>1.00</td>
<td>10.00</td>
<td>10.00</td>
<td>12</td>
<td>1.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>A</td>
<td>Christian Wells, PhD</td>
<td>Assoc. Prof.</td>
<td>Anthropology</td>
<td>Tenured</td>
<td>Spring, 2010</td>
<td>12</td>
<td>1.00</td>
<td>10.00</td>
<td>10.00</td>
<td>12</td>
<td>1.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>A</td>
<td>Daniel Yeh, PhD</td>
<td>Asst. Prof.</td>
<td>Anthropology</td>
<td>Courtesy</td>
<td>Spring 2010</td>
<td>9</td>
<td>0.75</td>
<td>10.00</td>
<td>7.50</td>
<td>9</td>
<td>0.75</td>
<td>10.00</td>
<td>7.50</td>
</tr>
<tr>
<td>A</td>
<td>Maya Trotz</td>
<td>Asst. Prof.</td>
<td>Engineering</td>
<td>Tenure</td>
<td>Spring 2010</td>
<td>9</td>
<td>0.75</td>
<td>10.00</td>
<td>7.50</td>
<td>9</td>
<td>0.75</td>
<td>10.00</td>
<td>7.50</td>
</tr>
<tr>
<td>A</td>
<td>Graham Tobin</td>
<td>Professor</td>
<td>Engineering</td>
<td>Tenured</td>
<td>Spring 2010</td>
<td>12</td>
<td>1.00</td>
<td>10.00</td>
<td>10.00</td>
<td>12</td>
<td>1.00</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td>A</td>
<td>Karen Liller</td>
<td>Professor</td>
<td>Graduate School//Education</td>
<td>Tenured</td>
<td>Spring 2010</td>
<td>12</td>
<td>1.00</td>
<td>25.00</td>
<td>25.00</td>
<td>12</td>
<td>1.00</td>
<td>25.00</td>
<td>25.00</td>
</tr>
<tr>
<td>A</td>
<td>Nancy Romero-Daza</td>
<td>Assoc. Prof.</td>
<td>Anthropology</td>
<td>Tenured</td>
<td>Spring 2010</td>
<td>9</td>
<td>0.75</td>
<td>10.00</td>
<td>7.50</td>
<td>9</td>
<td>0.75</td>
<td>10.00</td>
<td>7.50</td>
</tr>
<tr>
<td>A</td>
<td>R. Izurieta</td>
<td>Asst. Prof.</td>
<td>Public Health</td>
<td>MYA</td>
<td>Spring 2010</td>
<td>12</td>
<td>1.00</td>
<td>10.00</td>
<td>10.00</td>
<td>12</td>
<td>1.00</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td>A</td>
<td>Kamal Alsharif</td>
<td>Asst. Prof.</td>
<td>Arts and Sciences</td>
<td>Tenure</td>
<td>Spring 2010</td>
<td>9</td>
<td>0.75</td>
<td>10.00</td>
<td>7.50</td>
<td>9</td>
<td>0.75</td>
<td>10.00</td>
<td>7.50</td>
</tr>
<tr>
<td>A</td>
<td>S. Hanna-West</td>
<td>Instructor</td>
<td>Business</td>
<td>MYA</td>
<td>Spring 2010</td>
<td>9</td>
<td>0.75</td>
<td>10.00</td>
<td>7.50</td>
<td>9</td>
<td>0.75</td>
<td>10.00</td>
<td>7.50</td>
</tr>
</tbody>
</table>

**Total Person-Years (PY)**

<table>
<thead>
<tr>
<th>Faculty Code</th>
<th>Source of Funding</th>
<th>PY Workload by Budget Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Year 1</strong></td>
</tr>
<tr>
<td>A</td>
<td>Existing faculty on a regular line</td>
<td>Current Education &amp; General Revenue</td>
</tr>
<tr>
<td>B</td>
<td>New faculty to be hired on a vacant line</td>
<td>Current Education &amp; General Revenue</td>
</tr>
<tr>
<td>C</td>
<td>New faculty to be hired on a new line</td>
<td>New Education &amp; General Revenue</td>
</tr>
<tr>
<td>D</td>
<td>Existing faculty hired on contracts/grants</td>
<td>Contracts/Grants</td>
</tr>
<tr>
<td>E</td>
<td>New faculty to be hired on contracts/grants</td>
<td>Contracts/Grants</td>
</tr>
</tbody>
</table>

Overall Totals for Year 1 | 102.50 | Year 5 | 92.50

Worksheet Table 4 Faculty
Appendix 1

USF Libraries - Journals (Online & Print) - Environmental Science/Water Resources & Engineering /Environmental Technology

Acta hydrochimica et hydrobiologica
Advances in environmental accounting & management.
AIHA Journal
Air quality measurements.
Air quality report /
Air quality, atmosphere & health
Air/water pollution report
Alabama environmental compliance update.
Alternatives Journal
Ambient air quality in Florida.
Annales de géographie
Annual air quality report for Hillsborough County, Florida.
Annual report : Florida's Nongame Wildlife Program /
Annual report on abandoned artesian wells.
Annual report to Tampa Electric Company /
Annual review of environment and resources
Annual water use survey.
Applied catalysis. B, Environmental
Appropriate Technology
Aqua.
Aquaterra
ARC news
Archiv für Naturschutz und Landschaftsforschung
Asbestos & lead abatement report.
Ashore
Atmospheric environment. Part A, General topics
Atmospheric environment. Part B, Urban atmosphere
Australian geographic
Australian geographical studies
Australian Health Review
Aware: the environment magazine for electric industry people.
AWWA manual.
Basic and applied ecology
BioCycle
Bioremediation journal
Bulletin of the American Geographical Society
Bulletin of the International Association of Scientific Hydrology
Buyside
Cahiers de géographie du Québec
Canadian Geographer
Canadian Journal of Civil Engineering
Cartography and geographic information science
Children's geographies
Civil engineering and environmental systems
Clean products and processes
Clean soil, air, water.
Clean technologies and environmental policy
Clean water report
Coastal engineering
Compost science & utilization
Comprehensive annual financial report for the year ended ... /
Conservation & recycling.
Coordinates : Online Journal of the Map and Geography Round Table of the American Library Association. Series A
Coordinates : Online Journal of the Map and Geography Round Table of the American Library Association. Series B
Critical reviews in environmental science and technology
Critical Reviews in Toxicology
Cuadernos geográficos de la Universidad de Granada
Cultural Geographies [View journal history for additional full text]
CyberGeo: European Journal of Geography
Desalination.
Developments in water treatment.
Disaster management & response
Disasters
Discover
Discover
E : the environmental magazine.
Earth island journal
Ecological economics
Ecological engineering
Ecological Restoration
Ecology and society
Ecology letters
Economic Geography
E-journal AWWA
Electronic green journal
Electronic journal of environmental, agricultural and food chemistry EJEAFChe.
Ends report
Environment
Environment and planning. C, Government & policy
Environment business news briefing
Gender, work, and organization
Geo abstracts. B: Biogeography and climatology.
Geo abstracts. B: Climatology and hydrology.
Geografisk tidskrift
Geografski zbornik
Geografiska annaler
Geografiska annaler. Series B, Human geography
Geografiska annaler
Geografski zbornik
Geographical & environmental modelling
Geographical abstracts. B, Climatology and hydrology.
Geographical abstracts. B: Biogeography and climatology.
Geographical analysis
Geographical research
Géographie physique et quaternaire
Geographische Revue
GeoJournal
GeoTrópico
Glacial geology and geomorphology
Global ecology and biogeography
Global ecology and biogeography letters
Global Positioning & Navigation News
Greener Management International
Groundwater monitor
Habitat International
Hazardous Waste Consultant
HAZNEWS INTERNATIONAL HAZARDOUS WASTE MANAGEMENT MONTHLY
Headwaters.
Health & place
Hemisphere
Hydrological processes.
Hydrological sciences journal
Hydrology and earth system sciences
Hydrology and earth system sciences discussions
Hydroscope.
Hydrotechnical construction  [View journal history for additional full text]
IEE journal of oceanic engineering
IEQ strategies.
Impact assessment and project appraisal : journal of the International Association for Impact Assessment.
Indoor + built environment
Indoor air
Industrial process design for pollution control.
Industrial process design for water pollution control.
Industry and environment
Information.
Instructions for the agency strategic plan for information resources management / International journal of applied earth observation and geoinformation
International journal of environmental science and technology IJEST.
International journal of geographical information science
International journal of geomorphology
International journal of greenhouse gas control
International journal of hydrogen energy
International journal of phytoremediation
International journal of population geography
International journal of water resources development
International regional science review
International research in geographical and environmental education
International review for environmental strategies
Investigaciones Geográficas
Irish geography
Irrigation and drainage systems
ISPRS journal of photogrammetry and remote sensing
Journal of Anthropological Archaeology
Journal of applied meteorology
Journal of cleaner production
Journal of Coastal Research
Journal of contaminant hydrology
Journal of cultural geography
Journal of Economic Geography
Journal of environmental assessment policy and management
Journal of environmental economics and management
Journal of environmental engineering
Journal of environmental engineering and science
Journal of Environmental Hydrology
Journal of environmental management
Journal of environmental monitoring
Journal of Environmental Planning and Management
Journal of environmental science and health. Part A, Toxic/hazardous substances & environmental engineering
Journal of Environmental Sciences
Journal of environmental systems.
Journal of Geographical Sciences
Journal of Geographical Systems
Journal of Geography in Higher Education
Journal of geotechnical and geoenvironmental engineering
Journal of hazardous materials
Journal of Historical Geography
Journal of hydrologic engineering /
Ozone: science and engineering
Philosophy and geography
Physical Geography
Places
Planning update /
Polar Geography
Political geography
Political geography quarterly
Pollution engineering
Practice periodical of hazardous, toxic, and radioactive waste management.
Proceedings of the Institution of Mechanical Engineers; Part M; Journal of Engineering for the Maritime Environment
Proceedings of the Royal Geographical Society of London
Progress in Human Geography
Progress in Physical Geography
Progress in water pollution control in Japan.
Public land statistics
Public works.
Quaerendo
Quality of the environment in Japan.
Quarterly journal of engineering geology and hydrogeology
Quarterly progress report on the Big Bend thermal and ecological surveys /
Quarterly report to Tampa Electric Company /
Recycling today.
Remediation
Report to the Governor and Cabinet, short-term and long-term hazardous waste facility needs /
Research journal of the Water Pollution Control Federation.
Residuals inventory : Florida residuals, spread the wealth! /
Resource and energy economics
Resources and energy
Resources, conservation, and recycling.
Reuse/recycle
Revista brasileira de cartografia
Revista Cartográfica
Revista de geografia Norte Grande
Revista del Instituto de investigación de la Facultad de geologia, minas, metalurgia y ciencias geográficas de la Universidad nacional mayor de San Marcos
REVISTA GEOGRAFICA
Science and the environment bulletin
Singapore journal of tropical geography
Small flows quarterly : SF /
Social & cultural geography
Social science & medicine
Sociological methodology
Soil & sediment contamination
Soil dynamics and earthquake engineering
Solar energy
Solid Waste & Recycling
Solid waste report.
Solid waste technologies
Solid wastes management refuse removal journal and liquid wastes management.
Source OECD environment sustainable development
Southeastern Geographer
Soviet hydrology: selected papers.
Space & polity
Spill science & technology bulletin
Stabilization and solidification of hazardous, radioactive, and mixed wastes.
State air pollution implementation plan progress report.
State of Florida resource recovery activity report.
Statistical record of the environment.
Status report on the county and regional hazardous waste assessment program /
Structural Engineering International
Structural engineering/earthquake engineering
Summary of meeting - Advisory Committee on Water Data for Public Use.
Surface water quality, Hillsborough County, Florida.
Surveying and land information systems
Systematic Biology
The Air Pollution Consultant
The Annals of Regional Science
The Cartographic journal
The directory of national environmental organizations.
The Earth care annual.
The environmentalist
The global atmosphere and ocean system
The Great Lakes geographer
The Ground water newsletter /
The handbook of environmental chemistry
The hazardous waste consultant
The Industrial Geographer
The Journal of solid waste technology and management.
The Journal of Transdisciplinary Environmental Studies
The McGraw-Hill Companies' utility environment report
The Polar Record
The Professional geographer
The State of the environment.
The world's water : the biennial report on freshwater resources.
Tijdschrift voor economische en sociale geografie
Toxic substance mechanisms  Waste management & research Water Engineering & Management
Transactions of the Institute of British Geographers
UKEN United Kingdom environment news.
Urban Geography
Urban water
Waste age.
Waste management
Waste management & research
Water & sewage international
Water & wastes engineering.
Water & wastewater international.
Water engineering & management.
Water Environment & Technology
Water environment research : a research publication of the Water Environment Federation.
Water international
Water newsletter.
Water quality ... Hillsborough County, Florida.
Water quality and ecosystem modeling
Water quality instrumentation.
Water quality research journal of Canada.
Water quality technical series.
Water quality, Hillsborough County, Florida.
Water research
Water resources research
Water S.A.
Water science and technology
Water supply & management.
Water survey & research paper.
Water technology news.
Water, air & soil pollution. Focus
Water, air, and soil pollution
Waterworld
Waterworld news.
Waterworld review.
WEF highlights news for members of the Water Environment Federation.
West Central Florida air quality : annual report /
World wastes
ABRIDGED CURRICULUM VITAE

KAREN D. LILLER

Office Address: University of South Florida
Graduate School
4202 East Fowler Avenue, BEH 304
Tampa, FL  33620-8470

Office Telephone: (813) 974-7359

Email Address: kliller@grad.usf.edu

EDUCATIONAL BACKGROUND

1984-1988 University of South Florida
Tampa, Florida
Major: Curriculum and Instruction
Cognate (Minor area): Public Health
Degree: Ph.D

1984-1986 University of South Florida
Tampa, Florida
Major: Curriculum and Instruction
Degree: Ed.S.

1979-1982 University of Central Florida
Orlando, Florida
University of South Florida, Tampa, Florida
Major: Technical Education
Degree: M.A.

1974-1978 West Virginia University
Morgantown, West Virginia
Major: Medical Technology
Degree: B.S.
### ACADEMIC PROFESSIONAL EXPERIENCE

<table>
<thead>
<tr>
<th>Year</th>
<th>Position</th>
</tr>
</thead>
</table>
| 2009-Present | University of South Florida  
Dean of the Graduate School and  
Associate Vice President for Research & Innovation |
| 2008-2009    | University of South Florida  
Interim Dean of the Graduate School and  
Associate Vice President for Research & Innovation |
| 2005-2008    | Associate Dean for Academic and Student Affairs                           |
| 2005-2007    | Interim Director of the Practice Program                                   |
| 2004-2005    | Interim Associate Dean for Academic Affairs                               |
| 2004/05- Present | Professor                                                                |
| 1996/97-2004 | Associate Professor  
Tenured-August, 1996  
Acting Chairperson of the Department during Chairperson's absences, 1998-1999; periodically in 2002-2004 |
| 1990-1996    | Assistant Professor (Department of Community and Family Health)          |
| 1988-1990    | Post-Doctorate Fellow                                                     |
| 1987-1988    | Adjunct Faculty  
St. Petersburg Junior College Training Program, St. Petersburg, Florida |
| 1985-1988    | Teaching Assistant  
University of South Florida Department of Adult and Vocational Education, Tampa, Florida |
SELECTED RECENT PUBLICATIONS

BOOKS/BOOK CHAPTERS


SELECTED RECENT PEER-REVIEWED JOURNAL PUBLICATIONS

**Data-Based


**Kent, E., & Liller, K. The Student Research Program at the University of South Florida College of Public Health: A Valuable Investment in Graduate Public Health Education. Public Health Report, 124, 764-770.


**SELECTED RECENT PRESENTATIONS AT PROFESSIONAL CONFERENCES AND MEETINGS**


Liller, K.D. The Role Graduate School at USF. McKnight Doctoral Fellows’ Orientation Meeting, Tampa, FL, June 20, 2009.


SELECTED RECENT GRANTS/CONTRACTS

2010-2012
Title: Innovation in Promoting Success in Graduate Education: From Admissions through Completion
Role: Principal Investigator
Source: Educational Testing Service and Council of Graduate Schools
Amount: $20,000 ($10,000 match from USF)
Status: Under Review

2009
Title: A Statewide Initiative in Florida for Professional Science Master’s Programs-A Proposal for Planning
Role: Co-Investigator
Source: State of Florida
Amount: $850,000
Status: Under Review

2009
Title: A Statewide Initiative in Florida for Professional Science Master’s Programs-A Proposal for Planning
Role: Principal Investigator
Source: Subcontract from the University of Central Florida and Sloan Foundation
Amount: $3528
Status: Funded

2008-Present
Title: McKnight Doctoral 1-3 year award
Role: Principal Investigator (through Graduate School)
Source: Florida Education Foundation
Amount: $360,000 per year
Status: Funded

2006-Present
Title: SMART (Sports Medicine and Athletic Related Trauma) Injury Registry
Role: Principal Investigator
Source: USF Health and the State of Florida
Amount: $100,000 per year—to date over $300,000 awarded
Status: Funded
SELECTED AWARDS AND ACKNOWLEDGEMENTS

Exceptional Community Service Award, University of South Florida College of Public Health, May 3, 1994.

Faculty Recognition Award for Research, University of South Florida Health Sciences Center, February 13, 1997.

Teaching Incentive Program (TIP) Award, College of Public Health, University of South Florida, November 19, 1998.

Named as One of the "Top Fifteen Women Scholars in Health Education and Health Promotion" in studies conducted by researchers in the University of Utah, the University of Oklahoma, and Colorado State University, February 23, 1999.

Public Health Possibilities 1999 Special Partner Award, College of Public Health, University of South Florida, 1999.

Recipient of the 2005 Tampa Bay Business Journal’s 2005 Health Care Heroes Award for Health Care Educator

Inducted into Who’s Who in Tampa Bay Business, 2005

State of Florida First Annual Injury Prevention Award, December 11, 2006

State of Florida Service Award for Service on the Florida Injury Prevention Advisory Council, October 14, 2008
LINDA M. WHITEFORD, Office of the Provost, University of South Florida, 4202 E. Fowler Ave, (ADM 226), Tampa, Florida 33620-8100. (813) 974-0818. lindaw@cas.usf.edu

a) Professional Preparation
   Bachelor of Arts, Beloit College, Beloit, Wisconsin: Anthropology, 1969
   Master of Arts, University of Wisconsin-Milwaukee: Anthropology, 1971
   Doctor of Philosophy, University of Wisconsin-Milwaukee: Anthropology, 1980
   Master of Public Health, University of Texas, School of Public Health, 1980

b) Appointments
   Associate Vice President, Academic Affairs and Strategic Initiatives, University of South Florida, 2008-present
   Professor, Department of Anthropology, University of South Florida, 2003-2008
   Professor and Chair, Department of Anthropology, University of South Florida, 1997-2003.
   Professor and Graduate Director, Anthropology, University of South Florida, 1994-97
   Associate Professor and Medical Track Leader, Anthropology, USF, 1984-1993
   Assistant Professor and Medical Track Leader, University of South Florida, 1981-84
   Visiting Assistant Professor, Southern Methodist University, Dallas, 1979-81

c) Publications
   List of up to 5 publications most closely related to proposed project


   Concluding Comments: Future Challenges: Globalization, Water and Health: Resources in Times of Scarcity (2005), (Linda M. Whiteford and Scott Whiteford, editors), pp.s 255-


(ii) List of up to 5 significant publications


d. Synergistic Activities
President, Society for Applied Anthropology – 2003-2005
Executive Committee, Board of Directors, Society for Applied Anthropology, 1998 - present
Coordinator, Social Studies and Medicine, Latin American Studies Association, present - 2002
Executive Committee, Society of Medical Anthropology, 1987-90
Treasurer, Latin American Anthropology Group, AAA 1987-99
Chairperson, Florida Center for Children and Youth, Tallahassee, Florida, 1995-97

e. Collaborators
(i)Andrew Arata, Tulane University
Larry Branch, University of South Florida
Lenore Manderson: Director of the Key Center for Women, University of Melbourne,
Lois Nixon, University of South Florida
Barbara Szelag, University of South Florida
Graham Tobin, University of South Florida
Shyanika Wijensinha, Battelle Centers for Public Health Research and Evaluation
Scott Whiteford, Michigan State University

(ii) Graduate and Post Graduate Advisors
Sidney Greenfield, (emeritus) University of Wisconsin
Janet Schneider, University of Texas

(iii) Current and Recent Advisees Doctoral Students (Recent Graduates)
Jon Poehlman, Ph.D.  Research Triangle Institute
Diego Salazar, Ph.D.  University of Chile
Linda Scott, Ph.D.  Marshall University
Judith Vitucci, Ph.D.  All Children's Hospital
Deborah Rosenberg, Ph.D.  Halley Veteran's Hospital
Brenda Junco, Ph.D.  Tampa General Hospital
Dinorah Martinez, Ph.D.  Moffitt Cancer Research Center
Kathleen Maes, Ph.D.  Hillsborough County Children’s Board
Juan Luque, Ph.D.  Moffitt Cancer Research Center USF

Current and Recent Advisees
Susan Martin-Warren  Karon Szydlowski  Trina Thompson
Charmari Wijesinha  Christiana Schumann  Maridelys Detres
Leilani Francisco  Kenneth Goodman  Elizabeth Cooper
GRAHAM A. TOBIN
Associate Vice President for Academic Affairs and Professor, Department of Geography
University of South Florida, 4202 East Fowler Ave. (ADM 226),
Tampa, FL 33620. (813) 974 3077 (gtobin@acad.usf.edu)

DEGREES:
Bachelor of Arts: The University of Durham, England: Geography (Honors) - 1973.
Doctor of Philosophy: The University of Strathclyde, Scotland: Geography - 1978.

PROFESSIONAL POSITION:
Associate Vice President for Academic Affairs: University of South Florida (2008 -).
Professor: Department of Geography, University of South Florida (1996 -).

RECENT EXPERIENCE:
Professor and Chair: Department of Geography, University of South Florida (1996-2001).
Professor and Head: Department of Geography, University of Minnesota, Duluth. (1992-96).
Associate Vice Chancellor for Academic Administration: University of Minnesota Duluth. (1992-1994).
Director: Center for Community and Regional Research UMD (1990-1994).

RECENT HONORS:
Distinguished Scholar Award: University of South Florida, Askounes-Ashford Distinguished Scholar (2006)
USF Presidential Award: Presidential Excellence Award, University of South Florida (2003)
Research Honors Award: Southeastern Division of the Association of American Geographers (2001)
Research Award: University of Minnesota Duluth, College of Liberal Arts, Research Award (1995-96)

RESEARCH EXPERTISE:
Natural Hazards: Flood, Hurricanes and Volcanoes; Water Resources Policy; Environmental Contamination.

SELECTED RECENT PUBLICATIONS:


**RECENT AWARDS AND RESEARCH FUNDING:**

NATIONAL SCIENCE FOUNDATION: Collaborative Research: Social Networks in Chronic Disasters: Exposure, Evacuation, and Resettlement. With Dr. L.M. Whiteford (USF), Dr. A. Murphy and Dr. E. Jones (University of North Carolina at Greensboro). (Total $230,061, USF component $100,500) (2008-2010).

NATIONAL SCIENCE FOUNDATION: REU Site: Social Aspects of Hurricanes--Preparation, Response and Recovery with Vulnerable Populations. With Dr. N. Yavneh, Dr. R. Ersing, Dr. M. Kusenbach, and Dr. B. Ward (USF) (Smaller role by Tobin) ($415,368) (2007-2010).

NATIONAL SCIENCE FOUNDATION: Collaborative Research: Social Networks and Mitigation in Areas of On-Going Disasters. With Dr. L.M. Whiteford (USF) and Dr. A. Murphy (University of North Carolina at Greensboro). (Total $328,750, USF component $133,381) (2006-2009).


**ACTIVITIES:** Dr. Tobin has published 13 books and monographs, 17 chapters, over 80 refereed articles and proceedings, 33 technical reports and working papers, 24 book reviews and 30 miscellaneous publications. In addition, he has presented over 150 papers at academic meetings, organized/chaired 50 sessions, and given over 75 invited lectures and seminars at university institutions. He has received over $1.5 million in research support and has served on many committees at the national, university, college, and department levels, and participated in professional organizations.
E. CHRISTIAN WELLS
Office of Sustainability
Department of Anthropology
University of South Florida
University of South Florida
4202 East Fowler Avenue, LIB122
4202 East Fowler Avenue, SOC 107
Tampa, FL 33620-8100 USA
Tampa, FL 33620-8100 USA
813/974.5397, sustainability@usf.edu
813/974.2337, e-mail: cwells@cas.usf.edu

EDUCATION
2003  Ph.D., Anthropology, Arizona State University
1998  M.A., Anthropology, Arizona State University
1996  B.A., Anthropology, Archaeological Studies, and Latin American Studies, Oberlin College

ACADEMIC APPOINTMENTS, USF
2009+  Director, Office of Sustainability
2008+  Associate Professor, Department of Anthropology
2008-2009  Affiliate Faculty, Honors College
2007-2009  Graduate Director, Department of Anthropology
2004-2008  Affiliate Faculty, Institute for the Study of Latin America and the Caribbean
2003-2008  Assistant Professor, Department of Anthropology

CURRENT TEACHING
2009  Advanced Quantitative Methods [G], Honors College Seminar: Soil and Culture [U],
Archaeological Methods [G], Mesoamerican Archaeology [U/G], Archaeological Field Methods
[U/G], Laboratory Methods in Archaeology [U/G]
2008  Quantitative Methods [G], Honors College Seminar: Dirt, The Erosion of Civilizations [U],
Economic Anthropology [G], Honors College Seminar: Soil and Culture [U], Archaeology [U]

SELECT RECENT AWARDS AND CERTIFICATES
2008  Certificate for Excellence in Mentorship at the Doctoral Level, University of South Florida
2007  Outstanding Undergraduate Teaching Award, University of South Florida

SELECT RECENT GRANTS AND CONTRACTS
2009  Research Contract. Department of Anthropology, SUNY-Buffalo (NSF DIG); $9,195
2009  Research Grant. Institute for the Study of Latin America and the Caribbean, University of
South Florida; $1,300
2008  Summer Research Grant, Humanities Institute, University of South Florida; $4,883
2007  General Research Grant. Foundation for the Advancement of Mesoamerican Studies; $3,000
2006  UR USF Grant. Office of Undergraduate Research, University of South Florida; $10,000
2005  Research Grant. Committee for Research and Exploration, National Geographic Society;
$19,360

SELECT RECENT SERVICE
Society Officer
2008-2011  Board Member, Society for Economic Anthropology
2005-2009  Editor, SAS Bulletin, Newsletter of the Society for Archaeological Sciences
Proposal Reviewer
National Science Foundation, National Endowment for the Humanities, Blackwell Publishing, Springer
Article Reviewer
Journal of Archaeological Science, Journal of the Royal Anthropological Institute, Current
Archaeology, Journal of Anthropological Research, Chemosphere, Ancient Mesoamerica,
Geoarchaeology, Latin American Antiquity, The Holocene
University Service
2009-2011 Chair, Sustainability Initiative Steering Committee
2009-2010 Member, School of Global Sustainability Exploratory Committee
2009-2010 Member, Textbook Affordability Committee
2008-2009 Member, USF World Initiative Task Force (Co-Chair, Graduate Committee)
2007-2010 Member, Graduate Council (Member, Curriculum Committee)
2005-2006 Chair, College of Arts and Sciences Undergraduate Committee

SELECT RECENT JURIED PUBLICATIONS
Edited Works
Group Publishing Limited, Bingley, UK. (E. C. Wells and P. A. McAnany, Editors)
of Colorado, Boulder. (E. C. Wells and K. L. Davis-Salazar, Editors)
2007 Advances in Geoarchaeological Approaches to Anthrosol Chemistry, Part I: Agriculture.
Advances in Geoarchaeological Approaches to Anthroposol Chemistry, Part II: Activity Area
(E. C. Wells and R. E. Terry, Guest Editors)

Journal Articles
Publishing Limited, Bingley, UK. (P. A. McAnany and E. C. Wells)
2008 Environmental Worldview and Ritual Economy among the Honduran Lenca. In Dimensions of
Anthropology, Volume 27. Emerald Group Publishing Limited, Bingley, UK. (E. C. Wells and K.
L. Davis-Salazar)
2007 Balancing Archaeological Responsibilities and Community Commitments: A Case from
Moreno Cortés)
2004 Peopling Landscapes between Villages in the Middle Gila River Valley of Central Arizona.
2004 Investigating Activity Patterns in Prehispanic Plazas: Weak Acid-extraction ICP/AES Analysis of
2000 Pottery Production and Microcosmic Organization: The Residential Structure of La Quemada,
2000  Chemical Analyses of Ancient Anthrosols in Residential Areas at Piedras Negras, Guatemala.  
Parnell, S. D. Houston, and M. W. Jackson)

**SELECT RECENT PRESENTATIONS**

**Professional Papers**

2009  Characterization in Shades of Blue: Archaeological Applications of Extractable Soil Phosphate  
using Molybdate Colorimetry and ICP-Emission Spectroscopy. Paper to be presented in the  
symposium, “Archaeometry,” at the Annual Meeting of the Federation of Analytical Chemistry  
and Spectroscopy Societies, Louisville, Kentucky. (E. C. Wells, R. F. Beeston, and D. A. Storrer)

2009  The Importance of a Deep-time Perspective for Understanding Land Use Legacies. Paper to be  
presented at the Campus and Community Sustainability Conference, Tampa, Florida.

2009  Emission or Absorption? A Comparison of Spectroscopic and Colorimetric Methods for  
Characterizing Extractable Phosphate in Archaeological Soils. Poster to be presented at the  
2009 Archaeological Sciences of the Americas Symposium, Tampa, Florida. (D. Bohrer, P. 
Griffith, K. Surharski, D. A. Storser, K. A. Rothenberg, and E. C. Wells)

2009  Interlinking Soil Properties to Prospect for Ancient Activity Loci: An Example from Palmarejo,  
Honduras. Poster to be presented at the 2009 Archaeological Sciences of the Americas 
Symposium, Tampa, Florida. (K. A. Rothenberg, D. A. Storser, and E. C. Wells)

2009  Building Reference Models in Soil Chemistry for Archaeological Prospection. Paper to be  
presented at the 2009 Archaeological Sciences of the Americas Symposium, Tampa, Florida.

2009  Socio-natural Patterns and Processes of Community Integration in the Palmarejo Valley,  
Honduras. Paper presented in the symposium, “Communities across Space and Time:  
Investigations in Southeast Mesoamerica,” at the 74th Annual Meeting of the Society for  
American Archaeology, Atlanta, Georgia. (K. L. Davis-Salazar and E. C. Wells)

2009  Soilscape Legacies of the Palmarejo Valley, Northwestern Honduras. Poster presented in the  
symposium, “Geoarchaeology and Interpretation,” at the 74th Annual Meeting of the Society  
for American Archaeology, Atlanta, Georgia. (K. A. Rothenberg and E. C. Wells)

2008  Cultivated Landscapes as Inalienable Wealth in Ancient Mesoamerica. Paper presented in the  
symposium, “Inalienable Possessions in the Archaeology of Mesoamerica,” at the 73rd Annual  
Meeting of the Society for American Archaeology, Vancouver, British Columbia, Canada.

2008  Applying Archaeology to Hydroecological and Agroecological Development in Honduras. Paper  
presented in the symposium, “Archaeological Contributions to Understanding Socio-ecological 
Systems: Emerging Collaborations between Ecology and Archaeology,” at the 73rd Annual  
Meeting of the Society for American Archaeology, Vancouver, British Columbia, Canada. (J. E. 
Moreno Cortés, E. C. Wells, and K. L. Davis-Salazar)

**Scholarly Lectures**

2009  La cultura y la agricultura: Una perspectiva desde el antiguo pasado. Lecture presented at the  
Universidad Nacional de Agricultura, Catacamas, Olancho, Honduras, May 30.

2008  Souls and Soils of the Ancient Maya: Archaeological Lessons for Sustainable Land Use. Lecture  
presented in the Department of Anthropology, Oberlin College, Oberlin, Ohio, December 8.

2008  The Cornfield Spirits: Nonmaterial Motives for Cultivating Landscapes in the Ancient Maya 
World. Lecture presented for the Institute for Mesoamerican Studies, State University of New 
York, Albany, March 7.
Kamal Alsharif  
Assistant Professor of Environmental Science and Water Policy

a. Professional Preparation

M.S.  Minnesota State University, Mankato, Master of Science, Environmental Science, 12/1996.  
Thesis title: Nonpoint Source Pollution of Lake Shetek

b. Appointments.
08/07 to Current  University of South Florida. Environmental Science & Policy Program/Geography Department, Assistant Professor, Tampa, Fl.
03/07 to 08/07  Minnesota Pollution Control Agency. Municipal Division, Project Specialist -St. Paul, MN.
12/06 to 03/07  Silver Creek Institute, Executive Director- Two Harbors, MN.
04/06 to 12/06  Silver Creek Institute, Director of Environmental Management and Health Division- Two Harbors, MN.
09/02 to 01/05  Biology Department, Graduate Teaching Assistant (GTA), University of Minnesota Duluth, Duluth MN.
12/97 to 05/02  Minnesota Board of Water and Soil Resources (a State Regulatory Agency) and the University of Minnesota Extension Service, Water Resources Education Coordinator, Duluth, MN.
09/95 to 07/97  Youth Works*AmeriCorps, Mankato Cluster, Environmental Education Coordinator, Service Site University of Minnesota Extension Service, South Central Cluster, Le Center, MN.

c. Publications.
(i) Referred


d. Synergistic Activities

Languages other than English Fluent in the Arabic language writing and reading.

Recent Conference and Professional Presentations:

2009 Global warming and environmental production efficiency ranking of the Kyoto Protocol nations. Presented at the Association of American Geographers conference in Las Vegas.


2007 Middle East Water Management: A Look at Water Sustainability and Scarcity. A presentation at ERIC, Tampa.

e. Collaborators & Other Affiliations

2009 Co-Chair Middle East Specialty Group with the Association of American Geographers

2009 Interdisciplinary Environmental Association
2008-2009   Water Resources Specialty Group with the Association of American Geographers. Awards Committee
2007-2008   Association of American Geographers (AAG)
2007-2008   South-East Division of the Association of American Geographers (SEDAAG)
2007-2009   Florida Society of Geographers (FSG)

(i) Collaborators:
Assisted the Critical Languages Project at the University of South Florida with the development of twelve distance learning modules about water resources conflict, environmental management, and political geography in the Middle East.

(ii) Graduate and Postdoctoral Advisors
Ph. D. graduate advisors:   Dr. Andrew Klemer and Dr. Ehsan Feroz.
M.S. graduate advisor:      Dr. Bertha Proctor

(iii) Thesis Advisor and Postgraduate-Scholar Sponsor


Katrina Pichevin- Thesis Director. Rain Gardens.


Michelle Harmeling- Project Option Director. wetlands and mining.
BIOGRAPHICAL SKETCH – Izurieta R

Professional Preparation

<table>
<thead>
<tr>
<th>Institution</th>
<th>Field</th>
<th>Degree</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central University of Ecuador</td>
<td>General Medicine</td>
<td>MD</td>
<td>1979-1987</td>
</tr>
<tr>
<td>Central University of Ecuador</td>
<td>Tropical Diseases</td>
<td>Specialization</td>
<td>1978-1992</td>
</tr>
<tr>
<td>University of Alabama at Birmingham</td>
<td>Public Health/International Health</td>
<td>MPH</td>
<td>1993-1995</td>
</tr>
<tr>
<td>University of Alabama at Birmingham</td>
<td>Epidemiology/International Health</td>
<td>Dr. PH</td>
<td>1996-2000</td>
</tr>
<tr>
<td>Cayetano Heredia Univ/Gorgas Instit</td>
<td>Tropical and Infectious Diseases</td>
<td>Post-doctorate</td>
<td>1988</td>
</tr>
<tr>
<td>University of Emory</td>
<td>Global Health</td>
<td>Post-doctorate</td>
<td>2000-2004</td>
</tr>
</tbody>
</table>

Appointments and Experience

2004 – Present  Assistant Professor, Dept. of Global Health, University of South Florida (USF), Tampa, Florida.
2005  Consultant, Stockholm Environment Institute, Stockholm, Sweden
2000 – 2004 Associate Research Professor, Dept. of Global Health, Emory University, Atlanta, GA
1999 – 2000 Research Coordinator, University of Alabama at Birmingham, Birmingham, AL.
1997 – Present Professor and Honorarium Professor, Central University, Quito, Ecuador
1997-1998 Chair and Commander, Department of Epidemiology, General Armed Forces Hospital, Quito, Ecuador.

Awards and Honors

1999 – 2000 National Sciences Foundation of Ecuador, Award and Scholarship
1998 Gorgas Memorial Institute of Tropical Medicine Award and Fellowship
1996-1997 Pan American Health Organization Research Award and Fellowship
1995 University of Alabama at Birmingham Scholarship
1989-1992 Ministry of Public Health of Ecuador Award and Fellowship

Selected Publications


15. Armijos RX, Racines J, **Izurieta R**: “Evaluation de la sensibilidad de cinco metodos diagnosticos de la leishmaniasis cutanea”. Medical Faculty Journal, Central University of Ecuador, Vol 16 (3-4), 1991


**Synergistic Activities**

2. Integrating global capabilities into STEM education: Critical technologies and strategies for meeting the UN’s Millennium Development Goals on water and sanitation. Multidisciplinary Master and Doctoral program that develops adequate technologies and train fellows for the achievement of the Millennium Development Goals with the participation of faculty and students from Public Health, Engineering and Anthropology. USF 2007-Present

3. Main leader and host for the Juan Bosh Lecture 2006. Invited lecturer Dr Eduardo Gotuzzo Director of the Von Humboldt Tropical Diseases Center and President of the International Association for Tropical Diseases.

4. Technical Counterpart for the agreement of collaboration with Osaka University, Japan

5. Technical Counterpart for the agreement of collaboration with Central University, Ecuador

Collaborators & Other Affiliations

- **Collaborators (during past 5 years)**
  - Christine Moe (Emory University, CDC)
  - Robert Tesh (University of Texas Medical Branch)
  - Douglas Watts (University of Texas Medical Branch)
  - Sten Vermund (Vanderbilt University)
  - Yoshimasa Yamamoto (Osaka University, Japan)
  - Edmundo Estevez (Biomedicine Center, Ecuador)
  - Eduardo Gotuzzo (Universidad Cayetano Heredia, Peru)
  - Catalina Ochoa (Minister of Public Health, El Salvador)
  - Lana Corrales (CDC)
  - Maurizio Macaluso (CDC)
  - Tadahiro Sasaki (Japan-Thailand Center for Infectious Diseases)

- **Graduate Advisors and Postdoctoral Sponsors**
  - Sten Vermund (Chair and Professor of Global Health, Vanderbilt University)
  - Maurizio Macaluso (Chair Women’s Reproductive Health Branch, CDC)
  - Christine Moe (Director of the Center for Safe Water and Professor Emory University)
  - Edmundo Estevez (Director Biomedicine Center and Professor Central University of Ecuador)

- **Thesis Advisees and Postgraduate-Scholars Sponsored**
  - Carlos Espino, College of Public Health, USF, PhD 2005 (Dissertation Committee member).
  - Luis Galindez, College of Public Health, USF, PhD 2005 (Dissertation Committee member).
  - Rahul Mahaskar, College of Public Health, USF, PhD 2005 (Main Dissertation Committee member).
  - Arun Karpur, College of Public Health, USF, PhD 2006 (Main Committee member).
  - Ligia Cruz, College of Public Health, USF, PhD 2007 (Main Dissertation Committee member).
  - Wendy Mussolino, College of Public Health, USF, PhD 2007 (Dissertation Committee member).
  - Lana Corrales, Emory University, MS 2001 (Main Dissertation Mentor)
  - Tierney Murphy, Emory University, MS 2002 (Dissertation Committee Member)
  - Denara Nanning, College of Environmental Engineering, MS 2006 (Dissertation Committee Member)
Nancy Romero-Daza, Ph.D.

Professional Preparation:
Universidad de los Andes, Bogota, Colombia, Modern Languages, BA 1984
SUNY Buffalo, Linguistics, MA 1988
SUNY Buffalo, Anthropology, MA 1990
SUNY Buffalo, Anthropology, Ph.D. 1994

Appointments:
2009 Graduate Director, Dept. of Anthropology, University of South Florida
2005-present, Associate Professor, Dept. of Anthropology, University of South Florida
1998-2005, Assistant Professor, Dept. of Anthropology, University of South Florida
1997-1998, Women and Chemical Dependency Unit Coordinator, Hispanic Health Council (HHC) Hartford, CT
1996-1998, AIDS Education and Prevention Unit Coordinator, HHC, Hartford, CT
1994-1998 Senior Research Scientist, Research Department, HHC, Hartford, CT
Student Intern Coordinator, Hispanic Health Council, Hartford, CT

Professional Affiliations and Service: Society for Applied Anthropology, Sustaining Fellow; American Anthropological Association, member; AIDS and Anthropology Research Group, steering committee member and newsletter editor; Caring for Haitian Orphans with AIDS (CHOAIDS), member board of directors and secretary; Monteverde Institute, Monteverde, Costa Rica, Adjunct Faculty Member, 2002 to present; Florida Institute for Community Studies, Tampa, FL, Member, Institutional Review Board. Member, Collaborative Research for Understanding Sexual Health (CRUSH), USF College of Public Health, Member, USF Africa Initiative Group

Selected Publications:
Freidus, A. and N. Romero-Daza (in press) Betwixt and Between: Globalization, Liminal Spaces, and Personal Relations in Rural Costa Rica. Gender, Place, and Culture


Combating HIV/AIDS and food insecurity in Sub-Saharan Africa. AIDS and Anthropology Bulletin 17,2: 7-9


Synergetic Activities

1. **Co-Principal Investigator** (Himmelgreen, PI) The Impact of Economic Change on Food Habits and Nutritional Health in Monteverde, Costa Rica: Mixing Food Production and Tourism (NSF funded, BSN 0753017).

2. **Co-director and Faculty member**: 2002-2004, 2006, 2008 Globalization and Community Health Field School (Monteverde, Costa Rica in collaboration with the Monteverde Institute). Students learn qualitative and quantitative methods in community health and conduct community-participatory research on topics related to the impact of globalization on community health. Romero-Daza has supervised graduate and undergraduate students conducting community based research on nutrition and food security, HIV/AIDS, water quality, and reproductive health, among others.

3. **Co-director and Faculty member**, 2005 and 2006 Métodos de Investigación Aplicados a Problemas de Salud Comunitaria summer field school (with the Instituto de Investigaciones Interdisciplinarias, University of Puerto Rico, Cayey, NIH funding). Undergraduate students from the U.S. and Puerto Rico learn how to assess community health and conduct community based research.

4. **Principal Investigator**: Designing HIV awareness materials in the Monteverde Zone: A Community Participatory Approach. This project used the principles of community participatory action research to involve 40 women from four rural Costa Rican communities in the evaluation of existing HIV prevention materials and in the design and reproduction of culturally appropriate materials that can be used to raise awareness about HIV among rural women and their families

5. **Research Consultant** Family Health International. “Gender and Multiple and Concurrent Sexual Partners in Lesotho”. Provides advice and input in project design, logistics, and in the development of research instruments.

6. **Principal Investigator**: Minority Outreach Pilot Project. Three-year project funded by the Ryan White Council to assess factors utilization of health and social services by HIV+ African Americans in three FL counties and develop and deliver cultural competence training modules for agencies that serve this population.
Collaborators: Elsa Batres-Boni (MVI), Andrea Freidus (Michigan State), Jannette Gavillan (UPR, Cayey), Isar Godreau (UPR Cayey), David Himmelgreen (USF), Lynn Morgan (Mount Holyoke), Pushpinder Pelia (HHC), Ipolto Okello-Uma (National University of Lesotho), Oriana Ramirez-Rubio (MVI), Mariolga Reyes (UPR Cayey), Winna Rivera (UPR), Susan Scrimshaw (U. Illinois-Chicago), Daniel Sellen (U.Toronto), Merrill Singer (HHC), David Turkon (Ithaca College), Sharon Watson (USF), Margaret Weeks (Institute for Community Research, Hartford, CT).

Thesis/Dissertation Advisor: Advisor to 29 graduate students (15 PhD students and 14 MA). Member of additional 13 PhD committees, and 8 other MA committees. Major advisor to nine undergraduate honors students.
Maya A. Trotz
4202 East Fowler Avenue ENB118, Tampa FL 33620
PHONE: (813) 974-3172 FAX (813) 974-9106 matrotz@eng.usf.edu

EDUCATION
1996 – 2002 Stanford University, Stanford, CA PhD in Civil and Environmental Engineering
1994 – 1996 Stanford University, Stanford CA MSc in Civil and Environmental Engineering
1990 – 1994 MIT, Cambridge, MA BS in Chemical Engineering, minor in Theater

EXPERIENCE
Aug. 2004 – Present University of South Florida Tampa, FL Assistant Professor, Civil and Environmental Engineering Department. Consulting faculty, Department of Women Studies. USF Patel Faculty Fellow
Sep. 2003 – Dec. 2003 Nanyang Technological University Singapore Lecturer, Civil and Environmental Engineering Department:
June 2002 – July 2004 Stanford University Stanford, CA Postdoctoral Researcher, Environmental Engineering Department:

RELEVANT PUBLICATIONS

OTHER PUBLICATIONS
SYNERGISTIC ACTIVITIES:

- Environmental Protection Agency P3 Phase 2 Award Winner (2009).
- Faculty mentor USF Research Experience for Students and Teachers (REST) program (Summer 2008) providing research experiences for a science teacher and 11th grader. Faculty Mentor Research Experience for Teachers (Summer 2005 and Summer 2006). Provide high school research experience for Tampa Bay Tech students (Spring 2007), present USF to high school students (Fall 2006). Great America Teach-In (Fall 2004).
- Co-PI and departmental coordinator, SLOAN minority fellowship program for USF.

COLLABORATORS:
- Dr. Fenda Akiwumi (USF); Dr. Mark Stewart (USF); Dr. Jeff Cunningham (USF); Dr. Vinay Gupta (USF); Dr. Ashok Kumar (USF); Dr. Sylvia Thomas (USF); Dr. Amy Stuart (USF); Dr. James Mihelcic (USF); Dr. Delcie Durham (USF); Trent Green (USF); Dr. Patrick Williams, Director, WWF-Guianas.

GRADUATE AND POST DOCTORAL ADVISOR: James O. Leckie (Stanford University)

STUDENTS AT THE UNIVERSITY OF SOUTH FLORIDA:
- PhD: Douglas Oti; Erlande Omidipa (NSF Bridges to Doctorate, SLOAN); Omatayo Darlymple (co-advisor); Joniqua Howard (NSF Bridges to Doctorate, SLOAN); Ken Thomas
- REU: John Franklin; Ryan Locicero; Michael Roe; Daniela Soledade

THESIS COMMITTEES:
- Monica Gray, Civil and Env. Engineering, USF, PhD 2008 (Dissertation committee member).
- Ron Price, Geology, USF, PhD 2008 (Dissertation committee outside chair).
- Melody Nocon, Civil and Env. Engineering, USF, MS 2006 (Thesis co-advisor).
- Joniqua Howard, Civil and Env. Engineering, USF, MS 2006 (Thesis advisor).
- Kevin Young, Chemical Engineering, USF, MS 2006 (Dissertation committee member).
- Camille Daniels, Marine Science, USF, MS 2005 (Dissertation committee member).
Biographical Sketch

Daniel H. Yeh, Ph.D., P.E., LEED AP

PROFESSIONAL PREPARATION

The University of Michigan – Ann Arbor, MI
Civil Engin. BSE, 1991
The University of Michigan – Ann Arbor, MI
Natural Resources BS, 1991
Manhattan College – Riverdale, NY
Environmental Engin. Grad courses, 1991-92
The University of Michigan – Ann Arbor, MI
Environmental Engin. MSE, 1993
Georgia Institute of Technology – Atlanta, GA
Environmental Engin. PhD, 2000
Minor: Biogeochemistry
Stanford University – Stanford, CA
Environmental Engin. Postdoc, 2002-04

APPOINTMENTS

2009-present Assistant Professor (courtesy), Dept. Global Health, Univ. South Florida, Tampa, FL.
2008-present Faculty Research Fellow, Patel Center for Global Solutions, U. So. Florida, Tampa, FL.
2005-present Assistant Professor, Dept. Civil & Envirn. Engg, Univ. South Florida, Tampa, FL.
2002-04 Postdoctoral Research Fellow, Department of Civil & Environmental Engineering, Stanford University, Stanford, CA, and NSF STC WaterCAMPWS.
2000-02 Manager, Product & Technology Development, Wei Ming Pharma., Taipei, Taiwan
1994-99 Graduate Research Assistant, School of Civil & Environmental Engineering, Georgia Institute of Technology, Atlanta, GA
1993-94 Research Engineer, Scientific Research Lab, Ford Motor Company, Dearborn, MI.
1991-92 Environmental Engineer, HydroQual, Inc., Mahwah, NJ

PUBLICATIONS

Five Most Relevant

Yeh D., Criddle C., Prieto A. Lee Y and Ng, A. Complex Organic Particulate Artificial Sewage (COPAS) for wastewater treatment laboratory studies. Wat. Environ. Res. (submitted)

Five Other Significant

SYNERGISTIC ACTIVITIES

- **Funding:** Since 2005, I have been PI or co-PI on over $1.618M of funding ($686K external and $933K internal USF), collaborating with colleagues throughout campus.

- **K-12 Classroom Outreach:** At USF, I led undergraduate and graduate students in my laboratory to participate in the 2005 and 2006 Great American Teach-In, where teams of individuals delivered hands-on presentations to 2nd and 5th grade students on the subjects of water quality, acid rain and sink holes. I also participated in USF STARS (NSF GK-12 Fellowship Program) in which student fellows visit grade school classrooms as mentors to enhance science curricula and organize science summer camps. Our lab hosted STARS campers for lab tours in 2007 (water recycling for space travel) and 2008 (green building and renewable resource recovery from wastewater).

- **University-High School-Museum Partnerships:** Through the NSF Research Experience for Teachers (RET) and Research Experience for Undergraduates (REU) programs, I developed ecological engineering lesson plans with local high school teachers based on a wetland wastewater treatment exhibit (BioWorks) at The Museum of Science and Industry (MOSI) in Tampa. The lesson plan introduced the concepts of mathematical modeling and systems thinking to HS students using STELLA. In 2008/2009 I developed LEED assessment of MOSI and the Florida Aquarium as projects for my green building classes. While at Stanford, I also participated in the development of Green by Design, a sustainable environment display at The Tech Museum of Innovation, San Jose, CA.

- **Faculty Service:** I am the faculty advisor for Engineers Without Borders at USF (EBW-USF), and engineering faculty co-advisor of the Emerging Green Builders, a student chapter of the USGBC.

- **Knowledge Transfer:** I am active in a number of academic and professional organizations, and strive to link academic research with industrial applications to further technological advancements and workforce development. Examples of activities include: Organizer of a workshop on Climate Change Adaptation for Tampa Bay; Organizer of two expert panel discussions at USF on global water concerns; Organizer of a WEF internet webcast on membrane bioreactors for industrial effluents involving presenters from the US and Denmark; Planning committee member of the 2007 ASCE/EWRI Congress in Tampa; Member of the USGBC’s Water Efficiency Technical Advisory Group (WE-TAG) to assist in the development of LEED; Co-chair of the Microbial and Biochemical Processes session, Annual Symposium of the NSF WaterCAMPWS, Atlanta, GA 2005.

COLLABORATORS & OTHER AFFILIATIONS

- **COLLABORATORS:** C. Criddle (Stanford); R. Hickey (Ecovation, Inc.); D. Phipps (OCWD); K. Ishida (OCWD); Y. H. Lee (KIST); B. Norddahl (U. So. Denmark), I. Pinnau (KAUST); M. Reinhard (Stanford); H. Ridgway (AquaMem); T. Das (USF); D. Durham (USF); J. Cunningham (USF); M. Trotz (USF); A. Stuart (USF); D. Holtzhausen (USF); F. Jaward (USF); N. Alcantar (USF); R. Izurieta (USF); L. Whiteford (USF); V. J. Harwood (USF); R. Brinkmann (USF); J. Mihelcic (USF); L.D. Duke (FGCU); A. Lindner (UF); J. Heaney (UF); C. Kibert (UF); H. Hilger (UNCC); N. Love (Michigan); L. Raskin (Michigan); D. Reinhart (UCF); G. Amy (KAUST); P. Lens (UNESCO-IHE); M. Kennedy (UNESCO-IHE); B. Petruisevski (UNESCO-IHE); C. Tang (NTU); P. Wong (NTU).

- **GRADUATE AND POSTDOCTORAL ADVISORS:** Graduate advisor: Spyros Pavlostathis (Georgia Tech); PhD project co-PI: Kurt Pennell (Georgia Tech); Postdoctoral advisor: Craig Criddle (Stanford).

- **STUDENTS ADVISED:** Tommy Lynn (MS EnvE, 12/05); Ana Garcia (BSE CivE, MS EnvE, 08/07); Tim Ware (MS EnvE, 08/09); Mike Keen (BSE CivE, MS EnvE, 05/09); David Starman (MS EnvE, 08/09); Caryssa Joustra (BSE CivE, MS EnvE, 08/05 to present); Ivy Cormier (05/09 to present); Russell Ferlita (PhD EnvE, exp. 08/10); Ana Lucia Prieto (PhD EnvE, exp. 12/10); Anh Tien Do (PhD EnvE, exp. 12/10); Seungryong Park (PhD EnvE, exp. 12/11); Wendy Mussoline (PhD Public Health, co-adv., exp. 12/11). **REUs:** Alicia Ng (Stanford, 06/04-12/04); Ana Garcia (USF, 02/05–08/05); Alicia Greene (KSU, 08/05 - 12/05); Caryssa Joustra (USF, 08/05 to 08/08); Jessica Linville (USF, 01/07 to 04/07); Mike Keen (USF, 01/07 to 08/07); Mike Ayer (WPI, 05/07 to 08/08); Silvia Salas (USF, 04/08 – 08/08); Mike Gerdjikian (USF, 01/09 – present); Robert Bair (USF, 01/09 – present); Mike Welch (USF, 01/09 – present); Pacia Hernandez (02/09 – present); Laura Gonzalez (01/09 – 05/09); Matt Banas (01/09 – present); Joice Gomez (05/09 – present); Gerlinde Wolf (6/09 – 8/09). **Total no. grad. students advised (12).**
Curriculum Vitae

Sharon Hanna-West

SCHOOL ADDRESS

BUS ADM-DEAN
Business Administration
BSN3403 4202 E. Fowler Avenue
Tampa, FL 33620

PERSONAL AND CONTACT INFORMATION

Work Phone:
Work Fax:
Work Email: SHanna-West@coba.usf.edu

EDUCATIONAL QUALIFICATIONS

<table>
<thead>
<tr>
<th>Year</th>
<th>Degree</th>
<th>Major</th>
<th>Institution</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>JD</td>
<td></td>
<td>University of Florida</td>
<td></td>
</tr>
</tbody>
</table>

SERVICE-PROFESSIONAL, EDITORIAL, COMMUNITY, UNIVERSITY

<table>
<thead>
<tr>
<th>Year</th>
<th>Society/Association</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PROFESSIONAL SOCIETIES/ASSOCIATIONS

<table>
<thead>
<tr>
<th>Year</th>
<th>Society/Association</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GOVERNANCE/COMMITTEES

<table>
<thead>
<tr>
<th>Year</th>
<th>Name of Committee</th>
<th>Role</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>I was principle organizer of the USF Sustainability EXPO and Co-Chair of the Business Team. I supervised several subcommittees, developed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
contracts and media kits, networked and sold exhibitor spaces and sponsorships. I planned, developed and installed the COBA faculty exhibit. I was interviewed many times by reporters from newspapers, magazines, radio and television. I worked with volunteer teams and participated in the carbon offset tree installation at Tower Park. Our goal was to mobilize the entire USF community to participate in and contribute to events that showcase our sustainability related research, teaching and outreach activities which address and promote sustainable healthy communities.

2008

I served as the GBA faculty advisor. I meet with the officers weekly, I attend most of the general meetings, service activities and special events.

2008

I served as faculty advisor for Emerging Green Builders, a USGBC avvilate.

2008

I made presentations to Student Government, the Faculty Senate and the President's Cabainet to secure support to have President sign the American College and University Presidents Climate Agreement. I am pleased to report that she did so on April 8, 2008 at the Going Green Tampa Bay sustainability EXPO.

2005

Law, Ethics and Sustainability Track Chairperson for the MBA programs (I developed the track and changes thereto. I also conducted all MBA orientation sessions for this track.) After my lectureship appointment, I joined Chris Thomas and John Jermier on a new track committee.

2005

I served on a committee to plan a business sustainability symposium for 2006. I was successful in obtaining the world renowned speaker Ray Anderson to come as the keynote.

2004

Law, Ethics and Sustainability Track Chairperson for the MBA programs (I developed the track and changes thereto. I also conducted all MBA orientation sessions for this track.) After my lectureship appointment, I joined Chris Thomas and John Jermier on a new track committee.

2004

I am the GBA faculty advisor. I meet with the officers weekly, I
attend most of the general meetings, service activities and special events. I also was instrumental (understatement) in the lounge renovation project. This included numerous meetings with administration, meetings with furniture reps and designers, floor plans, purchase orders, oversight of old furniture disposal and new furniture placement as well as physical work such as painting!

AWARDS

<table>
<thead>
<tr>
<th>Year</th>
<th>Society/Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>I continue to be appointed as the Exide Distinguished Lecturer in Ethics and Sustainability.</td>
</tr>
<tr>
<td>2005</td>
<td>I received the re-appointment of Exide Distinguished Lecturer in Ethics and Sustainability.</td>
</tr>
<tr>
<td>2005</td>
<td>I was appointed to the Board of Directors of Pasco County Junior Achievement.</td>
</tr>
<tr>
<td>2004</td>
<td>I received the appointment of Exie Distinguished Lecturer in Ethics and Sustainability.</td>
</tr>
</tbody>
</table>

FACULTY DEVELOPMENT

<table>
<thead>
<tr>
<th>Year</th>
<th>Society/Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>I developed and delivered ethics workshops for the USF/COB undergraduate and graduate case competitions several times, along with handouts for same.</td>
</tr>
<tr>
<td>2007</td>
<td>I attended MBA Case Competitions, various speakers and presentations throughout the college, and I try to be present at all MBA networking functions.</td>
</tr>
<tr>
<td>2008</td>
<td>I helped coordinate student poster competitions for the sustainability EXPO.</td>
</tr>
</tbody>
</table>

PEDAGOGY & TEACHING

<table>
<thead>
<tr>
<th>Year</th>
<th>Society/Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>I supervised a directed study with Chris Moore.</td>
</tr>
<tr>
<td>2007</td>
<td>I am Co-Chairperson for the MBA track Designing Sustainable Enterprise. I review track changes and I conduct EMBA and MBA orientation sessions for this track.</td>
</tr>
<tr>
<td>2007</td>
<td>I worked on a committee with Chris Thomas and Don Fell to organize and host the first USF/COBA Building Sustainable Enterprise symposium on April 7, 2007. This involved weekly meetings and numerous tasks (developing format and schedule; proposal and budget requests: researching, calling and scheduling speakers: developing and merging contact lists; menu, site reservations, catering, floral and furniture reservations and delivery, picking up and delivering speaker to/from hotel, restaurants and event; introductory speech; post event follow-up. I am particularly proud of the fact that I secured the internationally renowned speaker Ray Anderson of Interface of the Americas, Inc. to serve as keynote speaker (he received a standing ovation) because he is extremely difficult to get and he agreed to appear for half of his usual fee.</td>
</tr>
<tr>
<td>2007</td>
<td>I have participated in several discussion groups exploring cross discipline sustainability ideas and projects with Dr. Delcy Durham, Dean of Graduate Studies.</td>
</tr>
</tbody>
</table>

Year Society/Association

2008 I supervised a directed study with Chris Moore.
2008 I attended the MBA Case Competitions, various speakers and presentations throughout the college, and I try to be present at all MBA networking functions.
2008 I helped coordinate student poster competitions for the sustainability EXPO.
2008 I supervised a directed study with Chris Moore.

2008 I developed a cross discipline course with Dr. Robert Brinkman. We combined his graduate students from Geography and Environmental Science and Policy with my Societal Law and Issues in Sustainable Enterprise MBA students in a course focused on competing interests in land management, particularly large tracts of privately held property in Florida. The Lykes Brothers 340,000 acre parcel provided a living classroom. The students met with the owners and toured the property. They examined various policy options that are available and suggested potential new policies that could be designed to promote sustainable use of land. The students were divided into cross discipline teams to determine how best to preserve privately held land in Florida for: sustainable tourism; sustainable agriculture; water management; wildlife management; sustainable growth (sustainable urbanization)

2005 All course I teach are intensely interactive courses with writing requirements and presentations. As such they are labor intensive as I evaluate multiple writings per student and meet with them individually and in groups for projects. I give no multiple choice Scan-Tron tests.

2005 The Social, Ethical & Legal Systems course must be continuously updated because I have formatted it as a theoretical and historical course with a current issues overlay. This necessitates review of two to three daily periodicals and weekly on-line research updates.

2005 The sustainability track and courses were re-designed. This required significant research as well as weekly meetings with Dr. Chris Thomas and Dr. John Jermier.

2005 I developed a business ethics workshop for the case competitions.

2005 Dissertation Committee Member for Denise Kleinrichart, Dept. of Philosophy.

2004 The Social, Ethical, Legal Systems course must be continuously updated because I have formatted it as a theoretical and historical course with a current issues overlay. This necessitates review of two to three daily periodicals and weekly on-line research updates.

2004 The sustainability course (Society, Enterprise and the Law) was redeveloped by approximately 50%.

2004 I developed a business ethics workshop for the case competitions.

2004 Member, Dissertation Committee for Denise Kleinrichart, Department of Philosophy
MEMORANDUM

TO: Graduate Council Representatives

FROM: Eric Eisenberg, Interim Dean of the College of Arts and Sciences

RE: MA Program in Global Sustainability

DATE: September 22, 2009

I have reviewed the curriculum of the MA Program in Global Sustainability and its role within the newly proposed School of Global Sustainability. On behalf of the College of Arts and Sciences, I agree in principal to the degree program and its home in the Graduate School until it can be placed in the newly developed School of Global Sustainability. I look forward to participating in efforts to advance USF’s educational endeavors related to global sustainability. Faculty from my College will be actively involved in the curriculum of the inaugural degree concentration of water. I understand that the Provost’s office will be providing funding to convert in-class courses to online and modular formats and that adjuncts may be hired to assist with the courses since the plan is to offer them on alternative calendars. Also, the FTE from such courses will be provided to the Colleges. Future concentrations and courses will be developed that will allow interested faculty and deans to create an interdisciplinary and holistic approach to global sustainability.
MEMORANDUM

TO: Graduate Council Representatives

FROM: Robert Forsythe, Dean of the College of Business

RE: MA Program in Global Sustainability

DATE: September 22, 2009

I have reviewed the curriculum of the MA Program in Global Sustainability and its role within the newly proposed School of Global Sustainability. On behalf of the College of Business, I agree in principal to the degree program and its home in the Graduate School until it can be placed in the newly developed School of Global Sustainability. I look forward to participating in the efforts to advance USF’s educational endeavors related to global sustainability. Faculty from my College will be actively involved in the curriculum of the inaugural degree concentration of water. I understand that the Provost’s office will be providing funding to convert in-class courses to online and modular formats and that adjuncts may be hired to assist with the courses since the plan is to offer them on alternative calendars. Also, the FTE from such courses will be provided to the Colleges. Future concentrations and courses will be developed that will allow interested faculty and deans to create an interdisciplinary and holistic approach to global sustainability.

Thank you.
MEMORANDUM

TO: Graduate Council Representatives
FROM: John Wiencek, Dean of the College of Engineering
RE: MA Program in Global Sustainability
DATE: September 21, 2009

I have reviewed the curriculum of the MA Program in Global Sustainability and its role within the newly proposed School of Global Sustainability. On behalf of the College of Engineering, I agree in principal to the degree program and its home in the Graduate School until it can be placed in the newly developed School of Global Sustainability. I look forward to participating in efforts to advance USF’s educational endeavors related to global sustainability. Faculty from my College will be actively involved in the curriculum of the inaugural degree concentration of water. I understand that the Provost’s office will be providing funding to convert in-class courses to online and modular formats and that adjuncts may be hired to assist with the courses since the plan is to offer them on alternative calendars. Also, the FTE from such courses will be provided to the Colleges. Future concentrations and courses will be developed that will allow interested faculty and deans to create an interdisciplinary and holistic approach to global sustainability.

Thank you.
To: Graduate Council Representatives  
From: Donna J. Petersen, ScD, MHS  
Re: MA Program in Global Sustainability  
Date: 9/21/09

I have reviewed the proposed curriculum for a new Master of Arts Program in Global Sustainability and the plans for a newly proposed School of Global Sustainability. After discussion with the chairs of the College of Public Health we agree in principle to the degree program and its temporary home in the Graduate School. We ask for two things: one, that whatever support is provided to the faculty responsible for the courses selected for this program be provided consistently across all courses and two, that discussion be continued over the next several months regarding the appropriate administrative structure for this and other similar cross-college degree programs. We may all agree to a new "virtual school" but we would prefer such a decision come after deliberate examination of all possible alternatives. We further expect that the FTE for courses taught in this and other similar cross-college degree programs would revert back to the home College and that if any alternative payment mechanism is devised for this or other similar degree programs that such revenues be allocated fairly among all participating Colleges.

Thank you.