

DEPARTMENT OF GEOGRAPHY

UNIVERSITY OF SOUTH FLORIDA

MASTER OF ARTS

**STUDENT HANDBOOK
2009-10**

Revised 6/18/2009

**DEPARTMENT OF GEOGRAPHY
<http://www.cas.usf.edu/geography/index.html>**

DEPARTMENT OF GEOGRAPHY MISSION STATEMENT

The mission of the Department of Geography at the University of South Florida is threefold: 1) to conduct basic and applied research; 2) to provide exceptional, quality education and professional development opportunities at the undergraduate and graduate levels; and 3) to serve the region, community, and the university. Teaching and research themes focus on: (i) Environmental Processes and Policy, (ii) Environmental Hazards, Sustainable Communities, and Vulnerability Assessment, (iii) Geographic Information Sciences, (iv) Globalization and International Development, and (v) Urban and Regional Development and Planning. The Department maintains a strong international focus and undertakes research in many settings in North America and throughout the world, particularly Africa, Asia (particularly China, India, and the Middle East), Europe, and Latin America. The Department encourages engaged teaching and scholarship within communities and has strong connections with community partners in the Tampa Bay region and many other locations around the world.

The department offers six degree programs and three graduate certificate programs. There is a BA in Geography and a BS in Environmental Science and Policy, an MA in Geography, an MA in Urban and Regional Planning, an MS in Environmental Science and Policy, an integrated Ph.D. in Geography and Environmental Science and Policy and three graduate and one undergraduate certificates. The Department is also home to the USF Botanical Gardens, the College's Community Initiative Program, the USF Weather Station, the GIS and Cartographic Services Laboratory, and the Center for Brownfields Rehabilitation. The undergraduate programs offer a broad education in geography and environmental science and policy, which, combined with undergraduate research and practical knowledge, provides the necessary experience for a range of employment opportunities. The undergraduate certificate in Urban Studies provides opportunities for in-depth examination of urban topics. The masters' degrees develop hands-on research undertaken with faculty mentors. The graduate certificate in GIS is designed for advanced learners interested in spatial information systems, the graduate certificate in Environmental Management and Policy focuses on training individuals in managing complex issues related to the environment, and the Community Development certificate promotes engaged scholarship. The doctoral degree is designed for advanced students specializing in research at the cutting edge of the discipline. www.cas.usf.edu/geography

January 2008

GEOGRAPHY MASTER OF ARTS PROGRAM

The Department of Geography at the University of South Florida serves the needs of a growing urban population in one of the largest metropolitan areas in the southeastern United States. As such, its research focus, although varied, is centered on urban processes, both physical and human.

Course offerings emphasize economic, social, and planning issues in the urban environment, natural/technological hazards and environmental justice, and geographic information systems (GIS) and spatial analysis.

ADMISSION REQUIREMENTS

Background Requirement

Students wishing to gain admittance into the Geography MA program must have a baccalaureate degree or its equivalent from an approved college or university. Typically, applicants have baccalaureate degrees in geography. However, applicants with degrees in other disciplines are also encouraged to apply. Those students admitted without a degree in geography will be required to take selected undergraduate courses as determined by the Graduate Program Director. At a minimum, incoming students without a degree in Geography will be required to take the following courses:

GEA 2000	World Regional Geography
GEO 2200	Introduction to Physical Geography
GEO 2200L	Introduction to Physical Geography Lab
GEO 2400	Human Geography
GIS 3006	Computer Cartography

If a student has taken a course similar to one of the previously listed courses, the requirement may be waived.

Grade Point and Graduate Record Exam (GRE)

Students must have a minimum grade point of 3.0 (on the four point scale) for the last 60 credits taken as an undergraduate, and the submission of GRE scores is required. The GRE must be taken within five years preceding the application and the score submitted regardless of the grade point average. GRE scores must be submitted directly to the Graduate Admissions Office with your graduate application.

Letter of Intent

A letter of intent must be submitted to the department prior to admittance. The letter should outline the applicant's specific academic interests and goals.

Letters of Recommendation

At least two letters of recommendation must be submitted to the department prior to admittance. Prospective students should solicit the letters of recommendation from sources who are familiar with the applicant's academic/work history and performance.

Submit your letter of intent and letters of recommendation directly to:

**Graduate Program Director
Department of Geography
University of South Florida
4202 East Fowler Avenue, NES 107
Tampa, FL 33620-5250**

Application Deadlines

Fall Semester	February 15 th whether applying for a Graduate Assistant (GA) Position or not.
Spring Semester	October 15 for both GA and non-GA applicants
Summer Semester	March 1

Students are encouraged to apply at least one month before the application deadline to allow time for processing of paperwork. For an application and application fee information, visit the Graduate Admissions Office (<http://www.grad.usf.edu/newsite/admissions/main.asp>) website. All application materials must be received by the application deadline to receive full consideration of admission.

Advising

When a student is admitted to the program, the Department's Graduate Director will assign an advisor. The role of the advisor is to guide the student in selecting appropriate courses during the first semester and to suggest possible advisors and options for the student given his/her interests and needs.

Prior to selecting a program advisor, the student should meet with each of the graduate faculty in order to determine the best advising "fit." Once the student selects a program advisor, the student, in consultation with the program advisor, should select a committee. For students completing a thesis, the program advisor serves as the thesis advisor as well. The thesis advisor is responsible for guiding the student through thesis proposal preparation, thesis writing, and the thesis defense. Students may change advisors and committee members during their program.

Graduate Student Supervisory Committee Expectations of Conduct

The following expectations will be followed by all participants involved in a dissertation/thesis committee, including student, advisor (major professor) and committee members:

- 1) Regular communication of research between the student and the committee members.
- 2) If major changes occur to the proposed study, the student in consultation with their advisor, is responsible to call a committee meeting.
- 3) If concerns arise either with regards to what can be considered major changes between committee members or other matters pertaining to the pursuit of the proposed study, these should be resolved by the graduate director working in conjunction with an ad hoc

committee appointed by the Chair. If the graduate director is the student's major professor, then the Chair will appoint another faculty to head that committee. If the concerns cannot be resolved at that level, then the matter will be referred to the Department Chair. If resolution cannot be reached at the departmental level, the student has the right to file a grievance with the College. If a student is considering such a step, they are encouraged to review the USF Graduate Catalog section on University Academic Grievance Procedures as time limits do apply.

FINANCIAL SUPPORT

Graduate Assistants

The department awards graduate assistantships annually. If a student would like to be considered for a graduate assistantship, he or she should complete the Graduate Assistantship Application (available at the USF Geography Department Website) and send it to the Graduate Director along with other application materials. Graduate assistantships are awarded based upon grade point average, GRE scores, and original application materials. Students are usually given a two-year contract as a graduate assistant subject to satisfactory performance and academic progress. **Only students pursuing the thesis option are normally eligible for an assistantship.**

Graduate assistants are under the direct supervision of the Chair of the Department and the Graduate Director who assign the specific duties to the students. Typically, students are required to supervise labs, grade exams, assist with audio-visual equipment, and teach specific lectures in courses. Students are often assigned to assist particular faculty. When this occurs, the faculty member is the direct supervisor of the graduate assistant.

Project (Research) Assistants

Project assistants are students who are hired to assist faculty with grant-funded projects. Students hired as Project Assistants will complete, for example, computer analysis, cartography, fieldwork, and/or laboratory analysis related to the project. Students may be hired on salary, or on an hourly basis. The rate of pay varies from project to project. Students are selected for these positions based upon the skills needed for individual projects.

Other Financial Support

The Center for Urban Transportation Research (CUTR), the United States Geological Survey (USGS), and the Florida Center for Community Design and Research (FCCDR) sometimes hire Geography Department graduate students. Students may submit applications for employment at these offices. In addition, part-time and full-time jobs that become known to the department are posted on the bulletin board outside of the department office (NES 201).

Fellowships

Fellowships are funds received by the student for which no work is required. USF's Graduate Fellowship is awarded annually, on a competitive basis, to full-time students of outstanding academic potential. For specific information and an application, students are advised to contact the Graduate School at (813) 974-2846, or check the Graduate School web page at www.grad.usf.edu

Scholarships, Grants, Work Study, and Loans

The Graduate School houses a Scholarship Library that allows students to access information on private sources of funding through computerized databases as well as source books.

The Office of Financial Aid administers the Federal Work Study Program as well as several loan programs. Students interested in loans or work study should apply as soon as possible after January 1 each year for the coming academic year, which starts in August. Application packets are available outside the Office of Financial Aid (SVC 1102) or by calling (813) 974-4700.

DEGREE INFORMATION AND REQUIREMENTS

Degrees Offered

The Department of Geography offers a Masters of Arts (M.A.) in Geography with a thesis and non-thesis option.

Degree Requirements

Credit Hours: Students must complete a minimum of 30 semester hours of graduate level course work for the thesis option and 36 hours for the non-thesis option. Students in the thesis option must complete the core course requirements outlined below before they are eligible to enroll in thesis hours.

Required Core Courses (Nine Hours)

All thesis and non-thesis students must take the following courses:

GEO 6058	Geographic Literature and History	3 cr. hrs
GEO 6970	Research Methods in Geography	3 cr. hrs

Based upon the student's area of interest, he/she must take one course from the following list of Quantitative or Qualitative course offerings:

Quantitative:

GEO 6166	Multivariate Statistical Analysis	3 cr. hrs
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Another course can be substituted for GEO 6166 with the permission of the Graduate Program Committee. Possible substitutions, based upon the student's area of interest can include, but is not limited to the following:

Geology: GLY 5865	Statistical Models in Geology	3 cr. hrs
Biology: PCB 6455	Statistical Ecology	3 cr. hrs
Statistics: STA 5166	Computational Statistics I	3 cr. hrs
Sociology: SYA 6405	Sociological Statistics	3 cr. hrs

Qualitative:

American Studies: AMS 6156	Theories & Methods of Cultural Studies	3 cr. hrs
Communication: COM 6400	Communication Theory	3 cr. hrs
Philosophy: PHI 6305	Seminar in Epistemology	3 cr. hrs
Sociology: SYA 6315	Qualitative Research Methods	3 cr. hrs
Women's Studies: WST 6001	Feminist Issues, Research, Methods	3 cr. hrs
Anthropology: ANT 6766	Research Methods Applied Anthro	3 cr. hrs

Regional:

Students are strongly encouraged to complete at least one of the following regional courses:

GEA 6195	Seminar in Advanced Regional Geography	3 cr. hrs
GEA 6215	Seminar in North American Geography	3 cr. hrs

GEA 6252	Seminar in the Geography of the American South	3 cr. hrs
GEA 6406	Seminar in Latin American and Caribbean Geography	3 cr. hrs
GEA 6504	Seminar in European Geography	3 cr. hrs
GEA 6745	Asian Geography Seminar	3 cr. hrs

Concentrations:

Students specialize in one of the three concentrations offered by the department. Students must select a minimum of three courses (9 credits) from the selected track.

Thesis option

Students take six credit hours of electives at a level of 5000 or higher, keeping in mind that a minimum of ten hours is required at the 6000-level. At least one of the electives must be taken outside of the student's track excluding GEO 6908, 6918 and 6944. Electives may also be selected from courses offered outside of the Department, with the consent of the student's advisor and the graduate program director. A maximum of six approved hours taken outside the department can be used in the student's degree program. The remaining 6 credit hours are taken as Thesis (GEO 6971). A student in the thesis option can only apply three credit hours of Internship (GEO 6944), and three credit hours of Directed Research (GEO 6918) and/or Independent Research (GEO 6908) toward his/her degree program.

Students are expected to present a thesis research proposal to their thesis committee shortly before or after the completion of 18 credit hours (which is to include the three core courses). The thesis committee will be given at least two weeks to review the written proposal, after which the committee will meet with the student to discuss the proposal and make recommendations. This meeting will take place at least one semester before the semester in which the student plans to graduate.

Students must present the completed written thesis to their advisor for approval before sending the thesis to the thesis committee. The thesis committee should be given three weeks to review the thesis; any major problems should be raised at this stage by the committee. If corrections are necessary, they should be made at this time. The student must then complete a public thesis defense during the semester in which they plan to graduate. An evaluation is made of the student's work and further changes to the thesis may be required.

Students must be enrolled in a minimum of 2 semester hours of thesis credit during the semester in which a thesis is submitted to the Graduate School.

Non-thesis option

Students complete a total of 36 hours, with 27 hours of electives completed at a level of 5000 or higher, keeping in mind that a minimum degree requirement is 16 hours at the 6000 level. Students can also take up to nine hours outside the department with the consent of their advisors and the graduate program director. Students can apply three credit hours of Internship (GEO 6944), three credit hours of Directed Research (GEO 6918) and/or Independent Research (GEO 6908) toward their degree program. Students must pass a comprehensive written examination that is administered during the semester in which they plan to graduate.

The following concentrations are available:

Concentration A: Economic, Social, and Planning Issues in the Urban Environment

GEO 6116	Perspectives in Environmental Thought	3 cr. hrs
GEO 6345	Technological Hazards and Environmental Justice	3 cr. hrs
GEO 6347	Natural Hazards	3 cr. hrs
GEO 6428	Seminar in Advanced Human Geography	3 cr. hrs
GEO 6475	Political Geography Seminar	3 cr. hrs
GEO 6605	Contemporary Urban Issues	3 cr. hrs
GEO 6545	Economic Geography Seminar	3 cr. hrs
GEO 6627	Site Feasibility Analysis	3 cr. hrs
GEO 6704	Transportation Geography	3 cr. hrs
GEO 7606	Seminar in Urban Environments	3 cr. hrs
PAD 6336	Community Development Problems and Strategies	3 cr. hrs

Concentration B: Environmental, Physical and Hazards

GEO 6116	Perspective in Environmental Thought	3 cr. hrs
GEO 6209C	Physical Geography Seminar	3 cr. hrs
GEO 6215	Geomorphology Seminar	3 cr. hrs
GEO 6217	Karst Geomorphology	3 cr. hrs
GEO 6263	Soils Seminar	3 cr. hrs
GEO 6286	Advances in Water Resources	3 cr. hrs
GEO 6288	Hydrological Systems	3 cr. hrs
GEO 6345	Technological Hazards and Environmental Justice	3 cr. hrs
GEO 6347	Natural Hazards	3 cr. hrs
GIS 6306	Environmental Applications of GIS	3 cr. hrs
GIS 6355	Water Resources Applications of GIS	3 cr. hrs
MET 6140/GEO 6255	Weather, Climate, and Society	3 cr. hrs

Concentration C: Geographic Information Systems and Spatial Analysis

GEO 6115	Field Techniques	3 cr. hrs
GEO 6119	Geographical Techniques & Methodology	3 cr. hrs
GEO 6166	Multivariate Statistical Analysis	3 cr. hrs
GIS 5075	Global positioning Systems	3 cr. hrs
GIS 6038C	Remote Sensing	3 cr. hrs
GIS 6039	Remote Sensing Seminar	3 cr. hrs
GIS 6100	Geographic Information Systems	3 cr. hrs
GIS 6103	Programming for GIS	3 cr. hrs
GIS 6112	Spatial Database Development	3 cr. hrs
GIS 6146	GIS Seminar	3 cr. hrs
GIS 6306	Environmental Applications of GIS	3 cr. hrs
GIS 6355	Water Resources Applications of GIS	3 cr. hrs

Policy for Taking Graduate Courses at USF St. Petersburg

Graduate courses offered at the USF St. Petersburg campus can have a different focus than those offered on the USF Tampa campus. Students must get approval from their advisors and the Graduate Director of Department of Geography (Tampa) prior to taking any courses at the USF St. Petersburg campus to verify that these courses will count toward the degree. Additionally, only faculty on the USF Tampa campus can serve as the major professor/advisor for graduate students enrolled on the Tampa campus.

Department Policy on Academic Dishonesty

It is the student's responsibility to review the graduate catalog's section on academic dishonesty, which covers plagiarism. This section provides detailed examples of plagiarism, hence there should be no confusion on this matter. The university takes academic dishonesty extremely seriously and possible consequences of such actions include an F or FF grade for the class or even dismissal from the university. Please see the following website link:

http://www.grad.usf.edu/newsite/grad_council/Catalog/2008_09/Grad_School_Policy_Academic_Integrity.pdf

GUIDELINES FOR GEOGRAPHY M.A. COMPREHENSIVE EXAMS

Thesis Option:

1. The student is required to present his/her thesis research at a public thesis defense.
2. As part of the thesis defense, an oral comprehensive exam is also administered. The defense and oral exam is scheduled and organized by the student's major professor, in consultation with the student's Supervisory Committee and the Graduate Director. As part of this process, a Presentations Form (available in the department office) needs to be completed one week prior to the defense date.
3. The exam can be completed only during the spring and fall Semesters.
4. A copy of the thesis must be made available in the department office one week prior to the defense for public review.

Non-Thesis Option:

1. The examining committee will be comprised of the student's Supervisory Committee.
2. Non-thesis students are required to complete a six-hour long, written, closed book, comprehensive exam, which typically consists of series of questions that are prepared by the examination committee. Students are not allowed any outside materials during the exam, which is to be hand-written on paper supplied by the examination committee.
3. The exam can be completed during the spring or fall semesters, but not during the summer.
4. Students are encouraged to complete the exam during the last semester of their coursework. The exam must be completed no later than one semester after the student completes the coursework for the degree. You must be registered for two credits in that semester in the semester that the exam is completed.
5. All non-thesis examinations will be scheduled for the same day each semester (i.e. all students will sit for the exam at the same time), the date being set by the Graduate Director. Students must coordinate with their major professors when they will take the exam.
6. Questions are solicited and organized by the student's major professor in consultation with the student's examination committee.
7. The answers to the questions are evaluated by the student's Supervisory Committee within two weeks of the exam.

8. If the answer to any question is determined to be incorrect or incomplete, the student may be required to retake that portion of the exam in the form of an oral exam that is only open to the committee. Students are encouraged to complete the oral exam in the same semester they completed the first written exam.
9. If the student fails all portions of the exam, they will have one opportunity to retake the entire exam. This second exam must be completed no later than the semester after the student receives notification that a second exam is necessary.
10. If it is determined that the student did not successfully complete his/her comprehensive exam after their second attempt, he/she will be dismissed from the program.

Preparation Guidelines for the Non-Thesis Geography MA Comprehensive Exam

1. The date of the comprehensive examination is set each semester by the Graduate Program Director in consultation with the Graduate Program Committee.
2. The date for the exam should be at least two months past the beginning of the semester in which the exam is to be completed, and no later than two weeks prior to the beginning of final exam week as scheduled by the university. The exam must be completed no later than one semester after the student completes the coursework for the degree. Please remember that students must be enrolled for at least two graduate hours in the semester they plan to graduate.
3. The student's non-thesis advisor in consultation with the already established two-person program committee will develop the exam.
4. At least six weeks prior to the exam, the student will be provided with preparation materials for the exam by the non-thesis advisor and the program committee.
5. These preparation materials can consist of the following:
 - a. Specific themes for the question(s) to be asked on the exam. The information provided should be specific enough to allow the student to prepare on his/her own for the question(s).
 - b. A reading list that consists of materials related to the question(s) to be asked on the exam. By reviewing and understanding this literature the student should be able to successfully answer the question(s) on the exam.
6. Any questions or concerns that the student has related to the comprehensive exam should be directed to his/her non-thesis advisor.

Guidelines for Students Switching from the Thesis to Non-Thesis Option

1. Students planning to switch from the thesis option to the non-thesis option should consult their advisors and the Graduate Director prior to making any change.
2. Students switching to the non-thesis program will be required to complete all requirements set forth in the most current Graduate Catalog.
3. As per the guidelines set forth by the USF Graduate Handbook, if a student changes from thesis to non-thesis in a semester that he/she is enrolled in thesis hours, these credits can be exchanged without academic penalty if a Graduate Studies Petition is filed with Graduate Studies prior to the last day of the drop/add period.

4. If a student enrolled in the thesis option has already taken thesis credits, but elects to change to the non-thesis option, the accumulated thesis credits may not be exchanged, or converted to another non-structured credit. The thesis hours will remain in the transcript and will retain the “Z” grade.
5. Students switching from the thesis to the non-thesis option will be required to complete the comprehensive written exam as indicated in the “Guidelines for Non-Thesis Comprehensive Exams.”
6. Students can also transfer up to 9 graduate credits from other institutions for inclusion in their non-thesis program of study. Transfer courses intended to meet non-thesis Geography program requirements must be approved by the Geography Graduate Director.
7. As per the non-thesis Geography Masters Degree guidelines in the most recent USF Graduate Catalog, no more than 9 graduate hours can be approved coursework from a discipline besides geography and no more than a total of 9 hours can be transferred into the program.
8. Graduate assistants who switch from the thesis to the non-thesis option will forfeit their assistantship at the end of that contract period.

Note: The non-thesis option is not available for students on graduate assistantships.

LIST OF GRADUATE COURSES OFFERED BY THE GEOGRAPHY DEPARTMENT

GEA 6195 SEMINAR IN ADVANCED REGIONAL GEOGRAPHY (3) Analytic study of a selected region of the world. Repeat once for credit, but region may not be repeated. (PR: GS in Geography)

GEA 6215 SEMINAR IN NORTH AMERICAN GEOGRAPHY (3) Advanced survey of historical and contemporary issues in North American geography including: west and non-west exchange, revolutionary transformation, nation-building, regional disparities, and continental relations among states. (PR: GS in Geography or CI)

GEA 6252 SEMINAR IN THE GEOGRAPHY OF THE AMERICAN SOUTH (3)
Intensive examination of regional geographic studies and their application to the American South, integrating concepts related to the physical and cultural landscapes, economic growth and change, urbanizations, and cultural diffusion processes. (PR: GS in Geography or CI)

GEA 6406 SEMINAR IN LATIN AMERICAN AND CARIBBEAN GEOGRAPHY (3)
Readings and discussions organized around an examination of regional and systematic analysis

of selected topics of Latin American and Caribbean geography. Emphasis is on combining physical and cultural analysis of this region. (PR: GS in Geography or CI)

GEO 6504 SEMINAR IN EUROPEAN GEOGRAPHY (3) Readings and discussions organized around an examination of regional and systematic analysis of selected topics of European Geography. Emphasis is on combining physical and cultural analysis of this region. (PR: GS in Geography or CI)

GEO 6745 ASIAN GEOGRAPHY SEMINAR (3) Analysis of regional divisions and spatial variations within Asia. Examines the significance of Asia in the global context. Focus on political, economic, cultural, and historical geographies, including development, environment, religion and gender. (PR: GS in Geography or CI)

GEO 6058 GEOGRAPHIC LITERATURE AND HISTORY (3) The origins and development of the discipline as revealed through an examination of the principal written sources. (PR: GS in Geography, or CI)

GEO 6115 ADVANCED FIELD TECHNIQUES (3) Field examination of one region. Students will complete field work in human and physical geography in a selected area. (PR: GS in Geography or CI)

GEO 6116 PERSPECTIVES IN ENVIRONMENTAL THOUGHT (3) Analysis of the evolution of the major schools of environmental thought from antiquity to present-day green analysis, deep ecology, eco-feminism, and post-modern ecology. (PR: GEO 6058 or CI)

GEO 6119 GEOGRAPHICAL TECHNIQUES AND METHODOLOGY (3) Analytic study of a technique or investigation into an aspect of methodology. Repeat. once for credit, but topic may not be repeated. (PR: GS in Geography)

GEO 6166 MULTIVARIATE STATISTICAL ANALYSIS (3) Examination of advanced statistical approaches used by geographers. Descriptive, spatial and inferential statistics and multivariate analysis are highlighted. (PR: GS in Geography or CI, GEO 3164C)

GEO 6209C PHYSICAL GEOGRAPHY SEMINAR (3) Analytic study of one or more topics from physical geography. Selected problems may include hydrology, physiography, meteorology, climatology, soils, or vegetation, etc. May be repeated once. (PR: GS in Geography or CI)

GEO 6215 GEOMORPHOLOGY SEMINAR (3) Advanced examination of geomorphic processes and landforms with an emphasis placed on the formation and evolution of landscapes on a variety of scales. (PR: GEO 4372 or CI)

GEO 6217 KARST GEOMORPHOLOGY (3) An in-depth examination of the geomorphic aspects of karst landforms. The objectives, methods and results of karst geomorphic studies in which both field and laboratory analysis have been applied to geomorphic problems are reviewed. (PR: GS in Geography or CI)

GEO 6255 WEATHER, CLIMATE AND SOCIETY (3) This course explores the societal impact of weather, as well as the human impact on weather and climate. Students lead and participate in discussions on topics such as weather hazards, extreme temperature and human physiology, historical civilization and extreme climate, economic value of forecasts, weather modification, urbanization, and other land use change, anthropogenic aerosols, past and future climates. (PR: undergraduate general meteorology or CI)

GEO 6263 SOILS SEMINAR (3) Examination of how earth systems influence soil formation and variation. Detailed analysis of soils climosequences, biosequences, toposequences, lithosequences, chronosequences, and anthrosequences. (PR: GEO 4372 or CI)

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)

GEO 6288 HYDROLOGICAL SYSTEMS (3) A systematic approach to hydrology using the drainage basin as the fundamental unit of analysis is used to explore form and process, while modeling streamflows. (PR: GEO 4372 or CI)

GEO 6345 TECHNOLOGICAL HAZARDS AND ENVIRONMENTAL JUSTICE (3) examination of theories, debates, methods, and models that improve our understanding of human vulnerability to technological hazards and risks, with emphasis on issues of fairness and equity in the distribution and impacts of hazards, (PR: GS in Geography or CI)

GEO 6347 NATURAL HAZARDS (3) Analysis of natural hazards integrating principles of physical, social, economic, political, and technical forces that affect extreme geophysical events. (PR: GEO 4372 or CI)

GEO 6428 SEMINAR IN ADVANCED HUMAN GEOGRAPHY (3) Analytic study of a problem selected from aspects of the human landscape (urban, political, economic, population, settlement). (PR: GS in Geography or CI)

GEO 6475 POLITICAL GEOGRAPHY SEMINAR (3) Advanced investigation of geopolitical issues including: the human construction of territoriality, ethnic relations, the making of nations and states, the geopolitics of localities, and environmental policy making. (PR: GEO 4470 or CI)

GEO 6545 ECONOMIC GEOGRAPHY SEMINAR (3) An intensive examination of selected issues in economic geography including: regional development and decline; spatial labor market trends; business locational analysis; and comparative economic policy. (PR: GEO 4502 or CI)

GEO 6605 CONTEMPORARY URBAN ISSUES (3) Advanced survey of urban issues such as: industrial restructuring and urban development, inner-city ethnic relations, the geopolitics or urban governance, and urban culture. (PR: GEO 3602; GEO 4604 or CI)

GEO 6627 SITE FEASIBILITY ANALYSIS (3) A project-oriented geographic examination of urban real estate development and site feasibility practices. Hands-on course including concepts of real estate development patterns, urban growth, and site-specific factors related to feasibility of specific developments. (PR: GS in Geography, or CI)

GEO 6704 TRANSPORTATION GEOGRAPHY (3) Review of transportation issues and analysis, focusing on modeling and planning for flows of goods and people. Provides a hands-on approach to the use of GIS for such analysis. (PR: GEO 4114C; GEO 4700 or CI)

GEO 6908 INDEPENDENT STUDY (1-19 Var.) Independent study in which students must have a contract with an instructor. S/U.

GEO 6918 DIRECTED RESEARCH (1-19 Var.) Repeat. S/U. (PR: GR, ML, CC)

GEO 6944 INTERNSHIP IN GEOGRAPHY (3) The internship in Geography is designed to provide students the opportunity to work in an appropriate governmental agency to gain practical field experience. S/U. (PR: GS in Geography, CC)

GEO 6947 DIRECTED TEACHING (1-6 Var.) (PR: GS or CI)

GEO 6970 RESEARCH METHODS IN GEOGRAPHY (3) This course stresses conducting geographic research within the scientific method. Include aspects of both quantitative and qualitative research. Specific topics include sample design, data collection, defending and discussing results and conclusions, developing oral presentations, construction of written proposals and production of a thesis. (PR: GS and CI)

GEO 6971 THESIS: MASTER'S (1-19 Var.) Repeat. S/U. (PR: CC)

GEO 7021 DOCTORAL DISSERTATION PREPARATION (3) This course is designed to assist students in discovering, framing, and developing dissertation topics; to think creatively about the theoretical issues raised by their topics; to begin research on these issues; to draft a dissertation proposal; and to draft a dissertation outline. (PR: GS and CI)

GEO 7606 SEMINAR IN URBAN ENVIRONMENTS (3) This seminar will explore topics in the study of urban environments through readings, discussion, and research. Students will be exposed to a wide variety of perspectives and scientific methodologies related to various aspects of the urban environment. (PR: GS and CI)

GEO 7980 DOCTORAL DISSERTATION RESEARCH (2-15 var.) The dissertation will be a cohesive, original, and independent contribution to scholarship. The research is to be performed under the guidance of the major professor and the supervisory committee, which determine how many total dissertation hours each student completes (maximum 42 hours). (PR: Accepted into program, GEO 7920 and permission of the student's advisor)

GIS 5049 GIS FOR NON MAJORS (3) An introduction to the concepts underlying digital information systems for non-geography majors and non-geography graduate students.

GIS 5075 GLOBAL POSITIONING SYSTEMS (3) Examination of the theory, operation and application of Global Positioning Systems (GPS). (PR: GIS for Non-Majors or permission of instructor).

GIS 6038C REMOTE SENSING (3) Study of digital image processing techniques. Topics include filtering techniques, geometric and radiometric normalization, and classification algorithms with emphasis on developing. (PR: GS in Geography or CI, GEO 4124C)

GIS 6039 REMOTE SENSING SEMINAR (3) Analytic study of selected topics in remote sensing. Discussions around topics include data acquisition, sensor systems, multispectral and radar image analysis, change detection, and integration of remote sensing with GIS. (PR: GIS 6038C)

GIS 6100 GEOGRAPHIC INFORMATION SYSTEMS (3) Spatial problem solving utilizing GIS mapping and statistical methods. The course is designed to give students hands-on experience in using computerized techniques for geographic analysis. (PR: GS in Geography or CI)

GIS 6103 PROGRAMMING FOR GIS (3) Examination of the concepts and techniques for the customization of Geographic Information Systems (GIS) using object-oriented programming. (PR: GEO 6157 OR CI)

GIS 6112 SPATIAL DATABASE DEVELOPMENT (3) Development and management of spatial data for use in a Geographic Information System (GIS), including creating, editing, modifying and validating spatial data. (PR: GIS 6100 or CI).

GIS 6146 GIS SEMINAR (3) Analytic study of selected topics in GIS. The course will familiarize students with case studies involving GIS applications in environmental studies, coastal modeling, and urban planning. (PR: GIS 6100 or CI)

GIS 6306 ENVIRONMENTAL APPLICATION OF GIS (3) Examination of GIS applications in agriculture, forestry, wildlife management, biodiversity conservation, environmental assessment, water resources, and pollution modeling. Use of advanced GIS analysis techniques relevant to the specific applications. (PR: GIS 6100)

GIS 6355 WATER RESOURCES APPLICATION OF GIS (3) Examination of GIS applications in water resources, including watershed analysis, pollution modeling, and water resources modeling. Use of advanced GIS analysis techniques relevant to the specific applications. (PR: GIS 6100 or CI)

MET 6149 – SAME AS GEO 6255.

PAD 6336 COMMUNITY DEVELOPMENT PROBLEMS AND STRATEGIES (3) Discusses community development principles and practices in historical and contemporary

perspectives. Federal, state and local initiatives. Physical, social, and economic approaches to community development. (Cross-listed with GPY)

FACULTY AND STAFF

Graduate Faculty Advisors:

Fenda Akiwumi	<i>Assistant Professor</i> , Ph.D. Texas State University (2006) Water Resources, Cultural Geography, Hydrology
Kamal Alsharif	<i>Assistant Professor</i> , Ph.D. University of Minnesota (2004) Water Resources, Conservation, Management
Kevin Archer	<i>Associate Professor</i> , Ph.D. John Hopkins University (1990) Urban Geography, Political Geography, Social Theory, Globalization
Pratyusha Basu	<i>Assistant Professor</i> , Ph.D. University of Iowa (2003) Rural Economies, Environmental Movements, Gender Issues.
Martin Bosman	<i>Associate Professor</i> , Ph.D. University of Kentucky (1999) History and Philosophy of Geographic Thought, Global City Formation, Economic Restructuring and Urban and Regional Revitalization, Globalization and Regionalization, Geographical Dimensions of the Digital Divide, Citizenship and the Production of Global Space
Robert Brinkmann	<i>Professor</i> , Ph.D. University of Wisconsin-Milwaukee (1989) Human Alteration of Soils, Sediments, and Water; Karst Geomorphology and Land Use
Jayajit Chakraborty	<i>Associate Professor</i> , Ph.D. University of Iowa (1999) Technological Hazards, Pollution, Environmental Justice, Environmental Health, Transportation Geography, Racial/Ethnic Disparities, Quantitative Methods
Jennifer Collins	<i>Assistant Professor</i> , Ph.D. University College London (England) (2001) Tropical climatology, Hurricane Activity, Environmental Factors Influencing the Inter-Annual Variation of Hurricane Numbers
Joni Downs	<i>Assistant Professor</i> , Ph.D. Florida State University (2008), Geographic Information Science, Landscape Ecology
Ruiliang Pu	<i>Assistant Professor</i> , Ph.D. University of California-Berkley (2000) Remote Sensing
Steven Reader	<i>Associate Professor</i> , Ph.D. University of Bristol (England) (1989) Geographical Information Systems, Computer Cartography, Spatial Analysis, Medical Geography
Philip Reeder	<i>Associate Professor</i> , Ph.D. University of Wisconsin-Milwaukee (1992)

Environmental Science and Policy Program Director, Water Resources, Geoarchaeology, Karst Studies, Soils Geography, Geomorphology, Middle East (Israel), Latin America (Belize), Southeast Asia (Philippines)

Elizabeth Strom *Associate Professor*, Ph.D. City University of New York (1996)
Urban Development; Urban Governance; Arts and Cultural Policies

Graham Tobin *Professor*, Ph.D. University of Strathclyde (Scotland) (1978)
Natural Hazards, Water Resources, Environmental Contamination

Philip van Beynen *Associate Professor*, Ph.D. McMaster University (1998), climate change, paleoenvironmental reconstruction, karst environments, human-environment interactions.

Additional Faculty:

Mark Hafen *Instructor*, Ph.D. University of South Florida (2001)
Water Quality & Conservation, Wetlands Hydrology & Ecology, Coastal Sedimentary Processes, Cultural Ecology, Environmental Ethics, Education

Jianguo Ma *Instructor*, Ph.D. Cornell University (2005)
Geographic Information Systems

Connie Mizak *Instructor*, Ph.D. University of South Florida (2004)
Air Quality, Environmental Health

Directors:

Robin Jones *Director*, M.A. University of Pittsburg (1974)
University of South Florida - Community Initiative

Laurie Walker *Director*, M.S. University of South Florida (1998)
USF Botanical Gardens

Department Staff:

Fredericka Williams *Office Manager*

Shay Ferrell *Office Assistant*

Luisa Ojeda *Program Assistant*

Karen Schrader

Program Assistant