Frequently Asked Questions

Prospective Graduate Students

(1) How will the MS Environmental Science or the MA Environmental Studies prepare me as an environmental science professional?

Our graduate programs are designed to train the next generation of environmental scientists, managers, policy makers, and educators. Our faculty members have diverse and complementary expertise and have focused their scholarship on matters of regional significance. We are working on most of the critical environmental issues affecting Southwest Florida, problems concerning water management, Greater Everglades’ restoration, coastal zone management, the effects of climate change and sea-level rise, harmful algal blooms, and the implications of the Deepwater Horizon oil spill to name a few, and we are approaching these from a multidisciplinary perspective. As a consequence, our graduate students are acquiring necessary skills and experiences needed to address these societal problems. And because much of our work is done cooperatively with local, state, and national environmental agencies and organizations, students network with potential employers. Despite our regional focus, the faculty and students are engaged in research and professional service beyond our immediate vicinity, making our students desirable for employment and further graduate education across the country. We have a very strong track record of getting our master’s recipients professional positions in Florida and elsewhere; and our graduates are being admitted into very competitive Ph.D. programs at other universities.

(2) How does the admission process work?

Our admission process has 3 steps. Applications are first reviewed by our Office of Graduate Studies. On receipt of your application materials there, that office determines the completeness of the application and, once complete, whether you meet the minimum criteria for admission to the university. (The university has an institution-wide prescribed minimum standard and then individual graduate programs may choose to be more stringent on their admission standards.) If your application is incomplete, Graduate Studies communicates this (though we recommend you verify completeness yourself by contacting that office). Once the
application is complete and assuming you meet the university-wide admission standards, your application is forwarded to the department for our consideration. Our graduate programs then approach admission decisions in two steps. First, a committee of graduate faculty members supporting the program reviews the qualifications of each applicant to determine who meets the program’s criteria for admission (these criteria are available at: www.fgcu.edu/CAS/EnvSci-MS/admissions.asp or www.fgcu.edu/CAS/EnvStudiesMA/admreq.asp. This committee also identifies potential mentors based on the content of your Research Interest Statement. The applications of those students who meet the minimum qualifications for admission are then distributed to these potential mentors. (We handle the applications of those candidates that just miss the admission standards similarly. We do have the ability to admit a small number of less-than-qualified students under special circumstances.) Faculty members are asked to provide their advocacy for certain candidates – we ask for a firm commitment from faculty members to serve as that student’s mentor. If that commitment is there and the admission criteria are met, that student is “admitted” to the program. Because a qualified student without a faculty intellectual-sponsor would struggle in the program, we believe a dis-service would occur if that student were admitted. Unfortunately there is a finite limit to how many graduate students a faculty member can sponsor. They may have too many students or have too many other commitments; they may lack funding to support a student, though this is not a critical concern for many faculty members; or a faculty member may worry about redirecting their scholarly efforts into an area where they feel uncomfortable mentoring a student.

Once the pool of admitted candidates with faculty mentors is generated, those applications are reconsidered by the Graduate Admissions Committee for financial support. We have a number of possible resources to help students. We receive some funds from the University to support tuition waivers and graduate assistantships. Additionally, faculty members may have their own support through extramural grants and can support graduate students through these funds. A faculty member with his/her own grant monies is free to provide tuition waiver and graduate assistantship support to anyone they wish as long as that student is admissible by the program (i.e., they meet the program admission criteria and have a committed faculty mentor). The remaining admissible students then compete for the waiver and assistantship dollars we receive from the university. Awards are made to those students that are most qualified, where qualification is assessed holistically from the student’s complete application package (i.e., from their undergraduate GPA, GRE scores, content of their letters of reference, and their research statement).

(3) What purpose does the Research Interest Statement serve?

The Research Interest Statement is perhaps the most important piece of your application portfolio. It provides our faculty with a sense of your interests and skills and ultimately determines which graduate faculty members make a commitment to serve as your interim research mentors. Our admission process is designed to
ensure that every entering student has at least one person that has both the interest and the background to ensure your success as a graduate student.

(4) **Whom should I choose as a reference to support my application?**

Our graduate faculty and the members of our Graduate Admissions Committee are trying to assess the likelihood of your success as a new scientist. Do you have the predisposition to think and work scientifically? Do you have the drive and dedication to work a project to completion? Do you interact well with others while having the abilities to work independently? Are you an effective communicator? And are you comfortable writing? The person or persons best able to address these questions are the most helpful. This person could be a former professor, preferably a professor that knows you beyond your performance on exams in a course. The person might be a former or current employer that can speak to your work skills and responsibilities. Because “it takes one to know one” having at least one former professor is ideal. Who better to judge your capacity as a graduate student than someone that was formerly a graduate student or someone who interacts with graduate students? Remember you need at least two letters, but there is nothing to prevent you from having more.

(5) **How long does the application review process last?**

Applications for the MS Environmental Science program are due by February 15, for the MA Environmental Studies by March 15 (note these deadlines do change from year to year; visit [http://www.fgcu.edu/Graduate/admissions.html](http://www.fgcu.edu/Graduate/admissions.html) for current deadlines). We as a department work to ensure that you know the status of your application by early April. Most competing graduate programs ask that you make your decision by April 15th and should not, assuming you’re not applying somewhere for early admission, force you to decide before that date. This provides students with multiple offers of admission from various universities to make a decision with all data in hand. By providing you with our decision concerning admission and funding by early April, you should have at least two weeks to carefully consider our offer.

**Entering the Program: The Beginning**

(6) **When I was admitted my admission letter listed one or more faculty members as interim mentors. What is an interim mentor?**

Because our MS and MA programs are thesis-based, it’s essential that an appropriate person or persons be available to serve as a student’s research mentor. The research statement you provided with your application described your research interests so that the most appropriate faculty mentors could be identified. Having an interim mentor ensures there is at least one faculty member that is willing and able to support your research intellectually. Once here as a member of the graduate
program, you are free to recruit any graduate faculty member to serve as your mentor, assuming that person is interested.

(7) What type of help should a student expect from their mentors?

Mentors come in all shapes and sizes and should serve a number of roles in your professional development. Perhaps most important is having one or more mentors that intellectually and, in many instances, financially support your research. As a soon-to-be-functioning independent environmental scientist, manager, policy developer, or educator, your mentors should provide the professional training you need to be independent. Those mentors should also assist you in the conceptual development of your thesis topic and your research design. If your thesis topic is closely aligned with a mentor, that person might have grant monies to help support your research-related expenses. That person, assuming current funding does not exist, should be willing to help co-develop research proposals to acquire the necessary funding. Your research mentors might complement each other and serve different functions. One faculty member might have the conceptual background, another the analytical and statistical skills, while a third might represent a local environmental agency that will ultimately benefit from your work.

Mentors should also serve as the gatekeepers to your profession. They should introduce you to potential employers, take you to scientific conferences, and provide you with the exposure needed for later gainful employment or for a subsequent doctoral-level degree.

Faculty members may also serve as academic advisors, people to help you select the most appropriate collection of courses to both prepare you for the research and for your future career.

Rarely does one person possess all the professional and personal skills to support these many needs. It’s in part for these reasons that your graduate thesis committee must be composed of at least 3 graduate faculty members. And it’s also for these reasons that engaging many mentors as possible does you the most good. A faculty member with a low “empathy quotient” might not be real helpful when it comes to dealing interpersonal problems, but she or he might be the world’s foremost authority on mathematically modeling trophic transfer in complex ecosystems. The keeper of the research purse-strings might have poor diplomacy skills.

(8) How are decisions concerning graduate student financial support made?

See question concerning the admission process above.

(9) What is the difference between a Graduate Assistantship, a Teaching Assistantship, and a Research Assistantship?

Graduate students can be financially supported with stipends a number of ways. Occasionally faculty members have grant monies to support a Research Assistant (RA). These dollars are awarded directly by the grant-holder, and because
these assistantships come with contractual obligations defined by the funded proposal, students receiving an RAship typically work toward accomplishing the objectives prescribed by the proposal. With forethought, however, graduate students often relate their thesis research to the funded research. Such a situation provides a student with a modest salary and results contributing to their thesis.

Teaching Assistantships (TAs) are sometimes awarded to second year (or beyond) graduate students to teach an undergraduate course. To qualify, a graduate student must have completed a minimum of 18 graduate credit hours in their discipline. Our TAs occasionally teach general education science courses or laboratory companion sections for courses in Biology.

Finally, graduate students can be hired as Graduate Assistants (GAs). GAs are funded to assist faculty teach courses (teaching Graduate Assistantships). These are $3,000 for a 20-hour per week commitment or less during a 15-week semester. Teaching GAs assist the faculty member in charge and help facilitate discussions, laboratory exercises, field trips, and grading. Teaching GAs are funded through monies that come from Academic Affairs. We do have “research GAs” that are either funded through faculty grants or from special awards that come from the Office of Research and Sponsored Programs (ORSP). Research GAs are typically $3,000 awards and, like RAships, are awarded by the faculty member holding the award, and hire graduate students to work on an established research project.

Teaching GAships and tuition waivers are competitive and awarded through a prescribed process. (See above.)

**How does one establish Florida State residency and what advantage does being a resident provide?**

If you are an out-of-state resident (someone that does not declare Florida as its State of permanent residency or someone that is financial dependent upon someone else that is not a permanent resident of Florida), it is critical that you take the appropriate steps to establish residency as soon as possible. Establishing residency requires that you reside in Florida for a complete 12 months; demonstrating that you live here requires that a number of documents be presented (e.g., vehicle registration, voter’s registration, driver’s license, lease or mortgage, etc.). These items must be predated one complete year before you can become a resident. This means if you’re a first fall semester graduate student and don’t take these measures before the first day of the fall semester, you won’t be declared a Florida resident for the subsequent fall semester; this means another semester of high out-of-state tuition. Please visit the following web site for details: [http://www.fgcu.edu/Admissions/Prospective/5408.asp](http://www.fgcu.edu/Admissions/Prospective/5408.asp)

**How long does it usually take a student to finish the program?**

The MS Environmental Science and MA Environmental Studies Programs are designed to be completed in 2 years by a fully committed, full-time student. The completion of the 36 credit hours required to graduate, taken 9 credit hours per semester for 4 consecutive semesters (two Fall and two Spring Semesters), will get
you through the program. Unfortunately, completion of the degree typically takes somewhat longer simply because the time needed to complete the research for and the writing of the thesis is difficult to constrain. Some students “hit the ground running” and begin the data gathering in their first spring semester or, more commonly, the first summer after the first two semesters. Delays can be caused by unforeseen factors: snags or problems associated with field or laboratory work, field work requiring longer intervals of time, or changes in research direction or focus. Delays can also be caused by human short-comings: student procrastination, indecision related to which project to pursue, and irresponsible mentors. Perhaps the most frequently encountered stumbling block is trouble with the writing of the thesis. Writing is often a painful process for students and professionals alike, and this can cause significant delays. The program has defined a set of “milestones to graduation” – a series of deadlines and products that, if followed well, will get you to completion in a timely fashion. We do have students finishing at the end of their second summer (two full years); many others finish the following fall, one semester beyond the 2-year term; and we do have students that hang on for years. In these latter situations, students are either very part-time or they leave full-time status behind for a job and have trouble managing the demands of employment and their thesis.

The best advice I can provide is to seek out good mentors and work with your graduate faculty to keep you on track. It’s easy for a faculty member to lose track of a student and their progress if that student isn’t regularly checking in, meeting with, or working with their mentors.

Tracking Through the Program: The Middle

(12) How should I select my courses?

Each graduate student is required to take a few core courses. (See www.fgcu.edu/CAS/EnvSci-MS/degreq.asp for the MS or www.fgcu.edu/CAS/EnvStudiesMA/degreq.asp for the MA.) Beyond this, however, elective courses are meant to supplement the core courses and provide the student with the necessary depth and breadth so that their thesis-related research is best supported. In short, the elective courses should best serve the student’s research needs. Students should consult with their main faculty advisor / mentor or, if possible, their complete graduate committee, to best select electives.

(13) What is a research thesis and how does a student develop one?

The research thesis is the culminating product of your master’s level experience. For our MS and MA programs the thesis is a written representation of at least one complete scientific investigation: essentially a lengthy paper that successfully tests one or more hypotheses following the scientific method and formatted similarly to a scientific journal article. Depending upon the effort required and the consensus decision of you and your graduate thesis committee, the
thesis might consist of one lengthy paper or multiple smaller papers. There is no prescribed length, rather you and your committee will decide what is an adequate effort. Most committees require their students to structure the thesis as a scientific article. This makes it easy to transform your work into a submittable manuscript to a professional journal. The department has a collection of previous successfully defended theses that you’re welcome to review. Copies of theses are also catalogued within FGCU’s library. A thesis must be formatted a particular way. Details concerning the thesis’s structure and binding can be found at: www.fgcu.edu/Graduate/thesisguidelines.html.

The more perplexing question concerns how a student should go about identifying a thesis topic and then initiating the research. It is here where good faculty mentorship is critical. The key to getting started is effective communication with your interim mentors or other faculty whose research interests you. My own practices as a graduate student mentor seem to work reasonably well. Early in a new student’s first semester, I arrange a series of meetings whose sole purpose is to develop a thesis topic. Sometimes students have an explicit interest, others just some general and somewhat vague interests. With explicit interests, the student drives the process until we reach a topic that excites and engages both of us. (A project of great interest to one party is predisposed to failure: the student lacks incentive or the faculty member isn’t motivated to help.) If a student’s interests aren’t well defined, then I try to be more influential and will suggest a few general topics that might be of mutual interest. We then move down a similar path followed by the student with a clear research interest coming in. A critical consideration is the financial cost associated with doing the research. If a student interest is far afield from the faculty member’s, then it is unlikely that the faculty member will have grant dollars in hand to help support the work. Applying for grant money to embark on a new project, at least a project that requires large sums of money, is time consuming; the proposal writing, submitting, reviewing, revising, and resubmitting processes can take months, sometimes years, time that a graduate student can’t afford to waste. In an ideal situation, the student is working on a project that is at least ancillary to a faculty member’s already funded research.

To remain on track to graduate in two years, a student should probably have the topic, research question, and testable hypothesis defined by end of the first semester. The second semester is the time a student should be developing their research proposal (see details below). This is often done in conjunction with the student’s enrollment in a core-required course, Environmental Research Methodology (EVR6022) that is offered in the spring semester. Here to the student must work closely with his/her mentors to develop a research design. If all goes well, the student enters there first summer ready to collect data.

(14) What types of theses have former students undertaken?

Our graduate students have worked on a variety of thesis topics. Most of the theses produced to date have concerned scientific research, and the vast majority has had a Southwest Florida focus – science applied to problems of regional importance. These projects have spanned the physical and biological sciences
(geology, hydrology, ecology, physiology, toxicology, geochemistry, etc.) and have concerned environmental problems from forested uplands, through freshwater and tidally influenced wetlands, in estuaries, and out onto the continental shelf. We have had students conduct environmental education-related research – looking at the effectiveness of or need for environmental educational experiences. With the newly launched MA program, students are now working on theses that involve problems of management, restoration design, and policy effectiveness.

Many of our graduate students have completed theses on projects affiliated with the Coastal Watershed Institute (CWI), a university- and region-wide organization housed within the Department of Marine & Ecological Sciences concerned with conservation of coastal watersheds (for a thorough description see: www.fgcu.edu/CWI/index.html). A list of former graduate student theses is available here at www.fgcu.edu/CWI/graduatestudents.html; additionally a list of student thesis-related publications can be found at www.fgcu.edu/CWI/students2.htm. Also see CWI’s Facebook page at www.facebook.com/coastalwatershedinstitute.

You might also visit www.fgcu.edu/Graduate/testimonials.html to read a couple of testimonials prepared by two former MS Environmental Science students.

Finally bound theses from former students are available at the Department office and at the FGCU Library.

(15) **How do I know I’m tracking through to graduation appropriately?**

Within our graduate student and faculty manual we have crafted a milestone schedule – a list of the critical steps needed for graduation and an ideal time line. In addition, our MA and MS programs are now using a “milestone to graduation” checklist that should be shared by you and your main research mentor. Your mentor should be dating and signing this form as you progress, and he/she should be giving you an updated copy as you track through the program.

Because faculty members are fallible, particularly when it comes to accounting, we recommend that you schedule an appointment with a CAS Advisor (office complex located off the lobby of AB7, room 109) once per year, perhaps once per semester, to ensure you are making adequate progress toward the completion of your degree.

The programs’ graduate faculty approved a new rule that takes effect in Fall, 2011 requiring students to register for at least one credit hour each fall and spring semester through to a student’s graduation. This ensures that if you’re in a situation where you’ve completed all the required courses with just the completion of the thesis remaining, registration for one credit of master’s thesis research (EVS6970) ensures you remain active and retain student privileges (e.g., use of the library).

Early in the semester you hope to defend your thesis and graduate, you need to “apply to graduate”. This can be done by contacting the CAS Advising Office (AB7, 109).

(16) **What is the graduate student’s Advisory or Thesis Committee?**
The committee goes by multiple names: Advisory Committee, Thesis Committee, Graduate Committee, Committee of Mentors, etc. There is only one committee that is required for graduation and completion of thesis: it is a committee of 3 or more faculty or environmental professionals that supervise your research, mentor you through the completion of the thesis, and ultimately sign your thesis for graduation. There are rules governing the composition of the Thesis Committee. All persons must be members of the graduate faculty. (Faculty members must show recent scholarly achievement in their discipline to be certified as graduate faculty members. Our faculty members know if they are members of the graduate faculty, and this should be something you ask when approaching a faculty member to serve on this committee.) Two must be graduate faculty within the Department of Marine & Ecological Sciences. The other graduate faculty might be from other departments, other universities, or environmental professional agencies. These non-departmental members are justifiable if your work requires some expertise not contained among the faculty or the collaboration of an organization to successfully complete the work. You and your major professor / principal mentor should work together to select appropriate committee members.

(17) **What is a research proposal and what purpose does it serve?**

Each student is required to produce a research proposal that is reviewed and approved by the student’s Thesis Committee. Our Environmental Research Methodology course (EVR6022), required of all students, helps students develop their proposal in the context of the course. The proposal typically follows the format adopted by the National Science Foundation (NSF). Copies of former graduate student proposals are available from the faculty and are reviewed in EVR6022.

(18) **How does a graduate student obtain monies to support the cost of their research?**

Graduate students most commonly obtain monies to support the expenses associated with their research through their faculty mentors. Faculty members often have existing grants that can support student work; alternatively faculty members, in cooperation with the student, often pursue funding opportunities. Beyond this, there are funding programs specifically for students that release RFPs (requests for proposals). Some of these programs are associated with professional societies; others are from local agencies and non-governmental, not-for-profit organizations; and still others are large nation-wide competitions. Your mentors are best informed to link you with funding opportunities. Additionally the department maintains a “student opportunities” blog on the department home page (at [www.fgcu.edu/CAS/Departments/MES/index.html](http://www.fgcu.edu/CAS/Departments/MES/index.html)).

Funding also exists to support student travel through the Office of Research and Sponsored Programs ([www.fgcu.edu/ORSP/InternalPrograms.html](http://www.fgcu.edu/ORSP/InternalPrograms.html)) and student travel and research is supported through the Whitaker Center ([www.fgcu.edu/WhitakerCenter/index.html](http://www.fgcu.edu/WhitakerCenter/index.html)).
Completing the Program: The End

(19) **What is the thesis defense?**

The thesis defense is a rite of passage. It should be scheduled at a time when your thesis is written and close to its final state, at a time when all your Thesis Committee members have provided feedback that you've already satisfactorily addressed. It’s an opportunity for you to present your research to a public audience (typically department faculty, students, and guests), to show off your accomplishments, and fulfill one of the obligations of scholarship – communicating your research. The presentation typically lasts 45 minutes or so and includes time for those in attendance to ask questions. After this public portion, you and your Thesis Committee meet to discuss the content of the thesis – it’s a formal occasion to get your entire committee together to determine what work still remains before the thesis can be signed. This second part can be intimidating. However, if you’ve been involving all your committee members in your work and your writing along the way, and if you’ve already addressed their concerns, nothing surprising should happen during the committee portion of your defense. In most situations, students just require a few more days of editing or additional writing after the defense.

We recommend you attend all the thesis defenses of the students that come before you. That will give you an appreciation of the process and the quality of the work our students are producing.

The thesis defense must occur during the semester (fall, spring, or summer) no later than one week prior to the last day of classes (and not during final’s week or during breaks) and must be publically announced, through email and flyers, at least two weeks in advance. Scheduling the event must be done cooperatively with your Thesis Committee; each member must be available and each member must agree the scheduling is timely given your progress.

(20) **What are the graduation requirements?**

The requirements for graduation are detailed for the MS program at [www.fgcu.edu/CAS/EnvSci-MS/degreq.asp](http://www.fgcu.edu/CAS/EnvSci-MS/degreq.asp) and for the MA program at [www.fgcu.edu/CAS/EnvStudiesMA/degreq.asp](http://www.fgcu.edu/CAS/EnvStudiesMA/degreq.asp).

Beyond completing the necessary courses, a student must successfully write, defend, and submit their thesis (see above) and apply to graduate through CAS Advising early in the semester they intend to finish (see above).