# The School of the Environment
# at Florida A&M University

# 2014-2015
# Student Handbook


ENERGYWATERFOODNEXUS

INTERNATIONAL SUMMIT ON SUSTAINABLE INDUSTRY SOLUTIONS FOR GLOBAL COMMUNITIES

## Disclaimer

This Student Handbook is a quick reference to the policies of Florida Agricultural and Mechanical University (FAMU) and the School of the Environment (SoE) as related to student matriculation. It is to be used as a supplement to the Florida A&M University Catalog, the official document that contains general University policies.

## Foreword

It is envisioned that the School of the Environment shall become one of the nation's most preferred place of study and research for the finest faculty and students and a favored place of investment and support for funding agencies, corporations, and individuals who seek to expand the horizon of environmental science education research, and public service. Faculty, staff and graduates of the Institute shall be noted for their "caring" approach to addressing community related issues on local and state levels, and for their "excellence" in contributing to the universal body of knowledge pertaining to environmental science issues.

This handbook has been designed as a tool to aid in the matriculation process by increasing students' awareness of key issues relevant to the School of the Environment. The statements set forth herein are for information purposes only and should not be construed as the basis for a contract between a student and the School of the Environment. The information presented in this document was derived from and should be used in conjunction with the University Student Handbook (The Fang), the latest FAMU Catalog, and existing University policies and procedures.

The policies and procedures specified in the present handbook apply to existing students and to the students entering their degree programs at this time. However, the School of the Environment reserves the right to modify the academic policies and procedures as necessary with appropriate notification to the students. It is hoped that the users of this document will be further empowered by the expansion of their knowledge of the educational opportunities offered by the School. It is eminently important that each student understands that it is his/her responsibility to keep abreast of current graduation requirements by regular consultation with his/her advisor.

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### Mission

The School of the Environment at Florida A&M University was established in February of 1995, and given degree-granting status by the Florida Board of Regents in February of 1996. The School's alignment within the Division of Academic Affairs as an autonomous unit allows the School to facilitate environmental science related instruction and collaborative research with faculty from the University's other Schools, Colleges, and Institutes. This organizational structure also enables the School to be the focal point for external organizations seeking assistance and advice on environmental science issues as well as those with intentions to support environmental science related teaching and research. The objectives of the School are to provide instruction, conduct research, perform public service, and initiate technology transfer which will result in the development of remedies for existing environmental problems; the enlightenment of communities on environmental science issues; and the production of students uniquely prepared to address present and future environmental science concerns.

The School of the Environment Strategic Plan for 2010 through 2020 may be obtained from the Dean of the School of the Environment.

## Organizational Structure

The School of the Environment is an instructional and research unit within the Division of Academic Affairs. The School of the Environment functions under a Dean who coordinates and manages the activities of faculty and staff. The faculty is engaged in instruction, research, outreach, and environmental technology transfer. The School houses the Florida A&M Center for Environmental Equity and Justice and the Florida A&M Center of Technology Transfer. In addition, SoE has a cooperative agreement with the National Oceanic and Atmospheric Administration (NOAA) for the Environmental Cooperative Science Center (ECSC), which provides training of environmental scientists and job placement in NOAA and other federal agencies. As discussed in detail below, the School offers the B.S., M.S. and Ph.D. degree programs. The School also has a collaborative agreement with the U.S. Coast Guard to admit students into the environmental sciences B.S. degree program for one year under the Coast Guard Recruitment Initiative Training program.

### SoE Academic Committee

The SoE Academic Committee consists of SoE faculty members appointed by the Dean. The responsibilities of the Academic Committee include: 1) Developing policies for admissions; 2) Development and monitoring of curricula; 3) Monitoring of individual student progress, including examinations and milestones for progress towards degrees; and 4) Other issues relating to the successful development and implementation of the SoE undergraduate and graduate education programs.

## Major Advisor

At the beginning of the student's first semester of study in SoE, a faculty Major Advisor is assigned. Normally, for undergraduate students, this faculty member remains the Major Advisor throughout the academic program, although the student may have a different Major Advisor assigned by the Dean as appropriate. For graduate students, by the end of the first semester of study, final selection of the Major Advisor and Supervisory Committee chairperson is made by mutual agreement of the student and the Major Advisor, as approved by the Dean. Procedures exist for changing Major Advisors as needed, as discussed in the Academic Concerns section below.

The Major Advisor is the student's first point of contact for all academic matters. All undergraduate students should meet with their Major Advisor at least twice a semester. It is essential that graduate students maintain continuous contact with their Major Advisor. The Major Advisor serves as the chair of the Master's Thesis Supervisory Committee, or Doctoral Dissertation Supervisory Committee. All course selections by the student must be made in consultation with and approval of the Major Advisor. The Major Advisor also provides guidance to the student on such matters as career development, professional growth, research program, internships, and other opportunities.

## Faculty and Expertise

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**Richard D. Gragg, Ph.D.**, Associate Professor
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**Charles H. Jagoe,** Distinguished Professor
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**Marcia Allen Owens, J. D., PH. D.,** Assistant Professor
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**Larry Robinson, Ph.D.**, Professor
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**Henry N. Williams, Ph.D.**, Professor
Environmental Microbiology
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## Post-Doctoral Research Associates

**Daniel M. Osborne**, Research Associate
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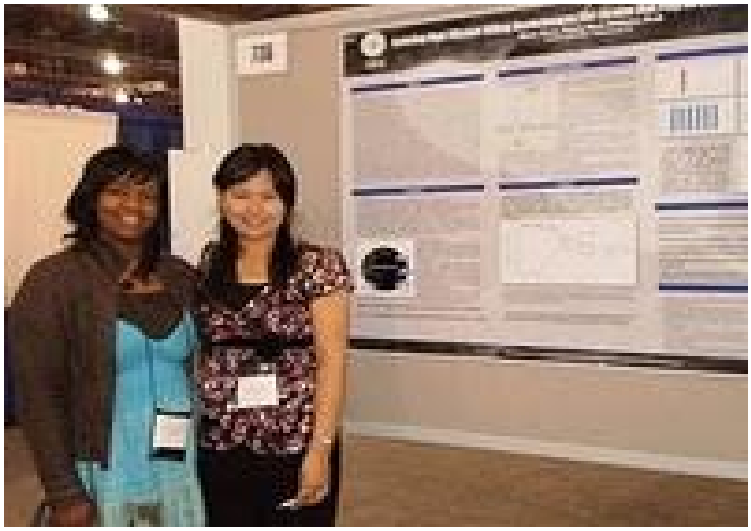

**Key Contact Information**
**School of the Environment and University Campus**

**School of the Environment**
1515 South Martin Luther King, Jr. Blvd - Room 305-D SRC
*Telephone:* (850) 599-3550; *Fax:* (850) 599-8183

**Dr. Victor M. Ibeanusi, Dean**; 305-D SRC
*Telephone*: (850) 599-3550; Fax: (850) 599-8183; *e-mail*: victor.ibeanusi@famu.edu

**Director CEEJ**; 305 SRC
*Telephone*: (850) 599-8549; Fax: (850) 412-7785; *e-mail*: richard.gragg@famu.edu

**Mr. Charles Foster**, **NOAA ECSC Coordinator, Mission Aransas National Estuarine Research Reserve**, *Telephone*: (361) 749-3099*; e-mail*: Charles.foster1@famu.edu

**Ms. Bonnie Morris Griffin, Coordinator of the ECSC,** 306-C SRC
*Telephone*: (850) 561-2128 Fax: (850) 561-2248; *e-mail*: linda.williams@famu.edu

**Mrs. Cynthia Henry, Coordinator of Budgeting**; 305-C SRC
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**Ms. Megan Lamb, NOAA ECSC Coordinator, Apalachicola National Estuarine Research Reserve**, *Telephone*: 850-670-7709; *e-mail*: megan.lamb@dep.state.fl.us

**Ms. Christina Mohrman, NOAA ECSC Coordinator, Grand Bay National Estuarine Research Reserve**; *Telephone*: 228-475-7047; *e-mail*: christina.mohrman@dmr.ms.gov

**Ms. Ora Mukes, Coordinator of Admissions and Employment**; 306-A SRC
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**Mr. Willie Stubbs, Coordinator of Environmental Health and Safety**; 314 SRC
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**Ms. Hazel Taylor, Coordinator of Research Program Services,** 305 SRC
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**Dr. Richard Walker, ECSC Coordinator of Student Affairs**; 307 SRC
*Telephone*: (850) 599-3550 Fax (850) 561-2248; *e-mail*: richard.walker@famu.edu

**Other Key University Offices:**

| **Office** | Location | **Telephone Number** |
|---|---|---|
| Admissions | G9 Foote-Hilyer | (850) 599-3797 |
| Financial Aid | 101 Foote-Hilyer | (850) 599-3730 |
| General Studies | 204-A GEC | (850) 599-3805 |
| Health Services | 114 Foote-Hilyer | (850) 599-3777 |
| Registrar | 112 Foote-Hilyer | (850) 599-3115 |
| Student Accounts | 202 Foote-Hilyer | (850) 599-3940 |

*NOTE: The Class Schedule and the University Catalog can be found on the Florida A&M University Homepage at* ***www.famu.edu.***

## General Information

### Admission
### Bachelor of Science Degree Program

The School of the Environment adheres to the admission requirements as established by the University and detailed in the FAMU Catalog. These policies are subject to change. Presently, students seeking a B.S. degree should have: (1) graduated from an accredited high school or an approved GED program; (2) earned at least 18 academic units of credit (4 English, 4 Mathematics, 3 Natural Sciences, 3 Social Sciences, 2 Foreign Languages and 2 Electives); (3) made a score of at least 460 on the SAT on both the Critical Reading and Mathematics sections and 440 on the Writing section or 19 on the Act Critical Reading and Mathematics sections and 18 on the Writing section; and (4) have at least a 2.5 high school cumulative grade point average.

Entering transfer students must be in good academic standing with a GPA of 2.0 or better. The FAMU Registrar's Office, and the SoE Academic Coordinator will determine credits that are to be transferred. A student having an A. A. degree normally enters at the junior level (60 semester hours of credit).

### M.S. and Ph.D. Degree Programs

Admission into the M.S. degree program requires that students hold a 3.0 GPA (on a 4.0 scale) on the last 60 credit hours or the last 90 quarter hours of undergraduate education, or have a combined score of 1000 or more on the Graduate Record Examination, or an advanced degree in a related area of study. Admission into the Ph.D. degree program requires that students hold a 3.0 GPA (on a 4.0 scale) on the last 60 credit hours or the last 90 quarter hours of undergraduate education and have a combined score of 1000 or more on the Graduate Record Examination, or an advanced degree in a related area of study. Admission into the Environmental Sciences M.S. and Ph.D. Degree Programs may be subject to space and fiscal limitations. Selection criteria include such factors as grades, test scores, educational objectives, area of study, work experience, recommendations, and personal records. The SoE Academic Committee, the SoE Dean, and the Graduate Studies Dean shall approve all admissions.

The SoE has additional requirements for admission beyond those specified by the FAMU Graduate School:
1) Graduate Record Examination. Applicants must submit a certified transcript of the GRE scores or advise when the examination will be taken.
2) A statement of goals for graduate school. This should include a specific area of concentration the applicant intends to pursue. Financial support may depend on the availability of funds in the field of interest. Applicants are encouraged to correspond with SoE faculty regarding plans for graduate work, and should so indicate that in the application. Relevant portions of the applicant's background focusing on previous experiences and achievements should also be included.

3) If the applicant has completed a master's thesis or other publications, a copy of each should be included in the application sent to SoE or, if the text is available through electronic means, the URL to access to the document.
4) All applicants should submit three (3) letters of recommendation. These will be more helpful if they describe specific qualifications for advanced study in the environmental sciences.

## International Students

International students must satisfy established admissions criteria before acceptance into the University. Additional requirements may be imposed also. If the applicant applies from a country where English is not the standard language, the University requires the applicant to provide evidence of language proficiency. Evidence of language proficiency can be provided by any American Institution of Higher Education or by a TOEFL score of 550 or better. An international student should forward an official copy of the undergraduate transcript and a comparative rating of each course. International students cannot be admitted as special students.

For students who have attended any international universities, a translation and evaluation of work completed at each institution is required. Transcripts should be sent to one of the agencies below for a course-by-course evaluation. Request the agency to send the evaluation directly to FAMU. Please note that if you have earned 60 or more semester or 90 quarter hours at a postsecondary US institution, it will not be necessary for you to submit your secondary school records.

**Educational Evaluations and Translations**

World Education Services, Inc.
PO Box 5087
Bowling Green Station
New York NY 10274
212.966.6311
info@jsilny.com
www.wes.org | info@wes.org

Josef Silny & Associates, Inc.
7101 SW 102nd Avenue
Miami FL 33173-1364
305.273.1616
www.jsilny.com

# Non-Discrimination Policy and Discrimination and Harassment Complaint Procedures

It is the policy of Florida A&M University that each member of the University community be permitted to work or attend class in an environment free from any form of discrimination including race, religion, color, age, handicap, disability, sex, marital status, national origin, veteran status, and sexual harassment, as prohibited by state and federal statues.

The School of the Environment shall take appropriate action to comply and adhere to the provisions contained in Florida Statues rule 7196 Sec. 6C3- 10.103. This applies to all areas affecting students, faculty, administrative and professional (A&P), University Support Personnel System (USPS), and Other Personal Services (OPS) employees.

**Definition of Discrimination and Harassment**

a) Discrimination shall include but not limited to:

1) Limiting, segregating or classifying students, employees, applicants for admission or applicants for employment in such a way as to deprive individuals of educational or employment opportunities or otherwise adversely affect individuals because of their race, religion, color, age, handicap, disability, sex, marital status, national origin or veteran status;

2) Denying educational or employment opportunities to individuals because of their race, religion, color, age, handicap, disability, sex, marital status, national origin or veteran status;

3) Providing unequal educational or employ m e n t opportunities to individuals because of their race, religion, color, age, handicap, disability, sex, marital status, national origin or veteran status;

4) Providing unnecessarily separate educational programs or activities for individuals because of their race, religion, color, age, handicap, disability, sex, marital status, national origin or veteran status.

b) Harassment shall include but not limited to:
1) Any slurs, innuendoes or other verbal or physical conduct reflecting on an individual's race, ethnic background, gender or handicapping condition which has the purpose or effect of creating an intimidating, hostile or offensive educational or work environment; has the purpose or effect of unreasonably interfering with the individuals work or school performance or participation; or otherwise adversely affects an individual's employment or educational opportunities.
2) The denial of or the provision of aid, benefits, grades, rewards, employment, faculty assistance, services or treatment on the basis of sexual advances or requests for sexual favors.
3) Sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature when submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or educational career, submission to or rejection of such conduct is used as a basis for educational or employment decisions affecting the individual; or such conduct has the purpose or effect of unreasonably interfering with an individual's work or educational performance or creating an intimidating, hostile or offensive working or educational environment. Any individual who believes that he/she is a victim of discrimination or harassment may seek guidance from the Equal Opportunity Programs (EOP) Officer who has been delegated authority by the President to receive and investigate EEO complaints, regarding options available for resolution of his/her concern. The EOP Officer shall inform each individual of the formal and informal options by which his/her concern can be addressed and resolved. The EOP officer may be contacted at (850) 599-3076.

## Attendance and Tardiness Policies

Students are expected to make the most of educational opportunities available by regularly attending classes and laboratory periods. Therefore, the School of the Environment and the University reserves the right to deal with individual cases of nonattendance.

Policies relating to attendance and absentees are as follows:

Instructors are responsible for enforcing university policies on attendance. University policy permits one unexcused absence per credit hour of the course the student is attending. Therefore, more than 3 unexcused absences (4 for a 4-semester hour class) can result in the student receiving a failure grade. It is the students' responsibility to know the policy. Students may be excused from classes for medical and or other emergencies and legal reasons. A certified professional in these areas may issue excuses at his/her discretion. Attendance records will be kept for all environmental science courses. Students who do not attend classes as required might jeopardize any financial assistance s/he is receiving from the School of the Environment.

## Leave of Absence

A Leave-of-Absence (LOA) for up to one year's duration may be granted upon petition to the SoE Academic Committee and approval by the Dean. The LOA may be extended one time by further petition to the Academic Committee and approval by the Dean. At the end of the LOA period, the student must register back into her/his degree program; failure to do so will result in dismissal.

### Academic Dishonesty and Academic Grievance

The information in this section is for undergraduate students and is compliant with the University regulations, as stated in the FAMU Fang. Any such issues involving SoE graduate students should first be referred to the SoE Academic Committee.

"Academic dishonesty shall include referring to written information not specifically condoned by the instructor. It shall further include receiving unauthorized written or oral information from a fellow student." An Academic Grievance is defined here to be a case in which a student has a grievance against how a course is being presented or about the grading of course work.

"In the instance of papers written outside of the class, academic dishonesty shall include plagiarism. Plagiarism may be specifically defined for the purposes of a course by the instructor involved. Unless it shall otherwise be defined, plagiarism shall include failure to use quotation marks or other conventional markings around material quoted from any source. Plagiarism shall also include paraphrasing specific passage from a source without indicating accurately what that source is. Plagiarism shall further include letting another person compose or rewrite a written assignment."

"Academic dishonesty shall include stealing, buying, selling, or referring to a copy of an examination before it shall have been administered. A student who assisted in the forms of dishonesty mentioned above shall be considered equally as guilty as the student who accepts such assistance."

In the instance of suspected academic dishonesty, a student may be deemed ineligible for any scholarship/fellowship awarded by the SoE or may be dismissed from the SoE academic program. Such cases shall be brought before the SoE Academic Dishonesty Committee for review and recommendations in accordance with the established University and SoE procedures.

The submission of an identical term paper, report, or other such assignment in more than one class without the expressed written approval of the course instructor is inappropriate and the student will be subject to the penalties involving academic dishonesty/plagiarism as cited above.

In any case the prior use of any such document or significant portion thereof should be clearly referenced in any subsequent submission.

**Academic Dishonesty Committee**

The Academic Dishonesty Committee will adjudicate Academic Dishonesty cases. The committee will consist of three faculty members and two students from the School of the Environment (SoE). The student members will be nominated by the Academic Committee and approved by the Dean of the SoE. The faculty members on the Committee will be nominated by the SoE Academic Committee and approved by the Dean. The student members will be appointed at the beginning of each semester or summer term. The term of service of the student members shall be one semester or summer term. The term of service of the faculty members shall be one year. There is no limit on the number of times that a student may be appointed to the committee. A quorum for the Committee shall be two faculty members and one student. Decisions shall be determined by a majority vote. The Chairperson of the Academic Dishonesty Committee shall be a faculty member of the Committee. The committee will nominate one member for Chairperson. The Dean of the SoE must approve the nominee for Chairperson.

**Academic Grievance Committee**

The Academic Grievance Committee will adjudicate Academic Grievance cases. Academic Grievance cases shall be adjudicated as described in The Fang. The relevant Section of The Fang is on page 18 Academic Grievances. This Section basically states that the SoE must develop a procedure for adjudicating Academic Grievance cases. An Academic Grievance is defined here to be a case in which a student has a grievance against how a course is being presented or about the grading of course work.

Academic Grievance cases will be adjudicated in the same manner in which Academic Dishonesty cases are adjudicated. The difference is that in the case of Academic Grievance the Accuser is a student and the Accused is the course instructor. In the case of Academic Dishonesty the Accused is always a student.

## Academic Concerns Procedures

The School of the Environment (SoE) Academic Committee (AC) has established the following procedures for addressing student issues relating to degree programs. Examples of the types of issues that should be addressed by this process including changing student major advisors, changing members of student committees, changing degree programs or areas of emphasis, etc. These procedures do not apply to issues that are under the purview of the Academic Dishonesty Committee and the Academic Grievance Committee.

Students should note that the major advisor and the thesis/dissertation committee are the final authority on: 1) deciding on the specific course requirements for the individual student's degree program (consistent with SoE curricula requirements); 2) approving the student's research proposal; 3) approving the student's research defense; and 4) approving the final thesis or dissertation. No student may graduate without the signature of all committee members on the defense and thesis/dissertation forms. The SoE Academic Concerns Procedures are in no way meant to bypass or substitute for the roles of the student's major advisor or committee.

1) Students should always discuss any potential issues with their major advisors first, and they are encouraged to raise any potential issues early, rather than allowing them to develop unaddressed. Students are also encouraged to discuss potential issues with other members of their committees. If issues remain requiring further resolution, then the SoE Academic Concerns Process must be followed.

2) The process may be initiated by the student or by her/his advisor or committee member at any time.

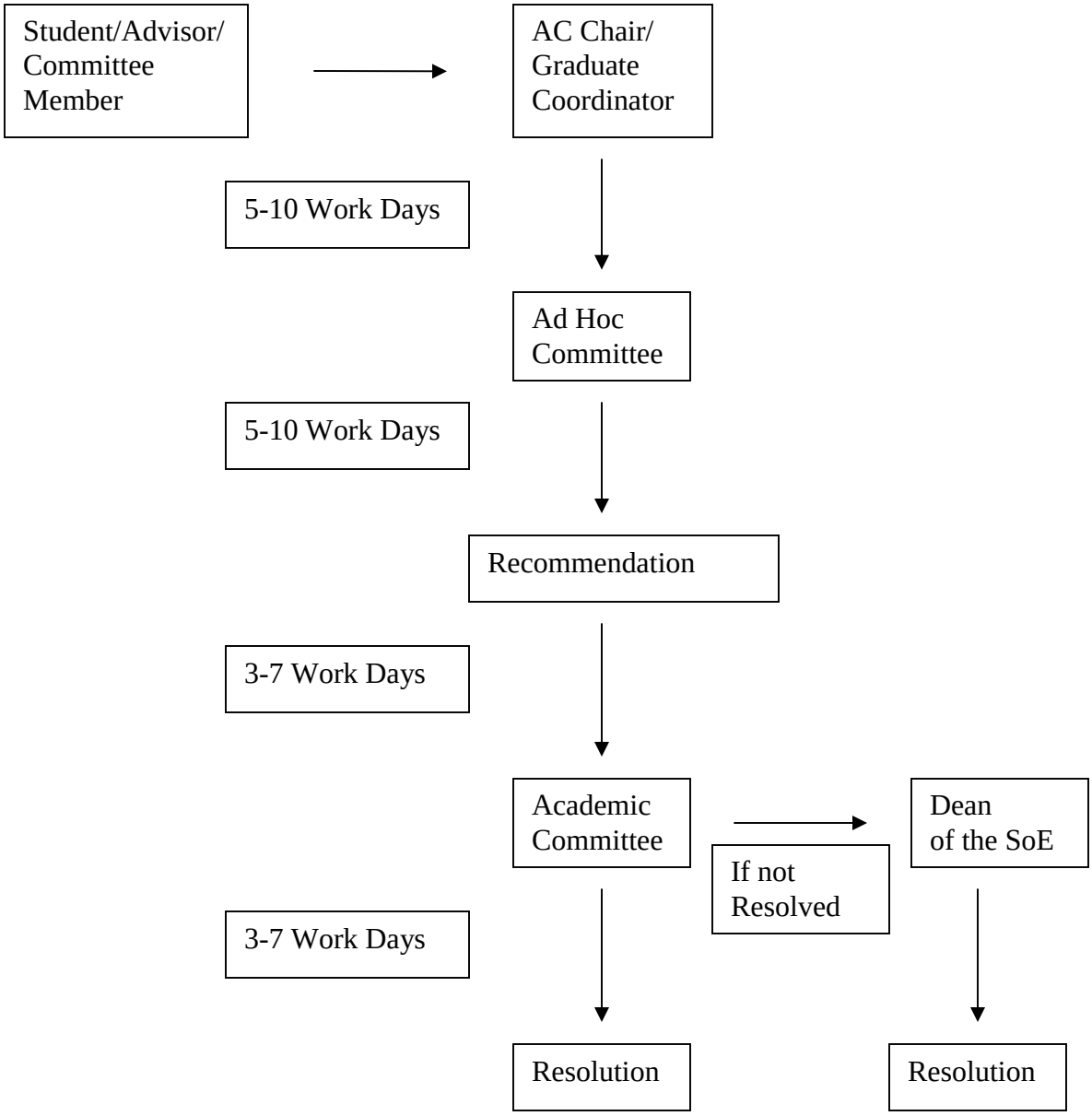
3) The student or faculty member should initially approach the Chair of the Academic Committee or, if for any reason the Chair is not available or has a potential conflict, the Director of the SoE Graduate Program.

4) At the discretion of the Chair of the Academic Committee or the Dean of the SoE Graduate Program, the issue may be further explored with the student or faculty member(s) from the student's Supervisory Committee. The issues may be resolved at this level and not require further action.

5) If necessary, an Ad Hoc Subcommittee of the AC will be established by the Chair of the Academic Committee unless the issue involves the Chair, in which case the Ad Hoc Subcommittee of the AC will be established by the Director of the Graduate Program. The Ad Hoc Subcommittee will not include any members of the student's thesis or dissertation committee. The Ad Hoc Subcommittee should consist of three members of the SoE AC. If there are an insufficient number of members of the AC available to serve on the Ad Hoc Subcommittee, additional member(s) will be appointed to the Ad Hoc Subcommittee by the Dean of the School.

6) The Ad Hoc Subcommittee will explore the issues with the student, committee members, and others as appropriate, and seek resolution. The Ad Hoc Subcommittee will make recommendations for approval by the SoE AC. Any member of the SoE AC involved in the issue at hand will be recused from voting on the recommendations. If the SoE AC fails to reach agreement on resolution of the issue, then the issue will be forwarded to the Dean of the School of the Environment for resolution.
7) The Director of the SoE Graduate Program or the Chair of the Academic Committee as appropriate will implement the decision of the SoE AC.
8) All discussions concerning this process will be considered to be confidential unless the issue of confidentiality is explicitly removed by the Director of the SoE Graduate Program or the Chair of the Academic Committee.

## SoE Academic Concerns Procedure Timeline



## Grading Policy for SoE Undergraduate Students

The general grading policy for undergraduate students of the University is detailed in the FAMU Catalog. The following grade designations shall be used:
A=Exceptional
B=Superior
C=Average
D=Passing (but poor)
F=Failure
I=Incomplete
S=Satisfactory
U=Unsatisfactory
P=Pass.

An undergraduate student who fails to maintain a cumulative GPA of at least 2.0 shall be subject to academic suspension, as follows:

If an undergraduate student's average for a single semester falls below 2.0, that student shall receive an academic warming. If the cumulative GPA falls below 2.0, the student shall be placed on academic probation for one semester. If the subsequent semester the cumulative GPA remains below 2.0, then the student shall be placed on academic suspension for one semester. A third academic suspension shall result in dismissal from the University.

In order to help students in the School of the Environment to receive satisfactory grades each semester, those who are failing a subject at mid term are required to meet with their academic advisor on a weekly basis, and to receive counseling from the academic advisor. Students who receive academic scholarships and/or fellowships are required to maintain a cumulative GPA of 3.00 regardless of course/ credit hour load.

## Grading Policy for SoE Graduate Students

The grading policy for graduate students is given in detail in the FAMU Catalogue.

M.S. and Ph.D. students must maintain at least a 3.00 overall GPA in all course work. Only a grade of "B" or higher is acceptable for required courses. A required course must be repeated if a grade lower than a "B" is received. For all other courses, the grade of "C" or better is acceptable. A grade of "U" in any phase of the thesis/dissertation process shall require the student to be placed on probation for one semester. A second grade of "U" may result in dismissal. Students who fail to meet these criteria may be dismissed from the program. Graduate students should consult the FAMU Catalog for further details on graduate student grading policies, including the University's grade forgiveness policy.

### Dismissal

All SoE students are expected to maintain the highest degree of professionalism, collegiality, and respect for the faculty and fellow students. The Student Code of Conduct is detailed in the FANG and must be understood and followed by all students. Failure to do so and to maintain good academic standing may be grounds for dismissal.

### Degree Conferral

Immediately prior to or at the beginning of the term in which a student expects to complete all requirements for a degree, he/she must file an application for graduation through the appropriate channels. The student's major advisor, the SoE Coordinator of Graduate Studies, will conduct a thorough graduation check before approval and submission to the FAMU Registrar's Office.

The procedure for the defense of theses/dissertations is at the following web site: http://www.famu.edu/index.cfm?graduatestudies&Overview.

## Financial Assistance

The School of the Environment offers financial assistance packages to exceptional undergraduate students and to graduate students. In order to receive financial assistance, a student must be fully admitted and enrolled during any semester for which financial aid is received.

All graduate students must meet the required academic standards of maintaining a minimum 3.0 GPA. Undergraduate students must meet the academic criteria of the particular award and will be required to complete and sign an Award Agreement Letter each semester. This letter must be signed before receiving an award.

Financial support may include tuition waivers, stipends, fellowships, scholarships, research assistantships, teaching assistantships, and/or internships. Other support may be available through the School of Graduate Studies and other specialized sources. Students receiving support from the School of Graduate Studies should inform the School of the Environment of such awards. Most funds for graduate student support come from grant sources as garnered by our faculty; therefore, financial assistance is based on availability, and is not guaranteed. However, SoE normally only admits students into the graduate program when appropriate financial support has been identified and a major advisor initially assigned.

All funded students in the graduate program are expected to enroll for nine (9) hours each semester in the fall and spring and six (6) hours for the summer. Financial support may include tuition support for graduate students. Since a student entering as a non-Florida resident is assessed out-of-state tuition, if tuition is covered through the financial support, the student is required to apply immediately for Florida residency through the Office of the University Registrar. After the student is eligible for Florida residency, SoE will be responsible for only the in-state portion of your tuition.

Students should speak with their faculty advisor soon after registering for fall classes to determine what your work responsibilities are. In addition to the work responsibilities assigned by the advisor, all students are required to commit to one or more general ESI activities. These include the SoE Summer Camp for high school students, coordination of the seminar program, working with the science bowl team, working with faculty as teaching assistants, assisting with recruitment activities, tutoring other students, and other related duties. Students are encouraged to sign-up for the activities they prefer, but the Dean, in consultation with the faculty, will make the final decision on the students' general responsibilities for the year. All students receiving support from any source of funds are required to attend the SoE seminar series throughout the year. Failure to adhere to any of the requirements described above may result in cancellation of the student's financial assistance.

Entering graduate students are sent articles and a list of book readings that are intended to introduce some aspect of environmental sciences and to prepare the student for the rigorous readings that will be assigned during the course of study in the School of the Environment. The student will be expected to present an oral summary of their selected book to give their impressions during the first week of classes, or shortly thereafter. However, at the time of registration you must certify with your advisor that you have read the articles and a book. This is necessary for you to receive financial support.

## Internships

The School of the Environment continuously seeks collaborations with various state, federal, and private agencies to provide internships and/or job opportunities for environmental sciences students. The Internship Program is designed to provide students the opportunity to participate in pre-defined research at the agencies. Students are expected to work with professional peers in specialized and comprehensive facilities and laboratories on tasks of mutual interest. Graduate participants have an opportunity to establish continuing research relationships with research and development professionals of the host laboratories that may result in thesis or dissertation topics. These relationships will also ensure a steady supply of well-trained environmental professionals with first hand knowledge of the implementation of state-of-the-art environmental practices. Students must meet eligibility requirements such as minimum 3.0 GPA, class level, academic preparation, et cetera that are established by the requesting agency and the Institute. Some appointments may require that the participant be a U. S. citizen either holding, or eligible for a security clearance, especially if the appointment is within a federal agency. Stipends are awarded at various levels depending upon the appointment. In addition, the participant may be reimbursed for his/her travel to and from the site. Housing availability and cost vary from agency to agency and host personnel may be able to assist participants in finding suitable housing. Assistance may or may not be given for housing depending upon the length of the appointment. A mentoring component may be a part of some of the internships especially if the participant plans to develop a thesis or dissertation topic from the research. The participant is assigned a practicing professional to serve as his/her mentor.

The mentor will be responsible for communicating with the participant and the faculty advisor at least twice each semester in order to identify factors that might advance or hinder the participant's progress.

All participants are required to submit a summary report of their research experience at the end of the internship. The participant may also be required to make a presentation at a scheduled School of the Environment seminar. An internship coordinator has been appointed to coordinate internship and placement activities. Students should have resumes on file and complete internship applications with the internship coordinator who, with the cooperation of the SoE Dean and other faculty members will help to secure internships and employment opportunities for students.

## Career Development Services

As businesses and governments increase efforts to assemble work forces that represent today's diverse society, there is a wide range of employment opportunities and a huge demand for talented individuals in the environmental field. Career development is an integral part of the School of the Environment's educational process and these services are designed to prepare and provide opportunities for students to pursue meaningful careers in environmental sciences. This is accomplished through seminar series, invited speakers, internships, career advice, and partnerships with government and private agencies. Announcements of environmentally related employment opportunities are posted on bulletin boards within the School. Sometime during the fall and/or spring semesters, representatives from various academic, government and corporate organizations will be invited to visit the campus to recruit students for permanent employment, and internships. Students will be formally informed of these activities and forums will be organized within the School of the Environment to expose students to a broad range of potential employers and post-graduate studies programs so that capable and qualified students can showcase their research and/or internship experiences and capabilities. All students are required to enroll and participate in seminar series every semester. Students are also encouraged to establish a credential file, which include comprehensive and up-dated resumes, at least three letters of recommendation, and reports of research and internship assignments.

**Some Career and Training Opportunities**

**NOAA Corps**

**Website**: http://www.noaacorps.noaa.gov/


"NOAA Commissioned Corps Officers are an integral part of the National Oceanic and Atmospheric Administration (NOAA). Officers can be found operating one of NOAA's 19 ships or 12 aircraft to provide support to meet NOAA's missions. Duties and areas of operations can range from launching a weather balloon at the South Pole, conducting hydrographic or fishery surveys in Alaska, maintaining buoys in the tropical Pacific, flying snow surveys and into hurricanes."

"If you are interested in joining the NOAA Corps, visit the Recruiting section for more information or call the Officer Recruiting Branch at : **800-299-6622."**

Currently applications are being taken for **BOTC 126**, which will begin **August 2015**. The application deadline is **February 1st** to receive an interview. Interviews will be completed once a candidate's whole package is received, all interviews must be completed no later than F**ebruary 15th**. BOTC 126 applicants may start the process utilizing the online NOAA Corp E-Recruit System.

**NOAA Educational Partnership Program**
**Website:** http://www.epp.noaa.gov/
**Undergraduate Scholarship Program**

"The Undergraduate Scholarship Program provides an opportunity for rising junior students to study disciplines relating to the NOAA's mission. Students attending Minority Serving Institutions (Hispanic Serving Institutions, Historically Black Colleges and Universities, Tribal Colleges and Universities, Alaskan-Native Serving Institutions, and Native Hawaiian Serving Institutions) receive appointments to approved NOAA offices and sites upon acceptance to the program."

**Graduate Sciences Program**

"The Graduate Sciences Program (GSP) is aimed primarily at increasing opportunities for students in NOAA-related fields to pursue research and educational training in atmospheric, environmental, remote sensing and oceanic sciences at minority serving institutions (MSI) when possible. The GSP offers between two years (master's candidates) to four years (doctoral students) of NOAA-related research and training opportunities."

### Student Organizations and Recreation Programs

The School of the Environment Environmental Sciences Student Organization (ESSO) is an educational and social dues paying organization with elected officers and a departmental advisor. ESSO is a member of Strategies for Ecological Education, Diversity, and Sustainability (SEEDS) Program of the Ecological Society of America. Membership includes students interested and willing to come together to make significant contributions to the nation's efforts to solve environmental problems. The graduate student organization was founded in the fall semester of 1996, and the undergraduate club in the fall semester of 1998. These organizations focus on campus and community events such as the Earth Day celebration to increase the awareness of environmental issues in all segments of society, and to inspire individuals to promote local, state and federal initiatives on environmental restoration and waste management. ESSO also participates in FAMU Homecoming activities and contributes articles on environmental issues to the FAMUAN. Activities are partially supported by funds contributed by external organizations as well as those funds garnered from student fundraising activities.

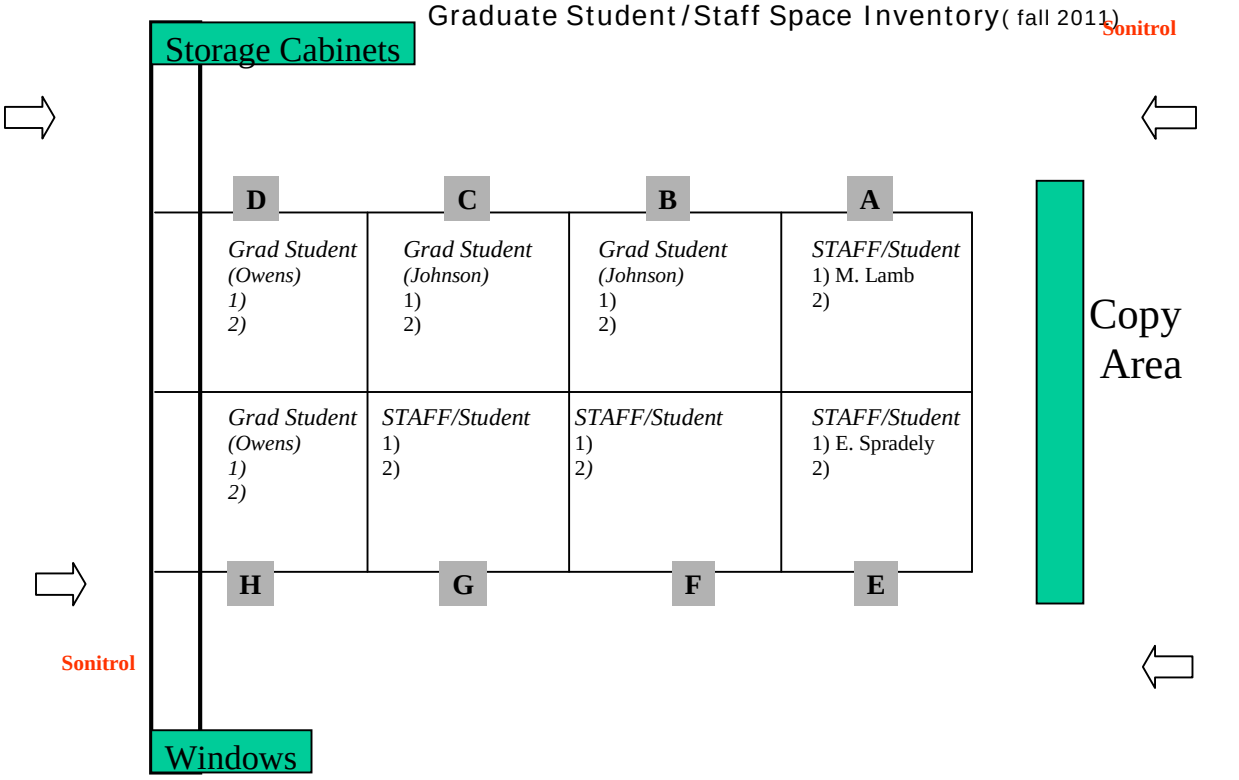
## Learning Resources

The School of the Environment continuously seeks to improve the learning environment for its students. The SoE resources include computers with Internet/online capabilities. Tutorial services are also available. Extensive library facilities are available in the Science Research Center and Coleman Library. The SoE also maintains a number of analytical chemical laboratories which are available for supervised student research.

### School of the Environment Facilities

## School of the Environment Facilities

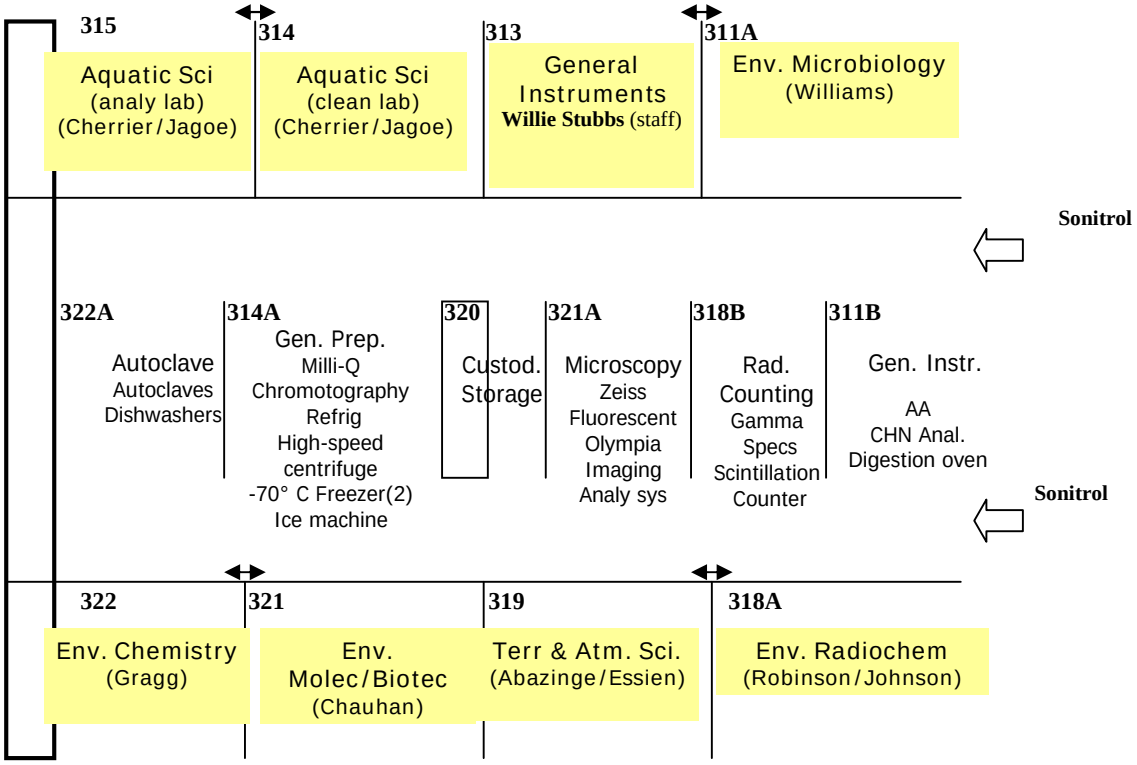
School of the Environment- **RM 307**
**Humphries Science and Research Center**
Graduate Student/Staff Space Inventory ( fall 2011)




(NOT TO SCALE)

## School of the Environment Facilities

School of the Environment - Laboratory Area
Humphries Science and Research Center
Graduate Student/Staff Space Inventory

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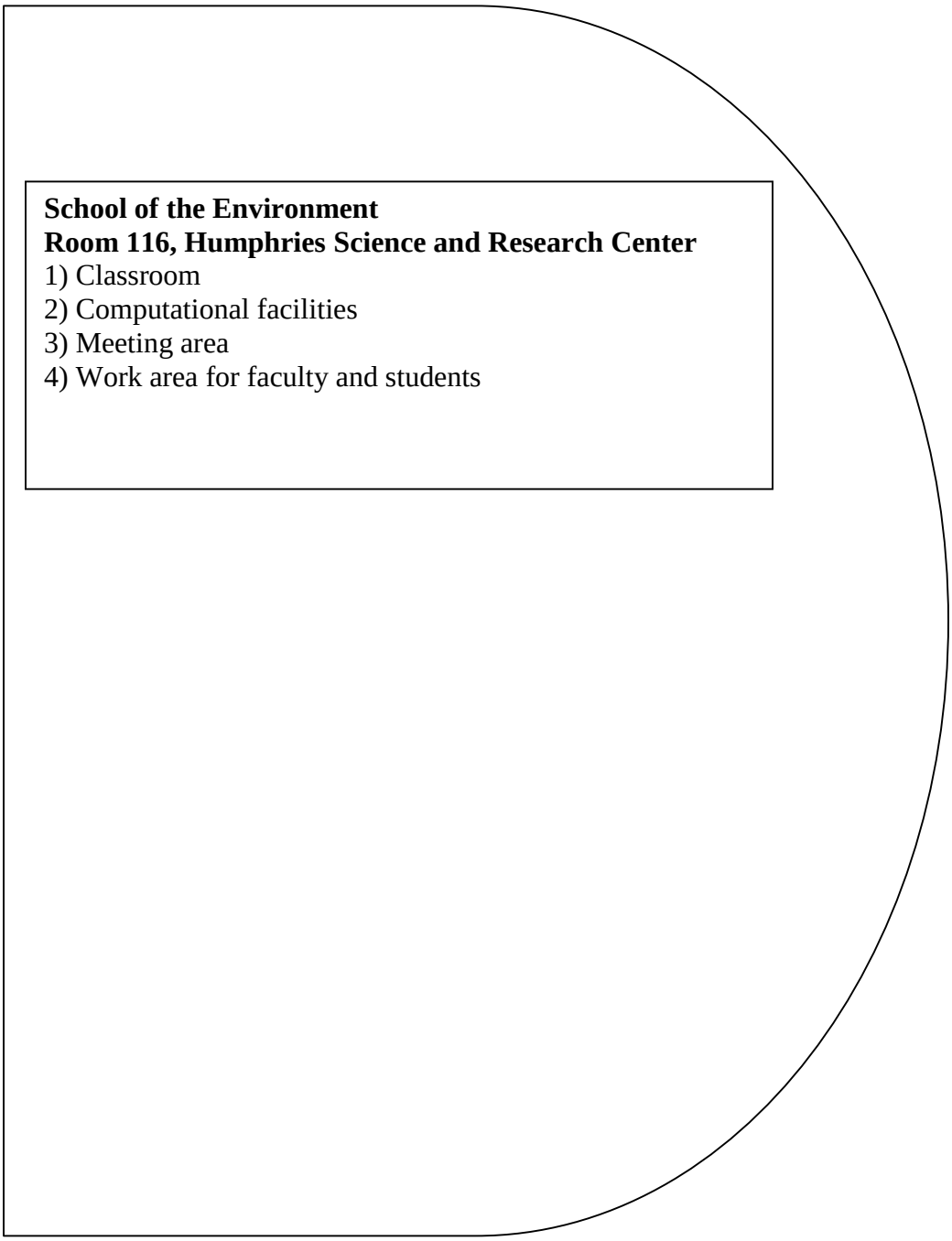
**School of the Environment Facilities**



# Programs of Study and Degrees

The School of the Environment offers programs in environmental science at the bachelor's, the Master's and the Ph.D. degree levels. The B.S. degree program is a 120 credit hour program, the Master's program is a 36 credit-hour program including 6 thesis hours, and the Ph.D. degree program is an 80 credit-hour program including 24 dissertation credit hours.

The School of the Environment also offers Bachelor of Science and Bachelor of Arts Degrees in Environmental Studies.

# The Bachelor of Science Degree Program in Environmental Science

The B.S. degree program in Environmental Science emphasizes rigorous academic course work, student involvement in faculty research and collaborative efforts with other universities, community/junior colleges, national laboratories, regulatory agencies, corporate environmental contractors, utilities, and municipalities. This program will offer students the opportunity for a general degree in environmental science with options for specialized concentration accomplished through electives in environmental restoration and waste management; environmental monitoring and instrumentation; environmental toxicology/risk assessment; and environmental policy. Other undergraduate students with strong mathematics, chemistry, biology, physics and computer science backgrounds may also supplement their degrees by taking environmental sciences core courses.

All SoE undergraduate students in environmental science are required to have research experience before they can graduate. For honors students, this is accomplished by doing an Honors Research Thesis and public presentation of the work. All other undergraduate students must meet this requirement by either: a) doing a Senior Thesis and associated public presentation of the work or b) demonstrating research experience through other means, such as participating in a research internship, working under supervision of a SoE faculty member on a research project, or other appropriate research activity. In any case, the student's research experience must be presented publicly, documented, and included in the student's permanent file.

The Honors/Senior Thesis shall be supervised by a Honors/Senior Thesis Committee, which shall consist of three faculty members. The thesis shall be based on scientific or policy research conducted on a research topic approved by the Committee. The thesis must be a written document approved by their Committee and presented publicly. Thesis guidelines are available from the Major Advisor.

## The Bachelor of Science Degree in Environmental Science Core Course Requirements

The listed core courses are required for a minor in Environmental Science follow:
EVR 2920 Environmental Forum & Colloquium (2)
EVR 3033 Environmental Regulations (2)
EVR 3867 Environmental Risk Analysis I (3)
EVR 4032 Environmental Ethics (3)
EVR 4140 Environmental Chemistry w/Lab (4)
EVR 4643 Environmental Policy & Risk Mgmt (3)
EVS 4007 Introduction to Environmental Sciences (3)

EVR 2920 is a one credit hour course offered in the fall and one hour in the spring. The core course requirements must be completed for a minor in environmental science.

## The Bachelor of Science Degree Suggested Course of Study

**Freshman Year**
**Fall Semester**
AMH 2091 Introduction to African American History (3)
BSC 1010C General Biology (4)
ENC 1101, 1102 Communicative Skills (3) or ENC 1121, 1122
EVR 2920 Environmental Forum & Colloquium (1)
MAC 2311 Calculus I (4)

**Spring Semester**
BSC 1011C General Biology II (4)
ENC 1102 Communicative Skills II (3) or ENC 1122 Honors English II (3)
EVR 2920 Environmental Science Forum & Colloquium (1)
MAC 2312 Calculus II (4)

**General Education Electives**
1) Six credit hours of Humanities
2) Six credit hours of Social Sciences. (AMH 2091 Introduction to African American History (3) and three more credit hours)

Some students may need to take College Algebra
(MAC 1105) and Algebraic and (MAC 1114) Trigonometric Functions as prerequisites to Calculus I and II.

**Sophomore Year**
**Fall Semester**
CHM 1045 General Chemistry I w/Lab (4)
EVS 4007 Introduction to Environmental Science (3)
PHY 2048 General Physics I w/Lab (5)
PHY 2048A General Physics I Recitation (0)

**Spring Semester**
CHM 1046 General Chemistry II w/Lab (4)
ENC 3243 Technical Report Writing (3)
PHY 2048 General Physics II w/Lab (5)
PHY 2048A General Physics II Recitation (0)
General Education Elective (3)

**Summer Semester**
EVR 3940 Internship (1-2)

**Junior Year**
**Fall Semester**
CHM 2210 Organic Chemistry I w/Lab (4)
EVR 3033 Environmental Regulations (2)
EVR 3867 Environmental Risk Analysis I (3)
EVS 3023 Introduction to Marine Environment (3)
MCB 3020 Microbiology (3)

**Spring Semester**
CHM 2211 Organic Chemistry II w/Lab (4)
EVR 3028 Environmental Modeling Principles (3)
EVR 3327 Environmental Resources Economics (3)
STA 2023 Introduction to Probability and Statistics (3)

**Senior Year**
**Fall Semester**
EVR 3235 Atmospheric Processes (3)
EVS 3395 Contaminant Hydrogeology (3)
EVS 4804 Environmental Toxicology & Human Health (3)
PCB 2033 Introduction to Ecology (3)
Concentration Electives (3)

**Spring Semester**
EVR 4032 Environmental Ethics (3)
EVR 4140 Environmental Chemistry w/Lab (4)
EVR 4910 Senior Thesis or DIS (3)
EVS 4643 Environmental Policy & Risk Management (3)
Concentration Electives (3)

**Concentration Electives**
Must Take a Minimum of 6 hours from the following:
**Environmental Toxicology/ Risk Assessment**
EVR 3662 Principles of Contamination Assessment (3)
EVR 4143 Environmental Radiochemistry (3)
EVR 4636 Risk Communication (3)
EVS 4810 Environmental Toxicology & Human Health II (3)
EVS 4869 Environmental Risk Analysis II (3)

**Environmental Monitoring & Instrumentation**
EVR 4193C Environmental monitoring w/Lab (3)
EVR 4215 Marine Pollution (3)
EVS 3024C Environmental Instrumentation & Analytical Techniques (4)
EVS 4024C Marine Microbial Ecology w/Lab (4)
EVS 4025C Applied Microbial Processes w/Lab (3)
EVS 4027C Wetlands Preservations and Restoration w/Lab (4)

**Environmental Restoration and Waste Management**
EVR 4024C Marine Microbial Ecology w/Lab (4)
EVR 4027C Wetlands Preservations and Restoration w/Lab (4)
EVR 4143 Environmental Radiochemistry (3)
EVR 4215 Marine Pollution (3)
EVS 3024C Environmental Instrumentation & Analytical Techniques (4)
EVS 3654 Hazardous Waste Management (3)
EVS 3662 Principles of Contaminant Assessment (3)
EVS 3672 Fundamentals of Bioremediation (3)
EVS 3823 Environmental Impacts (3)
EVS 4025C Applied Microbial Processes w/Lab (4)

**Environmental Policy**
EVR 3636 Risk Communication (3)
EVR 4036 Environmental Equity & Justice (3)
POS 4697 Environmental Law (3)

| Courses Needed for a Bachelor of Science Degree in Environmental Science | | | |
|---|---|---|---|
| **Semester** | **Course Number** | **Course Title** | **Credit Hours** |
| Year 1: fall | AMH 2091 | Introduction to African American History | 3 |
| Year 1: fall | BSC1010C | General Biology I with Laboratory | 4 |
| Year 1: spring | BSC1011C | General Biology II with Laboratory | 4 |
| Year 2: fall | CHM 1045 | General Chemistry I with Laboratory | 4 |
| Year 2: spring | CHM 1046 | General Chemistry II with Laboratory | 4 |
| Year 3: fall | CHM 2210 | Organic Chemistry I with Laboratory | 4 |
| Year 3: spring | CHM 2211 | Organic Chemistry II with Laboratory | 4 |
| Year 4: fall | Elective | Concentration Area | 3 |
| Year 4: spring | Elective | Concentration Area | 3 |
| Year 1: spring | Elective | Humanities: General Education Course List | 3 |
| Year 2: spring | Elective | Humanities: General Education Course List | 3 |
| Year 2: fall | Elective | Social Science: General Education Course List | 3 |
| Year 1: fall | ENC1101 | Communications Skills I | 3 |
| Year 1: spring | ENC 1102 | Communications Skills II | 3 |
| Year 2: spring | ENC 3243 | Technical Report Writing | 3 |
| Year 1: fall | EVR 2920 | Environmental Forum and Colloquium | 1 |
| Year 1: spring | EVR 2920 | Environmental Forum and Colloquium | 1 |
| Year 3: fall | EVR 3023 | Introduction to Marine Environment | 3 |
| Year 3: spring | EVR 3028 | Environmental Modeling Principles | 3 |
| Year 3: fall | EVR 3033 | Environmental Regulations | 2 |
| Year 4: fall | EVR 3235 | Atmospheric Processes | 3 |
| Year 3: spring | EVR 3327 | Environmental Resources Economics | 3 |
| Year 3: fall | EVR 3867 | Environmental Risk Analysis I | 3 |
| Year 2: summer | EVR 3940 | Internship | 1-3 |

| | | | |
|---|---|---|---|
| Year 4: spring | EVR 4032 | Environmental Ethics | 3 |
| Year 4: spring | EVR 4140 | Environmental Chemistry with Laboratory | 4 |
| Year 4: spring | EVR 4643 | Environmental Policy and Risk Management | 3 |
| Year 4: fall | EVR 4804 | Environmental Toxicology and Human Health | 3 |
| Year 4: spring | EVR 4910 | Senior Thesis | 3 |
| Year 3: fall | EVS 3395 | Contaminant Hydrogeology | 3 |
| Year 2: fall | EVS 4007 | Introduction to Environmental Science | 3 |
| Year 1: fall | MAC 2311 | Calculus I | 4 |
| Year 1: spring | MAC 2312 | Calculus II | 4 |
| Year 3: fall | MCB 3010C | Microbiology | 4 |
| Year 3: fall | PCB 3033 | Introduction to Ecology | 3 |
| Year 2: fall | PHY 2048 | General Physics I with Laboratory | 5 |
| Year 2: fall | PHY 2048A | General Physics I Recitation | 0 |
| Year 2: spring | PHY 2049 | General Physics II with Laboratory | 5 |
| Year 2: spring | PHY 2049A | General Physics II Recitation | 0 |
| Year 3: spring | STA 2023 | Introduction to Probability and Statistics I | 3 |

# The Bachelor of Arts Degree Program in Environmental Studies

| Courses Needed for a Bachelor of Arts Degree in Environmental Studies | | | |
|---|---|---|---|
| **Semester** | **Course Number** | **Course Title** | **Credit Hours** |
| Year 1: fall | AMH 2091 | Introduction to African American History | 3 |
| Year 1: fall | BSC 1005C | Biological Science | 4 |
| Year 1: spring | CHM 1030 and CHM 1030L | Introductory Chemistry for Non-Science Majors and Laboratory | 4 |
| Year 3: fall | Elective | Environmental Science | 3 |
| Year 3: spring | Elective | Environmental Science | 3 |
| Year 4: spring | Elective | Environmental Science | 3 |
| Year 4: fall | Elective | Environmental Science | 3 |
| Year 4: fall | Elective | Environmental Science | 3 |
| Year 2: fall | Elective | Foreign Language | 3 |
| Year 2: spring | Elective | Foreign Language | 3 |
| Year 3: fall | Elective | Foreign Language | 3 |
| Year 3: spring | Elective | Foreign Language | 3 |
| Year 2: spring | Elective | General | 3 |
| Year 4: fall | Elective | General | 3 |
| Year 4: spring | Elective | General | 3 |
| Year 4: spring | Elective | General | 3 |
| Year 4: spring | Elective | General | 3 |
| Year 1: spring | Elective | Humanities: General Education Course List | 3 |
| Year 2: spring | Elective | Humanities: General Education Course List | 3 |
| Year 1: spring | Elective | Mathematics | 3 |
| Year 2: fall | Elective | Minor | 3 |
| Year 2: spring | Elective | Minor | 3 |
| Year 2: spring | Elective | Minor | 3 |
| Year 3: fall | Elective | Minor | 3 |
| Year 3: spring | Elective | Minor | 3 |
| Year 3: spring | Elective | Minor | 3 |
| Year 2: fall | Elective | Science | 3 |
| Year 2: fall | Elective | Social Science: General Education Course List | 3 |
| Year 1: fall | ENC 1101 | Communications Skills I | 3 |
| Year 1: spring | ENC 1102 | Communications Skills II | 3 |
| Year 1: fall | EVR 2920 | Environmental Forum and Colloquium | 1 |
| Year 1: spring | EVR 2920 | Environmental Forum and Colloquium | 1 |
| Year 3: fall | EVR 3023 | Introduction to Marine Environment | 3 |
| Year 3: fall | EVR 3033 | Environmental Regulations | 2 |
| Year 4: spring | EVR 4032 | Environmental Ethics | 3 |
| Year 3: fall | EVR 4036 | Environmental Equity and Justice | 3 |
| Year 3: spring | EVR 4643 | Environmental Policy and Risk Management | 3 |

| | | | |
|---|---|---|---|
| Year 4: fall | EVR 4804 | Environmental Toxicology and Human Health | 3 |
| Year 2: fall | EVS 4007 | Introduction to Environmental Science | 3 |
| Year 4: fall | EVS 4636 | Risk Communication | 3 |
| Year 1: fall | MAC 1105 | College Algebra | 3 |
| **Total Credit Hours** | | | 120 |
| Tables are available which give suitable choices for electives in the categories of Environmental Science, Foreign Language, General Electives, and Science Electives. Acceptable Humanities and Social Science Electives are given in the General Education Course List in the Florida A&M University Catalog. The Electives required for Minor Courses of Study are given in the Florida A&M University Catalog. | | | |

# The Bachelor of Science Degree Program in Environmental Studies

| Courses Needed for a Bachelor of Science Degree in Environmental Studies | | | |
|---|---|---|---|
| **Semester** | **Course Number** | **Course Title** | **Credit Hours** |
| Year 1: fall | AMH 2091 | Introduction to African American History | 3 |
| Year 1: fall | BSC 1005C | Biological Science | 4 |
| Year 2: fall | CHM 1030 and CHM 1030L | Introductory Chemistry for Non-Science Majors and Laboratory | 4 |
| Year 1: spring | Elective | Environmental Science | 3 |
| Year 2: spring | Elective | Environmental Science | 3 |
| Year 3: fall | Elective | Environmental Science | 3 |
| Year 3: spring | Elective | Environmental Science | 3 |
| Year 4: spring | Elective | Environmental Science | 3 |
| Year 4: fall | Elective | Environmental Science | 3 |
| Year 4: fall | Elective | Environmental Science | 3 |
| Year 4: spring | Elective | Environmental Science | 3 |
| Year 2: fall | Elective | General | 3 |
| Year 2: spring | Elective | General | 3 |
| Year 4: fall | Elective | General | 3 |
| Year 4: spring | Elective | General | 3 |
| Year 4: spring | Elective | General | 3 |
| Year 4: spring | Elective | General | 3 |
| Year 1: spring | Elective | Humanities: General Education Course List | 3 |
| Year 2: spring | Elective | Humanities: General Education Course List | 3 |
| Year 2: fall | Elective | Minor | 3 |
| Year 2: spring | Elective | Minor | 3 |
| Year 2: spring | Elective | Minor | 3 |
| Year 3: fall | Elective | Minor | 3 |
| Year 3: spring | Elective | Minor | 3 |
| Year 3: spring | Elective | Minor | 3 |
| Year 2: fall | Elective | Science | 3 |
| Year 2: fall | Elective | Social Science: General Education Course List | 3 |
| Year 1: fall | ENC 1101 | Communications Skills I | 3 |
| Year 1: spring | ENC 1102 | Communications Skills II | 3 |
| Year 1: fall | EVR 2920 | Environmental Forum and Colloquium | 1 |
| Year 1: spring | EVR 2920 | Environmental Forum and Colloquium | 1 |
| Year 3: fall | EVR 3023 | Introduction to Marine Environment | 3 |
| Year 3: fall | EVR 3033 | Environmental Regulations | 2 |
| Year 4: spring | EVR 4032 | Environmental Ethics | 3 |
| Year 3: fall | EVR 4036 | Environmental Equity and Justice | 3 |
| Year 3: spring | EVR 4643 | Environmental Policy and Risk Management | 3 |
| Year 4: fall | EVR 4804 | Environmental Toxicology and Human Health | 3 |

| | | | |
|---|---|---|---|
| Year 2: fall | EVS 4007 | Introduction to Environmental Science | 3 |
| Year 4: fall | EVS 4636 | Risk Communication | 3 |
| Year 1: fall | MAC 1105 | College Algebra | 3 |
| Year 1: spring | STA 2023 | Introduction to Probability and Statistics | 3 |
| **Total Credit Hours** | | | 120 |
| Tables are available which give suitable choices for electives in the categories of Environmental Science, General Electives, and Science Electives. Acceptable Humanities and Social Science Electives are given in the General Education Course List in the Florida A&M University Catalog. The Electives required for Minor Courses of Study are given in the Florida A&M University Catalog. | | | |

# Some Degree Requirements in Both of the Environmental Studies Degree Programs

| **Course Requirements for a MINOR in Environmental Studies** | | |
|---|---|---|
| **Course Prefix and Number** | **Course Title** | **Credit Hours** |
| *EVR 2920 | Environmental Science Forum & Colloquium# | 2 |
| EVR 3033 | Environmental Regulations | 2 |
| EVR 4036 | Environmental Equity & Justice | 3 |
| EVR 4032 | Environmental Ethics | 3 |
| EVR 4643 | Environmental Policy & Risk Management | 3 |
| *EVS 4007 | Introduction to Environmental Science | 3 |
| EVS 4636 | Risk Communication | 3 |
| **Total Credit Hours** | | 19 |
| *This is a state common prerequisite. Substitutes identified in the state Common Prerequisites Manual at www.facts.org will be accepted. | | |
| #One hour course offered in the fall and spring | | |

| **Course Requirements for a Major in Environmental Studies** | | |
|---|---|---|
| **A Recommended Elective Course: Environmental Science** | | |
| **Course Prefix and Number** | **Course Title** | **Credit Hours** |
| EVR 3327 | Environmental Resources Economics | 3 |

| **Course Requirements for a Major in Environmental Studies** | | |
|---|---|---|
| **Some Possible Elective Courses: Environmental Science** | | |
| **Course Prefix and Number** | **Course Title** | **Credit Hours** |
| EES 3040 | Introduction to Environmental Engineering Science | 3 |
| ENV 4611 | Environmental Impact Analysis | 3 |
| EVR 3028 | Environmental Modeling Principles | 3 |
| EVR 3235 | Atmospheric Processes | 3 |
| EVR 3327 | Environmental Resources Economics | 3 |
| EVR 3867 | Environmental Risk Analysis I | 3 |
| EVR 3940 | Internship | 1-3 |
| EVR 4024C | Marine Microbial Ecology with Laboratory | 4 |
| EVR 4140 | Environmental Chemistry W/Lab | 4 |
| EVR 4215 | Marine Pollution | 3 |
| EVR 4869 | Environmental Risk Analysis II | 3 |
| EVS 3395 | Contaminant Hydrogeology | 3 |
| EVS 3672 | Fundamentals of Bioremediation | 3 |
| EVS 4025C | Advanced Microbial Ecology with Laboratory | 4 |

| | | |
|---|---|---|
| PCB 3033 | Introduction to Ecology | 3 |

| **Course Requirements for a Bachelor of Arts Degree in Environmental Studies** | | |
|---|---|---|
| **Some Possible Elective Courses: Foreign Language** | | |
| **Course Prefix and Number** | **Course Title** | **Credit Hours** |
| FRE 1120 | Elementary French I | 3 |
| FRE 1121 | Elementary French II | 3 |
| FRE 2220 | Intermediate French I | 3 |
| FRE 2221 | Intermediate French II | 3 |
| FRE 3420 | Advanced Conversation | 3 |
| SPN 1120 | Elementary Spanish I | 3 |
| SPN 1121 | Elementary Spanish II | 3 |
| SPN 2220 | Intermediate Spanish I | 3 |
| SPN 2221 | Intermediate Spanish II | 3 |
| SPN 2240 | Advanced Spanish Conversation | 3 |
| A student in the Bachelor of Arts Degree Program in Environmental Studies must earn at least twelve credit hours in one foreign language to fulfill graduation requirements. | | |

| **Course Requirements for a Major in Environmental Studies** | | |
|---|---|---|
| **Some Recommended Elective Courses: General** | | |
| **Course Prefix and Number** | **Course Title** | **Credit Hours** |
| ENC 3243 | Technical Report Writing | 3 |
| PHI 2101 | Introduction to Logics | 3 |
| STA 2023 | Introduction to Probability & Statistics I | 3 |

| **Course Requirements for a Major in Environmental Studies** | | |
|---|---|---|
| **Some Possible Elective Courses: General (Table 1)** | | |
| **Course Prefix and Number** | **Course Title** | **Credit Hours** |
| AEE 4301 | Sustainable Agriculture | 2 |
| AEE 4415 | Agroecosystem Management | 2 |
| AGR 4512 | Plant Ecology | 3 |
| BOT 1010C | Elementary Botany | 4 |
| BSC 1011C | General Biology II w/Lab | 4 |
| CHM 1031 | Organic Chemistry for Non-Science Major | 3 |
| CHM 1031L | Organic Chemistry for Non-Science Major Laboratory | 1 |
| CHM 1015 | Fundamentals of Chemistry | 4 |
| CHM 1046 | General Chemistry II w/Lab | 4 |
| CHM 2210 | Organic Chemistry I W/Lab | 4 |
| CHM 2211 | Organic Chemistry II W/Lab | 4 |
| COP 3300 | Statistical Computation and Analysis | 3 |

| | | |
|---|---|---|
| FOR 3093 | Forestry in Rural and Urban Environment | 3 |
| GEO 3354 | Environment and Human Ecology | 3 |
| GEO 3370 | Conservation | 3 |
| GEO 3421 | Cultural Geography | 3 |
| MAC 1114 | Trigonometric Functions | 3 |
| MAC 1147 | Pre-Calculus | 4 |
| MAC 2233 | Business Calculus I | 3 |
| MAC 2234 | Business Calculus II | 3 |
| MAC 2311 | Calculus I | 4 |
| MAC 2312 | Calculus II | 4 |
| MAD 2120 | Finite Mathematics | 3 |
| MAN 3025 | Principles of Management | 3 |
| MAN 3605 | Complete Culture of Business | 3 |
| MCB 3010C | Microbiology | 4 |
| PAD 3003 | Public Administration | 3 |
| PAD 4404 | Public Policy Management | 3 |
| PHY 2048 | General Physics I with Laboratory | 5 |
| PHY 2048A | General Physics I Recitation | 0 |
| PHY 2049 | General Physics II with Laboratory | 5 |
| PHY 2049A | General Physics II Recitation | 0 |
| PHY 2053 | College Physics I | 3 |
| PHY 2053L | College Physics-I Laboratory | 1 |
| PHY 2054 | College Physics II | 3 |
| PHY 2054L | College Physics-II Laboratory | 1 |
| PSC 1121 | Physical Science with Laboratory | 4 |
| STA 2023 | Introduction to Probability & Statistics I | 3 |
| SWS 3211C | Soil and Water Conservation | 3 |

| **Course Requirements for a Major in Environmental Studies** | | |
|---|---|---|
| **Some Possible Elective Courses: General (Table 2)** | | |
| **Course Prefix and Number** | **Course Title** | **Credit Hours** |
| ANT 2410 | Cultural Anthropology | 3 |
| ANT 3340 | Caribbean Cultural Patterns | 3 |
| ANT 3352 | Peoples and Cultures of Africa | 3 |
| CPO 3204 | Contemporary Africa | 3 |
| ENC 3243 | Technical Report Writing | 3 |
| INR 3002 | International Relations | 3 |
| INR 4102 | American Foreign Policy | 3 |
| INR 4403 | International Law | 3 |
| PHI 2101 | Introduction to Logics | 3 |
| PHI 3601 | Honors Ethics | 3 |
| POS 3163 | Local and Community Politics | 3 |
| POS 3603 | American Constitutional Law | 3 |
| POS 3684 | Nature and Functions of the American Legal System | 3 |
| POS 4697 | Environmental Law | 3 |

| | | |
|---|---|---|
| REL 2000 | Introduction to Religion | 3 |
| REL 2135 | Black Religion in America | 3 |
| REL 3130 | Religion in American Culture | 3 |
| REL 3145 | Women in Religion | 3 |
| REL 3156 | Religion, Personality, and Race | 3 |
| REL 3383 | Caribbean Religion and Culture | 3 |
| REL 3936 | Special Topics in Religion | 3 |

| **Course Requirements for a Major in Environmental Studies** | | |
|---|---|---|
| **Some Possible Elective Courses: Mathematics** | | |
| **Course Prefix and Number** | **Course Title** | **Credit Hours** |
| MAC 1114 | Trigonometric Functions | 3 |
| MAC 1147 | Pre-Calculus | 4 |
| MAC 2233 | Business Calculus I | 3 |
| MAC 2234 | Business Calculus II | 3 |
| MAC 2311 | Calculus I | 4 |
| MAC 2312 | Calculus II | 4 |
| MAD 2120 | Finite Mathematics | 3 |
| STA 2023 | Introduction to Probability & Statistics I | 3 |
| Any course that is on more than one List of Elective Courses can fulfill a course requirement in only one of these lists. | | |

| **Course Requirements for a Major in Environmental Studies** | | |
|---|---|---|
| **Some Possible Elective Courses: Science** | | |
| **Course Prefix and Number** | **Course Title** | **Credit Hours** |
| BOT 1010C | Elementary Botany | 4 |
| BSC 1011C | General Biology II w/Lab | 4 |
| CHM 1015 | Fundamentals of Chemistry | 4 |
| CHM 1031 | Organic Chemistry for Non-Science Major | 3 |
| CHM 1031L | Organic Chemistry for Non-Science Major Laboratory | 1 |
| CHM 1046 | General Chemistry II w/Lab | 4 |
| CHM 2210 | Organic Chemistry I W/Lab | 4 |
| CHM 2211 | Organic Chemistry II W/Lab | 4 |
| COP 3300 | Statistical Computation and Analysis | 3 |
| MCB 3010C | Microbiology | 4 |
| PHY 2048 | General Physics I with Laboratory | 5 |
| PHY 2048A | General Physics I Recitation | 0 |
| PHY 2049 | General Physics II with Laboratory | 5 |
| PHY 2049A | General Physics II Recitation | 0 |
| PHY 2053 | College Physics I | 3 |
| PHY 2053L | College Physics-I Laboratory | 1 |

| | | |
|---|---|---|
| PHY 2054 | College Physics II | 3 |
| PHY 2054L | College Physics-II Laboratory | 1 |
| PSC 1121 | Physical Science with Laboratory | 4 |
| Any course that is on more than one List of Elective Courses can fulfill a course requirement in only one of these lists. | | |

**Course Requirements for a Major in Environmental Studies**

**Minor Concentration Electives**

**Degree Offered at Florida A&M University Minor Concentration**

A requirement for a Bachelor of Arts Degree or a Bachelor of Science Degree in Environmental Studies is the fulfillment of requirements for a Concentration of Courses that are associated with a degree offered at Florida A&M University. The degree that is chosen for this Concentration of Courses must not be a degree offered in the School of the Environment.

A student can fulfill the Concentration of Courses requirements for a degree in Environmental Studies in two ways. The first way is to take a minimum of 18 credit hours of courses such that 1) These 18 credit hours of courses are not required courses for the degree being sought in the School of the Environment and 2) These 18 credit hours are required by a degree curriculum at Florida A&M University.

The second way is to fulfill requirements for a Minor Course of Study that is associated with a degree offered at Florida A&M University such that this Minor Course of Study is not a Minor that is associated with a degree in the School of the Environment. Examples of such minors are those in History, Journalism, Philosophy and Religion, and Political Science.

**Course Requirements for a Major in Environmental Studies: History Example**

**Concentration Area Electives**

**History Minor**

The Concentration Area Electives for History must fulfill the requirements of a Minor in History as specified at Florida A&M University. The Requirements for a Minor in History follow: "Those interested in earning a minor in History are required to complete a minimum of eighteen (18) hours. The following courses are required: AMH 2010 or AMH 2020, HIS 3104, HIS 3150, and nine (9) hours of 3000-4000 level history electives. Students earning a major or minor in History must earn at least a 2.00 GPA (“C”) in each history course completed."

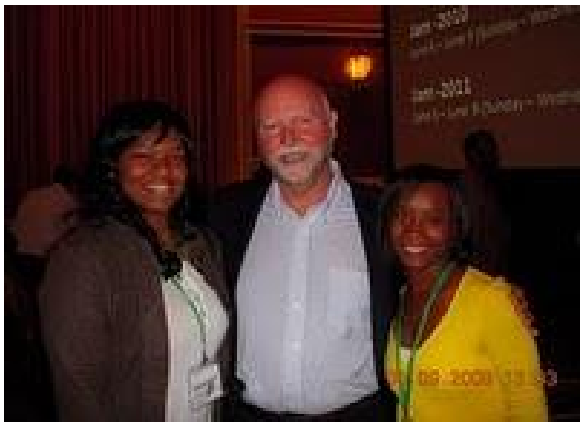
| **Course Requirements for a Major in Environmental Studies: Journalism Example** |
|---|
| **Concentration Area Electives** |
| **Journalism Concentration** |
| The Concentration Area Electives for Journalism must fulfill the requirements of a Minor in Journalism as specified at Florida A&M University. The Requirements for a Minor in Journalism follow: "Any FAMU student may minor in journalism by successfully completing 18 semester hours in journalism courses. Each student must complete 11 of the 18 required semester hours in the following journalism courses: MMC 2000, JOU 3110, MMC 2100, and JOU 3101. Other hours toward the journalism minor will be planned by the student with the consent of the journalism division director. Some prerequisites expected of journalism majors may be waived for journalism minors at the discretion of the division director. Students who minor in journalism will be expected to outline and discuss their minor programs with a journalism advisor before embarking on programs. Minors will be at some disadvantage if he/she does not type at least 40 words per minute with 85 percent accuracy. Minors must also be proficient in grammar and spelling." |

| **Course Requirements for a Major in Environmental Studies: Philosophy and Religion Example** |
|---|
| **Concentration Area Electives** |
| **Philosophy and Religion Concentration** |
| The Concentration Area Electives for Philosophy and Religion must fulfill the requirements of a Minor in Philosophy and Religion as specified at Florida A&M University. The Requirements for a Minor in Philosophy and Religion follow: "A minor may be earned in Philosophy and Religion with the completion of eighteen (18) semester hours from courses listed under Philosophy and Religion." |

| **Course Requirements for a Major in Environmental Studies: Political Science Example** |
|---|
| **Concentration Area Electives** |
| **Political Science Concentration** |
| The Concentration Area Electives for Political Science must fulfill the requirements of a Minor in Political Science as specified at Florida A&M University. The Requirements for a Minor in Political Science follow: "Other students wishing to minor in political science, public administration, pre-law, urban studies & economic development, or international relations must complete 18 semester hours in one of the aforementioned fields. A minor in political science must also include POS 2001, POS 2041 and PAD 3003." |

## The Master of Science Degree Program

The M.S. degree program offers students the opportunity to specialize in Environmental Restoration and Waste Management, Radiation Protection, Environmental Biotechnology, Marine and Estuarine Environments, and Environmental Policy and Management. Graduates of FAMU and other undergraduate programs in natural sciences, pharmacy, economics, mathematics, engineering, engineering technology, or computer science are the principal clientele for the program.



**Graduate Student Eligibility for Submission of an Application for Graduation**

A graduate student may submit an application for graduation only after:

**1)** The student has submitted a draft Thesis or Dissertation to his or her Supervisory Committee.

**2)** His or her Supervisory Committee has approved submitting an application for graduation.

**3)** The student must have completed all core courses pertaining to his/her concentration track as set forth in ESI graduate curriculum.

**4)** Students in the Doctoral Program must have submitted to his or her major advisor at least one draft manuscript for submission to a peer-reviewed journal. This manuscript should be based on his/her MS/Ph.D. research project and should advance knowledge in the specific field.

**5)** A Student in the Doctoral Program must have passed both the written and oral components of the ESI Comprehensive Examination.

## Theses Requirements

Students enrolled in the School of the Environment M.S. degree program are required to complete a thesis. The Thesis Supervisory Committee should be constituted during the second semester of study. The Thesis Supervisory Committee shall consist of at least 3 graduate faculty members, 2 of whom shall be SoE faculty members. The Major Advisor shall serve as the Chair of the Thesis Supervisory Committee. The Committee membership shall be approved by the Dean of the School of the Environment and Dean of the Graduate School. It is expected that the final appointment of the Major Advisor will be done by the end of the first semester of study and that the Thesis Supervisory Committee will be formed by the end of the following semester. It is expected that the Committee will meet at least once a semester.

It is the responsibility of the Thesis Supervisory Committee to approve the research proposal, thesis, and defense. The student and Major Advisor shall, work together to develop the course of study (courses appropriate for the M.S. in addition to the core courses), as well as the research proposal, and shall submit these to the Thesis Supervisory Committee for approval. The thesis and defense must each be approved unanimously by the Thesis Supervisory Committee members.

The thesis proposal should be developed by the student in close consultation with the Major Advisor before submission to the Thesis Supervisory Committee for approval. The proposal should demonstrate familiarity with the literature in the subject area, including a summary of the state of the science, clear objectives and research hypotheses, clear description of the procedures and analyses proposed to achieve the objectives, with a timeline of milestones, and references cited. The thesis must represent the student's own research. It is expected that the M.S. thesis shall result in at least one publication in the refereed literature.

The thesis defense shall begin with a public presentation of the student's research which is advertised and open to all interested parties. The defense shall be continued by the Thesis Supervisory Committee alone.

The website for the School of graduate studies is: http://www.famu.edu/index.cfm?graduatestudies.

All theses must conform to School of the Environment and university standards. Upon approval by the Thesis Committee, the thesis must be forwarded to the Director and Dean of the Graduate School at least ten (10) days prior to the defense. Defense notices must be publicized at that time. Committee members and the chair are responsible for determining the quality and accuracy of the thesis. The committee chair shall certify to the director in writing, whether the candidate passed or failed his/her defense. All theses shall be bound in the official olive green color within 30 days of successful defense. All covers must be hard back. Final bound copies of the thesis shall be distributed as follows: Dean of School of Graduate Studies, Dean of the School of the Environment, Library, student, and the thesis advisor.

**Progress Reports**

The student and Major advisor shall complete a progress report every semester of study. The form for this progress report is available from the Major Advisor and attached to this Handbook. The progress report shall be kept in the student's permanent file in the SoE.

**Mentoring**

All SoE graduate students are strongly encouraged to serve as mentors for the SoE undergraduate students, such as through the SoE Environmental Sciences Student Organization (ESSO). Mentoring should include assistance with academic work, research projects, laboratory techniques, etc. In addition, all SoE graduate students are expected to participate in the annual SoE Summer Camp for high school students, and other K-12 activities as assigned.

## Course of Study

**The following courses are required for all Master's students. The courses of study are organized into program tracks, but the specific courses taken by each student must be approved by the Major Advisor and the Thesis Supervisory Committee.**

**Required Courses**
EVR 5260 Sources & Control of Pollution (3)
EVR 5864 Environmental Policy & Risk Management (3)
EVS 5610 Environmental Chemistry w/Lab (4)
EVS 5905 Environmental Colloquium/Seminar (1) (NOTE: All students must register for this course for two semesters, but all students are required to attend and actively participate in the seminar throughout their graduate program)
EVS 6064 Principles of Ecology (3)
EVS 6885 Environmental Research Design Analysis (4)

**First Year**
***Fall Semester***
EVS 5905 Environmental Colloquium/Seminar (1)
EVS 6064 Principles of Ecology (3)
EVS 6885 Environmental Research Design Analysis (4)
Elective (3)

***Spring Semester***
EVR 5260 Sources & Control of Pollution (3)
EVR 5864 Environmental Policy & Risk Mgmt (3)
EVS 5610 Environmental Chemistry w/Lab (4)
EVS 5905 Environmental. Colloquium/Seminar (1)

**Summer Semester Options**
EVS 5911 Supervised Research (1-3)
EVS 5912 Dir. Individual Study and/or
EVS 5941 Internship (variable)
TOTAL 1-6

**Second Year**

**Areas of Concentration**

**Environmental Biotechnology**

***Fall Semester***

EVS 5028 Molecular Biology Techniques (3)
EVS 5896 Environmental Biotechnologies (3)
EVS 5905 Environmental Colloquium/Seminar (1)
EVS 5970 Master's Degree Thesis (3)

***Spring Semester***

EVS 5605 Environmental Toxicology (3)
EVS 5905 Environmental Colloquium/Seminar (1)
EVS 5970 Master's Degree Thesis (3)
Elective (3)

**Environmental Restoration and Waste Management**

***Fall Semester***

EVS 5604 Hazardous Material Mgmt. (3)
EVS 5970 Master's Degree Thesis (3)
GLY 5828 Subsurface Fate & Transport (3)

***Spring Semester***

EVS 5655 Waste Treatment & Disposal (3)
EVS 5673 Bioremediation Applications & Techniques (3)
EVS 5970 Master's Degree Thesis (3)

**Marine and Estuarine Environments**

***Fall Semester***

EVR 5213 Marine Pollution (3)
EVS 5970 Master's Degree Thesis (3)
PCB 5315 Marine/Estuarine Ecosystems (3)

***Spring Semester***

EVS 5068C Marine Microbial Ecology w/Lab (4)
EVS 5608 Aquatic Toxicology (3)
EVS 5970 Master's Degree Thesis (3)

**Environmental Policy and Management**
***Fall Semester***
EVR 5863 Environmental Resource Economics (3)
EVR 5865 Environmental Risk Analysis (3)
EVS 5862 Environmental Regulations & Regulatory Agencies (2)
EVS 5970 Master's Degree Thesis (3)

***Spring Semester***
EVR 5866 Principles of Environmental Law Practice (3)
EVS 5970 Master's Degree Thesis (3)
EVS 6883 Environmental Decision Making (3)

**Electives**
BCH 5340 Protein Chemistry (3)
CHS 5105 Radiochemistry I (4)
CHS 5106 Radiochemistry II (4)
CHS 5610 Environmental Chemistry w/Lab (4)
CWR 6125 Groundwater Hydrology (3)
EVR 5063 Elements of Environmental Biology (3)
EVR 5865 Environmental Risk Assessment (3)
EVS 5603 Site Characterization and Soil Survey (3)
EVS 5604 Environmental Microbiology (3)
EVS 5606 Environmental Physiology and Nutrition (3)
EVS 5607 Environmental Radioactivity (3)
EVS 5693 Radiation Instrumentation & Measurements (3)
EVS 5910 Environmental Science Research (2)
EVS 5911 Supervised Research (variable; 1-9)
EVS 5912 Directed Individual Study (3)
EVS 5930 Special Topics Environmental Sciences (3)
EVS 5941 Environmental Science Internships var
RHT 5124 Radiation Biology (3)
RHT 5130 Sources/Control Radiation Waste (3)
RHT 5210 Principles of Radiological Health (3)
RHT 5326 Internal Radiation Dosimetry (3)
RHT 5948 Special Topics in Radiation Protection (3)
RHT 5948 Special Topics Radiological Health Practice (3)

## Minor Options in Environmental Sciences

The minor in environmental science, available to graduate students, prepares students from diverse study areas for environmental science careers. Students add to their disciplinary strength the knowledge and skills necessary to meet present and future environmental restoration/waste management demands.

The environmental science option totals 18 semester hours and may be structured as indicated below.

**Courses: Semester Hours**
CHS 5610 Environmental Chemistry w/Lab (4)
EVR 5004 Principles of Environmental Sciences (3)
EVR 5062 Principles of Environmental & Occupational Health (3)
or
EVR 6064 Principles of Ecology
EVR 5063 Elements of Environmental Biology (4)
EVR 5260 Sources and Control of Environmental Pollution (3)
EVS 5862 Environmental Regulations and Regulatory Agencies (2)

# The Doctor of Philosophy Degree Program

The Ph.D. degree program in the School of the Environment will prepare scientists to confront environmental issues which can only be resolved through innovative basic and applied research. The degree requirements are intended to ensure that all Ph.D. candidates develop independence and originality of thought and that they have in-depth knowledge in a specialized area of study and a broad knowledge base in environmental science. The program utilizes graduate courses offered in other departments in the University that are complimentary to the SoE program. The program emphasizes environmental chemistry, environmental policy and risk management, aquatic and terrestrial ecology, and biomolecular science.

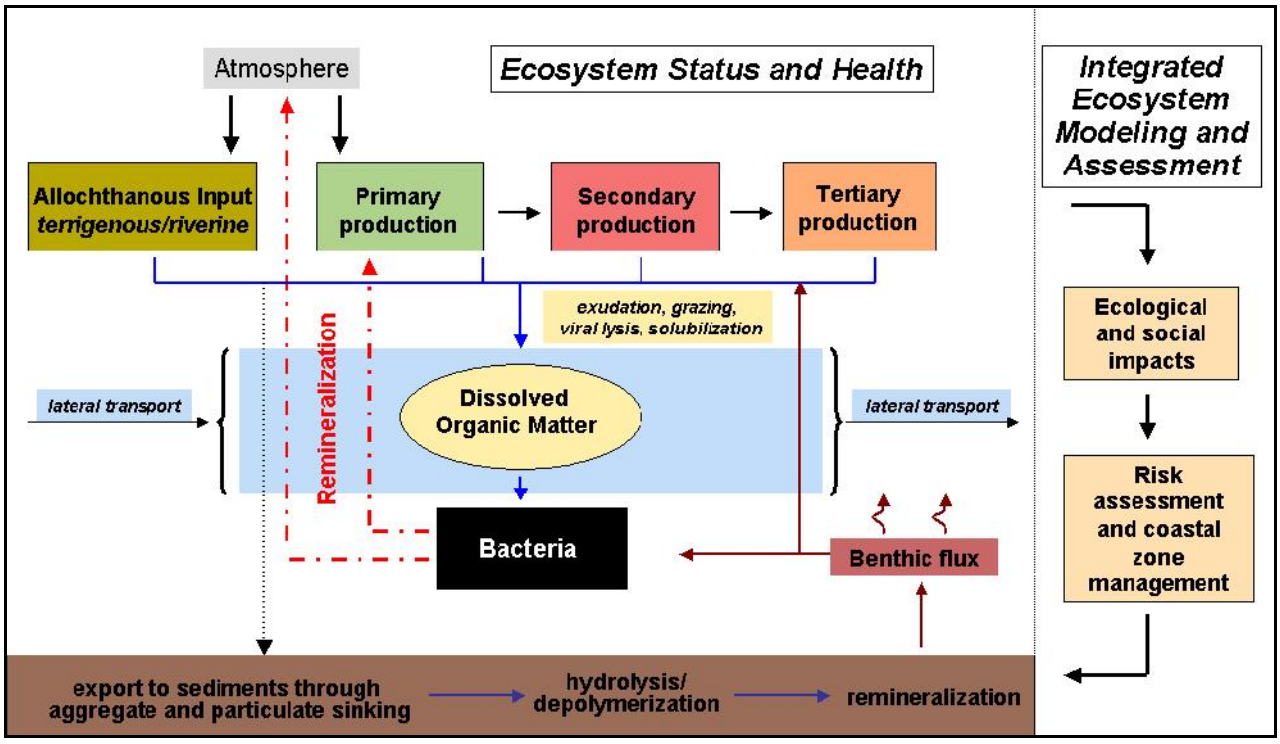
Applicants for admission should have a Bachelor of Science (B.S.) in the natural sciences, engineering, mathematics, or a closely related area. The Graduate Record Examination combined score of at least 1000 in the verbal and quantitative components of the general examination and a "B" average in the upper level (last 60 hours) B.S. degree course work are required of all applicants. Students must also submit three letters of recommendation from graduate or undergraduate professors or other persons who can attest to their potential to success in the SoE Ph.D. program.

**Evaluation Examination and Doctoral Supervisory Committee**

Upon admission each student will be matched with a major professor. A written examination will be administered to all students entering the Ph. D. program. This examination will focus on basic knowledge and concepts in biology, chemistry, mathematics, physics, engineering and related areas. The examination results will be used to aid in the development of the student's program of study. At the end of the first semester of enrollment, the major professor in consultation with the student will recommend a five member Doctoral Supervisory Committee to the Director of the Institute.

One member of the Doctoral Supervisory Committee shall be a member of the graduate faculty, but not a faculty member in the Institute. The major professor in consultation with the Supervisory Committee will develop a complete program of study and supervise the student's work until all degree requirements are completed. The major professor will submit an annual written evaluation of the student's progress to the Director. The Supervisory Committee must certify in writing the successful completion of the program of study.

By the end of the first year, under the direction of the major professor, students will begin research leading to an original proposal. Students must orally present the research proposal to the graduate faculty by the end of the second year. The research proposal shall focus in one of four program areas.



**Graduate Student Eligibility for Submission of an Application for Graduation**

A graduate student may submit an application for graduation only after:

**1)** The student has submitted a draft Thesis or Dissertation to his or her Supervisory Committee.

**2)** His or her Supervisory Committee has approved submitting an application for graduation.

**3)** The student must have completed all core courses pertaining to his/her concentration track as set forth in SoE graduate curriculum.

**4)** Students in the Doctoral Program must have submitted to his or her major advisor at least one draft manuscript for submission to a peer-reviewed journal. This manuscript should be based on his/her MS/Ph.D. research project and should advance knowledge in the specific field.

**5)** A Student in the Doctoral Program must have passed both the written and oral components of the SoE Comprehensive Examination.

**Schedule of Activities Associated with Fulfillment of Requirements for the Doctoral Degree**

**1)** Year One

a) Enroll in courses

b) Start dissertation research activities

c) Assemble a Supervisory Committee

**2)** Year Two

a) Enroll in courses

b) Develop and submit a research prospectus to the supervisory committee

c) Take the Comprehensive Examination

d) Prepare outline of manuscript(s) based on his/her research project's findings and submit to major professor(s)

**3)** Year Three

a) Enroll in additional courses if needed

b) Present a departmental seminar on your research findings and plans for future studies required to complete the MS/Ph.D. project.

c) Continue finalization of data analyses and manuscript(s) writing based on research project's findings and submit to major professor(s)

**4)** Year Four

a) Continue with dissertation research

b) Prepare manuscript(s) based on research project's findings

c) Submit manuscript(s) to major advisor for revisions/submission to appropriate scientific journal.

**5)** Year Five

a) Defend the dissertation

b) Submit all possible manuscript(s) based on research project's findings to appropriate scientific journal(s)

**The Dissertation and the Doctoral Supervisory Committee**

The Doctoral Supervisory Committee shall consist of at least 5 graduate faculty members, at least 3 of whom shall be ESI faculty members, and at least one of whom is from outside ESI. The Major Advisor shall serve as the Chair of the Doctoral Supervisory Committee. The Doctoral Supervisory Committee membership shall be approved by the Dean of the School of the Environment and the Dean of the Graduate School. It is expected that the final appointment of the Major Advisor will be done by the end of the first semester of study, and the Doctoral Supervisory Committee will be formed by the end of the first year. The candidate will be required to make a public presentation of the proposal. It is expected that the Committee will meet at least once a semester.

It is the responsibility of the Doctoral Supervisory Committee to approve the research proposal, dissertation, and defense. The student and Major Advisor shall, work together to develop the course of study (courses appropriate for the Ph.D. in addition to the core courses), as well as the research proposal, and shall submit these to the Doctoral Supervisory Committee for approval. The dissertation and defense must each be approved unanimously by the Doctoral Supervisory Committee members.

The dissertation proposal (prospectus) should be developed by the student in close consultation with the Major Advisor before submission to the Doctoral Supervisory Committee for approval. The proposal should demonstrate familiarity with the literature in the subject area, including a summary of the state of the science, clear objectives and research hypotheses, clear description of the procedures and analyses proposed to achieve the objectives, with a timeline of milestones, articulation of how the research will constitute a new contribution to sciences, and references cited. The dissertation must represent the student's own original research.

The dissertation defense shall begin with a public presentation of the student's research which is advertised and open to all interested parties. The defense shall continue by the Doctoral Supervisory Committee alone.

## Progress Reports

The student and Major advisor shall complete a progress report every semester of study. The form for this progress report is available from the Major Advisor and attached to this Handbook. The progress report shall be kept in the student's permanent file in the SoE.

## Mentoring

All ESI graduate students are strongly encouraged to serve as mentors for the SoE undergraduate students, such as through the Environmental Sciences Student Organization (ESSO). Mentoring should include assistance with academic work, research projects, laboratory techniques, etc. In addition, all SoE graduate students are expected to participate in the annual SoE Summer Camp for high school students, and other K-12 activities as assigned.

## Doctor of Philosophy Degree Requirements

Course work requirements:

Completion of up to eighty (80) semester hours of graduate level course work and research is required as shown below. A 3.0 cumulative grade point average must be maintained in all coursework.

1) Nineteen (19) hours of core requirements
2) Thirty-seven (37) hours of area and supporting courses
3) Twenty-four (24) hours of Dissertation Research

## Other degree requirements:

1) Participation in the instructional component of select graduate and undergraduate lectures and/or laboratories as assigned for a minimum of two semesters
2) Successful completion of an oral and written comprehensive examination
3) Submission and oral presentation of the research proposal
4) At least one presentation at a scientific meeting
5) Submission of at least one manuscript for publication in a refereed scientific journal
6) Submission and defense of an acceptable dissertation based on original research


## Program of Study

Upon admission each student will be matched with a Major Advisor as described previously. A written examination will be administered to all students entering the Ph.D. program to assess the completeness of the student's background knowledge. This examination will focus on basic knowledge and concepts in biology, chemistry, mathematics, physics, engineering and related areas. The examination results will be used to aid in the development of the student's program of study. The Major Advisor in consultation with the Doctoral Supervisory Committee will develop a complete program of study and supervise the student's work until all degree requirements are completed. The Major Advisor will submit a written evaluation of the student's progress to the Dean, as discussed elsewhere. The Doctoral Supervisory Committee must certify in writing the successful completion of the program of study. By the end of the first year, under the direction of the Major Advisor, students will begin research leading to an original proposal. Students must orally present the research proposal to the Doctoral Supervisory Committee after taking the Comprehensive Examination.

### Doctoral Qualifying and Comprehensive Examination

An oral and written examination will be administered to each student by the graduate faculty. The student must sit for the examination within the first two years of their program of study, normally during the Spring Semester of their second year of study. The faculty shall report the outcome to the Dean of the School who will then inform the Dean of Graduate Studies and Research. The outcome shall be recorded as "pass", "conditional pass" or "fail".

All students must pass the comprehensive examination in order to be advanced to candidacy.

If any student requires re-examination, the outcome can only be reported as "pass" or "fail". Any student who fails shall be recommended for dismissal from the program to the Dean of the Graduate School. Students are admitted to Ph.D. candidacy after passing this examination.

## Candidacy

Doctoral students in good academic standing who have completed all core courses with required grades and who have successfully passed both components of the comprehensive examination may be admitted to candidacy. By the time of admission to candidacy, the student must have formed a Doctoral Supervisory Committee and should have an approved proposal. Upon advancement to candidacy, the student must complete a doctoral dissertation on an original research topic approved by the student's Doctoral Supervisory Committee.


**Curriculum**
**Required Courses**
EVR 5260 Sources & Control of Pollution (3)
EVR 5864 Environmental Policy & Risk Management (3)
EVS 5610 Environmental Chemistry w/Lab (4)
EVS 5905 Environmental Colloquium/Seminar (1)
*(NOTE: All students must register for this course for two semesters, but all students are required to attend and actively participate in the seminar throughout their graduate program).*
EVS 6064 Principles of Ecology (3)
EVS 6885 Environmental Research Design Analysis (4)

# Appendix

**Committee for BS Senior Thesis**

Student's Name:_____ Date:_____

Date of Admission: _____

Advisor: _____ (name and title)

_____ (department)

_____ (signature)

Committee Member: _____ (name and title)

_____ (department)

_____ (signature)

Committee Member: _____ (name and title)

_____ (department)

_____ (signature)

*Approved by Director of ESI* _____

**BS Proposal Defense**

Student's Name: _____ Date:_____

Date of Admission: _____

Title of Proposal: _____

_____

Advisor: _____

Committee Member: _____

Committee Member: _____

Committee Member: _____

Committee Member: _____

Proposal *Approved or Disapproved* (circle one)

**Comments:**

**Senior Thesis Defense**

Student's Name: _____ Date:_____

Date of Admission: _____

Title of Proposal: _____

_____

Advisor: _____

Committee Member: _____

Committee Member: _____

Committee Member: _____

Committee Member: _____

Proposal *Approved or Disapproved* (circle one)

**Comments:**

**Committee for MS**

Student's Name:_____ Date:_____

Date of Admission: _____

Advisor: _____ (name and title)

_____ (department)

_____ (signature)

Committee Member: _____ (name and title)

_____ (department)

_____ (signature)

Committee Member: _____ (name and title)

_____ (department)

_____ (signature)

*Approved by Director of ESI* _____

## M.S. DEGREE CHECK LIST

*DATE COMPLETED/APPROVED*

_____ Advisor (1rst month of first semester in yr one)

Advisor (name)_____

_____ : Committee members selected (1rst month of second semester in yr one)

Member (name)_____

Member (name)_____

Member (name)_____

_____ First report from committee (by the end of the 2nd semester in yr 1)

_____ Proposal defense with committee approval
(by the end the 1rst academic year, i.e. 3rd semester)

_____ Subsequent reports from committee
**student's committee should meet at least once per academic year*

_____ Core courses completed or waived (Yes/No)

_____ Required courses completed (Yes/No)

_____ One copy of thesis sent to Dean of Graduate Studies at least ten days prior to anticipated date of defense

_____ One copy of thesis filed with ESI at least two
weeks prior to anticipated date of defense

_____ Thesis successfully defended

_____ Copy of final thesis filed with ESI

**Comments:**

**Committee Meeting Log/MS**

Student's Name: _____ Date:_____

Date of Admission: _____

Purpose of Meeting:_____

_____

Advisor: _____

Committee Member: _____

Committee Member: _____

Committee Member: _____

**Comments:**

**MS Proposal Defense**

Student's Name: _____ Date:_____

Date of Admission: _____

Title of Proposal: _____

_____

Advisor: _____

Committee Member: _____

Committee Member: _____

Committee Member: _____

Proposal *Approved or Disapproved* (circle one)

**Comments:**

**Masters Thesis Defense**

Student's Name: _____ Date:_____

Date of Admission: _____

Title of Thesis: _____

_____

Advisor: _____

Committee Member: _____

Committee Member: _____

Committee Member: _____

Thesis *Approved or Disapproved* (circle one)

**Comments:**

# PH.D DEGREE CHECK LIST

*DATE COMPLETED/APPROVED*

_____ Advisor (1rst month of second semester in yr one)

Advisor (name)_____

_____ Committee members selected (3rd month of second semester in yr one)

Member (name)_____

Member (name)_____

Member (name)_____

Outside Member (name)_____

_____ First report from committee (by the end of yr one)

_____ Comprehensive examination (end of second semester in yr two)
**once passed student is admitted to candidacy*

_____ Doctoral progress report to Dean of Graduate Studies (annually after passing comprehensive exam)

_____ Proposal defense with committee approval (by the end of the second year)

_____ Subsequent reports from committee
**student's committee should meet at least once per academic year*

_____ _____ _____

_____ Core courses completed or waived (Yes/No)

_____ Required courses completed (Yes/No)

_____ One copy of dissertation sent to Dean of Graduate Studies at least ten days prior to anticipated date of defense

_____ One copy of dissertation filed with ESI at least two weeks before date of defense

_____ Dissertation successfully defended

_____ Copy of final dissertation filed with ESI

**Comments:**

**Committee for Ph.D.**

Student's Name:_____ Date:_____

Date of Admission: _____

Advisor (s): _____ (name and title)

_____ (department)

_____ (signature)

Committee Member: _____ (name and title)

_____ (department)

_____ (signature)

Committee Member: _____ (name and title)

_____ (department)

_____ (signature)

Committee Member: _____ (name and title)

_____ (department)

_____ (signature)

Committee Member: _____ (name and title)

_____ (department)

_____ (signature)

Committee Member: _____ (name and title)

_____ (department)

_____ (signature)

*Approved by Director of ESI* _____

**Committee Meeting /PhD**

Student's Name: _____ Date:_____

Date of Admission: _____

Purpose of Meeting:_____

_____

Advisor(s): _____

Committee Member: _____

Committee Member: _____

Committee Member: _____

Committee Member: _____

**Comments:**

**PhD Proposal Defense**

Student's Name: _____ Date:_____

Date of Admission: _____

Title of Proposal: _____

_____

Advisor: _____

Committee Member: _____

Committee Member: _____

Committee Member: _____

Committee Member: _____

Proposal *Approved or Disapproved* (circle one)

**Comments:**

# Graduate Student Progress Form

Following is the form that must be completed by the student and her/his Major Advisor each semester and submitted to the SoE Graduate Coordinator for inclusion in the student's permanent file.

**ESI Graduate Student Progress Report**

All graduate students in the School of the Environment must file a student progress report at the end of each semester. The form must be completed and signed by the student and her/his advisor and sent to the SoE Graduate Coordinator for placement in the student's file. The faculty advisor will maintain an electronic version of this for each student to be updated at the end of each semester.

_____ _____ _____
Student's Name Degree Sought Date of Report
_____

M.S. or Ph.D.
Action Status/Date of Completion
Initial Faculty Advisor Assigned ———————————————
Final Assignment of Major Advisor ———————————————
Funding Source/Status ———————————————
Thesis/Dissertation Committee Status ———————————————
Proposal Status ———————————————
Comprehensive Exam Outcome ———————————————
Candidacy Status ———————————————
Defense Date Scheduled/Outcome ———————————————
Graduation Date ———————————————
Membership of Thesis/Dissertation Committee:
Name Affiliation

_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____

Thesis/Dissertation Committee Report 1 _____ Progress Report Semester 1 _____
Thesis/Dissertation Committee Report 2 _____ Progress Report Semester 2 _____
Thesis/Dissertation Committee Report 3 _____ Progress Report Semester 3 _____
Thesis/Dissertation Committee Report 4 _____ Progress Report Semester 4 _____
Thesis/Dissertation Committee Report 5 _____ Progress Report Semester 5 _____
Thesis/Dissertation Committee Report 6 _____ Progress Report Semester 6 _____

**Student's Name continued (page 2)**

_____

Course of Study:
Core Courses:

| **Course** | **Semester taken** | **Grade** |
|---|---|---|
| CHS 5610 Env. Chemistry w/Lab | _____ | _____ |
| EVR 5260 Sources/Controls Env. Pollution | _____ | _____ |
| EVR 5864 Env. Policy & Risk Management | _____ | _____ |
| EVR 5905 Env. Colloquium & Seminar | _____ | _____ |
| EVR 6064 Principles of Ecology | _____ | _____ |
| EVR 6835 Env. Research Design w/Lab | _____ | _____ |

Thesis/Dissertation Committee-Approved Courses:

| **Course** | **Semester taken** | **Grade** |
|---|---|---|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
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| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

**Student's Name continued (page 3)**

_____

Progress on thesis/dissertation research during past semester (brief discussion; use additional sheets if necessary ) (TO BE COMPLETED BY STUDENT)

I certify that these statements are complete and accurate to the best of my knowledge.

_____ _____

Student's Name Date

**Student's Name continued (page 4)**

_____

In my opinion, the student's research and academic progress have been:
(TO BE COMPLETED BY MAJOR ADVISOR)

_____ _____

Advisor's Name Date

**The School of the Environment**
**Florida A&M University**
Frederick S. Humphries Science Research Center
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Tallahassee, FL 32307
(850) 599-3550
http://www.famu.edu/index.cfm?a=environmentalscience