

THE UNIVERSITY OF CHARLESTON

Student Handbook

Master of Science in Environmental and Sustainability Studies (EVSS)

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Academic Policies and Procedures

Below are the academic policies and procedures for the Master of Science in Environmental and Sustainability Studies (EVSS) program, as of February 2024. All EVSS students are responsible for familiarizing themselves with the policies and procedures presented in this handbook. Therefore, it is important to read these policies thoroughly and consult this handbook for reference purposes.

Any additional questions may be directed to the EVSS Program Coordinator at (843) 953-2000.

Admission Requirements

Admission to the EVSS Program requires a bachelor's degree from an accredited institution. Students with a background in any undergraduate major are encouraged to apply. Minimum admissions requirements are listed below. Some applicants may not satisfy all requirements. Every effort will be made to accommodate such applicants through preparatory classes at the College of Charleston (CofC). Exceptions can be made on an individual basis, depending on a candidate's background or experience.

Undergraduate Record – Applicants to the program should have an overall GPA of 3.0 on a 4.0 scale.

Undergraduate Academic Training – Admitted students are expected to have completed significant coursework in the sciences. Students who do not meet the entrance requirements listed below but who otherwise seem well-suited for the program may be admitted, but they must be prepared to remedy their deficiencies as stipulated by the EVSS Admissions Committee.

- Science: One academic year (two semesters with labs) of either Biology or Chemistry, and one academic year (two semesters with labs) of Biology or Chemistry (whichever one has not already been taken), or another physical or natural science.
- Statistics: As a prerequisite to the core course EVSS 659: Environmental Statistics, each student must either have taken the undergraduate course MATH 250: Statistical Methods I (or an equivalent college level statistics course) OR have passed the EVSS entrance exam in Statistics.

Letters of Recommendation – Applicants must submit two (2) letters of recommendation from instructors or individuals who have had close contact with the applicant during their undergraduate training or professional career. **At least one of these** letters must be able to attest to the student's academic ability (i.e., be from a former professor).

Transcripts – One official transcript is required from each college or institution attended. Information concerning transcript submission is included in the EVSS application.

Transfer Credit – Upon written request, and with the approval of a student's Academic Advisor (see below), up to nine (9) semester hours of appropriate graduate level coursework may be transferred into a student's Program of Study (see below), under the following conditions:

- The institution transferring the credit is accredited to offer graduate degree programs by the cognizant regional accrediting association
- The credit is fully acceptable to that institution in satisfaction of its advanced degree requirements
- The credit is applicable in terms of content to the student's Program of Study

The student assumes responsibility for initiating the request for transfer graduate credit on his/her Program of Study (see below). An official transcript containing the requested transfer work must be on file in the Graduate School Office. If such work is shown on the transcripts provided in support of the student's admission to the EVSS Program, a new record is not needed.

Courses considered for transfer credit must carry a minimum grade of "B"/3.0. Also, accepted transfer credit must have been in courses started six (6) years or less before the semester in which the degree work is completed.

Admission Categories

Regular Admission – A prospective candidate for a degree who meets all requirements for admission to the EVSS Program will be classified as a regular degree-seeking student.

Provisional Admission – A prospective candidate for a degree who does not meet all the admission criteria but who, in the judgment of the Admissions Committee, has the potential to successfully complete graduate work will be classified as a provisional student. In the student's acceptance letter, the Admissions Committee will outline the deficiencies, as well as the requirements and deadlines to compensate them.

Non-degree Seeking – Non-degree seeking students are those who desire registration with credit in graduate courses but who are not candidates for a degree. Students wishing to take EVSS courses as non-degree students must have an overall undergraduate GPA of a 3.0 on a 4.0 scale. Applicants seeking non-degree status must contact the Graduate School Office.

No more than nine (9) credit hours of work taken in non-degree status may be applied toward the EVSS degree requirements if the student is later admitted to the program. To accomplish reclassification as a degree-seeking student, the candidate must complete a minimum of 9 credit hours as a non-degree seeking student before reapplying for admission as a degree-seeking student. Non-degree seeking students may enroll in Core Courses as well as electives.

Transient Students are those in good standing in any regionally accredited graduate school who wish to enroll in graduate courses for credit to transfer this credit to their graduate school. Students interested in applying for transient student credit must contact the Graduate School Office.

International Students

Each international student applying for admission to the EVSS Program must satisfy the following requirements:

1. Earn an appropriate undergraduate academic degree equivalent to an American bachelor's degree (B.A., B.S.) prior to enrolling for the EVSS Program.
2. Make up any deficiencies in previous college/university academic work by successfully completing appropriate courses at the undergraduate level at the College of Charleston.
3. Meet all admission criteria for the EVSS Program (see number 1, above).
4. Demonstrate proficiency in the English language (if English is not the student's primary language) as evidenced by the TOEFL (Test of English as a Foreign Language) iBT (internet-based testing) exam. The minimum total score accepted for admission is 81. The recommended section scores are as follows: writing = 20, speaking = 23, listening = 17 and reading = 21. If an applicant's score falls below the recommended minimum in one area but still meets the total score requirement of 81, section scores will be assessed individually in terms of their language adequacy. TOEFL scores are acceptable for a two-year period after the test.
5. Provide proof of ability to meet all education-related expenses while engaged in graduate studies by completing a Certification of Finances form with official signature, before being admitted to the program.

Note: In some cases, an affidavit of support or notarized bank officer's statement is sufficient. In certain countries, United States Consular officers require prior payment of the first-year tuition and fees before a non-immigrant student visa will be issued. Applicants should ask about local practices in advance to establish their graduate study plans.

Graduate Faculty Categories

Because the nature of contemporary environmental problems are complex, the Environmental Studies (MES) Program draws upon a wide range of expertise in the interdisciplinary pursuit of training future environment and sustainability professionals. These experts inform student work from within the College of Charleston and external to this institution, from the environmental and natural resource management community of the Lowcountry, and beyond. It is important to articulate these graduate faculty categories, as pertains to the EVSS program and the expectations of advising and committee service.

Type I Graduate Faculty members are roster faculty colleagues at the College of Charleston who

have been recommended by the relevant Academic Program Director(s) or Department Chair(s) for Type I membership and approved for such membership by the relevant school Dean(s), the Graduate Dean, and the Provost for a term of six years. The College's institutional criteria require that Type I Graduate Faculty members have:

- a.) An earned terminal degree in an appropriate discipline.
- b.) Demonstrated effectiveness in teaching.
- c.) A continuing record of scholarly achievement and professional activity, or a strong indication of growing involvement with scholarship for those holding the rank of Assistant Professor or its equivalent, consistent with the descriptions of scholarship provided elsewhere in the Faculty/Administration Manual (FAM).

Type II Graduate Faculty members are roster, adjunct, or courtesy faculty members at the College of Charleston who may not hold a terminal degree or some traditional qualifying credentials but meet other appropriate criteria for graduate faculty appointment. Such appointments are granted on the recommendation of the relevant Academic Program Director(s) and/or Department Chair(s) and with the approval of the relevant school Dean(s), the Graduate Dean, and the Provost for a maximum term of three years.

Qualification for Type II Graduate Faculty membership is determined based on program-specific criteria, including qualifications to instruct a graduate course, supervise graduate student research, act as lead advisor for academic internship or externship projects, and/or serve on thesis, doctoral, or intern/externship project committees.

Type I or Type II Graduate Faculty members may serve as the chair of a master's, doctoral, or intern/externship project committee.

Additional information can be found in the [Faculty/Administration Manual](#) on the Academic Affairs website.

Advising

Given that the University of Charleston/College of Charleston is a student-centered liberal arts institution, the faculty at CofC take advising students seriously. While graduate students are expected to exhibit independent initiative, the program has an advising structure designed to help them progress through their degree quickly.

All new MES students are to be advised by the Director and Program Coordinator upon acceptance into the program, through the first semester. This is to initially guide students through the selection of courses for their first semester, for guidance on developing a Program of Study, and for guidance on contacting faculty (Type I and Type II, [see above](#)) who might potentially serve as committee members or as a permanent Academic or Research Advisor for the student.

All incoming EVSS students will see an advising hold on their account that will prevent them from

registering for courses unless they have been advised by the Program Director or Program Coordinator. This advising hold will remain in place every semester until the student files the Program of Study Form ([EVSS-2](#) or [EVSS-2 Concurrent](#)) and/or the Research Advisory Committee Form ([EVSS-4](#)). Students should seek an advising appointment with the Program Director or Program Coordinator to schedule classes before submitting the forms.

A student needs to secure an Academic Advisor by the end of their first semester in the program, who is also ideally their Research Advisor and will serve on the student's Research Committee. For the rest of the student's career, this faculty member will serve as a topical expert (someone that may contribute methodological or topical expertise for a student project), and an expert of the academic institution. The Academic Advisor ensures the student's timely progress to their degree and shepherds the student through developing an academic project based on their academic needs and career goals. The Academic Advisor will supervise the completion of the Program of Study form, assist (if possible) the student in networking with experts and/or developing external institutional connections to complete an internship and provide other advice to the student about being a member of the College community. The Academic Advisor need not be the same as a student's Research Advisor (see description of Research Advisor below), but if the Academic Advisor is not overseeing the details of the student's research design, the Academic Advisor will nevertheless ensure that the student products are guided to meet the academic requirements of the EVSS Program.

The student's Academic Advisor will help select faculty members for the Internship or Thesis Committee, or a separate Research Advisor, if appropriate. Any changes in a student's Academic Advisor or Committee structure (whether for an Internship or Thesis) must be made with the Change in Advisor form ([EVSS-5](#)) through the EVSS Program Office.

The student's Research Advisor will guide them through their research design and ensure the quality and rigor of the student's proposal drafts and the final products of their thesis or internship work. The Research Advisor is usually the person who is the "first line" of reviewing the student's work before the rest of the Research Committee participates in the process. The Research Advisor may be separate from a student's Academic Advisor, but it is advisable that the student try to find a person that can fit both roles simultaneously as a "Main Advisor." Some situations might warrant other arrangements; it is the student's responsibility to ensure that they clearly articulate the roles they wish faculty to serve when the student invites a professional to serve on their committee.

Registration

Students register for courses in MyPortal ([my.cofc.edu](#)). After logging in, click on the "Academic Services" tab. Scroll to the middle of the page to the "Registration Tools" box. Here students have a few options: look up classes, add/drop classes, and registration status.

Dropping a Course

If a student registers for a course and later decides not to take the course, they must officially "drop" or "withdraw" from the course. Not attending class or not paying the bill will not automatically drop the student from the course. The drop/add period extends through the first

week of class during the Fall and Spring Semesters. Courses dropped during this period do not appear on the student's academic record.

Course Withdrawal

STUDENTS MAY WITHDRAW FROM A COURSE WITH A GRADE OF “W” FROM THE END OF THE DROP/ADD PERIOD UNTIL THE END OF THE WITHDRAWAL PERIOD, AS DETERMINED BY THE COLLEGE OF CHARLESTON GRADUATE SCHOOL OFFICE. Dates can be found on the [Academic Calendar](#).

After this date, students may appeal to withdraw from the course with a grade of “W.” Students must submit a Course Withdrawal form, available in the MES Program and Graduate School Offices, to the Graduate School Office. The withdrawal form must be accompanied by documentation of extenuating circumstances and must be signed by the course instructor to indicate that the student is passing the class at the time of the request to withdraw. The Dean of the Graduate School will review the petition and grant or deny the withdrawal.

It is the student's responsibility to be aware of the withdrawal deadline for the term(s) in which they are enrolled in courses, as it fluctuates from semester to semester. If a student ceases work or attendance in a course and does not withdraw by the withdrawal deadline, they will receive a grade for the work completed to that point, which could result in a failing grade. The outcome of a failing grade is dismissal from the program.

Incomplete Coursework

The grade “I” indicates that only a small part of the semester's work remains to be done, that the student is otherwise doing satisfactory work in the course, and that an extension of time is warranted to complete the work. Students receiving a grade of “I” or “IP” must complete the Course Completion Agreement (found on the Graduate School Office website) and submit it to the EVSS Program Office. All work for completion of the course requirements must be submitted by the end of exams in the next major term (Fall or Spring). One additional extension may be granted to the student using the Extension to Complete Course Requirements form with signatures of approval by both the professor and the Dean of the Graduate School. If the student does not complete the work within the prescribed time period, the “I” is changed to an “F” and the student will be withdrawn from the Graduate School and will not be allowed to reapply to his or her program or to enroll in any graduate coursework counting toward any graduate degree or graduate certificate at the College of Charleston for one calendar year. It is the student's responsibility to be clear on the deadlines of their extensions, and to abide by these deadlines.

In the case of Thesis or Internship credit hours, an extension of no more than 60 calendar days (or 30 days for Summer term) may be granted past the term in which the student was enrolled in Thesis or Internship credit hours without enrolling in Continuous Research Enrollment (EVSS 900). Students must request an extension, prior to the final week of class meetings, using the Request for Extension to Complete Course Requirements form.

Program of Study

A student's Program of Study contains a list of courses and other requirements that the student must complete, as well as courses which are accepted for transfer credit. This program of courses, developed in consultation with the Academic and/or Research Advisor (and sometimes the student's committee as a whole), should contribute to the kinds of expertise and skillsets a student will need to develop a rigorous research project, whether that project is applied (internship option) or a thesis. Students are strongly encouraged to select courses that will provide a theoretical basis, exploration of literature, or methodological skillset that will contribute to the research they want to complete. In some cases, planning for an Independent Study is most appropriate to develop the expertise or skillset necessary to complete a project with rigor.

All EVSS students must take a total of thirty-eight (38) credit hours of coursework to graduate, including at least twenty-four (24) credit hours of **core courses, outlined below:**

Environmental Studies		
EVSS 611 Graduate Core Seminar	3 credit hours	Fall or Spring

Policy		
EVSS 601 Economic Theory for Policy Analysis	3 credit hours	Fall or Summer
EVSS 602 Public Policy	3 credit hours	Fall or Spring

Natural Science (one of the following)		
EVSS 610 Environmental Biology (<i>Biology</i>)	3 credit hours	Fall
EVSS 631 Pollution in the Environment (<i>Geology</i>)	4 credit hours	Fall
EVSS 640 Earth Systems Science (<i>Geology</i>)	3 credit hours	Spring
EVSS 650 Energy Prod. & Resource Mgmt (<i>Physics</i>)	3 credit hours	Spring

Methods		
EVSS 632 Social Science Methods	3 credit hours	Spring or Summer
<i>Statistics</i> (one of the following)		
EVSS 624 Biometry (with lab)	4 credit hours	Spring
EVSS 659 Environmental Statistics**	3 credit hours	Spring

Internship or Thesis (one of the following)		
EVSS 690 Internship	6 credit hours*	Fall, Spring, or Summer
EVSS 691 Thesis	6 credit hours*	Fall, Spring, or Summer

TOTAL: 24 credit hours minimum (25 or 26 if a student elects to take Biometry to meet their core course in statistics, and/or Pollution in the Environment to meet their core course in natural science)

*Internship and Thesis credit hours may be split between two terms.

**As a prerequisite to the core course EVSS 659: Environmental Statistics, each student must either take the undergraduate course MATH 250: Statistical Methods I (or an equivalent college level statistics course) OR pass the EVSS entrance exam in Statistics.

Electives: The remainder of 14 credit hours is comprised of elective classes chosen by the student, with help from their Academic Advisor and Research Advisor, and the rest of the Research Advisory Committee, if appropriate. These classes give the student skills and knowledge for completing their Thesis or applied research.

The Program of Study form ([EVSS-2](#) or [EVSS-2 Concurrent](#)) must be turned into the EVSS Program Office by the end of the student's first semester of enrollment. Any subsequent changes to the Program of Study may be submitted using the Amendment to the Program of Study form ([EVSS- 3](#)).

Independent Study

The EVSS Program offers an Independent Study course category (EVSS 693) to allow students the opportunity to pursue a specialized course of study in a topic area not covered in the regular program curriculum. This individually-directed study of an environmental issue in the area of policy or science will be planned by the student in consultation with, and under the supervision of a faculty member. Independent Study is a variable credit hour course, ranging from one (1) to four (4) credit hours. Depending on the content of the course of study, the student and the supervising faculty member should propose a number of credit hours to be taken. The supervising faculty member, topic, and project outline must be approved by the EVSS Program Director, and the student should consult their Academic Advisor on the appropriateness of the coursework to their Program of Study.

A syllabus must be developed outlining the student learning outcomes, proposed credit hours, description of the project, research requirements (including bibliography, materials, equipment, etc.), and evaluation criteria and procedures. The syllabus must demonstrate graduate-level work, and thus, should be planned in advance of the semester in which the student would like to conduct the Independent Study. See [Appendix D](#) for a sample Independent Study syllabus, as well as Bloom's Taxonomy for creating student learning outcomes.

The student must submit the syllabus, approved by their Academic Advisor, along with the Individual Graduate Enrollment form (found on the Graduate School Office website) to the EVSS Program Office. With some exceptions, multiple projects may be conducted for up to six (6) credit hours of the Independent Study category.

Student Progress/Evaluation

Each EVSS student must maintain a 3.0 GPA during his/her Program of Study. Should a student's GPA fall below a 3.0, he/she will be placed on academic probation and given one semester in which to raise the average to the minimum. Students must also achieve a minimum grade of "B" or better in all but one of their Core Courses. Students receiving three (3) grades below the grade of "B" or one grade of "F" in any of their courses will be dismissed from the program.

Students may, upon petition and acceptance by the Steering Committee, retake Core Courses in

which they receive grades lower than “B.” Failure to achieve the required grade upon retaking the course will usually result in dismissal from the program, as will a grade of less than “C” in any course.

At the end of each semester, the student's record may be reviewed by the EVSS Steering Committee to determine whether he/she is making adequate progress towards the degree. Should a student fail to make adequate progress, the Steering Committee may recommend dismissal from the program. Student petitions citing extenuating circumstances will be considered by the Steering Committee. Students dismissed from the EVSS Program will not be allowed to reapply for one calendar year.

Leave of Absence

Should a student decide to take a leave of absence from the program, he/she must submit a letter describing why he/she is taking the leave and listing the dates the leave is expected to span. The student must then submit the letter and a Request for Leave of Absence form (found on the Graduate School Office website) to the Graduate School Office.

Note: A leave of absence cannot extend longer than two semesters.

Withdrawal from the Program

If at any time a student decides to withdraw from the MES Program altogether, he/she must complete a Graduate Program Withdrawal form (found on the Graduate School Office website). The Graduate Program Withdrawal form must be signed by the Program Director and submitted to the Graduate School Office. If, after withdrawing from the program, the student decides he/she would like to return, he/she must reapply to the program.

Petitioning

Any exceptions to the stated curriculum requirements or the policies and procedures outlined in this handbook that a student requests to be applied to his/her Program of Study must be approved by the EVSS Steering Committee. The student must write a letter and provide any documentation pertinent to his/her request. This information should be submitted to the EVSS Program Office and considered by the Steering Committee at its first meeting after the petition's submission.

Policies and procedures concerning grievances, sexual harassment, and honor code violations are available in the EVSS and Graduate School Offices.

Time Limit for Degree Completion

All EVSS students must fulfill the program requirements within five (5) years of matriculating. Petitions for extensions will be considered by the Steering Committee in extenuating circumstances.

Readmission

A student who has been dismissed from the EVSS Program because of a failure to resolve GPA or satisfactory progress issues may reapply to the program after one calendar year from the date of his/her dismissal. The student must meet all criteria for admissions currently in effect at the time of application for readmission.

Notice of Change

Rules, regulations, fees, course descriptions, and program requirements are subject to change without notice. When a change in program requirements is made while a student is enrolled, the student may elect to complete the program under the requirements in effect at the time of his/her matriculation OR he/she may elect to shift entirely to the new requirements. As a result of ongoing reviews of the EVSS Program, certain course offerings may be deleted or restructured between editions of the Student Handbook.

Thesis and Academic Internship Requirements

Introduction

Students are required to complete either a Thesis or Academic Internship as part of the EVSS Program, demonstrating mastery of research design in either an applied (internship) or academic (thesis) setting. In the thesis, the student will conceive, implement, analyze, and report on original research, based on a literature review that informs the research question/hypotheses. The academic internship is similar, except that it is geared towards students seeking research experience within a professional setting, such as for a governmental agency charged with environmental management. The academic internship therefore requires the student to engage with an off-campus institution to meet the needs of that institution's work, designing research appropriate to that applied setting, and being informed by existing agency (grey) literature and potential policy applications of the applied research, as well as informed by a review of peer-review literature.

While the student's research question in the Internship is largely guided by the institution's stated applied research needs, the thesis research question is derived exclusively from a review of scientific literature. The only difference between the Thesis and Internship options is the context in which the student develops their research question; all stages of the process of creating a research product (literature reviews, research design, public in-person defense of results) are the same for every student project.

Committee Structure

Composition and Communication Expectations

A Research Advisory Committee is made up of four experts willing to contribute their time, on a

largely volunteer basis, to cultivate graduate student research. All members of the student's committee, whether or not affiliated with the College of Charleston, collaborate with graduate students because they are interested in mentoring students, because the work has the potential to contribute to advancing the field, or because they believe that working on graduate projects enriches the local community. As such, students should be respectful of these experts' time. While students should network broadly when they begin the program, and not be afraid to ask to collaborate with specific faculty in forming their committees, being turned down for committee service or advising should not be taken personally. Students should not expect that all experts will always have the time to serve on their committee, most often because faculty want to be able to make *quality* contributions to student projects, in alignment with the College's mission of being an institution of student-centered learning. Students need to expect to spend a lot of time during their first semester of the program networking with a wide variety of faculty (both Type I and Type II), to understand the diversity of expertise across the local region for environmental research. Students are given advice about where to look to make these connections but are expected to be self-directed in reaching out to potential faculty.

The student's committee for an internship or thesis project must be composed of at least two Type I faculty members employed by the College of Charleston. The other two committee spots may be appropriate to fill with either Type I or Type II faculty: these may be faculty within the College or experts from another institution (such as where students may serve on internships). Students must consult with the Program Director or Coordinator to check whether potential committee members are of a Type I or Type II status to ensure their committees have the appropriate structure.

Since the EVSS degree aims to be interdisciplinary, so should be the student Research Advisory Committee. For example, a student whose Research Advisor is a faculty member in Biology may think about designing their committee with three Biology faculty members and one Political Science faculty member. Conversely, a student whose main methodologies rely on social sciences should be sure to engage at least one discipline in natural science for membership on their Research Advisory Committee. Or depending on the project, it might be most advantageous to select committee members who represent more than two disciplines or fields of study; students are welcome to consult with the Program Director or their Academic/Research Advisors to identify appropriate kinds of expertise that could best inform their work.

The following roles for committee members articulate specific needs for EVSS graduate student advising; however, committees are encouraged to operate autonomously and negotiate the sharing of advising responsibilities in ways that would be tailored to best meet the needs of the student project, especially with regards to the relationship between the Academic Advisor and Research Advisor.

Academic Advisor

The Academic Advisor may be either a Type I or Type II faculty member. Both the Thesis and Internship options require the student to select an Academic Advisor, who will shepherd a student through the process of being a graduate student at the University of Charleston. This includes guiding students in the selection of a Program of Study and the Research Advisory Committee structure, as well as ensuring that the student's proposed research timelines are appropriate to the academic calendar that structures our work at the College. An Academic Advisor does not have to be the same person as a student's Research Advisor but must ensure that the student's work adheres to expectations outlined in this EVSS Handbook. A student will develop connections with potential Academic Advisors in consultation with the Director and/or Program Coordinator of the EVSS Program. Students should secure an Academic Advisor by the end of their first semester in the program.

Research Advisor

The Research Advisor can be either a Type I or Type II faculty member. In many cases, a student's Research Advisor is the same person as the Academic Advisor: the individual responsible for guiding a student through the detailed development of a research design, and the reporting of research results. This advising relationship also follows the data: it is the expectation that a faculty member will serve as a Research Advisor when the student is given the opportunity to use that faculty member's (or institution's) existing data set for a project.

The Research Advisor is the principal director of the detailed research design for the student project, unless the Research Advisor and Academic Advisor decide to jointly guide a student on their research design to formulate the project to fit academic proposal expectations. Since the goal of a student research project is to produce publishable research, students will need to articulate an explicit agreement with their Research Advisor and/or Academic Advisor on issues such as co-authorship of publishable results and data ownership, prior to submitting the research proposal. This kind of conversation will set expectations and head off potential misunderstandings as the research progresses.

Students need to become aware of professional norms in working with their committees. It is important to note that faculty serving on their committees will NOT be available in short timeframes, just because a student needs to meet a specific deadline. For example, it is a norm to allow committees two weeks to review and comment on a draft of a research proposal, prior to the student defense date of that proposal; students should consult with either their Academic Advisor or the Program Director for advice on the professional norms of collaboration with members of their committee, and be sensitive to the busy schedules of the professionals with whom they wish to collaborate. Some faculty also are off-campus for their own research activities, with many CofC faculty being off-contract in Summer session to conduct their off-campus research; students must be sure to clearly understand their committee members' on-campus

availability in advance, and to negotiate timelines of communication with their committee to complete the various stages of a project and to convene the committee when needed. The student is responsible for coordinating committee members' schedules for these meetings.

Research Advisory Committee Functions and Timeline to Convene Committee

The function of the student's Research Advisory Committee is to direct and monitor the student's Thesis or Internship program and to assume responsibility for oversight of the student's progress toward the degree. While the Academic and Research Advisor roles are to meet the needs of a "Main Advisor," with this often being the same committee member that chairs the committee, while in other cases a more collaborative arrangement needs to be negotiated.

Before the first required meeting of the Research Advisory Committee to discuss the student proposal, the student must present committee members with a Program of Study with grades received in courses already completed. The Research Advisory Committee, after review of the student's Program of Study, may suggest further coursework deemed beneficial for completion of the research project. A student may also find it advantageous to convene their committee prior to completing the first draft of the proposal, to ensure that all committee members are in agreement about the research goals and diversity of methods being designed to address their research problems.

Throughout his/her research project, the student will meet regularly with some members of the Research Advisory Committee to discuss progress, problems, and additional work necessary to complete the research, but this is primarily the responsibility of the Research Advisor (and in certain cases, the Academic Advisor). The committee is supposed to function in a collaborative way, but the student should anticipate working on an individual basis with each member of the committee, to best take advantage of the kind of expertise that each committee member can offer to the project.

The committee is expected to convene in-person to discuss and approve a defense of the proposal, and then meet once more in-person when the student defends the results of their research. Due to the challenges of scheduling, students may be able to Skype members of their committee into an in-person meeting, the proposal or final defense, although this situation is not ideal. All committee members must be present at both the proposal and final research defense.

Developing a Thesis or Finding an Internship

The culmination of graduate study in the EVSS Program is independently-produced professional research in either an applied setting (via Internships) or for academic peer-review (via a Thesis). A student is expected to work on this research project from initial enrollment in the program through submitting the final product to the Graduate School Office.

The Thesis is developed by the student through research of relevant literature on their own time (supplemented by coursework), as guided by the Research Advisor. This is often accomplished not just through the advice of the Research Advisor, but also through networking across campus and the broader Lowcountry community of environmental experts, through exposure to concepts in the Graduate Core Seminar, and through other coursework completed in a student's first semesters.

In some cases, a faculty member has a project in mind and a data set, and advertises for a student to perform a scope of work; these research opportunities may be paid as a graduate assistantship (GA) or research assistantship (RA). In such cases, it is encouraged that a student develop thesis research questions that supplement the scope of work, or otherwise collaborate with their advisor on their grant or contract work to meet the requirements for the EVSS degree. In other cases, the student develops their own idea under advisement of the Research Advisor, who then guides the student through the specific stages of articulating a research design and analyzing results. The student needs to be aware that the latter option might require more time and effort to create a rigorous research design.

To finish the degree on time, a (full-time) student needs to select a research problem and develop a research question and research design – and have their committee approve their research proposal – no later than the start of their third semester.

For the Internship option, in consultation with their Academic Advisor, the student will ordinarily be expected to seek and arrange their own internship with an external institution and locate a Research Advisor from that external institution. Students are encouraged to use the Internship Resource List and the Positions Available emails from the EVSS Program Office and discuss these options with their Academic Advisor. The Research Advisor for internships shepherds the student through the applied research project's design, ensuring that the research question and goals meet the needs of the institution commissioning the work. Students must still develop their research designs in consultation with the appropriate academic and agency literature to pass the proposal stage of their academic requirements; all research proposals, including for internships, must engage academic literature to help frame the research question and identify appropriate methods to answer that question. A proposal may not state that the student will conduct literature reviews as the only product of the work; the proposal itself must engage literature to justify the pursuit of a review paper on a particular topic, if a white paper is a desired product for the internship sponsor.

The student should feel free to consult multiple members of their committee as they create their research designs; hopefully, the student has chosen people with particular expertise that can assist the student with various aspects of their interdisciplinary research design. It is the student's responsibility to be clear about which committee member is contributing what kind of expertise for the project, at the time the student forms the committee. However, it is often the practice that the student's Research Advisor serves to help the student formulate the proposal prior to sending

the text out for review by the committee.

As part of his/her internship experience, the student will work six hundred (600) hours or more in the internship setting, in addition to completing an applied research project. Completion of the applied research project and six hundred (600) work hours has been delineated as equivalent to six (6) credit hours of graduate study.

Note: In order to craft a viable internship proposal, substantial effort toward the proposal will be required; this effort is not considered part of the 600 hours of internship activity. Only after successful presentation of the internship proposal and acceptance by the student's committee will the student be released to perform the 600-hour project activity and allowed to register for credit hours of the internship (EVSS 690). In other words, a student cannot submit a proposal for an internship without a review of literature that informs the asking of the research question being proposed. A student cannot list the task of "writing literature reviews" as part of their internship activities, and must instead justify the writing of a white paper by drawing on literature in the field, from both academic and applied research settings.

Proposal Content

Students must write a proposal for their Thesis or Internship in consultation with their whole Research Advisory Committee. The proposal enables the student to prepare the Thesis or Internship manuscript by outlining the current research that informs their work and establish a way to ask and answer a question through proven research methods. In most cases what is being proposed is original research (either for peer-review or an applied setting). On occasion some applied projects might not take the form of a traditional research paper: such as creating an application for a mobile phone, or an agricultural plan. In the case of projects that take a non-text final manuscript form, standards for rigor of the final product are decided by the Research Advisory Committee. However, in all cases the student must adhere to the same rigorous standards for the proposal as would research products that are exclusively text-based; that is, a variety of literature reviews need to justify the creation and methods of creating the proposed final product, and the student must describe their methods of creating their project in sufficient detail.

The format for Thesis and Internship research and products is to develop through the following outline. The outline below is suggested; a student should follow the direction of their Research Advisor for final expectations.

Proposal Outline

- I. Project Title
- II. Sponsoring Organization (if an Internship)
- III. Research Advisor and Academic Advisor: sometimes the same person on your committee

will fill this role

- IV. Abstract
 - a. Summary of the research problem, research question, and what methods are being taken to answer the research question.
- V. Introduction
 - a. Includes a statement of the research problem;
 - b. Review of academic and relevant agency/policy literature;
 - c. Specific research question(s);
 - d. Hypotheses (if a deductive project).
- VI. Methods
 - a. Includes a description of the specific case study and/or internship context;
 - b. Specific articulation of data that will be gathered, and how;
 - c. Specific articulation of analysis techniques (i.e., how will you test your hypotheses?);
 - d. Each component of the methods must review and cite appropriate methodological literature to justify the specific choices being made to gather and analyze the data.
- VII. Time Table
 - a. Include specific stages of the data gathering and analysis of the data;
 - b. Time needed to write results;
 - c. Time needed to edit results with Research Advisor and/or Academic Advisor;
 - d. Time needed for the full committee review of the work (2 weeks minimum);
 - e. Approximate dates for final defense and final submission of the work to the Graduate School Office. Students are expected to look up or check with the MES Program Office about deadlines for paperwork specific to the semesters in the timeline.
- VIII. Resources required to conduct the project
 - a. Articulate whether any materials need to be purchased, or travel needs to be budgeted, and list any sources of funding to support the work, including whether the student has a paid Internship;
 - b. Articulate the responsibilities of the Internship sponsor, if applicable.
- IX. Qualifications to conduct the project
 - a. Articulate how the student's Program of Study relates to the project (specific coursework), and other qualifications the student has accumulated to prepare them for the work ahead (prior degrees, prior experience, existing methodological skills and training).
- X. Relevance/Expected Results of the Research
 - a. This section is an outline of what the deliverables will be (report, peer-review, applied project). Students should explain the social/policy relevance of the work, if any, such

as what specific government offices or initiatives might be informed by the research, or what specific academic journal the student would like to target for this work. List any products generated by the research (e.g., samples deposited in an institution; databases created; recipients of business plants).

- XI. Describe any additional duties/tasks/responsibilities required in the 600-hour Internship (if applicable).
- XII. Works Cited: Adhere to the citation style specific to the targeted academic journal, or consult with the Research Advisor.

The Thesis Proposal Approval form ([EVSS-6](#)) or the Internship Proposal Approval form ([EVSS-7](#)) should be brought to the committee discussion of the proposal, to obtain signatures.

Proposal Approval

Approval of the proposal from the Research Advisor and Research Advisory Committee must be gained before the student may proceed. The process for approval is explained below.

Thesis Proposal Defense

In many cases, the student works with the Research Advisor in a detailed process to shape and edit the student research proposal. When the Research and/or Academic Advisor is satisfied with the student's preparation and the content of the proposal, the student will send the proposal to the remaining members of the Research Advisory Committee, allowing for a minimum of two weeks to review a proposal. The student is responsible for scheduling the defense date with the entire committee, but will develop reasonable timelines with their Research Advisor.

The actual meeting for the proposal defense may be convened by either the Research Advisor or Academic Advisor, and during this meeting the student will present before the Research Advisory Committee a brief summary of the literature review, the research question, and the detailed methods and analysis plan for their project in a presentation format (PowerPoint, Canva, etc.). The student will be questioned on those methodologies, the overall research design, and the background areas needed to complete successfully the proposed research. Students should expect to have the committee make recommendations to improve the research design.

The Program Director must also review and approve the proposal, providing his/her signature after their review. Once the Research Advisory Committee and the Program Director have accepted the proposal, the student must submit the proposal, along with a signed Thesis Proposal Approval form ([EVSS-6](#)) or Internship Proposal Approval form ([EVSS-7](#)) to the EVSS Program Office. The Graduate Dean will then review the student's proposal for approval.

Note: The process of securing an internship with an outside agency requires that the student work

closely with their Academic Advisor to be sure that their proposal is approved before the majority of the internship activity is conducted. This usually requires carefully scheduling the student's progress toward completing their Program of Study through planning of course credits, developing a review of literature for the Academic Internship Proposal, and coordinating the actual internship activity hours with the sponsor.

Registering for Credit Hours

Students are unable to register for Thesis or Internship credit hours online. Students must submit the Proposal Approval Form ([EVSS-6](#) or [EVSS-7](#)), a copy of the approved proposal document, and the Individual Graduate Enrollment form (found on the Graduate School Office website) to the EVSS Program Coordinator in-person or electronically. The Program Coordinator will submit all three (3) documents to the Graduate School Office, which will then register the student for the appropriate credits, ideally three research credits in the last two semesters of the students graduate program.

Note: Students should work with their Research Advisor, Academic Advisor, and Research Advisory Committee to schedule a proposal review meeting well in advance of when they wish to register for Internship or Thesis credits, by the end of the semester prior to when they wish to be enrolled.

Preparing Research Results

Students are encouraged to work closely with their Research Advisor to organize reporting their results and draw on the expertise of the rest of the committee to interpret results and articulate the research's implications. As with the proposal stage, the student will edit drafts of their results until the Research Advisor deems that a full draft is ready to be reviewed by the rest of the committee.

The submission of the Thesis or Internship research is one of the last steps in the EVSS Program leading to the award of the degree. It is a scholarly statement of the results of a substantial amount of work. The EVSS Program has set guidelines for uniformity in the proposal and manuscript format. These guidelines were designed to ensure that all papers were high in quality and consistent in the arrangement of the contents, as the finished document reflects on both the student, their Research Advisory Committee, and the College. Manuscripts will be made available for public use through the EVSS Program Office and online through ProQuest (Thesis only).

The EVSS Style Guide governing the format of the manuscript is in [Appendix C](#); however, in some cases the Research Advisory Committee may prefer deviation from the structure of the final thesis or report, for example, to prepare a manuscript for a particular journal or meet the expectations of an agency report. Additional guidance for the final manuscript is found in the Graduate School Thesis Manual.

Note: Follow the Graduate School Thesis Manual directions if there is a deviation between it and the EVSS Style Guide and please notify the EVSS Program Office so we can make necessary

changes to this handbook.

Defense and Completion

The defense process timeline is as follows. At least two (2) weeks prior to defending, the Defense Notification Form ([EVSS-8](#)) should be submitted to the EVSS Program Office and the final draft of the report given to the Research Advisory Committee for review. Work on the draft should stop and attention focused solely on the presentation so the presentation mirrors what is in the document. The actual public in-person defense must be completed, at **latest**, two (2) weeks before the last day of classes in the term in which the student has applied to graduate.

Arranging and scheduling the defense is up to the student, though the EVSS Program Office can help the student identify suitable rooms and assist with technology needs. The student must work with the office to reserve a room to give the defense in, as well as notify the EVSS Program Office about the date, time, and location two (2) weeks prior to the defense via the Defense Notification Form ([EVSS-8](#)). The EVSS Program Office will send out announcements via email and the website, to invite other students and members of the broader public to learn about the research project. Students are encouraged to attend many of these public defenses of research early in their careers at the College. Not only will this provide the student with an appreciation of the range of projects and techniques that represent the diverse field of environment and sustainability studies, but this will be practical exposure to the defense process, and give students a greater understanding of what is to be expected of them.

Note: The above-stated timelines are of a minimum nature. Research Advisory Committees may set earlier deadlines in alignment with the commitments of its members. Students should adhere to the timelines agreed upon by their committee.

Defense Process

The in-person research defense is convened by the Research Advisor, who introduces the student and facilitates the stages of the meeting. In general, the defense begins with a formal presentation of the project, and should be approximately twenty to thirty minutes in length, at maximum. The public presentation of results is to demonstrate the student's skills in communicating research to a diverse audience of interested publics and experts, and therefore being succinct is most desired. The Research Advisor may encourage the public to ask questions of the candidate, but then the public is excused from the proceedings. The candidate's Research Advisory Committee then conducts an oral examination to test the candidate's understanding of the area of thesis or applied research, or to explain edits required for their draft.

In some cases, a student will still have to edit their final products after the defense; all required forms are to be signed only when all expected edits are complete. It is the responsibility of the Academic Advisor to ensure these forms are signed only after the student completes required edits, but it is the student's responsibility to obtain the signatures on their forms.

Note: If the student is unable to complete the thesis or internship report in the semester in which they are registered, a grade of Incomplete (I) will be issued until the requirements are fulfilled. Students can apply for one (1) credit of Continuous Enrollment (EVSS 900) for the subsequent term in which they will complete the project and receive approval from their committee. See the Graduate School Office website for relevant due dates for the term. Students should plan approximately 3 or 4 business days ahead of the due date to deliver the approved report and paperwork to the EVSS Program and Graduate School Offices for approval. Please see [Incomplete Coursework](#) for more information.

Thesis

Performance on the oral examination must receive the approval of most of the student's Research Advisory Committee before the student will be recommended for the Master of Science in Environmental and Sustainability Studies degree.

After completing the defense with committee approval and other academic requirements fulfilled, the student must submit the signed Certification for Successful Thesis Defense form ([EVSS-9](#)), the Thesis Release (found on the Graduate School Office website), and signed Title Page to the EVSS Program Office in-person or electronically along with an electronic copy of the final manuscript.

Applied Research/Internship

The Internship defense presentation is to be the same as a thesis presentation focused on what the student researched, not the other day-to-day aspects of the 600-hour internship activities that lay outside of the scope of their proposal. If the Research Advisory Committee determines that the Internship requirements designated at any previous time have not been met, they may require that the student remediate to fulfill these requirements, outside the scope of their public defense. For example, the committee could require the student to complete an additional literature review, relevant to the internship.

After completing the defense with committee approval and other academic requirements are fulfilled, the student must submit the signed Fulfillment of Internship Requirements form ([EVSS-10](#)) and an electronic copy of the approved Internship project to the EVSS Program Office.

Note: All signatures must be original (e.g., a handwritten signature). Electronic signatures will not be accepted.

Final Copy Submission

Final copies of the manuscripts are due by the last day of classes in the term in which the student applied to graduate.

Thesis Submission

Each candidate shall submit their thesis online via ProQuest using the instructions in the Graduate School Thesis Manual. A signed title/cover page is required for submission. Please contact the Director of Student Records in the Graduate School Office at (843) 953-5614 if you encounter any problems or have any questions. Check with the Graduate School Office to make sure you understand how to submit your thesis prior to going online.

Each student must submit an electronic copy of the final thesis manuscript to the EVSS Program Office. A signed title/cover page is required for submission. Committee members may request a bound copy of the thesis. Binding, paper quality, and other details should be discussed with each committee member.

Applied Research Submission

Each candidate shall submit an electronic copy (pdf) of his/her research to the EVSS Program Office. This is due at the same time as submission of the Fulfillment of Internship Requirements form ([EVSS-10](#)). A signed title/cover page is required for submission. Additionally, copies should be provided to the sponsoring organizations of the work, as well as any other individual or public entity that might be impacted by what the research showed. Students should discuss appropriate audiences for the work with their Research Advisory Committee.

Applying for Graduation

All candidates for a degree must submit an online Application for Master's Degree through [MyCharleston](#) on the date stated in the Graduate School Academic and Administrative Calendar for the semester you wish to receive the degree. Deadline information may be found on the Graduate School Office website. Additionally, application deadlines will be sent via email to students.

Students must also complete an Exit Interview before the end of their last semester. These interviews are conducted anonymously, and graduating students will be informed when they are expected to complete one.

Note: Students must be enrolled in courses or in one hour of Continuous Research Enrollment (EVSS 900) in the semester in which they intend to graduate; this also applies to the summer semester.

Appendices

Appendix A: Sample Thesis Timeline

The EVSS Program is designed to be a two-year program; the following timeline accommodates the EVSS Program design, in terms of how coursework is to be scheduled to best assist students to build their necessary skillsets to complete research. Please remember that actual experiences may deviate from this timeline, based on student needs and the advice of the Research Advisory Committee.

This is a hypothetical timeline example for a Thesis project, assuming that a student is attending full-time:

Fall Semester Program Entry:

- I. First Year
 - a. Fall Semester
 - i. Develop thesis project topic by:
 1. Attending core seminar presentations, developing reviews of literature
 2. Approach professors whose research interests you
 - ii. Select an Academic Advisor and Research Advisor
 - iii. Select a Research Advisory Committee:
 1. Your Research and/or Academic advisor will help you select a research advisory committee of three additional people.
 - b. Spring Semester
 - i. Work on Thesis Proposal
 1. Remember to allow time for edits from your Research Advisor
 - ii. Submit a Research Advisory Committee Form ([EVSS-4](#)) to the EVSS Program Office
 - iii. Submit Thesis Proposal to your Research Advisory Committee
 1. Remember to allow time for review by your committee
 - iv. Schedule and Defend Thesis Proposal
 1. Address any comments or revisions given by your committee
 - v. Research Advisory Committee approves your proposal
 - vi. Submit forms for registration in thesis credit hours to the EVSS Program Office
 1. You must submit your Thesis Proposal Approval form ([EVSS-6](#)), a copy of the proposal document, and the Individual Graduate Enrollment form to the EVSS Program Office in order to be registered for thesis credits (EVSS 691).
- II. Second Year
 - a. Fall Semester
 - i. Enrolled in three (3) or six (6) credit hours of EVSS 691, remaining core classes, and electives

- ii. Work on Thesis Results
- iii. Compose Thesis manuscript
- b. Spring Semester
 - i. Enrolled in three (3) or six (6) credit hours of EVSS 691 and electives
 - ii. Finish research
 - iii. Apply for graduation
 - iv. Submit Thesis manuscript to your Research Advisory Committee
 - 1. Remember to allow a minimum of two weeks for review by your committee and a minimum of two weeks prior to the deadline to submit to the Graduate School office (last day of classes for the term).
This means materials should be sent to the Research Advisory Committee no later than one month before the last day of classes.
 - 2. Cease work on the report until after the defense
 - v. Schedule and Prepare for Thesis Defense
 - 1. Work with your Research Advisory Committee to select a day, time, and location of the Defense
 - 2. Obtain signatures on the Notification of Defense form ([EVSS-8](#)) and submit it to the EVSS Program Office a minimum of two weeks prior to your defense date
 - 3. Prepare presentation of results for the public defense
 - vi. Defend Thesis
 - 1. Address any comments or revisions given by your committee
 - vii. Research Advisory Committee approves your Thesis defense
 - viii. Submit forms to graduate
 - 1. You must submit the Certification for Successful Thesis Defense form ([EVSS-9](#)), signed Title Page, and the Thesis Release in-person or electronically to the EVSS Program Office.
 - 2. Final manuscript must be submitted to the Graduate School Office via ProQuest by the last day of classes.
 - 3. Send an electronic copy of your manuscript to the EVSS Program Office. Committee members may also request a copy of the thesis.

Appendix B: Sample Internship Timeline

The EVSS Program is designed to be a two-year, full-time program; the following timeline accommodates the EVSS Program design. Please remember that actual experiences may deviate from this timeline, based on student needs and the advice of the Research Advisory Committee.

This is a hypothetical timeline example for an Internship project, assuming that a student is attending full-time:

Fall Semester Program Entry:

- I. First Year
 - a. Fall Semester
 - i. Select an Academic Advisor, if different from your Research Advisor
 1. Typically, your supervisor at your internship will be the Internship/Research Advisor
 - ii. Choose Internship topic by:
 1. Attending core seminar presentations
 2. Approaching a professor whose research interests you
 3. Network with local agencies; check for opportunities with the MES Program Office
 4. Research you are already conducting where you work
 5. Your internship will be in an applied setting other than at the College of Charleston under the direct supervision of an approved mentor at that institution (Research Advisor)
 - iii. Determine a target deadline to complete Academic Internship Report
 - iv. Begin literature review and writing the Internship Proposal
 - b. Spring Semester
 - i. Arrange an agreement with a sponsoring organization and select a Research Advisor
 - ii. Select a Research Advisory Committee:
 1. Your Academic and Research Advisor will help you select a Research Advisory Committee of the remaining experts
 - iii. Submit a Research Advisory Committee Form ([EVSS-4](#)) to the EVSS Program Office
 - iv. Work on the Internship Proposal
 1. To craft a viable Internship Proposal, substantial effort towards focusing your internship study topic is required
 2. This time is not included in your six hundred (600) hours in the internship setting
 - v. Submit Internship Proposal to your Research Advisory Committee
 1. Remember to allow time for review by your committee
 - vi. Schedule and Defend Internship Proposal
 1. Address any comments or revisions given by your committee

- vii. Research Advisory Committee approves your proposal
 - 1. The Internship Proposal must be approved by both the committee and the Program Director no later than two weeks prior to the internship start date
- viii. Submit forms for registration in internship credit hours to the EVSS Program Office
 - 1. You must submit your Internship Proposal Approval form ([EVSS-7](#)), a copy of the proposal document, and the Individual Graduate Enrollment form to the EVSS Program Office in order to be registered for internship credits (EVSS 690).

II. Second Year

a. Fall Semester

- i. Enrolled in three (3) or six (6) credit hours of EVSS 690, remaining core classes, and electives
- ii. Work on data gathering and analysis of results of applied research

b. Spring Semester:

- i. Enrolled in three (3) or six (6) credit hours of EVSS 690 and electives
- ii. Finish research and write up results in consultation with co-chairs
- iii. Apply for graduation
- iv. Submit Internship project to your Research Advisory Committee
 - 1. Remember to allow a minimum of two weeks for review by your committee and a minimum of two weeks prior to the deadline to submit to the Graduate School office (last day of classes for the term).
This means materials should be sent to the Research Advisory Committee no later than one month before the last day of classes.
 - 2. Cease work on the manuscript until after the defense
- v. Schedule and Prepare for Internship Defense
 - 1. Work with your Research Advisory Committee to select a day, time, and location of the Defense
 - 2. Obtain signatures on the Notification of Defense form ([EVSS-8](#)) and submit it to the EVSS Program Office a minimum of two weeks prior to your defense date
 - 3. Prepare presentation of results for the public defense
- vi. Defend Internship Project
 - 1. Address any comments or revisions given by your committee
- vii. Research Advisory Committee approves your Internship defense
- viii. Submit forms to graduate
 - 1. You must submit the Fulfillment of Internship Requirements form ([EVSS-10](#)) and an electronic copy of the Internship product to the EVSS Program Office. Committee members may also request a copy of the internship project manuscript.

Appendix C: Thesis and Internship Manual Style Guide



Thesis and Internship Manuscript Guide

Master of Science
in Environmental and Sustainability Studies

Updated March 2024

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Overview

The submission of your research is the last step in the program leading to the award of your degree. Your manuscript is a scholarly statement of the results of a substantial period of research and preparation. It will be made available for public use in the EVSS Program Office and online through ProQuest. For these reasons, the Environmental and Sustainability Studies Graduate Program has established guidelines in the physical format of the manuscript to obtain a high-quality product in a permanent and readily reproducible form of presentation, and with consistency in the arrangement of the contents. The thesis must be a professionally finished work in format, style, spelling and appearance. Failure to follow these instructions will necessitate revisions of the document until it meets the expected standards.

Your report must meet all the guidelines set forth in the Thesis Manual: A Guide for Graduate Students produced by the Graduate School Office. The manual, along with the most current information concerning the requirements, dates, and thesis preparation guidelines can be found on the Graduate School Office website. This document details requirements not specified in the Graduate School Office manual.

It is preferred that this manuscript be prepared in the format of an appropriate journal of publication, with minimal necessary revision prior to submission. Any deviation from EVSS presentation requirements must be approved by your committee and the Director of the MES Program. **In no case will any deviation from the format of the Graduate School Office manual be permitted.**

Report Body: What do I write about?

This section explains what is in the main parts of the report's text. The formatting of text and other sections are detailed elsewhere.

Introduction

The purpose of the Introduction is to introduce the reader to the problem. It is a concise statement of the problem and an outline of the scope, aim, and nature of the research. It should also include a review of the current literature on the subject. This should lead to the objectives of your research/internship, and the research question. Cover why are you conducting this research and how it is different from previous research. Then explain the hypothesis (if you have one). This section is likely an edited version of the introduction in the student's proposal.

Materials and Methods

The Materials and Methods are to concisely recount the materials and methods employed in the research. This section is a revision of the methods section of the proposal, except it recounts exactly the steps that the student took in conducting the research (since not all research happens exactly as planned). It should include sufficient information so that the study can be repeated. This section should also include a description of the research site or organization, depending on what pertains to your research/internship.

Care should be exercised not to include superfluous information. Also, extreme caution must be used to avoid including results and/or conclusions in this section. Specimens or data deposited in a museum or library should be cited here.

Note that all units of measurement shall be expressed in SI units. An excellent reference is the ASTM Standard for Metric Practice, a comprehensive guide for the application of the Systeme International d'Unites (SI). ASTM Standard E 380Z82.42 p. ASTM Publ. Code No. 06503808Z41. ASTM, 1916 Race Street, Philadelphia, Pennsylvania. Note especially the SI requirements: (1) use the terms mass or force instead of weight; (2) when one unit appears in the denominator, use the solidus, g/m²; (3) when two or more units appear in the denominator, use negative exponents. e.g., mZ² dZl.

Results

The Results reflect the findings of the student's investigation only, the analysis that is the result of the methods the student took in answering their research question and testing hypotheses. This is not the place to write the findings of other researchers in the area. This is a summarized form of extensive data that may also take the form of figures, tables and/or appendices. Do not attempt to write about the relevance of the results here; that is done in the Discussion section.

Discussion

The Discussion section is for writing about the relevance of the data acquired and overall results. In this section, the student may draw comparisons with findings of other researchers in the field or even speculate to some degree and, if appropriate, suggest additional research or develop policy recommendations.

Conclusion

The Conclusion (or Summary) is a final section which draws together the research project's objectives and findings. Care should be exercised to draw conclusions pertinent to the problem and to avoid personal bias. The conclusion should "close the loop" on the literature reviews from the introduction and summarize how the student research performed fits into that broader literature.

Arrangement

This section details how to arrange the final manuscript so that it fits the expectations of the Graduate School Office. The Environmental and Sustainability Studies Graduate Program has established guidelines for uniformity in the manuscript format. These guidelines are designed to ensure that all papers are high in quality and consistent in the arrangement of the contents.

The report must be a professionally finished work in format, style, spelling, and appearance as the finished document reflects both the student, Research Advisory Committee, and the College.

The format of the manuscript should be consistent with the guidelines presented herein. Failure to follow these instructions may result in either rejection of your report or revision.

Report formatting is determined by the Graduate School Office, so please refer to Thesis Manual: A Guide for Graduate Students for overall guidance. Details not discussed within that guide are explained in this section.

Section Layout

The pages of your thesis will appear in the following order:

- Title Page
- Abstract
- Copyright Page
- Acknowledgements
- Table of Contents
- List of Figures
- List of Tables
- Introduction
- Materials and Methods
- Results
- Discussion
- Conclusion
- Literature Cited
- Figures (See [Figure/Table](#) section)
- Tables (See [Figure/Table](#) section)
- Appendices

Explanation of Report Pages

Each of the following pages must conform to the following criteria. In all cases, the instructions in the Graduate School Office's Thesis Manual: A Guide for Graduate Students take precedence over any instructions contained herein.

Title and Abstract

The formatting of the Title Page and the Abstract pages is specified by the Graduate School's Thesis Manual: A Guide for Graduate Students. Refer to it for instructions and examples.

Copyright

This page should contain your copyright information should you decide to copyright your thesis or internship project. You should discuss the nature of your work and your plans for publishing your work with your Academic and/or Research Advisor. An example copyright page is included in the example report. This page will be blank if you do not wish to copyright your report.

Acknowledgements

If you wish you may include a page with a brief note of dedication or acknowledgement of help received from particular persons. (See [Published Material](#) in the [Citing Literature](#) section regarding acknowledgement for published material).

List of Figures and Tables

The directions for List of Figures and Tables are the same; substitute “Table” for “Figure” if making the other.

- The words “List of Figures” will be centered at the top of the page.
- One space down from the “List of Figures” appears the word “Figure” on the left margin and the word “Page” on the right margin.
- One space down from the words “Figure” and “Page” appears the description of the first figure. Directly under the word “Figure” is the number “1.”, followed by two spaces, followed by a description of the figure, followed by “. . .” until the right margin is reached, followed by the page number where the figure appears. Use single spacing for the figure description should you need more than one line.
- One (double) space down is the number, description and page number of the next figure. Repeat this step until all figures are listed.

Literature Cited

This section's style and format will ordinarily depend on the practice of the journal to which the paper based on the thesis is submitted. Make sure your style and format in the literature cited section is consistent; consistency is key.

Figures

This is optional; use it if figures are inserted after the text.

A figure legend shall be placed on a separate page from the figure and positioned so that the legend faces the figure. Only the legend page is numbered, with the page number placed at the bottom center of the legend page.

Tables

This is optional; use it if tables are inserted after the text.

Text material should not duplicate that in tables. Each table should be on a separate sheet. Each should have a short but ample description enabling the reader to understand the table without reference to the text. Multi-page tables are to be avoided when possible.

Appendices

A last section may contain supporting data for the text in the form of one or more appendices. Examples of appendix material are data sheets, questionnaire samples, illustrations, maps, charts, etc. If the appended data includes oversize illustrations or maps, several alternative methods of

inclusion are available. (See section dealing with Photographs, Plates, Tables, etc.).

Footnotes and Endnotes

The placement of citations is a matter of preference which you should discuss with your advisors.

Footnotes may be placed at the bottom of the pages and endnotes at the end of the chapter or at the end of the text preceding the bibliography. Use the style of the targeted journal or consult with your Academic and/or Research Advisor.

Formatting

This section details the specific formatting required for the report. An example report is found at the end of this document.

Spacing

Use double spacing throughout except in footnotes, indented quotations set off from the text, bibliography entries of more than one line, and materials such as captions or tables and appendices of data.

Margins

Every page of the thesis must be kept within margins set as follows: A minimum margin of 1.5 inches (for binding purposes) on the left side of the page; 1 inch at the top, right and bottom sides. The only exception is that there will be a two-inch margin from the top of the first page for each new chapter. All pagination and footnotes must fall within these margins. The right margin should not be justified. Any page submitted with less than the minimum margins will be rejected.

Fonts

Use one of the "Roman" fonts, such as Times New Roman, in either an 11-point or a 12-point size. Italics are used for all Latin phrases such as et al. and etc. and for genus and species names such as *Nyssa sylvatica*.

Justification and Hyphenation

A typed thesis will have a straight-line left margin and a ragged right margin, within the margins explained earlier. Long words may be hyphenated at the discretion of the typist to prevent unusually short lines from appearing, but hyphenation should be minimized. Each paragraph must be indented five (5) spaces. Do not end a page with a hyphen.

Pagination

The Title Page is not numbered. The Abstract through the List of Tables are numbered using small Roman numerals (ii, iii, iv...). The Abstract page is page "i" and all pages are numbered consecutively thereafter.

The pages starting with the body of the thesis through the last page of the last appendix are numbered using Arabic numerals (1, 2, 3...). The first page of the body of the thesis is page "1" and

all pages are numbered consecutively thereafter.

The page numbers displayed must be centered at the bottom of each page, within the bottom margin. Note that no words, punctuation, or diacritics of any kind accompany the page number: it says "4", not "Z4Z" or "4." or "Page 4".

Graphs, Tables, and Illustrations

At the committee's discretion, the graphs, tables, and illustrations may be embedded into the text or placed at the end of the thesis in separate sections. In all cases, figures are numbered consecutively, separate from table numbers. Thus, you will have "Figure 1," "Figure 2" and "Table 1," and "Table 2." They are numbered with Arabic numerals (1, 2, 3...) assigned in consecutive order as they are referred to in the text. Each must have a unique number and name.

Formatting should be based on the requirements of the target journal. Some general instructions follow.

Figures and Graphs

The figure number and title always appears below the figure. The figure number is followed by two spaces and the figure title. The title should informatively describe in a short form the content of the figure; it is usually a sentence fragment. The title is capitalized in sentence style, and no period follows the title unless additional information is presented in the title block. The figure title may contain abbreviations and symbols defined in the text. If the title is long enough to take more than one line, the first line of the title should be the longest. The second and succeeding lines should align with the letter F in "Figure" if the caption is flush with the figure's left edge. No line should be wider than the figure. If a source must be identified, it is set within parentheses as the last element of the caption.

Example:

Figure 6. The parts of a table (adapted from Journal of Food Science 1981; 46(2):661)

For graphs, titles should not simply repeat the axis labels; rather, the title should be a phrase describing what the data show. Titles of figures should not begin with a phrase describing the type of figure: for example, "Photograph of . . ."

Some journals require that each figure caption be accompanied by a summary of the experimental conditions applying to the figure. This can result in a paragraph of information that may be as large as the figure itself, and providing such a summary for each figure takes up valuable space. Routine restatements of experimental conditions for each figure should not be necessary if this information has been clearly provided in the methods section of the document and if the text that refers to the figure makes clear from which experiments the data come. When information specific to a figure is needed, it should be a brief note; otherwise, it should be

provided in the text.

A single caption should be provided for multipart (composite) figures, with necessary information about the separate parts provided by their individual labels. If the separate parts of the figure call for so much information that individual captions are needed, the composite should be divided into separately numbered figures.

Tables

Table numbers are normally consecutive through the document, but in large documents they may reflect the number of the section or chapter of which they are part ("Table 1 1", "Table 1 2", and so on).

The word "Table" and its number are followed by 2 spaces and the title. No period follows the title unless explanatory text is part of the title block.

The title of each table must be unique, succinct, and informative; it should be a phrase, not a sentence, but the phrase should be capitalized in sentence-style. The title is placed above the table. The title should not be a list of the column headings of the table; it preferably specifies a category or class that encompasses the variables in the table. Terms in the title should correspond to those used in the text, and if abbreviations are used, they should have been introduced in the text before being used in a table title.

The table number and title may be in a bold face or not, and may be placed flush with the table's left edge or centered on the table. About 0.6 cm (0.25 inch; 1.5 picas) should separate the last line of the table title from the 1st horizontal rule of the table.

Column headings (also called "heads" or "box-heads") identify the entries in the columns of the table; each column of a table, including the stub, must have a heading. Columns and their headings often (but not always) are used to display the dependent variable being presented in the table, so that data are compared down the columns.

A heading consists of a word or short phrase descriptive of the entries in the column, followed (if needed) by the appropriate units set within parentheses. Sentence-style capitalization is used for the headings. Occasionally a column will not need a descriptive word or phrase and the heading will consist solely of a unit designation; in such cases, the unit is not enclosed in parentheses.

Placement of Figures and Graphs

Placement of figures and graphs is at the discretion of the committee. If embedding figures and tables, place them in the document as close as possible to the first point in the text where they are referenced. If the figure will not fit on the page with the first reference to it, it should go on the next available page. Figures should be at the top of the page preferably; it allows the text to visually anchor the bottom of the page. Text may appear on any page carrying one or more figures, but the minimum amount of space available for text should be no less than 5.1 cm (2

inches, 12 picas); fewer lines on a page of figures can be overlooked too easily. When a figure appears on a page with text, about 1 cm of space (3/8 inch; 2 picas) should separate the text from the top of the figure or the bottom of the caption. Figures/tables should be centered horizontally within the margins, and a narrow figure occupying 1 column is centered within that column's boundaries.

If placing figures and tables at the end of the text, all figures or tables are placed in a separate section at the end of the report.

Legends

Figures and graphs

A figure legend shall be placed on a separate page from the figure and positioned so that the legend faces the figure. Only the legend page is numbered, with the page number placed at the bottom center of the legend page.

Tables

Text material should not duplicate that in tables. Each table should be on a separate sheet. Each should have a short but ample description enabling the reader to understand the table without reference to the text. Multi-page tables are to be avoided when possible.

Full-page tables, charts, graphs, photographs, plates, etc.

Full-page tables, charts, graphs and other non-text material require the same margins as typewritten pages. There are several methods of including oversize material: submit pages to be folded and inserted by the Library, indicating the appropriate page number; fold the material and request that it be placed in a pocket in the back of the thesis; or have the material photographically or xerographically reduced. If necessary, wide tables, charts, and figures can be placed in landscape orientation. Figures may be embodied in the text or take up a full page. Each figure or table must be numbered and should have a caption, and the caption must appear on the same page as the figure/table. However, for full page figures, captions may appear on the facing page. Such a caption page must be the mirror image of a normal page, i.e., the wider margin is on the right. The caption itself should be centered and should always be on a page by itself, not on the back of a preceding page.

Photographs may be included in the thesis. There are two options for including photographs in your thesis.

1. All photographs must be printed on paper size eight and one half inches by eleven inches. The print should be printed on the top of the page so that there is one and three quarters inches left hand margin, a one-inch right hand margin, a one and one half inch bottom margin, and a one-inch top margin. A five by seven sized photograph printed onto a size eight and one half inch by eleven-inch size paper will accommodate the margin requirements.

2. Photographs may be color photocopied onto paper which is eight and one half inches by eleven inches with a one and three quarters inch left hand margin, a one-inch right hand margin, a one and one half inch bottom margin, and a one-inch top margin.

Citing Literature

The format of both in-text citations and the Literature Cited section are dependent on the requirements of the target journal, and use the instructions provided by the editor to format your citations. Work closely with your Academic and/or Research Advisor to ensure that you do not have to rewrite your "Literature Cited" section. Be precise the first time you write a citation. You will save valuable time in the long run.

Note: It is helpful to use a citation manager such as Endnote. These allow for export of citations into specific formats and can link in-text citations.

Handling Quoted Material

Short quotations (fewer than 40 words) are incorporated into the text and enclosed by double quotations marks ("").

Long quotations of 40 or more words are displayed in a double-spaced block of typewritten lines with no quotation marks. The APA suggests that you do not single space; however, some instructors will require that indented quotations be single-spaced, especially when quoting poetry, which loses some of its formal characteristics when double-spaced. Check with your Academic and/or Research Advisor before single-spacing quotations. Indent five spaces from the left margin and type the entire quotation on the indented margin without the usual opening paragraph indentation. If the quotation is more than one paragraph, indent the first line of the second and additional paragraphs five spaces from the already indented margin, i.e. ten spaces from the left margin.

If you have a quotation within a block quotation, enclose it in double (") quotation marks. If you have a quotation within a short quote (one incorporated within the text), enclose it within single quotation marks (').

Ellipsis points are used to indicate omitted material. Type three periods with a space before and after each period to indicate omission within a sentence (. . .). To indicate an omission between sentences type a punctuation mark for the sentence followed by three spaced periods (. . .), (? . . .), (! . . .).

When a period or comma occurs with closing quotation marks, place the period or comma within the quotation mark. Put other punctuation outside quotation marks unless it is part of the quoted material.

Published material

As the author of the thesis manuscript, you will be asked to certify that any previously copyrighted material used in your work, beyond "fair use," is with the written permission of the copyright owner. (See the Chicago Manual of Style for an explanation of "fair use.")

With the approval of the thesis committee, your own published material may be accepted as all or part of the Master's thesis, where the publication or publications represent research or scholarship comparable in scope and contribution to that portion of the standard thesis they are intended to replace, and where the published material is substantially the product of the candidate's period of study while in the Environmental Studies Graduate Program. There should be an introduction showing the historical development, methods used, and results which would be helpful to others.

If your own published material lists a co-author, and if the co-author is listed by reason of having directed and supervised the research which serves as the basis of the thesis, only the candidate's name is listed as the author in the preliminary pages. The acknowledgment page should state, "The text of this thesis includes reprint [s] of the following previously published material: [give full publication information here]. The co-author listed in this publication directed and supervised the research which forms the basis for the thesis." If your own published material approved for submission has co-authors other than the Research Advisor(s), the candidate must submit letters to the Graduate School Office from the co-authors and copyright holders giving their approval for the material to be used. A detailed statement of the contribution by the candidate to all multi-authored publications must be included in the acknowledgment.

If your own published material is approved by the thesis committee for submission as a part or whole of the thesis or thesis, a memorandum stating this and approving the student's acknowledgement statement must be submitted by the committee chair to the Dean of the Graduate School. The pages of the published material must have the same margins and type of paper as specified for the thesis which may necessitate reduction of the material. Note that enlargement of the materials to meet standard margin requirements is not needed. When using reprints, page numbers of the reprint should be removed and replaced with numbers corresponding to the position of the reprint within the thesis. Each chapter may have an abstract of its own, but in any event there must be a general abstract covering the entire Thesis.

Report Submission

Deadline

All candidates for a degree must submit an online Application for Master's Degree to the Graduate School Office by 5 p.m. on the date stated in the Academic and Administrative Calendar for the semester you wish to receive the degree. Degree and thesis submission deadline information can be found on the Graduate School Office website.

Number of Copies

Thesis

The candidate shall submit his/her thesis online to ProQuest using the instructions in the Graduate School Thesis Manual. The candidate will send one electronic copy to the EVSS Program Office. In addition, committee members may request a bound copy of the thesis.

Internship

The candidate shall submit an electronic copy of their internship report to the EVSS Program Office. In addition, committee members may request a bound copy.

Paper and Binding of Original Report (Not Required)

If you, your Research Advisor, or other members of your committee would like a bound copy please follow the binding guidelines below. The general template for reports is as follows: printed on standard size, white, 8-1/2 x 11 inches, un-punched, non-glossy, non-textured paper of twenty (20) pound weight and 100% rag content. Your report may be on file for a time that may stretch into hundreds of years, and acid-free paper is essential to prevent premature deterioration.

Thesis

ProQuest will handle all these details when submitting the report online.

Internship

This can be done at a local copy shop. Only one side of the paper should be used. The paper must be plain white with no ragged edges

Paper and Binding of Copies

Thesis

Binding, paper quality, and other details should be discussed with each Thesis committee member.

Internship

Copies should be clean photocopies on at least 20% rag content and with acid free paper.

Appendix D: Sample Independent Study Syllabus and Bloom's Taxonomy

The syllabus for an Independent Study needs to contain the same details as any graduate course at the College of Charleston. Each syllabus must contain the following:

- the proper numerical designation (EVSS 693);
- a descriptive but succinct title;
- an overall description of the course;
- student learning outcomes (See Bloom's Taxonomy, below);
- course readings and assignments;
- timelines;
- grading scale for graduate students
- clear articulation on how the student will be assessed

What follows is one example of an Independent Study Syllabus, then more information on Bloom's Taxonomy. "Bloom's Taxonomy" is the standard list that professors use to create student learning outcomes. Please select 2-3 of these verbs from that page to create the student learning outcomes for the Independent Study. Examine how these Student Learning Outcomes are employed in the syllabus below.

EVSS 693: Independent Study African Political Environments and Public Health Spring 2017

Professor Christopher Day
Office: 114 Wentworth St. Room 105
Office Hours: Tuesdays & Thursdays 1-3
Email: dayc@cofc.edu
Phone: 843-953-6617

Course Syllabus

Project Description

In this Independent Study the student will survey different modes of environmental change on the African continent, such as urbanization, desertification, and natural resource extraction. In addition, the Study will consider the implications for each of these modes upon public health outcomes.

Student Learning Outcomes

- Explain the relationship between environmental change and African politics
- Classify literature on environmental health to develop a review of literature
- Identify literature for developing methods in content analysis about African health policy
- Structure methods to collect data on African health policy

Course Requirements

- Attendance at organizational meetings
- Timely submission of assignments
- Final product: 12-15 page paper

Assessment Plan

- Clarity of explanation of ideas
- Demonstrated understanding of scholarship
- Understanding of material
- Integration of short papers
- Ability to apply theory to new situation
- Structure of research design
- Well written and properly cited

Grading Scale

A	100-90%
B+	89-85%
B	84-80%
C+	79-75%
C	74-70%
F	Below 70%
V	Incomplete
W	Withdrawal

Specific guidelines for each stage of the independent study will be provided separately by the instructor. Students are encouraged but not required to communicate with the instructor outside of organizational meetings.

Course Outline

Part I: Administration

January 11-20

- Planning and strategy meetings

Part II: Conceptualization of Project

January 23-February 10

- Meetings with advisor
- Establish research framework
- Establish list of environmental causes

Part III: Literature Review

February 13-March 3

- Meetings with advisor
- Survey approaches to topic to date

Part IV: Data Collection

March 13-31

- Meetings with advisor
- Conduct research into each environmental cause

Part V: Written Presentation of Data

April 3-21

- Meeting with advisor
- Independent writing of data

Final Product Due April 25th

Intensive investigation of environmental problems in Africa and implications on human health: The student will review the existing literature on the major environmental problems in Sub-Saharan Africa and the social and political influences surrounding these issues. The student will also investigate the environmental effects of agricultural development, urbanization, and rural to urban migration and the impacts these may have on the physical and mental health of African peoples. In addition, the student will explore the policy terrain surrounding these issues and the policy actors and institutions that attempt to effect change in this region.

Working Bibliography

- Amechi, E. P. (2009). POVERTY, SOCIO-POLITICAL FACTORS AND DEGRADATION OF THE ENVIRONMENT IN SUB-SAHARAN AFRICA: THE NEED FOR A HOLISTIC APPROACH TO THE PROTECTION OF THE ENVIRONMENT AND REALISATION OF THE RIGHT TO THE ENVIRONMENT. *LEAD Journal (Law, Environment & Development Journal)*, 5(2), 107. Manuh, T., & Sutherland-Addy, E. (2013). CHAPTER 15. ENVIRONMENT AND DEVELOPMENT IN SUB-SAHARAN AFRICA. In , *Africa in Contemporary Perspective : A Textbook for Undergraduate Students* (p. 307). Oxford: African Books Collective.
- Barrios, S., Bertinelli, L., & Strobl, E. (2006). Climatic change and rural–urban migration: The case of sub-Saharan Africa. *Journal of Urban Economics*, 60(3), 357-371.
- Berry, S. (1993). *No condition is permanent: The social dynamics of agrarian change in sub-Saharan Africa*. University of Wisconsin Pres.
- Engström, E., Balfors, B., Mörtberg, U., Thunvik, R., Gaily, T., & Mangold, M. (2015). Prevalence of microbiological contaminants in groundwater sources and risk factor assessment in Juba, South Sudan. *Science Of The Total Environment*, 515-516181-187. doi:10.1016/j.scitotenv.2015.02.023
- Kalipeni, E. (1996). Reversing the Spiral: The Population, Agriculture, and Environment Nexus in Sub-Saharan Africa. *African Studies Review*, (2), 170.
- Markham, W. T. (2015). *Saving the environment in Sub-Saharan Africa : organizational dynamics and effectiveness of NGOs in Cameroon*. New York, NY : Palgrave Macmillan, 2015.
- Ribot, J. C. (2003). Democratic decentralisation of natural resources: institutional choice and discretionary power transfers in Sub-Saharan Africa. *Public administration and development*, 23(1), 53-65.
- Symeonakis, E., & Drake, N. (2004). Monitoring desertification and land degradation over sub-Saharan Africa. *International Journal of Remote Sensing*, 25(3), 573-592.v
- Pingali, P., Schneider, K., & Zurek, M. (2014). Poverty, Agriculture and the Environment: The Case of Sub-Saharan Africa. *Marginality*, 151. doi:10.1007/978-94-007-7061-4_10
- Wright, L. C. (2007). POINT: UN MDGS AND U.S. AID TO AFRICA: WORTHY CAUSES. *International Social Science Review*, 82(1/2), 73.
- Zaman, K., Ahmad, A., Hamzah, T. A. A. T., & Yusoff, M. M. (2016). Environmental factors affecting health indicators in sub-saharan African countries: health is wealth. *Social Indicators Research*, 129(1), 215-228.

Bloom's Taxonomy for Categorizing Learning Outcomes

Benjamin Bloom created a taxonomy that is used for categorizing learning outcomes in educational settings. The three categories in his schema are **cognitive**, **affective**, and **psychomotor**.

Cognitive* (knowing, awareness, insights)	Possible verbs to use
Knowledge (Recalling information)	define repeat memorize list recall name state relate label select
Comprehension (Explaining information)	restate discuss describe identify locate report explain express recognize interpret
Application (Solving closed-ended problems)	translate apply practice illustrate operate discover predict change compute demonstrate
Analysis (Solving open-ended problems)	identify analyze criticize compare differentiate contrast examine test infer distinguish
Synthesis (Creating "unique" answers to problems)	design compose plan create formulate manage construct revise rewrite explain
Evaluation (Making critical judgments based on a sound knowledge base)	judge evaluate value compute assess appraise conclude critique discriminate support
Affective (attitudes, appreciations, relationships)	claim cooperate defend join share avoid assist help select attempt
Psychomotor (action)	create design compose place align follow display move show reproduce

* The cognitive category shows development of lower-level skills through higher-level skills.

In 2001, Anderson and Krathwohl revised the taxonomy to include active verbs that are well suited for outcome-oriented language and workable objectives.

Remember:	Understand:	Apply:	Analyze:	Evaluate:	Create:
Arrange	Classify	Apply	Analyze	Appraise	Arrange
Define	Convert	Change	Appraise	Argue	Assemble
Describe	Defend	Choose	Categorize	Assess	Combine
Identify	Distinguish	Compute	Compare	Conclude	Compose
Label	Explain	Demonstrate	Contrast	Defend	Construct
List	Estimate	Dramatize	Criticize	Evaluate	Create
Match	Interpret	Employ	Diagram	Judge	Design
Outline	Infer	Illustrate	Differentiate	Justify	Develop
Recognize	Paraphrase	Manipulate	Discriminate	Support	Formulate
Recall	Summarize	Modify	Distinguish	Value	Generate
Repeat	Translate	Operate	Examine		Plan
Reproduce		Practice	Experiment		Synthesize
		Produce	Question		Write
		Solve	Model		

Appendix E: EVSS Forms

EVSS-1 Guidelines

This form provides information on the M.S. in Environmental and Sustainability Studies Program, including a generalized timeline of progress and forms due to the Program Office.

Due: Students are not required to turn in this form.

EVSS-2 Program of Study

The Program of Study Form provides a template for degree completion. The Program of Study should include elective courses that provide knowledge and skills necessary for the student to complete their internship or thesis research.

Due: Students should complete this form by the end of their first semester.

EVSS-3 Amendment to the Program of Study

If a change occurs to the Program of Study, this form should be submitted to the Program Office.

Due: Students should submit this form immediately upon changing their Program of Study. Some students may not have a need to complete this form.

EVSS-4 Research Advisory Committee Form

A Research Advisory Committee requires four (4) members, two of which must be roster faculty at the College of Charleston. The Committee will serve as a resource to the students as they conduct their internship or thesis research.

Due: Students should submit this form by the end of their second semester in the program or as soon as their committee is formed.

EVSS-5 Change in Advisor

If a change occurs to the Research Advisory Committee Form, this form should be submitted to the Program Office.

Due: Students should submit this form immediately upon changing to their Research Advisory Committee. Some students may not have a need to complete this form.

EVSS-6 Thesis Proposal Approval

The Thesis Proposal Approval Form must be taken to the thesis proposal defense. Along with a copy of the approved proposal and an Individual Graduate Enrollment Form, this form should be submitted to the Program Office immediately following approval by the Committee.

Due: Students should submit this form immediately following thesis proposal approval. Ideally, this will occur in the second or third semester of the Program.

EVSS-7 Internship Proposal Approval

The Internship Proposal Approval Form must be taken to the thesis proposal defense. Along with a copy of the approved proposal and an Individual Graduate Enrollment Form, this form should be submitted to the Program Office immediately following approval by the Committee.

Due: Students should submit this form immediately following thesis proposal approval. Ideally, this will occur in the second or third semester of the Program.

EVSS-8 Notification of Defense

The Notification of Defense Form provides details to the Program Office about a student's defense. Students may request assistance in scheduling a room for the defense when submitting this form to the Program Office.

Due: Students should submit this form at minimum two weeks prior to their scheduled defense date. The Program Office will announce all defenses to MES students and faculty.

EVSS-9 Certification for Successful Thesis Defense

The Certification of Successful Thesis Defense Form should be taken to the final defense. This form, along with a signed Title Page, signed Thesis Release, and final electronic copy of the thesis, is due to the Program Office immediately upon final Committee approval. The thesis must be uploaded to ProQuest by midnight on the last day of classes for the term in which the student is graduating.

Due: Students must submit this form by the last day of classes for the term in which they are graduating.

EVSS-10 Certification for Successful Internship Defense/Fulfillment of Internship Requirements

The Certification of Successful Internship Defense Form should be taken to the final defense. This form, along with a final electronic copy of the internship and any products, is due to the Program Office immediately upon final Committee approval.

Due: Students must submit this form by the last day of classes for the term in which they are graduating.