Environmental Science Graduate Handbook:
How to Successfully Complete the Master of Science Degree

Texas A&M University-Corpus Christi
Fall 2015
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I. Introduction

This handbook gives general guidance to students enrolled in the Master of Science in Environmental Science degree program at A&M-CC. It contains information about acceptance into the degree program, selecting your advisor and graduate committee, thesis vs. professional options, course of study, and final oral exam. For thesis students, it also has practical information about writing the thesis proposal, conducting research, preparing the thesis document, and defending the thesis. In addition to this Handbook, graduate students are urged to utilize the online TAMUCC Graduate catalog as a resource for policy, procedures, and requirements.

II. What's the Purpose of Graduate Work?

The purpose of graduate education is to provide advanced and specialized training beyond the baccalaureate program. Graduate study should strengthen your academic and professional competence, develop your capacity for independent study, familiarize you with the techniques of past and current research, and enable you to relate your research to the investigations of other scholars and derive significant implications from that relation.

The mission of the graduate program in Environmental Science at Texas A&M University - Corpus Christi is to provide a rich and rewarding setting in which students and faculty can develop and communicate innovative and practical solutions to present and future environmental challenges, with a focus on urban and coastal issues.

The goals of the program are to:

● Develop graduates who are fully prepared to face current and future cultural, political, economic and scientific environmental challenges;
● Foster an environment that nurtures research and scholarly activity through interdisciplinary approaches;
● Foster an environment that promotes education and services from the regional to international level.

As a graduate student you must assume greater responsibility and exercise more individual initiative than you probably did as an undergraduate. Graduate students must do more intensive and extensive reading. The graduate
faculty place greater emphasis on productive research, employ seminar methods more frequently, and expect greater class participation.

Graduate study in environmental science involves more than passing a given number of courses with acceptable grades and meeting minimum requirements. You must display continued intellectual growth and scholarly commitment to successfully complete the graduate program.

III. Application and Acceptance to the Degree Program

The Environmental Science Graduate faculty considers applications for the degree program as they are completed. Admission to the program is decided independently of funding awards (see section on “Financial Support” in this Handbook) and applicants must apply separately for any financial assistance (scholarships, assistantships). University processing of admissions documents can take some time; therefore applicants should submit all documents well in advance of the semester in which they wish to enroll. Before you apply, first contact the program faculty and identify a faculty member willing to serve as your graduate advisor. Applicants will not be admitted to the program without a graduate advisor.

A completed application consists of:

1. Completed university Graduate Application with essay of at least 300 words describing educational and career goals, interests within the field of environmental science, and if possible, identifying the faculty member who has agreed to be your graduate advisor,
2. At least three letters of evaluation,
3. Transcripts of all previous undergraduate/graduate work (including transcript evaluations of all work done at foreign institutions),
4. Graduate Record Examination (GRE) scores (applicants already holding earned graduate degrees need not submit GRE scores).
5. For international applicants, refer to additional requirements as noted in the International section of the graduate catalog.

Submit all materials to the College of Graduate Studies. It is your responsibility to make sure that your application is complete by the deadline, or the Admissions Committee cannot consider your application. Consult the College Academic Advisor or the Environmental Science Program Coordinator to determine program admission standards.
University regulations allow students to take up to nine semester hours or one semester of graduate coursework (whichever comes sooner) before being formally admitted to a graduate program. But, do not delay applying simply because you are allowed to begin coursework before being admitted. Take the GRE and apply for program admission as soon as you decide to pursue graduate study, for several reasons. First, it gives you assurance about whether graduate courses you took prior to program acceptance will apply towards your degree plan. Only those students admitted to the program have graduate advisors and only those students may assemble and meet with a graduate committee. The graduate committee helps the student formulate an official degree plan, and your graduate committee may or may not approve all elective graduate courses you may have taken before you were admitted to the program. If you are enrolling for a conditional term prior to formal program acceptance, you may be unsure of receiving approval for certain elective courses. In this case, prudent advice for conditional-term students is to take required core courses. Second, generally only students officially admitted to degree programs are eligible for teaching assistantships or graduate scholarships. If you delay applying to the program, you may lose out on the opportunity for such valuable financial support. Third, you might not be accepted to the program after your semester of effort, and it is wisest to know this up front.

IV. Thesis and Professional Options

You must choose between thesis and professional (non-thesis) program options. Decide before you begin graduate study; changing options later (particularly from professional to thesis) may significantly lengthen the time needed to complete your degree. Which option is best? It depends on your personal circumstances and objectives in graduate work.

Thesis Option. The purpose of the thesis is to demonstrate your competence to investigate a research topic and to report the findings with full documentation in a readable scientific style. Thesis research
affords you the opportunity to become an expert in a specific area of environmental science and to produce research results of publishable quality. Through thesis research you can develop a better appreciation of what constitutes valid research design, methodology, statistical analysis, and conclusions. If you plan further graduate study by completing a doctorate, consider the thesis option since some doctoral programs require completion of a masters degree thesis first.

**Professional Option.** The professional option is best if you prefer exposure to a wide range of areas of environmental science through additional coursework and a short independent research project over specialization in a narrower research topic. It may also be best if employment concurrent with graduate study precludes you from completing more comprehensive graduate research. All professional option students must complete and present a Directed Research project, which is of smaller scale than a thesis.

V. **Financial Support**

**Science Teaching Assistantships.** A limited number of science teaching assistantships are available within the College of Science and Engineering. University regulations require that you must be accepted as a graduate student to be considered for these assistantships, and must enroll for at least nine hours in any long semester, and three hours in the combined summer terms, for terms in which you hold the teaching assistantship. *The application deadline for priority consideration for a science teaching assistantship is February 1.* Applications are available online; see [http://www.sci.tamucc.edu/](http://www.sci.tamucc.edu/) (select “Students,” then “Graduate Students – Graduate Funding Opportunities”). The duration of an assistantship is normally two full semesters (fall and spring) although based on department need, a limited number of assistantships may be for only one semester. Assistantships are renewed annually. You may normally receive teaching assistantships for up to two years.

**Other Teaching Assistantships** are available as well. Consult the University Core Curriculum Program Office for information about Core Curriculum assistantships. Consult other departments for information about teaching assistantships within those departments.

**Research Assistantships.** A limited number of research assistantships are available through research institutes and centers, and individual faculty members; consult institute and center directors and individual faculty members to identify these funding sources. Some graduate research assistantships are administered through the College of Science and Engineering; see [http://www.sci.tamucc.edu/](http://www.sci.tamucc.edu/) (select “Student Information, Graduate Students, and Graduate Funding Opportunities & TAs”).
Exemption from Higher Out-of-State or Foreign Tuition Rates. If you receive a 50% time (20 hours/week) teaching assistantship or research assistantship you may be eligible to pay tuition at Texas Resident rates, even if you are an out-of-state or foreign student. Such reduction is determined by application. To apply, complete a Graduate Assistant Exemption form at: http://gradschool.tamucc.edu/forms/Lori/GradAssistExemption.pdf

Loans and Scholarships. Consult the Office of Financial Assistance for information regarding student loans. Most Graduate Scholarships for S&E students are administered through the College of Science and Engineering; see http://www.sci.tamucc.edu/ (select “Students,” then “Graduate Students – Graduate Funding Opportunities”). The College also routinely distributes information about many scholarships awarded by private organizations.

Agency Internships. A limited number of student internships are available with state or federal natural resource agencies. Generally more advanced (second or third-year, rather than first year) students are placed in these positions. Consult the Director of the Center for Coastal Studies about availability of these positions (Phone 361-825-2736; Office Location in Carlos Truan Natural Resource Center 3200).

Outside Employment. The University Office of Career Services can assist you in finding employment in the community and in preparing for careers upon graduation. Subscribing to listservs (see “Get Connected! Listserv for Environmental Science Program News”) and networking with fellow graduate students and faculty will also help you find employment.

VI. Graduate Advisor, Graduate Committee, and Degree Plan

How to Select a Graduate Advisor. Your graduate advisor, the faculty member who primarily guides you through your course of study and graduate research, will also chair your Graduate Committee. You must identify a faculty member willing to serve as your graduate advisor before you apply for admission to the Environmental Science Program. Your graduate advisor must be a full-time Environmental Science faculty member within the Department of Physical and Environmental Science, or the Department of Life Science at A&M-CC, although other persons may serve as co-advisors. Choose a graduate advisor because of related research interests, expertise in your research field, and compatible personality. A professor has the right to refuse to be your graduate advisor. The decision not to assist you should be based upon some definable criteria such as workload, incompatible research interests, lack of proper equipment
and facilities to do your proposed research, etc. Your graduate advisor will recommend coursework for your first semester of graduate study and will help you identify other persons suited to serve on your Graduate Committee.

Do not confuse the term “Graduate Advisor” with another position, “Academic Advisor.” The Academic Advisor is a professional staff member. In the application process, the Academic Advisor will route your completed file from the College of Graduate Studies to the Program Coordinator for faculty consideration. On behalf of the College Dean, in the graduation clearance process, the Academic Advisor will review your degree plan and record on file for verification of program and university requirements. Should you have any questions on university processes, or resources at A&M-CC, contact the Academic Advisor for clarification or guidance.

Requirements for composition of the Graduate Committee vary between graduate programs. Within the Environmental Science Program, a Graduate Committee must have at least three members, including the Graduate Advisor (who is your Graduate Committee Chair). At least one of the other committee members must be a full-time Environmental Science faculty member of the Department of Physical and Environmental Sciences or the Department of Life Sciences. Additional committee members may be A&M-CC faculty members from a related discipline, adjunct faculty members, or qualified individuals approved by the graduate advisor.

Once you (the graduate student) and your graduate advisor agree on the membership of the committee, it is your responsibility to contact each prospective committee member and ask that person to serve. Attempt to meet with your Graduate Committee towards the end of your first full semester after acceptance to graduate study, but no later than the end of the second full semester after acceptance to prepare your degree plan. Meet with them sooner or more often if appropriate.

**Role of the Graduate Committee.** Your Graduate Committee directs your degree plan, thesis research and manuscript preparation (if there is a thesis), and oral examination. Your Graduate Advisor provides primary guidance in constructing the degree plan, thesis selection and
research, and submits all necessary paperwork from the Graduate Committee to specified university offices. The Graduate Advisor and Graduate Committee must approve all changes to elective coursework if you wish to apply it to the total semester hours required for the degree. Beyond these functions, your graduate advisor and Graduate Committee members should serve as valuable mentors. Remain in close contact with your graduate advisor and Graduate Committee members during your graduate study and thesis research.

Preparing a Degree Plan. The goal of the first committee meeting is to allow you to introduce yourself and your academic and career interests to your committee members, and to work with them to devise a degree plan (that is, a roadmap) outlining your environmental science course of study. It is good to be well organized because it is the first picture that most committee members will have of you. Also, this saves your committee members time so they can focus in the meeting on discussing more important things such as your proposed research.

During the first meeting with the Graduate Committee, give your committee a summary of all scientific/technical courses taken, both undergraduate and graduate. It is helpful to bring copies of your transcripts for this. Explain your academic and career interests and goals within the broad field of environmental science. Explain possible research projects you may be considering. Bring a one-page summary of the proposed research and a time line, if you are far enough along in your studies that you can prepare these. Also bring copies of any key papers related to the project if not all committee members are familiar with the subject. Then, with help from the committee, suggest an emphasis area to serve as the focus for all your subsequent coursework and thesis research (if applicable). The graduate committee identifies areas in which you need additional coursework (including prerequisite work), approves elective courses, recommends possible thesis topics, and formulates a tentative degree plan.

Your committee may require you to do leveling coursework if they feel you are inadequately prepared to complete the required core courses or graduate level work in your desired emphasis area. You generally cannot receive graduate credit for taking an undergraduate course as leveling work. If your committee prescribes leveling work, plan to do it immediately or risk significant delays in completing the graduate program.

Your graduate advisor prepares a Tentative Degree Plan and at the close of the meeting, you or your graduate advisor forwards it to the S&E College Academic Advisor, who prepares an Official Degree Plan. If a student later changes electives or clarifies an elective on the plan, an
email from your graduate advisor will suffice to document the approval of the switch. If a student has an exception or waiver to the Plan, a separate form for approval is submitted to document the change. The Academic Advisor circulates the Official Degree Plan to your committee members for signatures.

**Emphasis Area or Track.** A student will define an emphasis area or track for his or her graduate studies with assistance from the graduate advisor and Graduate Committee. Marine Policy and Human Dimensions is one possible track; another is Coastal and Marine System Science. These are described in further detail below.

**a. Emphasis Area.** The *emphasis area* is a word or phrase which best expresses the intended focus of your graduate studies within the broad field of environmental science. You define an emphasis area, with assistance from your Graduate Advisor and Committee, and then state it on your degree plan. There is no established list of emphasis areas from which to choose. Rather, you uniquely formulate an emphasis area based on your own academic or career interests. “Biology” is an example of an emphasis area which is so broad as to be meaningless; better emphasis areas (not an exclusive list) include “contaminants,” “environmental regulations,” “coastal ecosystems,” “hydrogeology” or “habitat management. Other emphasis areas are possible as approved by a student’s Graduate Committee. You should be able to justify how your electives and your thesis or directed-research project produce a coherent graduate program focused around the emphasis area. Designated electives must receive the approval of a student's Graduate Committee. Electives from the natural sciences, computer science, geographic information science, mathematics, political science, public administration, business law, or other areas may be approved.

**b. Marine Policy and Human Dimensions Track.** Students with an interest in studying the application of environmental science to ocean/coastal policy may choose the Marine Policy and Human Dimensions track. The track provides an understanding of the physical and biological coastal environment and its interaction with human behaviors and policies. This transdisciplinary program is designed to prepare students to work with a wide variety of marine and coastal constituencies to translate sound environmental science to public policy. Suggested electives include:

- ESCI 5340 Ocean Resources
- ESCI 5345 Living with Coastal Hazards
- ESCI 5360 Coastal Management and Ocean Law
- ESCI 5490 Biodiversity and Conservation Science
- ESCI 5490 GIS Applications in Environmental Science
c. Coastal and Marine System Science Track. This track is appropriate for students who may wish to apply selected Coastal and Marine System Science courses to a M.S. degree in Environmental Science, as approved by the student’s Graduate Committee.

Advancement to Degree Candidacy. Graduate students who have met with their Graduate Committee and have a degree plan on file are considered degree candidates. You must have advanced to degree candidacy by the end of your second full semester of graduate study following your admission to the program. *If you fail to advance to degree candidacy by then, during that second semester the S&E Academic Advisor will place a "hold" on your records which prevents you from registering for a third semester and progressing further towards your degree.* If you later advance to degree candidacy during that second full semester the "hold" will be removed.

VII. Course of Study

Degree Requirements (Thesis, Professional Options). There are two options for the M.S. degree. The **Thesis Option** consists of 36 semester hours of coursework including a thesis. The **Professional Option** consists of 36 semester hours of coursework (including a directed research project).

All students must complete 36 semester hours of coursework for the degree. Generally, leveling work, if prescribed by your Committee, will not count towards the total. At least 24 of the 36 semester hours must be taken at A&M-CC. Also, at least 24 of the 36 semester hours must be taken after you were admitted into the program, unless you transferred from another graduate program at A&M-CC into the Environmental Science program. No more than 9 hours of course work taken to fulfill the requirements for an earlier masters degree from A&M-CC may be applied to a second master’s degree, and 30 additional residency hours are required for a second master’s degree.
All students entering the program on or after Fall 2011 must follow one of the two curricula listed below:

**Thesis Option***:

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
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<tbody>
<tr>
<td>ESCI 5101</td>
<td>Environmental Research Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ESCI 5203</td>
<td>Professional Skills for Scientists</td>
<td>2</td>
</tr>
<tr>
<td>MATH 6315</td>
<td>Statistical Methods in Research I</td>
<td>3</td>
</tr>
<tr>
<td>Choose one:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BLAW 5330</td>
<td>Environmental Law and Policy</td>
<td></td>
</tr>
<tr>
<td>ESCI 5302</td>
<td>Advanced Environmental Regulations</td>
<td></td>
</tr>
<tr>
<td>ESCI 5360</td>
<td>Coastal Management and Ocean Law</td>
<td></td>
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</tbody>
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Electives in specialty area (to be chosen in consultation with a student’s advisory committee). At least 9 hours must be from BIOL, CHEM, CMSS, ESCI, GEOL, or PHYS. 18

ESCI 5392/5393/5394 Thesis I/II/III 9

Total 36

**Professional Option***:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESCI 5101</td>
<td>Environmental Research Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ESCI 5203</td>
<td>Professional Skills for Scientists</td>
<td>2</td>
</tr>
<tr>
<td>MATH 6315</td>
<td>Statistical Methods in Research I</td>
<td>3</td>
</tr>
<tr>
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</tr>
<tr>
<td>ESCI 5360</td>
<td>Coastal Management and Ocean Law</td>
<td></td>
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</tbody>
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Electives in specialty area (to be chosen in consultation with a student’s advisory committee). At least 9 hours must be from BIOL, CHEM, CMSS, ESCI, GEOL, or PHYS. 24

ESCI 5397 Directed Research 3

Total 36

* Core requirements may be substituted if a student can demonstrate equivalent competencies.

Students may apply up to six hours of ESCI 5596 Directed Independent Study towards the elective hours required by either option.

**Suggested Schedule of Study.** Meet with your graduate advisor before the beginning of your first semester of graduate work to identify courses appropriate to the first semester of graduate work. You will work with your graduate advisor to identify other persons best suited to serve on your Graduate Committee. As noted above, you must hold a graduate committee meeting, complete a tentative degree plan, and advance to degree candidacy by the end of your second full semester.

Generally graduate students complete most required Core Courses during their first year of study, and may or may not take several electives during that year. In certain circumstances you may postpone completion of the Core Courses so that you may take a particular elective, but first consult your graduate advisor. Both non-thesis and thesis graduate students continue taking elective or remaining core coursework during the second year of graduate study.
**Thesis Students**  Enrolling in Thesis I/II/III.  Thesis students should tentatively identify a thesis topic by the end of their second semester of graduate work. The first summer following the first two semesters of graduate work is an opportune time to begin reconnaissance fieldwork or labwork and library research on the thesis topic and you may enroll in ESCI 5392 (Thesis I) and complete a Thesis Proposal that summer or the following fall semester.

Enrollment in any Thesis course requires approval from your graduate advisory to the Office of the Department of Physical and Environmental Sciences, and takes place through that office. Once you confer with your graduate advisor on registering for these courses, the graduate advisor emails the department administrative assistant your name, student identification number, term, course, title, and course name so the secretary may create a specific section for you. Once the section is created, the administrative assistant gives you authorization to enroll in that section. Do this at least two weeks prior to registration. You must then finalize your registration in to that section via SAIL.

Enroll in ESCI 5392 (Thesis I: Thesis Proposal) when you and your graduate advisor mutually decide on a research topic. Your Graduate Committee must sign the completed Thesis Proposal before you can earn a letter grade for ESCI 5392. If you do not complete the proposal by the end of the semester your graduate advisor will award a non-punitive grade of "IP" (In Progress). You must enroll again in ESCI 5392 until you complete the proposal and then you will receive a letter grade for the course. See Section XI (Thesis Proposal) for more information on proposal format and official proposal approval.

Enroll in ESCI 5393 (Thesis II: Thesis Research) only after your thesis proposal is completed to your Graduate Committee’s satisfaction, and you are ready to begin your thesis research. Enroll in ESCI 5394 (Thesis III: Thesis Submission) for the semester in which you plan to complete the thesis manuscript. Research and writing the manuscript often overlap and may occur simultaneously or the process may extend beyond two semesters. Therefore, as appropriate, you may enroll in ESCI 5393 and ESCI 5394 simultaneously or enroll for additional semesters of ESCI 5393 or 5394 as needed to complete the project. The prerequisite to ESCI 5393 or ESCI 5394 is that your completed thesis proposal, signed by your committee, is filed in the College of Science and Engineering Dean’s Office.

Your graduate advisor assigns a mark of "IP" for each subsequent semester of ESCI 5394 until you have defended the thesis and your Graduate Committee approves and signs the final thesis manuscript. Then, your graduate advisor will change the remaining IP marks to a letter grade
which reflects the overall quality of your thesis research, defense, and manuscript.

University rules stipulate that the university will not change a past mark of “IP” to a letter grade unless you register for the same course in a subsequent semester, paying the appropriate tuition and fees. Therefore students who do not continuously enroll for thesis will retain permanent marks of IP for some of these thesis hours. These students must enroll in more than nine hours of ESCI 5392/5393/5394, in total, to earn the requisite nine hours of thesis credit with assigned letter grades.

If you have completed all 36 hours required for the degree, are completing thesis work, and are in your final semester of enrollment, you need not enroll in ESCI 5394 (see Academic Requirements: Minimum/Maximum Course Loads).

(Professional Students) Enrolling in Directed Research. Professional students should work with their graduate advisor and Graduate Committee to identify an appropriate professional research project. Enrollment in ESCI 5397 Directed Research requires approval from your graduate advisor to the Office of the Department of Physical and Environmental Sciences, and takes place through that office. Once you confer with your graduate advisor on registering for these courses, the graduate advisor emails the department administrative assistant your name, student identification number, term, course, title, and course name so the secretary may create a specific section for you. Once the section is created, the administrative assistant gives you authorization to enroll in that section. Do this at least two weeks prior to registration. You must then finalize your registration in to that section via SAIL.

The completed Directed Research project should be summarized in a documented, scientific paper of professional appearance. It is customary to have the paper bound (spiral or tape binding is acceptable). Give copies of the completed paper to all your committee members, and give a file copy to the College of Science and Engineering Academic Advisor. You may wish to retain additional copies to show potential employers or others as well. You will present the project formally at a project defense, similar to the thesis defense.

Time to Obtain the Degree. Most students take two to three years to complete all requirements for the M.S. degree in environmental science. The length of time depends on amount of prerequisite coursework needed, concurrent employment or other commitments which may not allow students to devote full time to graduate study, and thesis choice (a topic which is well-
defined, narrow in scope, does not require development of untested techniques or technologies, and does not entail long-term sampling will be completed faster), among other factors.

VIII. Interact with Other Graduate Students

Graduate education is not a solitary endeavor. Make opportunities to discuss with other graduate students their projects, and offer to assist them in the field or laboratory. Beyond generating camaraderie, this will give you a more comprehensive understanding of specific issues and problems in environmental science, expose you to a broad array of lab/field techniques, give you ideas for your own thesis, and may gain you reciprocal lab and field assistance when needed to carry out your own investigations.

Join the A&M-CC Graduate Student Organization. This organization provides a support network for graduate students throughout the university, contacts with fellow graduate students, fun, opportunity to learn from the experiences of others, forum to advocate for graduate student issues, and opportunities for professional development. Monthly meetings of that group will be publicized through their listserv.

IX. Academic Requirements

Transfer of Credit. University requirements permit you to apply up to 12 semester hours of approved coursework from another university towards the graduate degree in Environmental Science. That is, you must complete at least 24 hours through A&M-CC. It is recommended you read the full policy regarding Transfer of Credit via the TAMUCC online catalog.

Course work transferred or accepted for credit toward a graduate degree must represent graduate coursework relevant to that degree, with course content and level of instruction resulting in student competencies at least equivalent to those of students enrolled in A&M-CC’s own graduate degree programs. The following rules apply to all graduate transfer courses.

Transferred graduate credit must have been earned at an accredited institution. The student must have earned a grade of B or better in the transfer course work. Courses lacking letter grades (e.g.,
courses graded pass/no pass, credit/no credit, or satisfactory/unsatisfactory) will not be accepted as transfer credit. The course work must be less than 7 years old at the time the A&M-CC degree is awarded. All transferred work (with accompanying grades or marks) will be translated into Texas A&M University-Corpus Christi terms. If an equivalency has not already been established, the College of Graduate Studies will consult with the appropriate graduate program that represents the course content to determine the course equivalency and transferability. Should the Graduate Dean determine that a student has taken courses of similar level and content at more than one institution (duplicated work), the grade of the second course attempted will be the grade of record, and all others will be recorded without credit. Transfer work will become a part of the student’s record only after matriculation and then only when the student has established a course-of-record. Additional limitations on transfer of credit are discussed in the university online graduate catalog.

Minimum / Maximum Course Loads. You must successfully complete six semester hours of advisor- or committee-approved work during each academic year (September-August). Students who fail to complete six hours in any academic year will be classified as inactive. Students who fail to complete the needed hours the next full semester will be dropped from the graduate program. If dropped from the program but you wish to continue, you must reapply for admission.

You must enroll at the university for all semesters in which you plan to use the campus library, computing facilities, laboratory space or equipment, or other university facilities. Consult the academic advisor for further details. If you hold a teaching assistantship you must enroll for at least nine semester hours each long semester in which you are employed.

University requirements specify that a graduate student may register for up to 12 hours of coursework in a regular semester, or up to seven hours in a single summer session. Registration for a higher course load requires approval of the dean of the college in which the student is majoring. A student may not register for more than 1216 total coursework hours in the combined summer sessions (not counting May-Mester) and 6 hours in a single summer session.

Minimum Grade Point Average and Academic Probation. The university requires that you maintain a minimum grade point average (GPA) of 3.0 (“B”) for all graduate work undertaken to remain in good standing and to receive the degree. The university will place you on probation if
your cumulative graduate GPA falls below 3.0 at the end of a semester. The university will allow a graduate student on probation to complete one additional semester of work, but will terminate the student at the end of that next semester if he/she does not achieve at least a 3.0 GPA for that semester. A terminated student cannot re-enroll at A&M-CC for graduate study for two years.

No more than six semester hours' credit with a grade of "C" is acceptable as credit for a masters degree at A&M-CC. The university will not count any course grade below a "C" for graduate credit. All grades received for a repeated course will be computed in the grade point average.

**Time Limit (Statute of Limitations).** University regulations specify that academic credit which is more than seven years old at the time the degree is conferred will not apply towards that degree.

### X. Choosing a Thesis Topic (Thesis Students)

One of the hardest aspects of graduate education is choosing a thesis topic worthy of investigation. Seek input on possible research topics from your graduate advisor and try yourself to conceive a study. When choosing a research topic, consider:

- **Cost.** The cost of the project, both to you and to the university, is the most important consideration. If the cost is high and the likelihood of funding is low, you probably cannot complete the project.

- **Facilities.** If the proper facilities and equipment are not immediately available, don’t depend on them in time to complete your research. Your graduate committee will know or can determine what equipment is in the university inventory.

- **Time.** A research problem for the M.S. degree is ordinarily completed within two years. Regard with caution any project which requires more time.

- **Expertise.** Undertake a project only if the university library or graduate advisor has access to the pertinent literature. Similarly, avoid a project in which the advisor lacks competence, experience, or interest.

- **Feasibility.** Examine the project critically to ensure that you can collect the data necessary, samples are available in sufficient numbers, in general you are not dependent on others to obtain your data, and you can collect and analyze the data within your limits of time, financial support, and abilities.

- **Other Options.** Prepare a list of contingency plans of secondary projects related to the proposed project in case the proposed project falls through.

If the proposed project meets the above criteria and your graduate advisor agrees to sponsor the research, begin the Thesis Proposal.
XI. Thesis Proposal (Thesis Students)

The thesis proposal is an organized description of your planned thesis research. The thesis proposal succinctly narrates the nature of the problem to be examined, status of previous or current research relating to the subject under consideration, research method, and importance of the projected work.

Thesis Proposal Style and Format. Appendix I outlines guidelines for preparing the thesis proposal. A thesis proposal must include the following sections, in this order:

1. **Title Page.** Appendix I is an example of a correctly spaced title page.

2. **Background and Relevance.** This section at the beginning of the proposal summarizes (with appropriate literature citations) all past and present research pertaining to each aspect of the research objectives. This section should explain why the proposed research is necessary.

3. **Purpose.** Explicitly state the purpose of the research project (e.g., to determine the effect of local discharges of oilfield brines on adjacent populations of estuarine benthic invertebrates). The purpose statement should reflect the environmental question(s) that the research is designed to answer, rather than the method used to conduct the research. For example, "to measure salinity" is not a sound purpose for proposing research. But, if the research is to discover (or attempt to discover new methods of analysis, collection, etc., then it is acceptable to list methods to be tried.

4. **Study Site.** If the planned research will take place in the field, show the study site location via a map. Briefly characterize the physical or biological attributes of the site. Omit this section if inapplicable to the proposed research.

5. **Methods.** Describe the methods and materials that you will use to meet each research objective. Describe in detail any special items that must be purchased or constructed to complete the research. If lengthy descriptions or drawings are necessary, describe the equipment fully in an appendix.

6. **Timetable.** Estimate the time schedule for research and academic work. Establish tentative deadlines for completion of data-gathering for each research objective. Take into account coursework demands as you plan your fieldwork, field trip schedules, etc. State an estimated completion date for data gathering and a graduation date. Present your timetable in tabular form.

7. **Budget.** Include an accurate assessment of the expenses incurred during the research project. The budget
should clearly define the expenses the University covers and the costs you will incur. Include financial or other support obtained from other governmental or private sources. Explain each item in the budget in the "Methods" section of the proposal. For example, do not include the cost of photographic film in the budget unless the "Methods" section describes the specific rationale for photography. Divide the budget into four subsections and present it in tabular form (Table I, Appendix I):

a. **Equipment.** Include cost figures for each piece of non-expendable equipment that you must purchase to support your research. Do not include purchase costs for equipment already available for use at A&M-CC, but make sure that such equipment is operational and available for your use. **Obtain permission before using University equipment and expendables.**

b. **Expendables.** Estimate costs for all supplies, chemicals, or other items to be exhausted during the research project. All items currently in stock must be replaced. Include the replacement costs. Expendables include items such as microscope slides, test tubes, chemicals, cotton, jars, vials, etc.

c. **Operational Expenses.** Include expense estimates for data collection. Include the costs of travel, boat rental, and other expenses. The use of University vehicles and boats requires approval by (a) the Field Trip Coordinator and Department of Physical and Life Sciences Chairperson, or (b) the research institute or center director with oversight over that vehicle.

d. **Document Preparation.** Include cost estimates for all aspects of preparing the proposal and thesis, including the cost of having the final document bound. Depending on the number of drafts prepared, costs may exceed $200. The College of S&E and the Department of Physical and Life Sciences will not bear any cost involving the preparation or reproduction of the proposal or thesis.

8. **Literature Cited.** The Literature Cited section includes the complete citation of each article referred to in the proposal. Follow the bibliographic format of the Format Journal you have selected. See Appendix I.

**Approval of Thesis Proposal.** Submit a draft copy of the complete proposal, as outlined in the previous section, to your graduate advisor. This process may require several revisions, so start it as soon as possible. After the proposal meets your advisor's approval, provide one copy of the proposal to each of your Graduate Committee members to review. After you have made their requested changes and the committee is satisfied that all aspects of the proposal are in order, deliver the final Thesis Proposal to your graduate advisor. The advisor and the Graduate Committee members sign the title page. Then, make five copies of the now-signed Thesis Proposal and distribute as follows: original to the College of Science and Engineering Academic Advisor, one copy each to your graduate advisor and two Graduate Committee members, and you keep the final copy.

*Submit the signed Thesis Proposal to all persons noted above on or before the last day of final exams.* Your graduate advisor will assign a letter grade for ESCI 5392 (Thesis I: Thesis Proposal) only after the entire graduate committee signs the proposal. If you cannot complete the
proposal by the deadline, your graduate advisor will assign a mark of "IP." Sign up again for ESCI 5392 the next semester so that you can complete the proposal; your advisor will change the IP to a letter grade after you complete and submit the proposal. Enroll in ESCI 5393 (Thesis II: Thesis Research) only after you have completed the Thesis Proposal. Only in exceptional circumstances may you begin a thesis research project or utilize A&M-CC equipment for thesis research before the Graduate Committee approves the proposal. The Graduate Committee must approve such exceptions.

XII. Thesis Research (Thesis Students)

Thesis research will not always go according to plan. Be prepared to adopt new sampling or analysis methodologies if necessary, in consultation with your graduate committee. Also, take the opportunity to pursue side projects as time and resources permit, to gain additional understanding of your research topic.

XIII. Assembling the Thesis Manuscript (Thesis Students)

Once you have completed the thesis research, analyze the data, organize the research into a meaningful format, and explain it in a written narrative. The written narrative follows a style and format standard to scientific papers.

Style and Format. Appendix I outlines guidelines for preparing the thesis. You may choose between two models of organizing the thesis, the traditional model and the journal manuscript model. The traditional model presents the thesis research in a single, cohesive manuscript. Information is presented sequentially and no section stands alone as a publishable document. The journal manuscript model presents the thesis research as several discrete articles, each appropriate for submission to a journal, bound together as the thesis document. In the latter, information may be repeated as necessary between articles so that each article can stand alone as an academic work. Presentation of thesis research through the journal manuscript model significantly reduces the work needed to submit articles to professional journals for publication. Whether you choose the traditional or journal manuscript model, follow the style and format of your selected Format Journal(s) for headers, punctuation, citation of references, bibliography, and other details except where specifically noted below and in Appendix I.

The thesis is a complete document to be bound and filed in the University Library. It must include certain accessory pages. An annotated list appears below, presenting in the order of appearance in the manuscript all pages and sections of a thesis. A thesis has three main parts, preliminary pages, main text, and supplementary pages, organized in this order:

I. Preliminary Pages (both Traditional Model and Journal-Manuscript Model)
   A. Title/Approval Page
B. Abstract
C. Table of Contents
D. List of Figures (if more than one)
E. List of Tables (if more than one)
F. Acknowledgements

II. Text (Appears once for Traditional Model; repeat as needed for each article in Journal-Manuscript model)
   A. Introduction
   B. Materials and Methods (you may include "Study Area" as a separate section if acceptable in format journal)
   C. Results
   D. Discussion (you may combine "Results and Discussion" if acceptable in format journal)
   E. Summary (you may omit if format journal does not include it)
   F. Conclusions (you may omit if format journal does not include it)
   G. Literature Cited

III. Appendix (omit if inappropriate)

Submitting the Manuscript. When you are satisfied with your typed draft of the thesis, submit it to your graduate advisor. Respect your advisor's time: submit a draft as perfect as you can make it (grammatically correct, spell-check everything, and include your planned illustrations). Your graduate advisor will critically examine the manuscript for scientific content, errors in grammar and punctuation, wordiness, terminology, soundness of scientific reasoning, and accuracy. Your graduate advisor will suggest changes, additions, and deletions that will better organize and clarify the manuscript, then return the corrected document to you and ask for a copy for revision.

You may consider yourself a good writer and thus may be taken aback when your advisor suggests numerous changes. Editing and revising are a normal part of the professional writing process, and the best writers edit and revise extensively. Use this as an exercise to improve your professional writing skills. Submission, review, and revision of the manuscript continue until the graduate advisor considers your manuscript satisfactory.

Next, reproduce the approved rough draft and submit one copy to each Graduate Committee member. Each committee member then edits the manuscript. Let your advisor review their suggested changes and discuss each suggested change together. Your graduate advisor may ask you to revise and resubmit the document accordingly. If your graduate advisor does not agree with a committee member's suggestion, your graduate advisor should, in your presence, reach a compromise with the committee member.

Reproducing Manuscript Copies. Check with the University Library for additional requirements beyond those described herein. When your advisor and all committee members are satisfied, reproduce at least four final copies of the document for original signature (see below) on 25%, 50% or 100% cotton, 20- or 24-pound acid free white bond paper with a plain finish. Copies must be one-sided. This paper (especially with the higher percent cotton content) may be difficult to obtain locally, and towards the end of each semester local office-supply stores are quickly depleted of stock by the demand from A&M-CC graduate students, so check with these stores well in advance.
Final Deposition of the Manuscript. Check with the University Library for additional requirements beyond those described herein. After you have successfully presented your graduate seminar and completed your oral examination, your graduate committee will sign the cover pages to copies of your thesis. Submit **at least four copies** of the thesis cover page to them for original signature (one for you, two for the University Library, and one for your graduate advisor, accompanied by copies of the manuscript itself which they are approving with their signatures. Consider preparing additional courtesy copies for your committee members, copies for parents, etc.

After the copies are signed, pay a binding fee to the University Business Office and retain the receipt. Submit the copies to the College of Science and Engineering Academic Advisor **on or before the last day of classes** for that semester, for the College of Science and Engineering Dean's approval and signature. The receipt showing that you have paid the binding fee for each thesis copy must accompany the thesis copies. Separate each thesis copy with a color sheet to distinguish the cover letter insert after the Dean signs.

After you obtain the Dean's signature, staff in the Dean’s office will forward the thesis copies to the University Library for binding. Leave your contact information with the College of S&E staff so that this can be provided to the library and you can be contacted when the bound copies are ready. It is the student’s responsibility to pick up the bound copies and distribute them. Distribute as follows: one copy to you, two to the University Library, one to your graduate advisor, and additional copies to any other persons you designate. It is your responsibility to make arrangements if you cannot pick up the bound thesis copies personally for distribution.
Manuscript Rejection. Any member of your graduate committee or the Dean of the College of Science and Engineering can reject the thesis at any stage of the submission and approval process. Rejection of the manuscript can occur for many reasons, including (but not exclusively):

■ The manuscript does not conform to the required format.
■ The manuscript is messy, poorly reproduced, or contains an excessive number of grammatical or spelling errors.
■ The manuscript describes scientific data inconsistent with the research project approved in the thesis proposal.
■ The paper contains errors, inappropriate analysis of data, erroneous conclusions, or other scientific inaccuracies.
■ The paper contains plagiarized work.

XIV. Assembling the Professional Paper (Professional Students)

The Environmental Science Program has not established rigid guidelines for the format of the professional paper completed for the professional option, as the nature of the projects vary widely. If your project lends itself to a journal manuscript format as described in Section XIII for the thesis, then consider that as it may quickly enable you to submit the paper for publication. Some projects are performed for a natural resource agency and follow a format prescribed by that agency.

Do design a cover and appropriate title page for your paper and have it bound (soft-cover, with tape or spiral binding are acceptable) so that it presents a professional appearance. Appendix III presents an example of a title page of a professional paper.

When duplicating, make multiple copies and distribute them as follows: One (or more) for yourself, one for the College of Science and Engineering Academic Advisor, and one for your graduate advisor. It is courteous to distribute copies to your other Graduate Committee members as well. Submit a copy of the signed cover page only for the College of Science and Engineering Academic Advisor (it is fine to email an image of the signed cover page).
XV. Publishing the Thesis/Professional Paper

The thesis and professional paper do not constitute “published works,” but the graduate faculty anticipate that students will submit the theses, and excellent professional papers, in the proper format to scholarly journals for publication. If the graduate advisor or another faculty member significantly contributed to the research or manuscript writing, list that person as a co-author of the published article. Both you and your graduate advisor should agree about the authorship (keep in mind that the faculty members are supposed to assist you to a certain degree as part of their professional requirement). Seriously consider co-author status if the faculty member:
- Supported you on the work through a grant awarded as a result of the faculty member’s authorship of a grant proposal.
- Did a significant portion of the field or laboratory work with you or before you began the project.
- Assigned you some aspect of a much larger research project already underway.
- Contributed materially to the research in any other way.

Always acknowledge your graduate advisor and members of your Graduate Committee, other faculty members who assisted, and A&M-CC in the publication. It is courteous to acknowledge persons who supported in any major way including moral support, lab/field assistance, and financial assistance.

XVI. The Graduate Seminar (All Students)

All graduate students must present their thesis research orally during a Graduate Seminar open to all faculty and students. Schedule your Graduate Seminar to take place during your last semester of graduate work. It should, if possible, precede the final oral examination. Deadlines are noted below.

The Graduate Seminar consists of a formal oral and visual presentation of the results of the student's research or some pertinent aspect of the research, and should bear the aspect of a formal scientific presentation. The seminar should review parts of the thesis or professional paper such as the background and relevance of the research, a brief discussion of the methods used, a
summary of the results, and an explanation of the conclusions. Professional-quality visual aids should complement the oral presentation. As a general rule, the oral presentation should not exceed 30 minutes. This allows a similar period for questions and answers at the end.

You must **prepare and submit a formal announcement of the seminar to your graduate advisor for approval at least two weeks prior to the seminar date.** It is your responsibility to contact each graduate committee member and arrange a time for the event. All members of the Graduate Committee must attend the seminar.

Appendix II gives an example of the correct format for a Graduate Seminar notice. You are responsible for posting your seminar notice as an E-mail to these listservs at least one week before your seminar date:

- escistu-list@sci.tamucc.edu
- escifac-list@sci.tamucc.edu
- scitech-list@sci.tamucc.edu

You cannot post to a listserv if you are not subscribed, but your graduate advisor can post your seminar notice for you to the second two listservs noted above. All environmental science graduate students are welcomed and encouraged to attend all environmental science graduate seminars.

### XVII. Final Oral Examination (All Students)

**Purpose of Oral Examination.** Both thesis and professional environmental science graduate students must take a final oral examination. The final oral examination is a means of determining the scope of your understanding of the principles and broad aspects of environmental science. The oral exams forces you to review and synthesize all material from your past graduate courses. If you properly prepare for your exam, relationships between once separate and distinct courses begin to appear and you can assimilate broad concepts from isolated facts. **Deadlines for the oral exam are April 15, July 15, and November 15 for the spring, summer, and fall graduations respectively.**

**Review Method.** There are several ways to review for oral exams and you should probably use a combination of methods. Study of old course notes and exams is useful, especially those courses taught by members of your graduate committee; also review course textbooks, and study a comprehensive text such as used in an undergraduate environmental science course.

**Format and Scope of Exam.** During the initial stages of the exam, the Graduate Committee will usually ask you to give a brief personal history and reasons (goals) for desiring the M.S. degree. The committee will then ask you to briefly review the research methods and conclusions of the thesis, if there was one. Following this, the committee will ask questions of three main types: (1) those concerning specific aspects of all graduate coursework undertaken for the environmental science graduate program; (2) those concerning specific aspects of your emphasis area and thesis (if there was one); (3) those concerning broad concepts of environmental science, including a familiarity with the literature and appropriate professional societies.
Your Graduate Committee will decide whether you have passed the oral exam. Your graduate advisor will notify the College of Science and Engineering Academic Advisor of the results of the final oral exam. If you fail the exam the committee will discuss with you their assessment of your performance. If you fail you may retake the exam only once again, and only after an interval of at least four months.

**XVIII. Program Deadlines**

Program deadlines are as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 1</td>
<td>Application for priority selection of science teaching assistants for fall semester</td>
</tr>
<tr>
<td>April 15</td>
<td>Completion of oral exam and graduate seminar for spring graduation</td>
</tr>
<tr>
<td>July 15</td>
<td>Completion of oral exam and graduate seminar for summer graduation</td>
</tr>
<tr>
<td>Nov. 15</td>
<td>Completion of oral exam for fall graduation</td>
</tr>
</tbody>
</table>

Consult the University Term Calendar for additional deadline dates listed in the University Schedule:

http://sail.tamucc.edu/

**Thesis Proposal Deadline.** Thesis students must submit a thesis research proposal signed by all members of the committee to the College Academic Advisor by the last day of final exams for any semester in order to consider the work completed by that semester.

**Thesis Manuscript Deadline.** Thesis students must submit the required number of signed copies of the thesis (along with your copy of the binding receipt) to the College of Science and Engineering on or before the last day of classes for a given semester for the Dean's approval and signature.

**University Graduation Application Deadline.** Students are required to apply for graduation by the last class day of the semester prior to graduation. The graduation application is obtained through the College of Science and Engineering Academic Advisor. A post-deadline graduation application may be obtained through the Office of the Registrar. You must pay a graduation application fee. If a student applied for graduation and did not complete the degree requirements by the end of the term, the student must submit a new graduation application for a subsequent term and is subject to payment of new graduation fees.
XIX. Get Connected! Listserv for Environmental Science Program News

Communications within the College of Science and Engineering at A&M-CC are largely via listservs. See https://camslab.tamucc.edu/index.php/CAMSLab/Listservs for a general description of listservs. Most Environmental Science graduate students receive timely news and email updates on program seminars, jobs, internships, scholarships, research assistantships, new courses, and other opportunities through the Environmental Science Program Student Listserv. To subscribe, send an email message to:

escistu-list-request@listserv.tamucc.edu

On the subject line of the email, type:

subscribe

Another useful listserv is the Opportunities listserv, which posts information on job, internships, scholarships, and other opportunities of general interest to Science and Engineering students. The procedure to subscribe is similar; address and send an email message to:

opportunities-list-request@listserv.tamucc.edu

On the subject line of the email, type:

subscribe

You will undoubtedly find other listservs useful, and should subscribe to and monitor them to remain knowledgeable and updated.

XX. Important Contacts

Environmental Science Program Coordinator - Dr. Jennifer Smith-Engle, jennifer.smith-engle@tamucc.edu, NRC 3502, 825-2436
Administrative Assistant, Dept. PENS – Alessandra Garcia, alessandra.garcia@tamucc.edu, NRC 3500, 825-2814.
Academic Advisor, College of S&E - Martha Simcik, martha.simcik@tamucc.edu, CI 366, 825-3721
Chair, Dept. Physical & Environmental Sciences (PENS) - Dr. Richard Coffin, Richard.coffin@tamucc.edu, NRC 3506, 825-2456
Dean, College of Science and Engineering - Dr. Frank Pezold, frank.pezold@tamucc.edu, CI 374, 825-2349
Dean, College of Graduate Studies - Dr. JoAnn Canales, joann.canales@tamucc.edu, FC 179, 825-2177
Environmental Science Faculty: For a listing of faculty, their interests, and contact information, see the Environmental Science program website at:
http://pens.tamucc.edu/esci/
APPENDIX I

Guidelines for Preparation of the Thesis Proposal and Thesis Manuscript

General Instructions. Make all narrative material of the thesis clearly understandable to the reader through careful, well-organized writing, meaningful figures and tables, and adequate utilization of references. Several publications available in the A&M-CC library answer specific questions regarding the style of scientific writing, including the Council of Biology Editors (CBE) Style Manual, the United States Government Printing Office Style Manual, and others.

Format Journal. When writing the thesis proposal and thesis, follow the general format and style of the most recent issue of a respected scholarly journal in the field of your research. However, you should not follow some journal practices such as the use of double columns on a text page, literature citation methods other than the name-date system, etc., nor can the typed manuscript duplicate every printing technique. Do not necessarily follow the journal's "Instructions to Contributors." These instructions are for the convenience of the editors and printers of the journal and do not necessarily apply to the format of thesis proposals or thesis manuscripts. The journal that you choose as the "Format Journal" for your graduate manuscript must be readily available in the A&M-CC library. Your committee must approve your Formal Journal choice before you begin to write the manuscript.

Ordering of Sections. The sections of the thesis are generally ordered as follows: Title/Approval page, Abstract, Table of Contents, List of Figures, List of Tables, Acknowledgements, Text (including Literature Cited), Appendices. If following a journal format you may place separate, appropriate Literature Cited sections and Appendices relevant to that paper, at the end of each paper.
**Paper Size and Quality.** Print or duplicate thesis manuscripts on standard size (8 ½” x 11”) paper. It must be 25%, 50% or 100% cotton, 20- or 24-point, acid-free white bond paper with a plain finish. This paper (especially with the higher percent cotton content) may be difficult to obtain locally, and towards the end of each semester local office-supply stores are quickly depleted of stock by the demand from A&M-CC graduate students, so check with these stores well in advance.

**Font Style.** Print the manuscript using 10 or 12 characters-per-inch (cpi) type size with a plain font such as Helvetica or Times Roman, not some unusual font. Use the same font throughout the paper; do not mix fonts. When using a computer printer, make sure that (1) you print the manuscript with a letter-quality or laser printer; (2) the paper meets the size and quality standards defined herein; and (3) the manuscript meets all other style and format conventions established in this guidebook. The type must be clean.

**Italics and Underlining.** Follow your format journal in italicizing or underlining scientific nomenclature, foreign words, and titles. When underlining a word, use a continuous underline; do not leave a space in the underline between letters. Separately underline each word of a multiword term, leaving a gap between adjacent words.

**Corrections.** No corrections of letters or figures should be visible on the final copies.

**Spacing.** In general, double-space your thesis proposal and thesis manuscript. The exceptions to this rule are for quotations exceeding six typed lines (inset and single-space these) and footnotes (which you should avoid).

**Margins.** No letters may extend beyond a left-hand margin of 1.5 inches and a 1-inch margin along the other three edges of the page. The extra margin on the left side allows for binding of the completed thesis. All figures and tables must also conform to these margins. Do not hyphenate (split) words between lines.

**Pagination.** Number all pages in the thesis proposal or thesis manuscript except the Title/Approval page. Number the preliminary pages of the thesis with lower case Roman numerals centered above the bottom margins. The Abstract page is the first numbered page; it follows the Title/Approval page and is numbered ii.

Number the text and supplementary pages of the thesis proposal or thesis manuscript with Arabic numerals. The first page of the narrative text begins with 1 and the numbering runs consecutively to the end of the manuscript. Except on page 1, place all page numbers on the upper right hand corner of the page approximately 1 inch from the top and right-hand edges of the page. On page 1, center the page number one inch (1”) from the bottom of the page.
Headings and Subheadings. Your style and format for all headings and subheadings in the thesis proposal and thesis manuscript should follow the standard practice of the format journal. However, leave a four-space break between the last sentence in a major section of text and the next major heading (i.e., Methods, Study Area, Results, Discussion, etc.).

If the style of the Format Journal dictates that major headings are to center above the text and the text of your manuscript is spaced so that the heading would be placed on the bottom line of a page, move the heading to the top line of the subsequent page. Never place a stand-alone heading on the last line of a page. Center the title "Literature Cited" and type it in capital letters.

Title Page and Format. Pages A-5 and A-6 of this Appendix provide examples of correctly spaced title pages for a thesis proposal, and a thesis.

Figures and Tables. Figures and tables, regardless of size, may appear on separate pages or within the text itself. Place them in the manuscript as close as possible to their first reference in the text (generally the page on or immediately following the first reference). Avoid including excessive numbers of figures or tables. If this is impossible, place the figures or tables in an appendix.

Give each figure or table a number and title, and transcribe these exactly on the List of Figures or List of Tables pages. Make titles as concise as possible, but clearly describe the content of the illustration. Follow exactly the format and style for figures and tables prescribed by the Format Journal.

Type all tables. Titles for tables must appear on the same page as the table, placed above the table. Make horizontal rules mimic the Format Journal. The following page gives an example of a thesis proposal budget table.

Figures consist of graphs, maps, drawings, photographs, and other illustrations. All visual material that you prepare for a graduate manuscript must be neat, clean, and professional in appearance. Hand-lettering on figures are unacceptable.

Consult the CBE Style Manual, U.S. Government Printing Office Style Manual, or other scientific writing guide for suggestions concerning proper preparation of figures. Reproduce all figures on suitable paper for inclusion in the proposal or thesis manuscript.

Photographs constitute a figure; either print digital photos or secure original prints to individual manuscript copies by use of rubber cement, spray cement, or photo mounting cement.

Type titles for figures below the figure or place titles on a facing page, the title centered on the back side of a blank page, or on the figure page itself. If placing captions on the facing page, margin requirements for the facing page are reversed; that is, the 1.5 inch margin of a facing page will be on the right side of the page. Place the page number, however, on the opposite (blank) side in the standard position.
Reductions of tables and figures must remain large enough to be read easily. Fold materials to be bound within the pages of a manuscript or as separate inserts in pockets on the pages. Alternatively you can reduce many such items and photographically reproduce them. Fold oversized materials, such as large maps or charts which you cannot reduce in size and yet must include in the thesis, so that they measure no more than 7.5 x 10 inches and enclose them in a close-fitting envelope. Fasten this envelope to the back inside cover of the volume when it is bound. If you place tables or figures in landscape format on a page, the top of the table or figure should be at the binding side of the paper.

**Footnotes.** Scientific writing generally avoids the use of footnotes when possible. However, in rare circumstances, some Format Journals may permit the use of footnotes. In such instances, follow the journal format exactly except as provided for earlier in this guide.

**Citing Literature.** Cite all references to the literature in the text using the name-date system; this method is the most widely used one in the sciences, i.e. (Heron, 1995; Seagull 1996; Seagull and Plover, 1999). Choose a Format Journal that uses this system. Do not cite sources by number, i.e. (1). If you use or adapt a figure from another author, cite the source in the figure caption.

**Literature Cited.** Generally, follow the format in the Format Journal when you develop the Literature Cited section. Use the same system of abbreviations, punctuation, underlining, and italics as the Format Journal. There is one exception (mainly applies to chemistry Format Journals): if the Literature Cited section of your Format Journal does not list the title of an article, make sure that you do include it to enhance the usefulness of your citations to readers.

**Duplicating the Manuscript.** There are two acceptable methods of reproducing copies of thesis proposals and thesis manuscripts: (1) photocopying and (2) printing via computer printer. Reproduce the various text pages of your manuscript using only one method of duplication. The reproduction must be one-sided, and of high quality. Broken type or faint print is unacceptable, as are photocopies with dark or blurred lines, dark edges, or spotty pages. Reproductions of tables and figures must be consistent in quality with the rest of the manuscript, although different methods of reproduction may be involved.
Example of Title Page for Thesis Proposal:

THE TENTATIVE TITLE SHOULD APPEAR IN ALL CAPITALS

AND BE CENTERED

prepared by

YOU A. STUDENT

MONTH, 20__

for

The Graduate Committee
Environmental Science Program
Texas A&M University-Corpus Christi
Corpus Christi, Texas

Approved:

________________________
Dr. A. Marsh, Chairperson

________________________
Dr. O. Shinn, Member

________________________
Dr. C. Gull, Member

Format: Title of Journal used as format.
Example of Title Page for Thesis Manuscript:

THE TITLE SHOULD APPEAR IN ALL CAPITALS
AND BE CENTERED

By

You A. Student

Month, 20__

A Thesis Paper Submitted
In Partial Fulfillment of the
Requirements for the Degree of

MASTER OF SCIENCE

Texas A&M University-Corpus Christi
Environmental Science Program
Corpus Christi, Texas

Approved: __________________________ Date:__________
Dr. A. Marsh, Chairperson

________________________
Dr. O. Shinn, Member

________________________
Dr. C. Gull, Member

________________________
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College of Science and Engineering
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*Funds provided by student Grant-in-Aid-of Research from Sigma Xi
APPENDIX II

Preparation of the Professional Paper

Example of Title Page for Professional Paper:

THE TITLE SHOULD APPEAR IN ALL CAPITALS
AND BE CENTERED

By

You A. Student

Month, 20__

A Professional Paper Submitted
In Partial Fulfillment of the
Requirements for the Degree of

MASTER OF SCIENCE

Texas A&M University-Corpus Christi
Environmental Science Program
Corpus Christi, Texas

Approved: ______________________________ Date: ___________
Dr. A. Marsh, Chairperson

____________________________
Dr. O. Shinn, Member

____________________________
Dr. C. Gull, Member

A-8
APPENDIX III

Announcement of the Graduate Seminar

(Note: Time and date are examples only)

GRADUATE SEMINAR NOTICE
ENVIRONMENTAL SCIENCE PROGRAM
TEXAS A&M UNIVERSITY-CORPUS CHRISTI

SUBJECT: Official Title of Your Thesis or Graduate Project
SPEAKER: You A. Student
GRADUATE ADVISOR: Dr. Pectin A. Clamshell
DATE: Tuesday, March 15, 20__
TIME: 3:00 p.m.
PLACE: Center for Instruction, Texas A&M-CC
Room 109

ABSTRACT

The abstract of your thesis or graduate project should appear here (shortened version if necessary). An abstract of 50-200 words length is recommended for inclusion in the Graduate Seminar Notice.

[NOTE: Students should post this notice electronically to faculty members and graduate students involved in the Environmental Science program via the escifac-list, escistu-list, and scitech-list listservs.]
APPENDIX IV

Faculty of the Environmental Science Program

As of Fall 2014, the following full-time faculty and full-time research scientists are affiliated with the Environmental Science Program and may variously participate by teaching courses, or by chairing, co-chairing or serving as members of Environmental Science graduate committees.

Hussain Abdulla
Tania Anders
Mark Besonen
Feri Billiot
Derek Bogucki
Kirk Cammarata
Suzzette Chopin
Rick Coffin
Jeremy Conkle
Andreas Fahlman
David Felix
Jim Gibeaut
Xinping Hu
Patrick Larkin
Roy Lehman
Chuntao Liu
Cherie McCollough
Richard McLaughlin
Paul Montagna
Riccardo Mozzachiodi
Dorina Murgulet
Thomas Naehr
Kevin Nelson
Jennifer Pollack
Toshiaki Shinoda
James Silliman
Lee Smee
Jennifer Smith-Engle
Michael Starek
Greg Stunz
Philippe Tissot
Mike Wetz
Kim Withers
Tony Wood
Feiqin Xie
David Yoskowitz
Paul Zimba