Section 4: Ph.D. in Marine Science: Coastal and Marine Systems Science Requirements

The Ph.D. program in Coastal and Marine Systems Science facilitates students to work with faculty on original research expanding and applying knowledge of coastal systems. Emphasis is on developing predictive capabilities of coastal environmental systems and infusing an appreciation of associated environmental policy development.

General Program Requirements

Students must complete the Doctoral Degree Program Timeline and Degree Completion Checklist (Appendix B)! Review this list with the Major Professor often and complete milestones/tasks in a timely manner.

1. Successful completion of an approved program of study with a minimum of 60 graduate hours; (3.1.1, 3.1.2)
2. Successful Passing the Comprehensive Examination (3.2)
3. Successful Passing the Qualifying Examination (3.3)
4. Admission to Candidacy; (3.4)
5. A minimum grade point average of B on all course work;
6. Completion, presentation, and successful defense of a dissertation (3.5)
7. All work applied toward the degree must be earned in the seven years immediately preceding the completion of the graduate program.

Note: Transfer credit(s) cannot be used to raise the GPA at CCU

4.1 Enrollment Requirement

Students in the Coastal and Marine Systems Science Ph.D. degree program must be continuously enrolled during all phases of graduate work. This includes fall, spring and summer terms. Registering for a minimum of one graduate credit in each term typically satisfies this requirement. However, the situation may arise where students have completed all course requirements except for the dissertation. In this case, students must enroll in CMSS 702 Project Completion in order to satisfy the continuous enrollment requirement. Registering in CMSS 702 maintains email and library privileges and also allows access to university facilities and faculty advisers. CMSS 702 does not count toward degree requirements and does not substitute for the 6 credit hour requirement in CMSS 700 Thesis Research.

4.2 Required Graduate Courses (60 Graduate Credit Hours)

The Ph.D. degree program in Coastal and Marine Systems Science requires the successful completion of an approved program of study with a minimum of 60 graduate credit hours.

The approved program of study includes a series of: core and seminar courses required for all students, specialized content supporting a student's individual research or academic needs and a required thesis.

The core of the curriculum is intended to provide a comprehensive foundation across the sub-disciplinary areas of the marine sciences (Atmospheric, Physical, Chemical, Geological, Biological, and Policy) to facilitate a systems approach to the coastal marine environment and preparation for Comprehensive Exams. Specialized coursework, directed study, and research courses identified by the student's Graduate Advisory Committee are required to support student research and professional objectives. Students may receive credits for an earned master's degree in an area related to the doctoral program.

The curriculum for the Ph.D. in Coastal and Marine System Science (60 credit hours)

CORE COURSES (21 credit hours)

CMSS 605 Coastal and Marine Hydrodynamics (3)
CMSS 606 Coastal and Marine Geological Processes (3)
CMSS 607 Coastal and Marine Bio-Geochemistry (3)
CMSS 608 Coastal / Marine System Science, Issues and Applications (2)
CMSS 609 Coastal / Marine System Science Seminar (4)
CMSS 610 Temporal and Spatial Analysis (3) or CMSS 611 Modeling Coastal and Marine Systems (3)
CMWS 603 Coastal and Wetland Policy and Management (3)

SPECIALIZED COURSES (18-27 credit hours) ***

Graduate coursework approved from an earned master's degree and/or required by a student's Graduate Advisory Committee.

DISSERTATION RESEARCH AND DIRECTED (Minimum of 12 credit hours)

*** With the approval of the School's Graduate Programs Coordinator a student's Graduate Advisory Committee may specify other course work to satisfy the core or specialized course requirements to suit a student's particular needs and the objectives of the curriculum.

4.3 Ph.D. Program Comprehensive Examination

Students are required to pass the Comprehensive Exam to be taken within a year of completion of the core curriculum courses. This is typically after the third semester of the program. The format of the exam will consist of written and oral components. In the written exam, students will respond to questions established by the Comprehensive Exam Committee to assess the broad range of sub-disciplinary knowledge required to address complex coastal systems and the ability to identify and explain the linkages between sub-disciplinary concepts and processes. The Comprehensive Exam Committee will schedule a follow-up oral examination with each student based on the responses of the written exam and allow for further examination of sub- and interdisciplinary knowledge and applications not emphasized in the written exam. Following the oral examination, the Committee will identify one of the three following outcomes: pass, fail, or retake the exam within three

months. Students must pass the Comprehensive Exam to continue in the doctoral program.

4.4 Ph.D. Program Qualifying Examination

Students are required to present and defend their dissertation research plan. This examination of the student's dissertation research plan and specific technical background required to complete the proposed research must be completed before the sixth full semester in residence to advance to candidacy in the doctoral program. The dissertation proposal will be constructed as a formal research proposal addressing the objective and need for the proposed research, command of the existing literature and foundation of the proposed research, specific testable hypotheses or research questions, an experimental design and work plan to address the questions, as well as description of proposed analyses and the broader implications of the research results. The proposal is reviewed by the student's Graduate Advisory Committee, which will schedule a formal presentation and defense of the proposal by the student. The presentation will be open to all SCMSS faculty and students. Following the public presentation, the Committee will meet with the student for an oral examination of the proposal and presentation. The oral exam will assess the student's research plan and preparation for the proposed research. The Committee will also identify any deficiencies in the proposal and assign one of three outcomes: pass and approval of the final proposal/work plan; provisional pass and require a resubmission of an improved proposal and work plan and re-exam within three months; or failure. Upon passing the Qualifying Exam, the student may proceed with the dissertation research.

The Graduate Programs Coordinator or designee from the School's faculty will serve as chair of the examination in an ex officio capacity. The role of the chair is ensure the exam follows School requirements, ensure key questions related to overall program objectives (integrating concepts) are explored in addition to the more specific technical content being examined by the Graduate Advisory Committee and major professor. The Chair of the Committee also ensures the Committee's vote on acceptableness of the work is documented along with any other information, perspectives or guidance for the student going forward.

Students failing the Qualifying Exam may petition the program to convert their program of study to the CMWS Master's Degree Program with the positive recommendation of the student's Graduate Advisory Committee and SCMSS Graduate Programs Coordinator and approval of the Director of the School of Coastal and Marine Systems Science. The Graduate Advisory Committee and Graduate Programs Coordinator will determine the applicable conversion of course and degree program requirements satisfied by work to date and provide an updated course of study to enable the student to complete the master's program.

4.5 Admission to Candidacy

Admission to the graduate program does not signify Admission to Candidacy for the Ph.D. in Marine Science: Coastal and Marine Systems Science. To be eligible for Admission to Candidacy for the Ph.D. in Marine Science: Coastal and Marine Systems Science, a student must satisfy the corresponding requirements.

1. Achieve regular admission status;

2. Complete a minimum of 30 semester hours of graduate work at Coastal Carolina University, including core curriculum courses;

3. Have earned a B or better average on all graduate work pursued and a B or better in the SCMSS core courses;

4. Successfully passed the Comprehensive Exam;

5. Approval of dissertation proposal by Graduate Advisory Committee and Graduate Programs Coordinator;

6. Successfully passed the Qualifying Exam; and

7. Recommendation by Graduate Advisory Committee, Graduate Programs Coordinator, SCMSS Director and Dean.

4.6 Dissertation

Students will submit the results of his/her doctoral research as a formal dissertation and/or series of publications in compliance with Coastal Carolina University Graduate Studies and School of Coastal and Marine Systems Science policy and procedures.

4.7 Dissertation Defense

The Graduate Programs Coordinator will schedule a formal public presentation of the work by the student to be followed by an Oral Examination (Defense) of the work by the student's Graduate Advisory Committee.

The Graduate Programs Coordinator or designee from the School's faculty will serve as Chair the examination in an ex officio capacity. The role of the Chair is ensure the exam follows School requirements, ensure key questions related to overall program objectives (integrating concepts) are explored in addition to the more specific technical content being examined by the Graduate Advisory Committee and major professor. The Chair of the committee also ensures the committee's vote on acceptableness of the work is documented along with any other information, perspectives or guidance for the student going forward.

Upon passing the defense, the student will submit the completed dissertation as specified by the School of Coastal and Marine Systems Science Program and University guidelines.