## **School of Marine Science and Policy**

# Policy Statement 2.1 Graduate Programs

#### I. Administration

- A. The School of Marine Science and Policy (SMSP) offers the following graduate degrees and concentrations.
  - 1. Master of Marine Policy
  - 2. Master of Science in Marine Studies with a concentration in Marine Biosciences
  - 3. Master of Science in Marine Studies with a concentration in Oceanography
  - 4. Master of Science in Marine Studies with a concentration in Physical Ocean Science and Engineering
  - 5. Doctor of Philosophy in Marine Studies with a concentration in Marine Biosciences
  - 6. Doctor of Philosophy in Marine Studies with a concentration in Marine Policy
  - 7. Doctor of Philosophy in Marine Studies with a concentration in Physical Ocean Science and Engineering
  - 8. Doctor of Philosophy in Oceanography
- B. The Director of the School in coordination with the standing Graduate Committee is responsible for the graduate-degree programs in the School. The membership of the Graduate Committee should represent the academic disciplines within the SMSP and is expected to rotate approximately every two years (see SMSP Policy Statement 1.1).
- C. All Core and Joint faculty members of the School are eligible to teach graduate courses and to serve as principal advisors or as advisory committee members. Core faculty members are those individuals who have primary appointment in the School. These include Tenure Track and Continuing Track faculty. Temporary Non-tenure Track faculty may teach only with approval of the Director and agreement regarding salary and workload concerns (see SMSP Policy Statement 3.5). Joint faculty members have primary appointment in another unit of the University and secondary appointment in the SMSP (see College of Earth, Ocean, and Environment Policy Statement F/2/09).
- D. Individuals other than School faculty may be permitted to teach specific graduate courses during specific terms if both the course and instructor are approved by the Director.

#### II. Assessment

The Mission Statement for the School is to advance knowledge and education critical to the understanding, stewardship, and conservation of estuarine, coastal, and ocean environments. The curricula in the School are multidisciplinary and encompass the fields of Marine Biosciences, Marine Policy, Oceanography, and Physical Ocean Science and Engineering. Students are encouraged to explore areas outside of their own specialties.

A. The faculty of the School has defined eight learning goals consistent with this Mission Statement. Students will:

- 1. Identify or define a research question
- 2. Understand and synthesize literature material
- 3. Design and execute a research study or experiment
- 4. Data analysis
- 5. Critically evaluate and interpret the outcome
- 6. Write for peer review publications
- 7. Present in professional and public forums
- 8. Perform in collaborative workgroups
- B. The specific learning goals stated above are linked to courses administered by the Graduate Committee in the School, and achievement of these goals is assessed through multiple methods including:
  - 1. Exams
  - 2. Term Project(s) / Paper(s)
  - 3. Field/Laboratory Report(s)
  - 4. Oral Presentation(s)
  - 5. Problem Based Learning
  - 6. Problem Sets
  - 7. Case Studies

#### III. Admission

- A. Admission to the graduate programs is competitive. Those who meet stated requirements are not guaranteed admission, nor are those who fail to meet all of those requirements (except the foreign language minimum) necessarily precluded from admission if they offer other appropriate strengths.
- B. Admission to the graduate programs of the School is based on GRE scores, grade point averages, letters of recommendation, and other appropriate information.
- C. Prospective students apply online through the University Office of Professional and Graduate Education. Subsequent evaluation of the applications for Master of Science (MS), Master of Marine Policy (MMP), and Doctor of Philosophy (PhD) is conducted by relevant faculty members. Relevant faculty members forward a recommendation for admission to the Director, who makes final decisions concerning admission.
- D. International students are required to take the Test of English as a Foreign Language (TOEFL), to be considered for admission. A minimum score of 95 must be achieved by applicants taking the TOEFL IBT exam. The International English Language Testing System (IELTS) may be taken in lieu of the TOEFL exam. The University of Delaware requires an overall band score of a 6.5 or higher on the IELTS with no one category of the test being less than 6. No exceptions will be made to these minimums.
- E. Before qualified applicants are admitted to the School, a specific faculty member must be identified as the primary advisor for the admitted applicant. The Director appoints the faculty advisor *pro tem*;

at the initiative of faculty or applicant, the advisor may be changed.

#### IV. Policies for Matriculated Students

- A. Requirements for the various degrees offered by SMSP can be accessed by using the hyperlinks below.
  - 1. Master of Science in Marine Policy (MMP) (30 credits minimum)
  - 2. Ph.D. in Marine Studies with a concentration in Marine Policy (must complete the 42 credits of required coursework at minimum)
  - 3. M.S. in Marine Studies with a concentration in Marine Biosciences (30 credits minimum)
  - 4. Ph.D. in Marine Studies with a concentration in Marine Biosciences (must complete the 28 credits of required coursework)
  - 5. M.S. in Marine Studies with a concentration in Oceanography (30 credits minimum)
  - 6. Ph.D. in Oceanography (must complete the 34 credits of required coursework)
  - 7. M.S. in Marine Studies with a concentration in Physical Ocean Science and Engineering (30 credits minimum)
  - 8. Ph.D. in Marine Studies with a concentration in Physical Ocean Science and Engineering
- B. Submission of equivalent courses may be approved by the Graduate Committee of the program. A higher level course may be substituted for these courses on approval of the advisor and committee.
- C. All degrees, except the Master of Marine Policy, require a thesis or dissertation describing original work completed by the student.

#### V. Milestones

Graduate work must be completed within the time limits imposed by the University and the School. The School provides guidance for students with regard to the timeframe in achieving individual academic milestones as listed below:

| Milestones for M.S. and M.M.P.                              | Time Limit        |
|---|-------------------|
| Approved Advisory Committee                                 | Two semesters     |
| Approved Thesis Proposal                                    | Two semesters     |
| Complete Required Courses & Credits                         | Before graduation |
| Six Credits MS Thesis or Three Credits MMP Analytical Paper | Before graduation |
| Defend Thesis or Analytical Paper                           | Six semesters     |
| Graduate  | Six semesters     |
| Milestones for Ph.D. with M.S.                              | Time Limit        |

| Approved Advisory Committee                                 | Three semesters       |
|---|-----------------------|
| Approved Dissertation Proposal                              | Before fifth semester |
| Pass Qualifying Exam (both written and oral)                | Before fifth semester |
| Complete Required Courses and Credits                       | Before graduation     |
| Nine Credits Ph.D. Dissertation                             | Before graduation     |
| Defend Dissertation   | Eight semesters       |
| Graduate  | Eight semesters       |
| Milestones for Ph.D. without M.S. (For students admitted    |                       |
| directly into a Ph.D. program)                              | Time Limit            |
| Approved Advisory Committee                                 | Three semesters       |
| Approved Dissertation Proposal                              | Before fifth semester |
| Pass Qualifying Exam (both written and oral)                | Before fifth semester |
| Complete Required Courses and Credits                       | Before graduation     |
| Nine Credits Ph.D. Dissertation                             | Before graduation     |
| Defend Dissertation   | Ten semesters         |
| Graduate  | Ten semesters         |
| Milestones for Ph.D. with M.S. Bypass (students admitted to |                       |
| a M.S. program who are bypassing the M.S. degree)           | <u>Time Limit</u>     |
| Approved M.S. Advisory Committee                            | Two semesters         |
| Approved M.S. Thesis Proposal                               | Two semesters         |
| Approved Bypass Petition                                    | Three semesters       |
| Approved Ph.D. Advisory Committee                           | Three semesters       |
| Approval of Ph.D. Dissertation Proposal                     | Before fifth semester |
| Pass Qualifying Exam(both written and oral)                 | Before fifth semester |
| Complete Required Courses and Credits                       | Before graduation     |
| Nine Credits Ph.D. Dissertation                             | Before graduation     |
| Defend Dissertation   | Ten semesters         |
| Graduate  | Ten semesters         |

- A. All students matriculated into the School will have their milestone achievements tracked in the SMSP Graduate Student Database. Each year during the faculty performance review with the School Director, the milestone achievement and academic progress of each SMSP student advisee will be discussed and appropriate notes about progress will be updated into the student's file. Students who are significantly overdue on their milestone achievements and have been notified must submit (jointly with their advisor) a justification and a detailed plan and timeline for completion of the remaining milestones. In the case of University time limits extensions, all requests must be approved by the School Director and then the University Office of Graduate and Professional Education.
- B. A Ph.D. committee must consist of at least four members, but not more than six. At least one member of the committee must be a core faculty member of the School and at least half of the committee members (but no less than three) must be either core or joint faculty in the School. As per University regulations, at least one member of the committee must be external to the School, and students are

- "encouraged to seek the external member from outside the University in order to broaden the perspectives of the committee."
- C. An MS or MMP committee must consist of at least three members, but no more than four. At least one member of the committee must be a core faculty member of the School and at least half of the committee members must be core or joint faculty in the School.
- D. Only core or joint appointees may serve as committee chairs, except in the case of a professor who has, prior to retirement, been the advisor of a student when that student's committee was formed.
- E. A dissertation proposal is required to obtain admission to candidacy for the Ph.D. Satisfactory completion of dissertation proposal is at the discretion of the advisor in consultation with the student's advisory committee. The dissertation proposal may be included as part of the written qualifying exam (below) at the discretion of the advisor in consultation with the student's advisory committee.
- F. A qualifying examination is required to obtain admission to candidacy for the Ph.D. In order to take the examination, each student must be in good academic standing and have approval of the advisory committee. A research proposal is ordinarily required before a student takes the qualifying examination.
- G. The qualifying examination must include both oral and written parts.
  - 1. The examination is prepared and administered by the advisor in consultation with the student's advisory committee
  - 2. At least 60 days prior to the examination, the advisor must inform the student of the areas to be examined and the format of the written and oral parts of the examination. If the student is not notified with at least 60 days notice, the student has the option to petition the School Director for a postponement of the qualifying examination.
  - 3. The student must be informed of success or failure of the written portion of the qualifying examination within two weeks of completion and if the written component is not successfully satisfied the oral may not be administered. Once the written component is satisfied, the oral component may be administered. The student must be informed of success or failure of the oral portion of the qualifying exam within two weeks of completion.
  - 4. A student who fails either part of the qualifying examination is entitled to only one reexamination, which must be taken within six months of the first examination.
  - 5. A student who fails either part of the second qualifying examination may be considered for reclassification as a Master's student only after advisory committee consultation with the School Director. If a student is reclassified in this situation, the Master's thesis must follow the same rigor outlined in 6.b. of this policy statement. In some cases, if recommended by the committee and the School Director, the student may be terminated from the program.

- H. The defense of the dissertation, thesis, and analytical paper focuses on the scope of the research and its contribution to the field.
  - 1. The student's advisory committee serves as the examining board.
  - 2. The defense is oral and open to the academic community of the University and to interested members of the public; the defense must be announced at least two weeks in advance.
  - 3. The defense begins with a presentation of the work by the candidate, followed by an open period of questions from the audience.
  - 4. After a short break, the members of the examining board address questions to the candidate.
  - 5. At the close of questioning, the examining board retires for deliberation and decision.
  - 6. Upon reaching a decision, the board communicates that decision to the candidate and to the Director of the School.
  - 7. Dissertations, theses, and analytical papers must be submitted to the Office of Graduate and Professional Education according to the deadline schedule published by that office.
- I. The dissertation proposal and the qualifying examination are to be completed before the fifth semester, however because of workload it is advised that either the proposal or the qualifying exam be completed during the third semester.

## VI. Change in Student Status

- A. A student may change advisor in consultation with the assigned advisor and the potential advisor. The relevant representative of the Graduate Committee and the Academic Coordinator of the School must be informed of the change.
- B. Students who have formed a Master of Science (MS) or Master of Marine Policy (MMP) advisory committee and who have completed a thesis proposal may petition for admission to a PhD program within three semesters of matriculation in the School. This is known as the *bypass option*. Petitioning students must submit evidence of high performance to the M.S. or MMP advisory committee. Ordinarily this evidence includes excellent grades in graduate courses, promising research results, and sound plans for dissertation research. The following steps are necessary for approval of a bypass petition:
  - 1. Chair of MS or MMP advisory committee sends a letter of support of behalf of committee to relevant representative of the Graduate Committee.
  - 2. The representative of the standing Graduate Committee forwards approved letter to the Assistant Dean for Graduate Services and the Director of the School.
  - 3. Director of the School approves bypass.

- 4. The student submits completed "Change of Classification" form to Assistant Dean for Graduate Services which must be signed and forwarded to the Office of Graduate and Professional Education
- 5. Student continues as a PhD student
- C. Students who want to continue for a PhD after completing an MS or MMP must submit a letter of intent to the relevant representative of the Graduate Committee.
  - 1. The letter should outline dissertation research plans and specify an advisor and funding source.
  - 2. The representative of the Graduate Committee reviews the applicant's credentials and consults with faculty members as required.
  - 3. The representative of the Graduate Committee forwards a recommendation concerning admission to the Director of the School.
  - 4. The Director acts on this recommendation
  - 5. If approved, the student submits a completed "Change of Classification" form to Assistant Dean for Graduate Services which must be signed and forwarded to the Office of Graduate and Professional Education

## VII. Competency of SMSP graduates

- A. A recipient of a PhD from the University of Delaware must have the analytical skills and intellectual scholarship to perform research with independent creativity. This criterion is demonstrated by the submission of a **written dissertation** of original research. Furthermore, it is expected as part of the Ph.D. that the thesis, or portions thereof, be published in one or more articles in an internationally recognized and refereed journal or equivalent medium. Going through this process will demonstrate the student's ability to communicate their results to the larger community and, as a result, gain wider recognition of their work.
- B. A written thesis is required for the MS, and an analytical paper is required for the MMP. The depth and breadth of these documents are more limited than a dissertation and reflect a more focused and restricted exposure to research and analysis, yet must still demonstrate analytical skills and intellectual scholarship to perform research. Students are expected to produce work worthy of publication in a refereed journal and are encouraged in consultation with their advisor to submit their work for publication.

# VIII. Changes in Requirements

- A. Any change in academic requirements requires approval of the Director of the School.
- B. The Director's Council advises when a vote of the entire faculty of the School is necessary to effect a

change in requirements.

C. Notice of the proposed change must be sent to the Office of Graduate and Professional Education to be approved by the University Graduate Committee and the Graduate Faculty Senate Committee.

#### **Legislative History**

- Draft given by Associate Dean of College of Marine Studies (CMS) to Program Directors for review and comment December 1981.
- Draft C/1/82 circulated for faculty comment 10 February 1982.
- Promulgated by Dean of CMS 3 March 1982.
- CMS Executive Committee reviewed and recommended retention after modification 25 February 1985.
- Dean of CMS promulgated 1 December 1985.
- Revised by Academic Council of CMS annually and sent to Office of Graduate Studies for approval.
- A decision was made that the revised Graduate Program Policy Statement would be placed in the CMS Student Advisement Manual with a note to that effect in this policy manual 1 May 1992.
- Some sections of the CMS Student Advisement Manual (now Current Student information) were moved back to this section. Revised and approved by Academic Council of CMS 27 July 2004.
- Approved by Faculty of CMS 7 February 2005.
- Promulgated by Interim Dean of CMS 7 February 2005.
- Discussed and approved by Academic Council of CMS- 30 May 2006.
- Revised by Interim Director of SMSP—1 September 2009.
- Discussed and approved by Director's Council of School of Marine Science and Policy—10 May 2010.
- Approved by Dean of College of Earth, Ocean, and Environment—31 May 2010.
- Promulgated by Interim Director of SMSP—31 May 2010.
- Revised at the request of the Office of Graduate and Professional Education by the Assistant Dean for Graduate Services—1 January 2012.
- Discussed and approved by Director's Council of School of Marine Science and Policy—26 Jan 2012.
- Promulgated by the Dean of College of Earth, Ocean, and Environment—2 Feb 2012.
- Revised by the Director of the SMSP 20 Dec 2012.
- Discussed and approved by the Director's Council of the School of Marine Science and Policy 20 Dec 2012.
- Approved by the Dean of the College of Earth, Ocean, and Environment 11 Jan 2013.
- Promulgated by the Director of the SMSP 11 Jan 2013.
- Revised by the Director of the SMSP 31 July 2015.
- Updated by Director's Council 12 January 2018.
- Updated by SMSP faculty 02 February 2018.