# The University of Maine Department of Chemistry Graduate Rules (Revision: December 8, 2016)

#### I. Qualifying Examination Requirements

- 1. All entering students must take qualifying examinations in Analytical, Inorganic, Organic, and Physical Chemistry upon arrival to assess their competency and for advising purposes. Students must earn a satisfactory score (40%ile on the ACS national rankings) on the examination in three out of four areas.
- 2. If the student does not earn a satisfactory score on 3 of the 4 areas, then the student's advisory committee (see VI.5) will make a decision as to what should be done next, e.g., taking an approved course, or study and retake the exam.

#### **II.** Course Requirements

- 1. Students are required to take 21 and 16 classroom hours (including seminars, but excluding CHY 698 and 699) for the Ph.D. and M.S. programs, respectively. To satisfy modernized interdisciplinary requirements, students will be allowed to select from appropriate science, math, and engineering courses University-wide. A student's advisory committee must approve course selection.
- 2. Masters candidates are required to have a *minimum of 30* credit hours to graduate, including classroom hours, research (CHY 698) and thesis (CHY 699). There is no *total* credit hour requirement for Ph.D. candidates.
- 3. All students are required to have a minimum of 5 thesis credits of CHY 699 and 1 credit of INT 601 or other course approved by the Graduate School to satisfy the Responsible Conduct of Research requirement. Students must be registered for at least 1 credit of CHY 699 in the semester they plan to defend their thesis.
- 4. Grades of B or better are expected in all courses. The chemistry graduate faculty may approve credit for a C grade, upon recommendation from a student's advisory committee. (Normally, credit for up to two C grades will be allowed if the courses are outside the student's area of concentration.) Students receiving more than two C grades (or lower) will be considered as not having made satisfactory progress toward completing degree requirements. (Please see the "General Policies and Regulations of the Graduate School.).
- 5. Students are required to present one seminar each year that they are in residence, except the first, up to a total of four seminars for PhD candidates or a total of two seminars for MS candidates. The grade will be assigned by the faculty coordinating seminar in consultation with the faculty in attendance at the seminar. The grade includes participation during the entire year as well as giving a seminar. Although students register for CHY 693 only in the semester in which the seminar is given, the grade will be deferred until the end of spring semester. Appropriate topics, suggestions for preparing and giving a seminar, and criteria for grading will be discussed by the faculty coordinating the seminar program. The topic of the first seminar may be (but is not

required to be) the background to the student's research. For MS candidates, the second seminar must be on a topic not directly related to the student's research. For PhD candidates, the 2<sup>nd</sup> and 3<sup>rd</sup> (if still in attendance) seminars must be on a topic not directly related to the student's research or proposal topic. For PhD candidates, the topic of the fourth seminar may be a presentation of the student's research work. Students are required to attend all departmental colloquia as well as seminars given by fellow graduate students.

### **III.** Comprehensive Exam Requirements (for Ph.D. candidates only)

- 1. Students must pass three out of five written or oral comprehensive exams as well as prepare and defend an original research proposal.
- 2. Each student's schedule of written or oral comprehensive exams must be approved by her/his advisory committee. The topics of the exam should be listed on the Program of Study. A coordinator (faculty member) will be assigned to each exam. The designated lead coordinators/responsible faculty members will determine the structural details of each exam and provide pass/fail criteria in advance to the committee.
- 3. The written or oral comprehensive exams must be completed successfully within two and one half years of the student's entry. Students are encouraged to begin taking them at the beginning of the third semester in order to complete them by the deadline.
- 4. Students are required to prepare one full scientific proposal that adheres to National Science Foundation guidelines. The proposal topic must be significantly different from the student's research thesis or any of the student's seminar topics and approved by a student's advisory committee. Students will submit their written proposal to their advisory committee for a preliminary review before the final proposal defense. All proposals must be completed with the important details (e.g., abstract, budget justification and etc) in place and attended to. Additional guidelines for preparing a proposal and review criteria may be provided/suggested by the advising committee.
- 5. The research proposal must be accepted and defended within three years of entry.
- 6. Upon passing three written or oral comprehensive exams and successfully defending the research proposal, the student should submit the form titled "Notification of Results of the Doctoral Comprehensive Examination" to the Graduate School.

### IV. Thesis

- 1. Students must submit and defend in a public oral examination a thesis acceptable to their advisory committee.
- 2. Students should consult with the Graduate School for the appropriate deadlines and format guidelines.
- 3. Students are encouraged to include their published work in some form in their thesis.

## V. Publications

1. Students are expected to prepare manuscripts from their research for publication.

## VI. Research Advisor, Advisory Committee and Evaluation

- The student's research advisor and Chair of the Advisory Committee should be selected and approved by the Graduate Faculty by the end of the first semester of graduate study. A student must talk to at least four faculty members and obtain their signatures on the "Choice of Research Advisor" form before officially requesting an advisor. The Chair must be a Full Graduate Faculty member in the Graduate School, in Chemistry or have Cooperating Faculty status in Chemistry. Students are urged to select a first and second choice, since the faculty may not approve of everyone's first choice. Each faculty member can have no more than 2 graduate students supported by departmental teaching assistantships. Students may not select an advisor who has two TA's at the time of selection.
- 2. Each graduate student is advised by a committee consisting of five or more faculty members (three for a M.S. student). At least three members (two for a M.S. student) must be Graduate Faculty in Chemistry. The advisory committee is selected by the student in consultation with his or her research supervisor, and is subject to approval by the graduate faculty and the Director of the Graduate School.
- 3. The Advisory Committee will convene every year, between January 1 andMarch 1, to review the student's progress. At these meetings, the student will present a brief oral report and a 1-2 page written summary of progress in the last year and goals for the next year. This summary, signed by the committee, becomes part of the student's file. The committee will also maintain, on the "Graduate Student Record and Progress Report" or similar form, a detailed record of the student's progress.
- 4. The Advisory Committee may also meet with the student whenever necessary, upon request from the student, his or her research advisor, or a committee member.
- 5. Before the advisory committee has been chosen, the student's committee will consist of the Graduate Executive Committee.

# VII. Good Standing and Support

- 1. A student in "Good Standing" is satisfying the requirements of his or her program by the appropriate deadlines, performing teaching duties satisfactorily (for TA's), and is making progress in research satisfactory to the advisor and advisory committee.
- 2. The department will support, with a teaching assistantship, a research assistantship (from the research advisor), or a fellowship, a student in Good Standing for two and one half years for an M.S. and four and one half years for a Ph.D. An additional semester of support may be granted by the Graduate Committee on petition by a student or advisor. This commitment of support does not apply to students who have agreed to enter the program without support.
- 3. Students supported by assistantships must not accept employment outside the department.

#### VIII. Miscellaneous

- 1. In order to keep graduate students informed of decisions of the graduate faculty that may affect them, appropriate portions of the graduate faculty minutes may be distributed after approval.
- 2. Entering students will be informed that they are required to take the qualifying examinations. They will be advised to review appropriate material before they arrive.
- 3. Entering teaching assistants will also be informed that they are responsible for all charges other than tuition (9 hrs/semester), e.g. fees and health insurance