

Introduction

Welcome to the graduate program in the Department of Biological Sciences at The University of Southern Mississippi. The purpose of this handbook is to provide you with information concerned with requirements for the successful completion of the Masters of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees in the Department. General university-wide policies concerning time limitations, continuous enrollment, privacy of student information, sexual harassment, and academic honesty, are explained in the Graduate Bulletin (<http://catalog.usm.edu/>) and generally are not repeated in this handbook.

Research Mind-Set

Tenure as a graduate student provides one the opportunity to specialize in a particular field of study through active research. It is important that new graduate students make the transition from an undergraduate mind-set where degree requirements are fulfilled by completing a defined number of classes or credit hours to a graduate mind-set where degree requirements are fulfilled by completing and defending a research thesis. Graduation is rarely held up because the student was not able to complete enough course credit hours. The limiting factor is almost always the completion of research and the writing of the thesis or dissertation.

Admission to the Doctoral Program

A student with a B.S. degree may pursue a doctorate directly with the approval of the major advisor, graduate committee, and department chair. Students admitted to the M.S. program that want to subsequently change to the Ph.D. program can request that change from the graduate committee. Students must submit a current C.V., research statement, copies of transcripts, GRE scores and a letter of recommendation from the advisor. The graduate committee will then make a recommendation to the Chair of the Department. If approved, the advisor can request a change of status (M.S. to PhD) using the change of status form (<https://www.usm.edu/graduate-school/advisordepartment-completion-forms>).

Degree Requirements

The major degree requirements for the M.S. and Ph.D. are listed below. The Department of Biological Sciences has adopted a set of guidelines concerning when certain accomplishments should be achieved and they are listed separately below under Milestones.

Master of Science Degree Requirements

- A minimum of 30 graduate hours with a 3.0 GPA or higher; 18 hours must be at the 600 level or higher, including 3-6 hours of thesis (698). A minimum of 6 hours must be in-class graded coursework (not research, seminar, or independent study hours) at the 500 level or above. Students must enroll in the departmental seminar (BSC 790) one semester per academic year.
- Formation of a committee that includes the advisor and a minimum of two other members with Regular or Associate level 1, 2 or 3 Graduate Faculty status.

- Completion of Integrity Assurance Program training (<https://www.usm.edu/research/research-and-scholarly-integrity-assurance-program>).
- Completion of a plan of study.
- Approval (by a majority of the committee) of a written prospectus documenting the research to be undertaken.
- Pass (by a majority of the committee) a written and/or oral comprehensive examination administered by the thesis committee.
- Completion of a thesis approved by the majority of the committee and the graduate reader.
- Successful public oral defense of the thesis at a research seminar presented at an advertised meeting (see Appendix for an example). The advertisement should be posted at least five working days before the defense.

Doctor of Philosophy Degree Requirements

- A minimum of 84 graduate hours beyond the bachelor's degree or a minimum of 54 graduate hours beyond the master's degree with a 3.0 GPA or higher. A minimum of 9 hours must be formal graded coursework (not research, seminar, or independent study hours) at the 500 level or above, including 9-12 hours of dissertation (898). Students must enroll in the departmental seminar (BSC 790) one semester per academic year.
- Formation of a committee that includes the advisor and a minimum of four other members with Regular or Associate level 2 or 3 Graduate Faculty Status.
- Completion of Integrity Assurance Program training (<https://www.usm.edu/research/research-and-scholarly-integrity-assurance-program>).
- Completion of a plan of study.
- Approval (by a majority of the committee) of a written prospectus documenting the research to be undertaken.
- Pass (by a majority of the committee) both a written and oral comprehensive examination administered by the doctoral committee.
- Fulfillment of the research tools requirement (see below) specified by the student's doctoral committee.
- Completion of a dissertation approved by the majority of the committee and the graduate reader.
- Successful public oral defense of the dissertation at a research seminar presented at an advertised meeting (see Appendix for an example). The advertisement should be posted at least five working days before the defense.

Conditional Admission

Graduate students admitted on a conditional basis must satisfy specific academic requirements to continue in the graduate program and are not eligible for any university support (assistantship or tuition waiver) while classified as a conditional student. A conditional student at the master's level must achieve a GPA of at least 3.00 on the first nine semester hours of course work above 500. A conditional student at the doctoral level must achieve a GPA of at least 3.50 on the first nine semester hours of course work above 600. To request reclassification as a regular graduate student, the student's advisor must request a change of status by filling out a change of status

form (<https://www.usm.edu/graduate-school/advisordepartment-completion-forms>) that is then submitted to the Chair of the Department, and then to the Graduate School.

Academic Standing

To remain in good academic standing, graduate students must: 1) maintain a GPA above 3.0, 2) not receive a grade below “C” in any attempted coursework, and 3) not receive a grade below “C+” in any two courses or six completed hours. Students not meeting any of these three criteria are placed on academic probation. Students may correct deficiencies (replace a grade) by retaking a maximum of one graduate level course. Failure to correct deficiencies will result in dismissal from the program. For details on academic standing policy, students should read pertinent sections in the Graduate Bulletin (<http://catalog.usm.edu/>).

Major Advisor

Students applying to the program must arrange to have a major advisor prior to admission. The advisor provides guidance and support thus the choice of faculty adviser is critical to the success of the graduate student. Students applying to the program should read about faculty research interests at www.usm.edu/biological-sciences/faculty, identify those that are conducting research of interest and then contact the faculty members to discuss the potential of joining their group. Topics that should be discussed include mutual research interests and ideas, possible course work schedule and financial support. Advisors must have Regular Graduate Faculty status level 2 or 3 to chair a M.S. committee, and level 3 to chair a Ph.D. committee.

Thesis/Doctoral Committee

The purpose of the Graduate Advisory Committee is to supervise the student’s work toward degree. Thesis (M.S.) and doctoral (Ph.D.) committees are composed of a minimum of three and five faculty members, respectively. The student’s advisor serves as the chair of the committee. The committee evaluates the prospectus, provides guidance on courses the student should take, administers the comprehensive exam and evaluates the written and oral defense of the thesis or dissertation. Successful completion of the prospectus, comprehensive exam and thesis/dissertation defense requires the approval of a majority of the committee members.

The choice of which faculty members to ask to serve as a committee member is made jointly by the student and advisor. The decision should be based on the likelihood that the faculty member will be of assistance in the student completing the graduate program. Qualified individuals from outside the university may serve if granted appropriate Graduate Faculty status (<https://www.usm.edu/graduate-school/graduate-faculty-listings>).

Research Tools Requirement

Given the disciplinary diversity that characterizes the biological sciences, the graduate advisory committee is in the best position to determine the number and nature of research tool requirements and to evaluate competency in relation to research skills. The research tools requirement as determined by the student's Graduate Advisory Committee and approved by the

Chair of the Department becomes part of the student's plan of study.

Once a doctoral student's research tools requirement is determined, the advisor will submit a memo describing the requirement to the Chair for approval. The memorandum will be placed in the student's file, and copies returned to the student and to the student's major advisor. The research tools requirement should also be listed on the Plan of Study Form.

Teaching Requirement

Doctoral students are required to teach a minimum of two laboratory sections during their tenure as students. Students with previous teaching experience can be exempt from this requirement.

Milestones

The following milestones were established to guide graduate students toward successful and timely completion of degree requirements. These milestones must be met for students to continue receiving financial support in the form of teaching assistantships, tuition waivers or travel support to conferences. Students who do not meet these milestones must meet with the Chair of the Department and their major advisor to decide on the appropriate course of action. Students substantially behind on milestones may be dismissed from the program.

Master of Science Milestones

- Year 1
 - Form a committee and have a thesis committee meeting
 - File a Plan of Study Form
 - Completion of Integrity Assurance Program training (<https://www.usm.edu/research/research-and-scholarly-integrity-assurance-program>).
- Year 2
 - Prospectus approval.
 - Pass written and/or oral comprehensive exams.
- Year 3
 - Write and defend thesis.

Doctor of Philosophy Milestones

- Year 1
 - Form a committee and have a committee meeting
 - File a Plan of Study Form
 - Completion of Integrity Assurance Program training (<https://www.usm.edu/research/research-and-scholarly-integrity-assurance-program>).
- Year 2
 - Prospectus approval.
- Year 3

- Pass written and/or oral comprehensive exams.
- Year 5
 - Write and defend dissertation. Doctoral students are strongly encouraged to present the public portion of their defense at the weekly departmental seminar. Students should contact the seminar coordinator well in advance to schedule a time.

Documentation

The following documents must be on file with the Graduate School in order for the student to graduate. All forms are available from the Graduate School webpage (<https://www.usm.edu/graduate-school>).

Master of Science Students

- Plan of Study Form
- Graduate Committee Request Form
- Thesis Proposal Approval Form
- Comprehensive Exam Results Form
- Application for Degree
- Thesis Defense Results Form

Doctor of Philosophy Students

- Plan of Study Form
- Graduate Committee Request Form
- Results of Comprehensive and/or Qualifying Exams Form
- Dissertation Proposal Approval Form
- Comprehensive Exam Results Form
- Application for Degree (see paragraph below)
- Dissertation Defense Results Form

Students are responsible for meeting all applicable deadlines for submission of materials to graduate.

Travel Support

The Department encourages graduate student participation at scientific conferences. Those making a presentation may request financial support to help defray travel expenses. All requests for departmental support of student travel are made to the graduate committee. Students who anticipate needing funds to attend a conference should submit proposals to the committee by September 15 (for fall and early spring travel) or March 15 (for late spring and summer travel). The graduate committee will review submitted proposals and make recommendations within two weeks of these deadlines (October 1 and April 1). Students should submit the following travel

documentation: detailed budget of all anticipated costs, meeting information, abstract of the research they are going to present including author names with the presenting author indicated. A template is provided at the end of this document. The budget should indicate what other sources of funds will be used by the student. In ranking proposals, the graduate committee will review proposal material along with student progress on milestones and annual reports. Students granted financial support need to submit a Permission to Travel Form approximately one month before the conference. To be reimbursed for travel expenses, students need to submit a Travel Voucher (with original receipts) after the completion of travel to Accounts Payable (USM Box 5104).

Annual Reporting

Each fall, the graduate committee will solicit all returning graduate students (i.e. those that have been in the program for a minimum of one semester) for an annual report. This report will request information on milestone completion, presentations made, publications, grants, awards, and plans for the upcoming year. Once reports are submitted, a copy will be sent to the advisor for their review. The graduate committee will also use reports in assessing student productivity, professional development and progress towards graduation.

Grievance Procedure

While pursuing graduate studies, students may encounter problems in areas such as academics, student life and financial support. If a student feels a need to pursue a grievance, the graduate student should first consult his/her thesis advisor. However, if the student is uncomfortable or dissatisfied using this route, the student should meet with the Graduate Coordinator or department Chair who will counsel the student on a confidential basis and will assist in selecting an appropriate grievance procedure.

Example of Defense Announcement:

Thesis/Dissertation Defense

Title of Thesis or Dissertation

Student Name

Department of Biological Sciences

TEC 106

1 PM

Tuesday 22 March 2016

The Public is Invited

Request for Travel Support

Name:

Meeting:

Location:

Dates Attending:

Presentation Type (oral/poster):

Authors (indicate presenting author):

Title:

Abstract:

Budget of all expected costs. Please also indicate other funding sources (grant, society travel awards, etc).