M.S. in Biology with Thesis (Three Year Program)

Curriculum Requirements

1. Credit hours: a total of 30 credit hours are required:
   • 24 course credit hours, including the two semester departmental core courses for graduate students and at least one graduate course in statistics. Students are encouraged to take courses from more than one conceptual area; they are encouraged to select courses and independent studies that will prepare them for research, as listed under the Ph.D. requirements. No more than 9 credit hours from the independent study series may be used to fulfill the 24 course credit hours.
   • 6 research credit hours (BIL 810); no more than 6 M.S. research credit hours are allowed.
   • The minimum acceptable grade average in all coursework towards the degree is a "B (3.0)" and no grade may be below a "C."

2. Research Proposal: public presentation and successful defense to the committee of a written research proposal. The public presentation must be given during regular sessions of the Fall or Spring semesters, not during summer sessions, intersessions, reading days or finals weeks.

3. Thesis: A well-written and successfully defended thesis of publishable quality; a defense is successful if all members of the committee sign the grad school form and the signature page of the dissertation.

4. Other requirements described under "The Master's Degree," including but not limited to:
   • a total of at least 30 credit hours (course credit hours plus research credit hours). The Graduate School and the Department concur in requiring at least 24 course credit hours and exactly 6 research credit hours (BIL 810) for a thesis M.S.
   • once a student has completed all required credit hours, she/he must enroll in "Research in Residence" (BIL 820) status until the degree is granted. This course carries 1 credit hour, but is considered full-time enrollment. Even though no credit is earned, a tuition charge equivalent to 1 course credit hour normally applies to this course.

5. About the committee:
   • A single committee will combine the responsibilities of the supervisory and thesis committees.
   • The supervisory committee will be determined by the student in consultation with his or her advisor. The committee will consist of a minimum of three faculty, one of whom must be from outside the department, and one of whom must be a member of the graduate faculty. There is no sub-disciplinary representation requirement.
   • The thesis committee is formed officially when the student is admitted to candidacy. It may comprise the same individuals as the supervisory committee, or it may be formed anew. The student in consultation with the advisor suggests the membership of the committee to the graduate school. The committee will consist of a minimum of three faculty, one of whom must be from outside the department, and one of whom must be a member of the graduate faculty. There is no sub-disciplinary representation requirement.
   • The thesis committee is nominated by the department, but it must be approved and appointed by the Dean of the Graduate School. There is a special form that must be filed with the graduate school.
   • Committee meetings are required at least once a year (recommended at least once a semester); the student is responsible for arranging meetings; the student should consult with the committee about major changes in research goals and about problems. Memos summarizing each meeting should be in the student's file and emailed to the Coordinator of Graduate Studies in Biology (bio.gradcoord@miami.edu).

6. About the time table:
   • A written thesis proposal is due no later than the middle of the second semester. Please take note of this deadline. The scope of the M.S. thesis should be in line with the timetable.
   • Analysis of data and a polished draft of the thesis should be completed and in the hands of the committee by the middle of the sixth semester. Please take note of this deadline. The scope of the M.S. thesis should be in line with the timetable.
   • Defense of the thesis and its submission to the Graduate School must meet or precede the deadline for graduation immediately following the sixth semester unless an extension has been approved by the Graduate Admissions and Advisement Committee (GAAC) upon recommendation of the thesis committee. Notice of the defense must be submitted on a special form to the graduate school in advance of the defense and must be posted publicly in the department.
   • The oral defense of the thesis must be given during regular sessions of the Fall or Spring semesters, not during summer sessions, intersessions, reading days or finals weeks.
   • No student may receive the degree in the same semester in which she/he is admitted to candidacy.
   • The indicated dates form firm deadlines. A student's committee, however, may submit a written petition to GAAC for an extension of time detailing reasons for the request. An extension will be granted only under extraordinary circumstances and will be effective upon written approval by GAAC.
Proposals to change the schedule for any reason should be preceded by a study of the graduate bulletin sections on leaves of absence, full time student status and recency of credit hour and explicitly address how the proposed change of schedule relates to these matters. The memo requesting the change also should address the proposed financial support.

7. Completed SACS evaluation forms are required at two points during the course of study. One following the research proposal defense and the final following defense of the thesis. The student is responsible for providing blank forms to the committee at each milestone. The graduate advisor is responsible for forwarding completed forms to the Graduate Director. The student is responsible for ensuring the Graduate Director receives these forms.

Mission

The purpose of the Biology M.S. program is to engender the knowledge of biological concepts as well as the critical thinking and presentation skills that are central to professional careers in teaching, laboratory employment and non-governmental organizations.

Goals

Student Learning Outcomes

- Students will demonstrate a deep knowledge of a biological area.
- Students will demonstrate the ability to critically evaluate peer-reviewed publications in Biology.
- Students will demonstrate the presentation skills necessary for presenting their work at professional meetings.