

# BIOLOGY (MS) - THESIS CONCENTRATION

## Requirements for MS Degree for All Students

Students planning to pursue a Ph.D. are encouraged to follow the thesis option. However, a non-thesis curriculum is available for those students who so elect. The non-thesis degree allows students to further their academic credentials to prepare themselves for professional careers in healthcare, government, and private enterprise.

Together with the student's advisory committee, a curriculum will be developed that best aligns with the student's professional goals. If, in the opinion of a student's committee, the student lacks adequate undergraduate preparation or English skills, the student will be required to make up such deficiencies.

All requirements must be met in five years. In addition to satisfying the general requirements of the Graduate School, candidates for the Master of Science degree in Biology must satisfy the following requirements:

## Thesis Degree Requirements

- Complete, with a minimum grade of "B", 30 hours of coursework at the 500 level. Students must complete at least 18 hours of formal coursework in BLY (excluding directed studies and thesis) listed courses. No course at the 400 level or below may be taken for graduate credit. A maximum of six credit hours may be granted for Directed Studies (BLY 594). All courses must be approved by the student's graduate advisory committee. The student's graduate committee, after consultation with the student, may require demonstration of additional proficiency in mathematics, computer skills, statistics, and/or require the student to take additional coursework.
- Included in the 18 hours of formal coursework, students will complete the following core sequence:

Code	Title	Hours
BLY 510	Prof in Science	3
BLY 520	Biometry	4
BLY 544	Molecular Biology	3
BLY 585	Evolutionary Biology	3
BLY 592	Seminar	1
Remaining 4 hours can be chosen from other 500-level BLY courses		
Total Hours		18

- Complete a thesis representing original research. A maximum of 9 hours credit will be granted for the thesis. Enrollment in BLY 599 (Thesis) is not permitted until the student's research prospectus has been approved by the advisory committee and Director of Graduate Studies, College of Arts and Sciences.
- Write a research prospectus during the first year of study and submit it to the advisory committee for approval. Once the prospectus is approved, the student will schedule an oral defense.
- Defense of the prospectus serves as the comprehensive qualifying exam and begins with a presentation of the prospectus and, where applicable, a progress report. The examination will begin with the presentation and progress report, followed by questions from any area of study closely or broadly related to the area of specialization.

The exam committee will consist of the student's advisory committee members.

- Each committee member will issue a grade for the student, following a rubric that considers various aspects of the presentation and oral examination, and has three possible scores for each category: 1 (insufficient), 2 (meets expectations), and 3 (above expectations). To pass the exam, a student must have an average score of 2 or above. Students are encouraged to review the rubric before the presentation, so they are aware of the committee's expectations. Students who fail will be allowed a second opportunity to pass the exam.
- Publicly present an oral defense of the thesis.