

## M.S. in Biological Science

### Description

The M.S. in biological science prepares a student for various academic, industry, or government professional positions that involve freshwater biology, medicine, education, molecular genetics, ecology and conservation biology.

### Minimum Total Credit Hours: 30

### Course Requirements

A minimum of 30 semester hours of graduate credit are required, and there are two options for satisfying this requirement: 1) Thesis option, which must include 6 thesis hours and at least 24 hours of graduate coursework acceptable to the advisory committee, of which 18 must be formal courses, that is, courses that require regular attendance, study assignments, final exams and letter grades. Z-graded or pass/fail courses will not count toward the 24 hours.

In addition, all students pursuing the thesis option must satisfactorily complete a research prospectus, a thesis based on potentially publishable research, and one seminar on their research (which is part of the defense), and must take Bisc 691 during the semester in which they defend their thesis research. Additional requirements may be stipulated by the advisory committee. 2) Nonthesis option, which must include at least 30 hours of graduate coursework, of which at least 24 hours must be formal courses.

A cumulative average of not less than B (3.0) must be achieved in all graduate work attempted.

Undergraduate biology majors who have completed 90 credits as an undergraduate with a GPA of 3.0 or greater can begin earning credit toward an M.S. in biology, while completing their B.A. or B.S. in biology, potentially allowing an M.S. to be earned in only one additional year of graduate work after completion of the B.A. or B.S. To pursue this path, undergraduate students enroll in the GradSHARK Launch "PAAD" (Program for Accelerated Advanced Degrees) program by submitting a required form each semester, and can earn up to 15 credits toward the M.S. in biological science by taking 500- or 600-level biology courses. Graduate credit for 500-level courses is reserved by completing any required program forms to notify the Graduate School during registration for each semester, and by completing all coursework requirements for graduate-level credit as specified in the course syllabi. Students who fail to reserve 500-level courses for graduate credit at the time they take the course will not receive graduate credit for the course (graduate-level work must be completed to earn graduate credit). Reserving graduate credit for 500-level courses is required to ensure the Graduate School and instructor know the student must complete graduate credit requirements for the course. Students cannot later claim graduate credit if they did not take the appropriate steps to notify the Graduate School (by enrolling in the GradSHARK Launch PAAD program) and instructor prior to taking the course.

Admission to the graduate program in biology is a separate process, not guaranteed by participation in the Launch PAAD program. Participants in the Launch PAAD program who do eventually gain admission to a graduate program in biology can apply graduate credits earned as an undergraduate through the Launch PAAD program (with a grade of B or higher) to their graduate degree in biology.

### Other Academic Requirements

Thesis Advisory Committee -- During the first two semesters, a master's student pursuing the thesis option should become familiar with the research programs in the department and establish an advisory committee. The advisory committee's role is to recommend courses and to evaluate the student's coursework. In addition, the committee is then responsible for evaluating the student's research productivity, knowledge of the research topic, and for approving the thesis.

