

## Biology

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**Degree:** **Master of Science**

**Major:** **Biology**

**Emphases  
 (thesis plan):** **Applied Ecology**  
**Botany**  
**Cell, Molecular Biology and Biotechnology**  
**Microbiology**  
**Zoology**

**Emphasis  
 (non-thesis plan):** **Education**

The degree of Master of Science in biology offers a combination of advanced study in general biology and specialization in an area tailored to the interest of the student. To begin a master of science program in biology, a student must:

1. Meet Graduate School admission requirements.
2. Have earned a bachelor's degree.
3. Submit GRE scores to the Department of Biology.
4. Submit a statement of research interest(s) to the Department of Biology.
5. Submit at least two letters of recommendation to the Department of Biology.
6. Be approved by the graduate faculty in the Department of Biology. Students lacking sufficient background in biology may be admitted with the stipulation that leveling courses will be completed in addition to degree requirements.

### Specific Requirement for degree of Master of Science with a major in Biology:

1. **Preliminary examination:** to assess writing skills and knowledge of general biology.
2. **Required courses:** 24 cr. (thesis plan) or 26 cr. (non-thesis plan) in biology or a related field (exclusive of requirements in 3, 4 and 5 below), including the following core courses:

BIOL 513 Conservation Biology (3)  
**or**  
 BIOL 528 Biotechnology (3)  
 BIOL 562 Evolution (3)  
 BIOL 582 Biological Literature (2)  
 BIOL 592 Graduate Seminar (2)

A minimum of 50 percent of the degree plan will be composed of graduate-only courses (not 400/500).

3. **Knowledge of statistics:** STAT 500 (3 cr.) and STAT 513 (3 cr.), or an equivalent academic training (exclusive of the requirements in 2 above).
4. **Knowledge of research methods:** BIOL 599 Master's Thesis (6 cr.; thesis plan only), or BIOL 579 Individual Research (3 cr.; non-thesis plan only).
5. **Knowledge of education (non-thesis plan only):** two graduate courses (6 cr. minimum) from the College of Education and Technology. Courses must be chosen in consultation with and approved by the student's graduate committee.
6. **Written final comprehensive examination:** to assess non-thesis student's knowledge in area of emphasis (final semester of enrollment; non-thesis plan only).
7. **Oral final examination:** defense of thesis and assessment of thesis student's knowledge in area of emphasis (final semester of enrollment; thesis plan only).