

Biology M.S.

Biology Major

The Biology M.S. major is available for students seeking a graduate research and/or coursework experience. Students interested in enrolling in the program must submit a completed Application for Admission to Graduate Study and should refer to their MyUNIverse Student Center To-Do list or contact the Department of Biology for any other application requirements. Applications should include a personal statement indicating students academic interests and goals, one recommendation, and transcripts of undergraduate and graduate credits. Graduate information and application for graduate admission can be found at <https://admissions.uni.edu/application>.

The Graduate Record Examination (General Test) **is not** required for admission to the program.

This major is available with either a **thesis** option or a **non-thesis** option. A **minimum of 30 semester hours** is required for either option.

The **thesis option** requires a minimum of 21 hours of normal course work and a maximum of 9 hours of thesis research. A minimum of 18 hours of 6000-level course work is included in the degree requirements. **Students are required to pass an oral comprehensive examination in defense of their final thesis.**

The **non-thesis option** requires 30 hours of normal course work. At least 12 of those hours must be 6000-level. **Students are required to submit a final project related to their graduate coursework.**

Both options are flexible and designed to allow students, working with their advisor, to tailor a program to fit student interests and aspirations in biology.

Only graduate courses (course numbers 5000 or above) will apply to a graduate degree, even if the undergraduate course number (4999 or less) is listed. No exceptions

Thesis option:

Required:

Biology:

BIOL 6202	Graduate Colloquium and Scientific Skills (2 hr. each semester for four semesters)	8
BIOL 6292	Research Methods in Biology (1 hr.)	1

Research:

BIOL 6299	Research	9
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Electives: 12

BIOL 5000-level or above.

Total Hours 30

Non-thesis option:

Required:

Biology:

BIOL 6202	Graduate Colloquium and Scientific Skills (2 hr. each semester for three semesters)	6
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Electives: 24

BIOL 5000-level or above. At least 6 of these hours must be at 6000-level. Maximum of 3 hours of BIOL 6299 may count.

Total Hours 30

Learning Outcomes

Biology, M.S.

Goals: Students will gain an advanced understanding of a sub-discipline within biology through advanced biology coursework. Students will develop an understanding of the nature of science and learn critical thinking skills by completing a research project that advances knowledge in their subdiscipline. Students will generate data, analyze and interpret data, and present data in thesis format (thesis track) or complete a portfolio of project-based assignments (non-thesis track). Students will improve communication skills through scientific writing and oral communication in formal settings.

Outcomes:

- Students will show proficiency in content chosen from the student's area of interest in the fields of ecology, evolution, organismal biology, physiology, development, cellular biology, immunology, and/or genetics.
- Students will communicate effectively on the topic of their research or project based assignments, using discipline-specific vocabulary and standard written and oral scientific communication skills.
- Students will be proficient in discipline-specific research techniques, allowing the student to think critically as needed to solve problems new to science.

Related Programs

- Biology B.A. or B.S.
- Biology: Biomedical B.A.
- Biology: Ecology, Evolution and Organismal Biology B.A.