

# Biology, M.S.

The M.S. in Biology offers two areas of specialization:

- Biology Specialization (Thesis)
- Biology Specialization (Non-Thesis)

## Admission Requirements

In addition to the University graduate admission requirements described in the [Admissions section](#) of the catalog, the applicant must meet the following minimum departmental admission requirements for regular admission:

- Earned baccalaureate degree.
  - **Thesis Track:** Applicants for the thesis track should hold a B.S. in Biology or a related field from an accredited college or university. Applicants applying for admission to the thesis track with a B.A. in Biology or a B.S. degree in another area must have satisfactorily completed at least 3 core classes (or equivalents) required of UWF biology undergraduates.
  - **Non-Thesis Track:** Applicants applying for admission to the non-thesis track with a B.S. or B.A. in another area must have satisfactorily completed at least 3 core classes (or equivalents) required of UWF biology undergraduates.
- Submission of a letter describing the student's area of interest within biology, relevant past experience, future objectives, and, for students applying to the thesis track, the name of a UWF faculty member who has agreed to serve as their thesis advisor.
- Submission of a curriculum vitae.
- Submission of three letters of recommendation from individuals who can evaluate the student's academic ability.
- Applicants for the thesis track must have a faculty member who has agreed to provide laboratory space and serve as the applicant's major advisor. Applicants are urged to speak with prospective faculty advisors prior to the application deadline date. Prior to registration, students in the non-thesis tracks must consult with the faculty advisor assigned to oversee the program into which the student has been accepted.

## Department Guidelines

Individual faculty members may request exemptions from some of the departmental, but not University, requirements listed above for specific students. Students desiring to transfer from a non-thesis to a thesis specialization must fulfill all requirements for admission to that specialization.

## Departmental Application Deadlines and Review Process

Prospective students must submit the materials by the first Monday in June to be considered for admission in the fall semester, or by the first Monday in October to be considered for spring admission, or by the first Monday in March for admission in the summer semester. To be considered for financial aid within the department, all prospective students for each academic year must also submit these materials by the first Monday in March.

The completed application will be reviewed by the faculty and by the graduate program committee. Conditional admission may require the student to complete the appropriate foundation courses with grades of

"B" or better. Only complete applications will be reviewed. Students will be notified of the final decision on their admission to the program.

## Biology Specialization (Thesis)

The thesis program is designed for students seeking advanced studies in areas of modern biology and biotechnology with training in the fields of aquaculture, biochemistry, ecology, environmental studies, fisheries biology, genetics, immunology, marine biology, microbiology, molecular biology, plant science, and physiology.

In addition to the University's general academic requirements, students seeking the M.S. degree in Biology must meet the following departmental requirements:

- Select a thesis advisory committee composed of a chairperson and at least two additional faculty members.
- Meet with the thesis advisory committee and complete a written plan of study that specifies courses and other work necessary for the program.
- Submit a written research proposal acceptable to the thesis supervisory committee and demonstrate by oral examination that the proposed research is feasible.
- Complete a minimum of 30 semester hours (sh) of credit approved by the thesis advisory committee. Fifteen of these hours must be at the 6000 level, and must include the following courses:
 

BSC 6002L	Contemporary Laboratory Skills	4
BSC 6840	Professional Development in Biology	3
BSC 6971	Thesis	3 - 6
PCB 5924	Biology Seminar	1
PCB 6074	Experimental Design in Biology	3
5000/6000 level advisor-approved electives (can include up to 6 sh of Directed Independent Study)		13 - 16
<b>Total Hours</b>		<b>30</b>
- Up to 6 semester hours of thesis may be taken towards degree requirements. Other 5/6000 level advisor-approved electives may be taken towards completion of the degree if the student selects not to take the maximum thesis credits allowed. At least 5 semester hours of thesis is recommended in order to help ensure completion of the 15 hours at the 6000 level.
- A maximum of 6 semester hours of Directed Study (BSC 5905, BSC 6905, PCB 5905, PCB 6905) may be taken towards the elective hour requirement.
- Submit an acceptable thesis and successfully defend it in an oral public presentation.
- Earn a grade of "B-" or better in all courses in the program.

## Biology Specialization (Non-Thesis)

The General Biology non-thesis master's degree is a flexible graduate degree that allows students to tailor coursework to their specific interests. The degree does not require completion of a thesis. The core required courses provide a foundation in experimental design, lab techniques, and other aspects of graduate-level knowledge. Directed study hours allow for hands-on experiences within a more restricted time frame than a thesis. A large number of elective hours allow students to shape their degree to support their future goals. For example, individuals interested in medical-oriented fields can choose electives in microbiology, immunology, etc.; while individuals interested in environmental work can choose electives in ecology and environmental studies.

Prior to registration the student will meet with the program advisor and discuss a plan for completing the required coursework.

The student must complete **30 semester hours (sh) of coursework** composed of the required selections on the list below and from graduate electives approved by the non-thesis advisor.

The student must earn a grade of "B-" or better in all courses in the program.

PCB 5924	Biology Seminar	1
BSC 6002L	Contemporary Laboratory Skills	4
BSC 6840	Professional Development in Biology	3
PCB 6074	Experimental Design in Biology	3
Directed Independent Study		0 - 6
Department approved 5000/6000 level electives. A minimum of 15 sh must be at the 6000 level.*		13 - 19
Total Hours		30

\* A total of 6 semester hours from up to two courses of directed independent study (DIS) may be applied to the elective hours.

The student must complete a presentation with a graduate course instructor (typically as part of a course), which will include a written and oral summary of a paper from the original literature. The presentation and summary of the paper will be used as the assessment of the program.