

# Master of Science with a Major in Biology

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## Selected Educational Outcomes

1. To demonstrate competency in factual content and interpretation of the major biological concept areas of cell and molecular biology, genetics, organismal biology, and evolution and ecology.
2. To demonstrate the ability to identify significant biological research questions, develop research protocols, and properly analyze research questions through the use of the scientific method.
3. To produce a systematic and thoroughly researched thesis suitable for publication and appropriate to the thesis sub-discipline.
4. To participate in activities related to the profession.

## Examples of Outcome Assessments

1. Students must complete all academic requirements to a satisfactory degree.
2. Students must submit a thesis.

Prior to admission to any graduate program at Valdosta State University, applicants must first submit a completed application to the Graduate School. A completed application packet includes official transcripts from all institutions previously attended, official test scores (GRE), completed application form, fee, and any additional program requirements, submitted by the admission deadline. To be considered for the preferred term, all required materials must be received by the Graduate School no later than the close of business on the deadline. It is the responsibility of the applicant to allow adequate time for document submission and to ensure receipt of documents.

## Application Deadlines

Fall Deadline	July 15
Spring Deadline	November 15
Summer Deadline	April 15

Go to the Graduate School website (<http://www.valdosta.edu/academics/graduate-school/welcome.php>) and click on Our Programs, then click on Biology Program for information on:

- Specific Biology Program Admission Requirements
- Biology Program Retention, Dismissal, and Readmission Policies
- Biology Program Graduation Requirements

To Apply Online, click here (<https://www.applyweb.com/apply/vsug/menu.html>).

## Accelerated Undergraduate-to-Graduate Track

Students wishing to pursue a Master of Science in Biology at Valdosta State University may take up to 9 semester hours of graduate-level coursework (courses numbered 5000 or above) that will count toward Biology electives or general electives for the undergraduate degree.

Acceptance in to the Accelerated track requires:

1. written notification by a Biology faculty member to the Biology Graduate Program Coordinator of her/his willingness to serve as the student's thesis advisor;
2. completion of 90 semester hours of undergraduate coursework, at least 18 hours of which is in Biology; and
3. an overall GPA in undergraduate coursework of at least 3.0.

Once accepted, a specific course of study will be developed with the student's advisor. Successful completion of the Accelerated Undergraduate-to-Graduate Track requires a grade of B or better in all graduate coursework.

Students interested in continuing their graduate education may apply for admission to the M.S. in Biology program in their senior year or upon completion of their undergraduate degree. Full admission to the Graduate School requires completion of the bachelor's degree. Students in the Accelerated Undergraduate-to-Graduate track will not be required to take additional admission tests but must meet all other graduate admission requirements. See the Graduate School website (<http://www.valdosta.edu/academics/graduate-school/welcome.php>) for admission requirements. Students who have completed 9 hours of graduate level coursework to complete their bachelor's degree will be required to complete an additional 21 hours of graduate courses to meet the M.S. in Biology degree requirements.

## Thesis

A master's thesis in biology should be a written work suitable to a relevant, professional subdiscipline of biology, demonstrating competent and substantial research coupled with an innovative approach to the subject matter. The thesis will be directed by a faculty member and a committee of two

other faculty members (one of whom may be from outside the Department of Biology). Once the thesis has been submitted, students will have an oral defense covering both the thesis and their coursework. Students must complete a minimum of 30 hours of coursework and 6 hours of thesis credit.

The program of study will consist of 30 semester hours. Of these 30 semester hours, a graduate student must take six hours of Thesis (BIOL 8999), two hours of Graduate Seminar (BIOL 7900), two hours of a special topics course BIOL 7020 or BIOL 7030), and three hours of Experimental Design and Data Analysis in the Biological Sciences (BIOL 7050) to earn the Master of Science degree with a major in biology. Students may take up to 6 hours of approved course work outside of biology that the thesis committee deems acceptable and supportive of the program of study (e.g., math, geology, chemistry, physics, education, etc.).

Students working in educational fields may take up to 6 hours of courses that involve science education such as ELED 7431, ELED 7432, MGED 7500, MGED 7520, MGED 8000 as well as selected courses in Middle Grades and Secondary Education (MGED and MSED), Special Education (SPEC), and Psychology (PSYC).

Requirements for the M.S. Degree with a Major in Biology

Code	Title	Hours
<b>Required Courses <sup>1</sup></b>		
BIOL 7010 or BIOL 7020 or BIOL 7030	Special Topics in Ecology and Evolution Special Topics in Cell and Molecular Biology Special Topics in Physiology	2
BIOL 7050	Experimental Design and Data Analysis in the Biological Sciences	3
BIOL 7900	Graduate Seminar (must be taken twice)	2
BIOL 8999	Thesis	6
<b>Guided Electives <sup>1</sup></b>		
Studies Courses (7000-level or above BIOL)		2
Studies Courses (5000-level or above)		9-15
Electives (5000-level or above)		0-6
<b>Total Required for the Degree</b>		<b>30</b>

<sup>1</sup> Students may complete up to 9 hours of required or guided elective graduate courses as undergraduates in the Accelerated Undergraduate-to-Graduate track. Students must complete all required and guided elective courses not already successfully completed for the B.S. or B.A. in Biology Accelerated Undergraduate-to-Graduate track.