# Master of Science with a Major in Biology

## 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

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| Fall Deadline | July 15 |
| Spring Deadline | November 15 |
| Summer Deadline | Aprl 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).

## 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.

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

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| **Required Courses** | | |
| BIOL 7010 | Special Topics in Ecology and Evolution | 2 |
| or BIOL 7020 | Special Topics in Cell and Molecular Biology | |
| or BIOL 7030 | Special Topics in Physiology | |
| 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 |
| **Guided Electives** | | 17 |

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| Studies Courses (7000-level or above BIOL) | 2 |
| Studies Courses (5000-level or above) | 9-15 |
| Electives (5000-level or above) | 0-6 |
| **Total Required for the Degree** | 30 |