

# Bachelor of Science with a Major in Biology

## Requirements for the Bachelor of Science Degree with a Major in Biology

| Code   | Title  | Hours      |
|--|--|------------|
| <b>Core Curriculum</b>   |  | <b>60</b>  |
| Core Curriculum Areas A, B, C, D.2.a, and E (See VSU Core Curriculum) <sup>1</sup> |  | 42         |
| Core Curriculum Area F   |  |            |
| Science  |  | 14-15      |
| BIOL 1100  | Biology Freshmen Seminar - Introduction to the Biological Sciences |            |
| BIOL 1108 & 1108L  | Principles of Biology II and Principles of Biology Laboratory II   |            |
| CHEM 1211  | Principles of Chemistry I  |            |
| CHEM 1211L   | Principles of Chemistry Laboratory I                               |            |
| CHEM 1212  | Principles of Chemistry II   |            |
| CHEM 1212L   | Principles of Chemistry Laboratory II                              |            |
| PHYS 1111K   | Introductory Physics I   |            |
| PHYS 1112K   | Introductory Physics II  |            |
| PHYS 2211K   | Principles of Physics I  |            |
| PHYS 2212K   | Principles of Physics II   |            |
| A minimum grade of "C" is required for all BIOL, CHEM, MATH, and PHYS courses.     |  |            |
| MATH 2262 or MATH 1401   | Analytic Geometry and Calculus II<br>Elementary Statistics         | 3-4        |
| <b>Senior College Curriculum</b>   |  | <b>60</b>  |
| A minimum grade of "C" is required for all BIOL and CHEM courses.                  |  |            |
| Required Biology Courses   |  | 8          |
| BIOL 3200  | Introductory Genetics  | 3          |
| BIOL 3250  | Ecology and Evolution  | 4          |
| BIOL 4900  | Senior Seminar   | 1          |
| Biology Electives <sup>2</sup>   |  | 26-27      |
| Required Chemistry courses   |  |            |
| CHEM 3401  | Organic Chemistry I  | 4          |
| CHEM 3402  | Organic Chemistry II   | 4          |
| CHEM 3601  | Biochemistry I   | 3          |
| General Electives  |  | 11-12      |
| Carry-over from Core   |  | 3-4        |
| <b>Total hours required for the degree</b>   |  | <b>120</b> |

<sup>1</sup> Biology majors are required to take pre-calculus (MATH 1113) in Area A and calculus (MATH 2261) in Area D.2.a One hour of calculus will transfer to the upper elective hours. Biology majors must take 8 hours of science in Area D.2.a and may choose any of the following courses: BIOL 1107 and BIOL 1107L, CHEM 1211 and CHEM 1211L, CHEM 1212 and CHEM 1212L, or calculus-based physics (PHYS 2211K and PHYS 2212K). If biology or chemistry courses are taken in Area D.2.a, biology majors may take non-calculus-based physics (PHYS 1111K and PHYS 1112K) in Area F.

<sup>2</sup> 3000-level and above (but not BIOL 4830, BIOL 4840, BIOL 4850)  
Four courses with labs required  
BIOL 4950 limited to 3 hours.

## Accelerated Undergraduate-to-Graduate Track

Contingent upon acceptance in to the 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.

Graduate courses taken as an undergraduate will count toward the 120-hour graduation requirement but will not count toward the student's undergraduate GPA or the calculation of academic honors.

Upon acceptance into the Accelerated Undergraduate-to-Graduate Track in Biology, students must maintain an overall GPA of 3.0 to remain in good standing. Students who do not maintain good standing or who do not wish to continue with the Accelerated Undergraduate-to-Graduate Track in Biology may revert to their original track to complete the remaining requirements for the B.S. in Biology.