

Major:

Biology (B.A.)

The B.A. in biology can provide students with the experience and knowledge necessary to have a successful career. A B.A. in biology requires 20 approved hours from Math, Physics, or Chemistry department courses. The B.A. has a more flexible supporting area and is a particularly appealing option for students who would like to combine their biology degree with another area of emphasis.

Departments/Programs:

Biology

Biology Major (B.A., 31 hours plus a 20-hour supporting program)

| Biology Core | 12 hours |
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| BIO 1400FYW Introduction to Biological Inquiry | 4 hours |
| BIO 2200 Genetics and Cell Biology | 4 hours |
| BIO 2300 Ecology and Evolution | 4 hours |
| Biology Electives | 16 hours |
| Must have two lab courses, with at least one from Area A and one from Area B. Remaining hours from any areas (A, B, C, D, E). | |
| Capstone | 3 hours |
| BIO 4990 Senior Capstone | 3 hours |

Biology Electives

| Area A. Cellular, Developmental and Molecular Biology | |
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| BIO 3160 Medical Botany | 3 hours |
| BIO 3160 Medical Botany and BIO 3170 Medical Botany Lab (lab course) | 4 hours |
| BIO 3440 Developmental Biology (lab course) | 4 hours |
| BIO 3690 Microbiology (lab course) | 3 hours |
| BIO 3800 Molecular Genetics | 4 hours |

Area A. Cellular, Developmental and Molecular Biology

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| BIO 3800 Molecular Genetics | 4 hours |
| BIO 4190 Histology (lab course) | 4 hours |
| BIO 4750 Immunology | 3 hours |
| BIO 4750 Immunology | 3 hours |

Area B. Population and Ecological Biology

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| BIO 3180 Plant Taxonomy (lab course) | 4 hours |
| BIO 3220 Parasitology (lab course) | 4 hours |
| BIO 3500 Conservation Biology (lab course) | 4 hours |
| BIO 3530 Principles of Marine Biology and Oceanography and BIO 3540 Applied Marine Biology (lab course) | 5 hours |
| BIO 3550 Tropical Ecosystems | 3 hours |
| BIO 3640 Animal Behavior | 3 hours |
| BIO 3640 Animal Behavior and BIO 3650 Laboratory in Animal Behavior (lab course) | 4 hours |
| BIO 3720 Physiological Ecology (lab course) | 4 hours |
| BIO 4210 Ecology (lab course) | 4 hours |
| BIO 4480 Vertebrate Zoology (lab course) | 4 hours |
| BIO 4610 Evolution | 4 hours |

Area C. Applied Biology

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| BIO 2940 Biology Assistantship | 1 hour |
| BIO 2970 Internship | 1 hour |
| BIO 2980 Practicum | 1 hour |
| BIO 3000 An Introduction to Biomedical Ethics | 2 hours |
| BIO 3200 Advanced Human Anatomy and Physiology I and BIO 3200L Advanced Human Anatomy and Physiology I Lab (lab course) | 4 hours |

Area C. Applied Biology

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| BIO 3210 Advanced Human Anatomy and Physiology II and BIO 3210L Advanced Human Anatomy and Physiology II Lab (lab course) | 4 hours |
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| BIO 3300 Cadaver Dissection | 2 hours |
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| BIO 3950/BIO 4950 Independent Study | 1-2 hours |
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| BIO 3970 Internship | 2-3 hours |
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| BIO 3980 Practicum | 2-3 hours |
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| BIO 4700 Pathophysiology | 3 hours |
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Area D. Global Experience in Biology

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| BIO 3510 Tropical Biology of Costa Rica | 3 hours |
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| BIO 3520 Tropical Biology of Belize | 3 hours |
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| BIO 3530 Principles of Marine Biology and Oceanography | 3 hours |
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| BIO 3540 Applied Marine Biology | 3 hours |
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Area E. Additional Courses

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| BIO 3900/BIO 4900 Selected Topics | 1-4 hours |
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| BIO 3910 Directed Readings | 1-2 hours |
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BIO 1080 Microbiology, BIO 1090 Introduction to Human Anatomy and Physiology I, and BIO 1100 Introduction to Human Anatomy and Physiology II may not fulfill biology major requirements.

Required Supporting Program

20 hours

An approved supporting program of 20 hours is also required, normally comprised of courses from the Math, Physics, or Chemistry departments. Required Supporting Program Courses:

- CHEM 1110 Chemical Principles I and CHEM 1110L Chemical Principles I Laboratory
- CHEM 2100 Organic Chemistry I and CHEM 2100L Organic Chemistry I Laboratory