

Major: Biology (B.A.)

The B.A. and the B.S. in biology can both provide students with the experience and knowledge necessary to have a successful career. A B.A. in biology requires 20 hours of approved hours in the Natural Sciences Division. 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 such as math or physics.

Biology Major (B.A., 30 hours plus a 20-hour supporting program)

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| Biology Core | 12 hours |
| 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 | 2 hours |
| BIO 4980A Senior Thesis and BIO 4980B Senior Thesis or BIO 4990A Senior Research and BIO 4990B Senior Research | 2 hours |

Biology Electives

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| Area A. Cellular, Developmental and Molecular Biology | |
| 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) | 4 hours |
| BIO 3800 Molecular Genetics | 3 hours |
| BIO 3800 Molecular Genetics and BIO 3850 Molecular Genetics Lab (lab course) | 4 hours |
| BIO 4190 Histology (lab course) | 4 hours |
| BIO 4750 Immunology | 3 hours |
| BIO 4750 Immunology and BIO 4760 Laboratory in Immunology (lab course) | 4 hours |

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| Area B. Population and Ecological Biology | |
| 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 | 2 hours |
| BIO 3530 Principles of Marine Biology and Oceanography and BIO 3540 Applied Marine Biology (lab course) | 5 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 | 3 hours |
| Area C. Applied Biology | |
| BIO 3000 An Introduction to Biomedical Ethics | 2 hours |
| BIO 3200 Advanced Human Anatomy and Physiology I (lab course) | 4 hours |
| BIO 3210 Advanced Human Anatomy and Physiology II (lab course) | 4 hours |
| BIO 3970 Biology Practicum | 1-3 hours |
| BIO 3950/BIO 4950 Independent Study | 1-2 hours |
| BIO 4700 Pathophysiology | 3 hours |
| Area D. Global Experience in Biology | |
| BIO 3510 Tropical Biology of Costa Rica | 3 hours |
| BIO 3520 Tropical Biology of Belize | 3 hours |
| BIO 3530 Principles of Marine Biology and Oceanography | 2 hours |
| BIO 3540 Applied Marine Biology | 3 hours |
| Area E. Additional Courses | |
| BIO 3900/BIO 4900 Selected Topics | 1-4 hours |
| BIO 3910 Directed Readings | 1-2 hours |

[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 |
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| <p>An approved supporting program of 20 hours is also required, normally comprised of courses from the Natural Sciences division. Required Supporting Program Courses:</p> <ul style="list-style-type: none">• CHEM 1110 Chemical Principles I and CHEM 1110L Chemical Principles I Laboratory• CHEM 2100 Organic Chemistry I and CHEM 2100L Organic Chemistry I Laboratory | |

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