BIOLOGY

Degree Requirements

Total program: 68 - 74 semester hours

Prerequisite Courses

28 semester hours

| Code | Title | Semester Hours |
|--|----------------------|-------------------|
| MATH 105 | Precalculus | 4 |
| PHYS 201 | General Physics I | 5 |
| or PHYS 203 | Physics I: Mechanics | |
| CHEM 201 | General Chemistry I | 5 |
| CHEM 202 | General Chemistry II | 5 |
| CHEM 311 | Organic Chemistry I | 5 |
| Any 200-400 Natural Science or advisor approved courses from: MATH, PHYS, CHEM, NASC | | |
| Total Semester Hours | | |

Core Requirements

28-34 semester hours

| Code | Title | Semester Hours | |
|--|---|-------------------|--|
| Core Introductory Courses | | | |
| BIOL 201 | General Biology I | 4 | |
| or BIOL 205 | Animal Biology | | |
| BIOL 202 | General Biology II | 4 | |
| or BIOL 204 | Plant Biology | | |
| Core Foundational Courses | | | |
| BIOL 310 | Cell Biology | 4 | |
| BIOL 311 | Genetics | 4 | |
| BIOL 323 | Ecology | 2 | |
| BIOL 378 | Evolution and Biosystematics | 2 | |
| One 200-400 elective biology, or advisor approved course | | | |
| Core Mastery Courses | | | |
| BIOL 381 | Research Writing in the Sciences | 2 | |
| BIOL 382 | Statistics for Life Sciences | 2-4 | |
| or BIOL 383 | Statistics and Applications for Life Sciences | | |
| Select one of the following: | | 0-4 | |
| BIOL 499A | Senior Seminar/Project | | |
| & BIOL 499B | and Senior Seminar/Project | | |
| BIOL 499 | Senior Seminar/Project | | |
| Total Semester Hours | | 26-34 | |

Requires the completion or concurrent enrollment in two qualified courses with undergraduate research experience aligned with the Council on Undergraduate Research (CUR).

Additional Biology Requirements

12 semester hours

One course (4 semester hours) must be taken from each of the three designated themes.

Themes

Environmental

(one of the following must be taken)

| Code | Title | Semester Hours |
|-----------|--|-------------------|
| BIOL 305 | Vertebrate Zoology | 4 |
| BIOL 312 | Environmental Biology | 4 |
| BIOL 322 | Marine & Freshwater Biology ¹ | 4 |
| BIOL 327 | Mountain and Desert Biology ¹ | 4 |
| BIOL 334 | Ornithology | 4 |
| BIOL 390 | Natural History of the Tropics | 4 |
| BIOL 390F | Natural History of the Tropics Fieldwork Cou | rse 2 |
| 1 | | |

These courses are designated as CURs. However, the CUR status may not apply every semester. Students must confirm course status before enrolling for CUR credit.

Applied/Translational

(one of the following must be taken)

| Code | Title | Semester Hours |
|----------|--|-------------------|
| BIOL 302 | Microbiology | 4 |
| BIOL 316 | Molecular Biology ¹ | 4 |
| BIOL 343 | Human Anatomy | 4 |
| BIOL 345 | Immunology | 4 |
| BIOL 346 | Molecular Basis of Disease | 4 |
| BIOL 376 | Human and Environmental Toxicology | 4 |
| BIOL 385 | Community-Engaged Health Research ¹ | 4 |
| BIOL 441 | Nutrition | 2 |

These courses are designated as CURs. However, the CUR status may not apply every semester. Students must confirm course status before enrolling for CUR credit.

Integrative/Interdisciplinary (one of the following must be taken)

| Code | Title | Semester Hours |
|----------|--|-------------------|
| BIOL 313 | Developmental Biology ¹ | 4 |
| BIOL 314 | Biochemistry | 5 |
| BIOL 344 | Human Physiology | 4 |
| BIOL 350 | Introduction to Computational Biology ¹ | 4 |
| BIOL 361 | Plant Physiology ¹ | 4 |

These courses are designated as CURs. However, the CUR status may not apply every semester. Students must confirm course status before enrolling for CUR credit.