

Minor in Biology

26 units

Requirements

- The minimum prerequisites for the biology minor are a C- in BIOL 151 and a B- in MATH 110 or equivalent (for example, an ALEKS score of 65). Students may not earn a biology minor if they are majoring in allied health or biochemistry.
- Students must complete all prerequisites for a BIOC, BIOL, or CHEM course with a C- or better before taking the course (except as noted in the course description).
- Students must maintain a minimum cumulative GPA of 2.0 in all biology, chemistry, biochemistry, math, and physics courses required for the minor.
- Students must complete each course required for the minor with a C- or higher for the course to meet a degree requirement in the Department of Biology and Chemistry.
- Any single course within the minor can be taken only two times at APU; students will be dismissed from the minor after two unsuccessful (below C-) attempts in a single required course.
- Only two courses total within the minor can be repeated; students will be dismissed from the minor after unsuccessful (below C-) attempts in any three required courses.

| Code | Title | Units |
|--|--|-----------|
| Lower-Division Requirements | | 20 |
| BIOL 151 | General Biology I ¹ | |
| BIOL 152 | General Biology II | |
| CHEM 151 | General Chemistry I ^{1, 2} | |
| BIOL 240 | Biology of Microorganisms | |
| BIOL 280 | Cell Biology | |
| BIOL 396 | Topics in Biology and Christian Thought ³ | |
| Upper-Division Electives | | 6 |
| Choose 6 units of electives from the following; these may not include units used to fulfill requirements of the student's major. | | |
| BIOL 300 | Genetics | |
| BIOL 311 | Teaching and Learning in STEM ⁴ | |
| BIOL 312 | STEM Education Research Seminar ⁴ | |
| BIOL 313 | STEM Teaching Practicum ⁴ | |
| BIOL 320 | Ecology | |
| BIOL 326 | Neurobiology | |
| BIOL 336 | Vertebrate Biology | |
| BIOL 342 | Medical Microbiology | |
| BIOL 350 | Mammalian Physiology | |
| BIOL 365 | Plant Biology | |
| BIOL 394 | Directed Research Internship ⁴ | |
| BIOL 395 | Biological Science Internship ⁴ | |
| BIOL 410 | Molecular Biology | |
| BIOL 435 | Stewardship Ecology | |
| BIOL 440 | Developmental Biology | |
| BIOL 495 | Advanced Topics in Biology | |
| BIOL 497 | Readings | |
| Total Units | | 26 |

¹ Meets the APU Core: Natural Science general education requirement.

² This course may be waived with an appropriate Advanced Placement test score.

³ BIOL 152 (<http://catalog.apu.edu/search/?P=BIOL%20152>) meets this requirement if taken at APU.

⁴ Up to 3 units combined of either BIOL 311, BIOL 312, BIOL 313, BIOL 394, or BIOL 395 may count toward minor elective units.

Program Learning Outcomes

Program Learning Outcomes

Students who successfully complete this program shall be able to:

1. Demonstrate a broad knowledge base in the field of biology.
2. Effectively communicate scientific ideas and research orally.
3. Effectively communicate scientific ideas and research in writing.
4. Demonstrate proficiency in problem solving and applying the scientific method to scientific questions.
5. Demonstrate laboratory skills and techniques.
6. Demonstrate knowledge of relevant laboratory instrumentation.
7. Express a Christian worldview that integrates faith with their biology vocation.