

Biology

Bachelor of Arts

The Biology program provides students with a comprehensive understanding of living things with examination of plants, animals and microbes on a microscopic and macroscopic level. Students receive hands-on training using sampling and identification techniques in the lab and in the field.

Career Options:

- Public Health Careers
- Academic Research in University Settings
- Conservation Biologist
- · Wildlife Biologist

- Research and Product Development in Medical Supply and Pharmaceutical Industries
- Laboratory Technology
- Middle & High School Science Teacher
- Industry Scientist & Outreach Coordinator

Major Requirements:

Life Science w/Lab Methods in Biology Cell Biology **Evolution** Intro to Environmental Science* Conservation Biology Genetics Ecology **Ecological Methods**

Senior Seminar Two additional BIO 300-400 level courses (one must include a lab)

General Chemistry I w/Lab

General Chemistry II or General Organic and Biochemistry Requirement

College Algebra (or equivalent) **Elementary Statistics**

At least one course from each of the following categories:

- 1. Written Communication: Journalism, Editorial Techniques, Business Communication, Creative Writing
- 2. Oral Communication: Presentation 3, Oral Communication Methods; **Fundamental Communication**
- 3. Business: Fundamental Accounting; Principles of Management; Computer Software; Principles of Marketing

Minor Requirements:

Life Science w/Lab Methods in Biology Cell Biology Evolution

At least one course from two of the four categories below and one lab:

- 1. Animal Form & Function: Developmental Biology, Developmental Biology Lab, Physiological Ecology, Pathophysiology, Histology
- 2. Animal Diversity: Animal Behavior, Invertebrate Zoology, Vertebrate Zoology
- 3. Taxonomic Diversity: Biology of Plants, Microbiology, Molecular Evolution/Biotechnology
- 4. Biology Core: Genetics, Ecology, **Ecological Methods**

Department Contact:

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General Education Requirements

| I. | Interdisciplinary Requirements | Credits | | | |
|------|--|---------|--|--|--|
| | Ethics | 3 | | | |
| | International Studies | 3 | | | |
| | Total Hours | 6 | | | |
| II. | Science Courses | Credits | | | |
| | Mathematics | 3 | | | |
| | Biology, including lab | 4 | | | |
| | Physics, Earth Science or Chemistry, incl. lab | | | | |
| | Total Hours | 11 | | | |
| III. | Social Science Courses | Credits | | | |
| | History, Political Science | 3 | | | |
| | Communication, Economics, Geography | | | | |
| | or Criminal Justice | 3 | | | |
| | Psychology or Sociology | 3 | | | |
| | Total Hours | 9 | | | |

| IV. Humanities Courses | Credits |
|-------------------------------------|---------|
| Religion | 3 |
| English Composition | 6 |
| Literature | 3 |
| Art, Music or Entertainment/Theatre | 3 |
| Total Hours | 15 |
| TOTAL GENERAL EDUCATION HOURS | 41 |

Unless otherwise specified, transferred credits may be used to fulfill the general requirements at the Registrar's discretion.

| Major | Requirements | Credits | | | | | Credits |
|---|-----------------------------------|---------|--|----------------------------|---------|---|---------|
| BIO 101 | Life Science | 3 | MAT | 113 | College | e Algebra or higher-level | 3 |
| BIO 102 | Life Science Lab | 1 | equivalent | | lent | | |
| BIO 123 | Methods in Biology | 2 | МАТ | 213 | Flemer | ntary Statistics | 3 |
| BIO 200 | Cell Biology | 3 | | | | | · · |
| BIO 222 | Evolution | 3 | At least one course including the laboratory | | | | |
| BIO 224 | Intro. to Environmental Science | 3 | from each of the following three categories: | | | | |
| BIO 301 | Conservation Biology | 4 | 1. | Write | ten Com | munication: | |
| BIO 303 | Genetics | 4 | | ENG | 210 | Journalism | 3 |
| BIO 401 | Ecology | 3 | | | NG 211 | 1 | 3 |
| BIO 402 | Ecological Methods | 2 | | | NG 304 | | 3 |
| BIO 499 | Senior Seminar | 3 | | or EN | NG 305 | Creative Writing | 3 |
| Two additional 300-400 level BIO courses, | | | 2. | 2. Oral Communication: | | | |
| at least one must include lab. | | | | ENT 120 | | Presentation | 3 |
| CHM 111 | General Chemistry I | 3 | | | NT 140 | Oral Communication Metho | |
| CHM 112 | General Chemistry I Lab | 1 | | or ENG 130 Fundamentals of | | Fundamentals of Communicat | ion 3 |
| CHM 121 | General Chemistry II | 3 | 3. | Busii | ness: | | |
| CHM 122 | General Chemistry II Lab | 1 | | ACC | 200 F | undamental Accounting | 3 |
| or CHM 201 General Organic & Biochemistry | | 3 | | | JS 206 | Principles of Management | 3 |
| CHM 202 | General Organic & Biochemistry La | ıb 1 | | | S 310 | Computer Software | 3 |
| | | | | or M | KT 205 | Principles of Marketing | 3 |

A customized plan will be developed for each student.

General Graduation Guidelines:

Total of 120 semester hours, 33 of which must be numbered 300 or 400.

(Other programs may require coursework beyond 120 semester hours.)

At least 9 semester hours of courses designated as writing intensive.

A declared major.

A cumulative GPA average of C (2.00) and at least a C average in the graduation major.