## GENERAL CURRICULUM IN BIOLOGY

The General Curriculum in Biology is followed by default if no concentration is declared.

### Biodiversity Courses

Select from the following:

- BIO 321: Mammalogy
- BIO 322: Ichthyology
- BIO 323: Ornithology
- BIO 324: Herpetology
- BIO 329: Vertebrate Field Zoology
- BIO 335: General Entomology
- BIO 336: Invertebrate Zoology
- BIO 429: Parasitology
- BOT 313: Taxonomy of Vascular Plants
- MCRO 224: General Microbiology I
- MCRO 402: General Virology
- MSCI 324: Marine Mammals, Birds and Reptiles

### 400-level Electives

Select from any 400 level BIO/BOT/MCRO/MSCI course, except BIO 400, BIO 450, BIO 461, BIO 462, BIO 463.

### 300-400 level Electives

Select from any 300-400 level BIO/BOT/MCRO/MSCI course, except BIO 300, BIO 330, BIO 400, BIO 450, BIO 461, BIO 462, BIO 463, and courses which are "not open for major credit in Biological Sciences.”

### Approved Electives

At least 12 units must be upper-division.

At least 4 units must be BIO/BOT/MCRO/MSCI course(s)

Select from the following:

- AG/EDES/ENGR/ISLA/SCM/UNIV 350: The Global Environment
- ANT 401: Culture and Health
- ASCI 239: Principles of Rangeland Management
- ASCI 351: Reproductive Physiology
- ASCI 403: Applied Biotechnology in Animal Science
- ASCI 405: Domestic Livestock Endocrinology
- ASCI 438: Systemic Animal Physiology
- BMED 470: Selected Advanced Topics (Topic: Cellular Immunotherapy)
- CHEM 217: Organic Chemistry II
- CHEM 218: Organic Chemistry III
- CHEM 220: Organic Chemistry Laboratory For Life Sciences II
- CHEM 223: Organic Chemistry Laboratory For Life Sciences III
- CHEM 314: Biochemistry: Fundamentals and Applications
- or CHEM 369: Biochemical Principles
- CHEM 331: Quantitative Analysis
- CHEM 341: Environmental Chemistry. Water Pollution
- CHEM 372: Metabolism
- CHEM 377: Chemistry of Drugs and Poisons
- CHEM 418: Neurochemistry
- CHEM 428: Nutritional Biochemistry
- CHEM 474: Protein Techniques Laboratory
- COMS 418: Health Communication
- CSC 101: Fundamentals of Computer Science
- DATA 301: Introduction to Data Science
- ENGR 322/SCM 302: The Learn By Doing Lab Teaching Practicum
- ERSC/GEOG 250: Physical Geography
- ES/WGQS 350: Gender, Race, Culture, Science & Technology
- FSN 310: Maternal and Child Nutrition
- GEOG 441: Advanced Applications in Geospatial Technologies
- KINE 406: Neuroanatomy
- KINE 445: Electrocardiography
- KINE 446: Echoardiography
- LA/NR 218: Introduction to Geographic Information Systems (GIS)
- or GEOG 218: Applications in GIS
- NR 141: Introduction to Forest Ecosystem Management
- NR 142: Environmental Management
- NR 404: Environmental Law
- NR 416: Environmental Impact Analysis and Management
- NR 418: Applied GIS
- NR 425: Applied Resource Analysis and Assessment
- PHIL 323: Ethics, Science and Technology
- or PHIL 339: Biomedical Ethics
- or PHIL 341: Professional Ethics
- PSC 201: Physical Oceanography
- PSY 320: Health Psychology
- PSY 340: Biopsychology
- SS 120: Introductory Soil Science
- SS 321: Soil Morphology
- SS 322: Soil Plant Relationships
- SS 422: Soil Ecology
- STAT 313: Applied Experimental Design and Regression Models
- STAT 324: Applied Regression Analysis
- or STAT 334: Applied Linear Models
- STAT 330: Statistical Computing with SAS
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>STAT 416</td>
<td>Statistical Analysis of Time Series</td>
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<tr>
<td>STAT 419</td>
<td>Applied Multivariate Statistics</td>
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<tr>
<td>STAT 421</td>
<td>Survey Sampling and Methodology</td>
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Total units 43

1. Consultation with advisor is recommended prior to selecting electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.
2. Excess units will be applied to Approved Electives.
3. Recommended for students interested in health science careers.
4. Excess units will be applied to 300-400 level Electives.
5. If a course is taken to meet a Major or Support requirement, it cannot be double-counted in the concentration.
6. Taking a General Education (GE) course that double-counts as an elective may cause an upper-division unit shortage. Use care to ensure that you have taken enough 300-400 level courses to meet the required 60 units of upper-division courses.
7. If BIO 461 or BIO 462 is used to meet the senior project requirement, it cannot be double-counted as an elective.
8. Maximum of 6 units may be applied toward Approved Electives: BIO 200, BIO 300, BIO 400, BIO 450, BIO 485, BIO 495, MSCI 401.
9. Only one of the following courses may count toward Approved Electives: BIO 231, BIO 232.
10. Maximum of 2 units may be applied toward Approved Electives from ENGR 322/SCM 302.