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.

**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 or BIO 407 Advanced Anatomy and Physiology Endocrinology  
- ASCI 406 Applied Animal Embryology and Assisted Reproduction  
- ASCI 438 Systemic Animal Physiology  
- 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 313 Survey of Biochemistry and Biotechnology  
- CHEM 371 Biochemical Principles  
- CHEM 331 Quantitative Principles  
- CHEM 341 Environmental Analysis  
- 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 Practicum  
- ERSC/GEOG 250 Physical Geography  
- ES/WGS 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 Echocardiography  
- 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  
- STAT 416 Statistical Analysis of Time Series  
- STAT 419 Applied Multivariate Statistics
<table>
<thead>
<tr>
<th>Total units</th>
<th>43</th>
</tr>
</thead>
</table>

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. Maximum of 2 units may be applied toward Approved Electives from ENGR 322/SCM 302.