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
- BIJO 429: Parasitology
- BOT 313: Taxonomy of Vascular Plants
- MCRO 224: General Microbiology I
- MCRO 402: General Virology
- MSC 224: 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:

- Any BIO/BOT/MCRO/MSCI course except those which are "not open for major credit in Biological Sciences."

**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 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**

- 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
Consultation with advisor is recommended prior to selecting electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.

Excess units will be applied to Approved Electives.

Recommended for students interested in health science careers.

Excess units will be applied to 300-400 level Electives.

If a course is taken to meet a Major or Support requirement, it cannot be double-counted in the concentration.

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.

If BIO 461 or BIO 462 is used to meet the senior project requirement, it cannot be double-counted as an elective.

Maximum of 6 units may be applied toward Approved Electives: BIO 200, BIO 300, BIO 400, BIO 450, BIO 485, BIO 495, MSCI 401.

Only one of the following courses may count toward Approved Electives: BIO 231, BIO 232.

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