

# Acceptable Upper-level Electives for the B.S., B.A. and Minor in Biology

- For the B.S. degree, a minimum of 9 of the 15 upper-level electives must be BIO courses (i.e must have a BIO prefix).
- For the B.A. with Topical Focus, a minimum of 9 of the 15 upper-level electives must be BIO courses
- For the B.A. with Minor option, a minimum of 6 of the 4-9 upper-level elective credit hours be BIO courses. If fewer than 6 hours are required to complete the requirements, all hours must be BIO courses
- For the Biology minor, a minimum of 4 of the 8 elective credit hours be BIO courses

## Biology

BIO 3xx, BIO 4xx, BIO 5xx, BIO 6xx

## Anthropology

ANT 332 (3) Human Evolution

## Chemistry

CHE 226 (3) Analytical Chemistry  
CHE 233 (1) Organic Chemistry Laboratory II  
CHE 440G (3) Introductory Physical Chemistry  
CHE 441G (2) Physical Chemistry Lab  
CHE 446G (3) Physical Chemistry for Engineers  
CHE 532 (2) Spectrometric Identification of Organic Molecules  
CHE 533 (2) Advanced Organic Chemistry Laboratory  
CHE 550 (3) Biological Chemistry I  
CHE 552 (3) Biological Chemistry II  
CHE 558 (3) Hormone Receptors and Cell Signals  
CHE 565 (3) Environmental Chemistry

## Geology

EES 401G (3) Invertebrate Paleobiology and Evolution

## Psychology

PSY 459 (3) Neuropharmacology: Drugs and Behavior

## Statistics (Biology usually accepts only one of the following for each student)

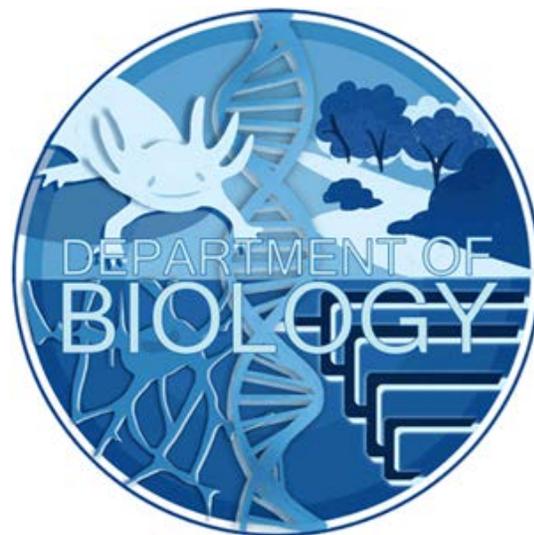
STA 570 (4) Basic Statistical Analysis

STA 580 (2) Biostatistics I

Other STA courses may be accepted at the discretion of your advisor.

## College of Agriculture, Food and Environment

ABT/ENT 460 (3) Introduction to Molecular Genetics  
ASC 364 (4) Reproductive Physiology of Farm Animals  
ASC 378 (4) Animal Nutrition and Feeding  
ENT 310 (3) Insect Pests of Field Crops  
ENT 320 (3) Horticultural Entomology  
ENT/FOR 502 (3) Forest Entomology  
ENT 561 (3) Insects Affecting Human and Animal Health  
ENT 564 (4) Insect Taxonomy  
ENT 568 (3) Insect Behavior



FOR 340 (4) Forest Ecology  
FOR 370 (4) Wildlife Biology and Management  
FOR 435 (3) Conservation Biology  
FOR 530 (3) Freshwater Ecology  
FOR 510 (4) Herpetology  
FSC 530 (5) Food Microbiology  
NRE 420G (4) Taxonomy of Vascular Plants  
NRE/PLS 450G (3) Biogeochemistry  
PLS 320 (4) Woody Horticultural Plants  
PLS 330 (2) Herbaceous Horticultural Plants I  
PLS 332 (2) Herbaceous Horticultural Plants II  
PLS 366 (4) Fundamentals of Soil Science  
PLS 502 (3) Ecology of Economic Plants  
PLS 566 (3) Soil Microbiology  
PLS 567 (1) Methods in Soil Microbiology  
PPA 400G (3) Principles of Plant Pathology

### College of Medicine

ANA 410G (3) Neurobiology of Brain and Spinal Cord Disorders  
ANA 442 (3) Molecular and Cellular Neurobiology  
ANA 511 (5) Intro To Human Anatomy  
ANA 512 (4) Microscopy and Ultrastructure  
ANA 516 (3) Selected Topics in Advanced Neuroscience  
Some other anatomy courses at the 500-level are acceptable, but they are usually restricted to professional students.

BCH 401G (3) Fundamentals of Biochemistry  
MI/BIO 494G (3) Immunobiology  
MI 595 (2) Immunobiology Laboratory  
MI/PAT 598 (3) Clinical Microbiology

*PGY 412G (4) Principles of Human Physiology is acceptable as an elective for upper level biology credit ONLY IF a student DOES NOT complete BIO 350. It DOES NOT substitute for BIO 350 or BIO430G [Counts ONLY for students that started program before Fall 2017]*

PGY 417 (2) Genomics and Epigenetics  
PGY 431 (3) Introduction to Neuroendocrinology  
PGY 502 (5) Systems, Cellular and Molecular Physiology  
PGY 512 (3) Evolutionary Medicine  
PGY 560 (1) Pathophysiology: Integrative Study in Physiology and Medicine  
TOX 509 (2) Environmental and Regulatory Toxicology

### Unacceptable courses often mistakenly thought to be acceptable:

ANA 209 (3) Principles of Human Anatomy and PGY 206 (3) Elementary Physiology are not acceptable electives for Biology majors.

Other courses may be accepted at the discretion of the Director of Undergraduate Studies in the Department of Biology.