## 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 (3-5) Analytical Chemistry\*

CHE 233 (1) Organic Chemistry Laboratory II\*

CHE 440G (4) Physical Chemistry

CHE 441G (2) Physical Chemistry Lab\*

CHE 442G (3) Physical Chemistry

CHE 446G (3) Physical Chemistry for Engineers

CHE 532 (2) Spectrometric ID of Organic Compounds

CHE 533 (2) Qualitative Organic Analysis Lab\*

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 Paleontology 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

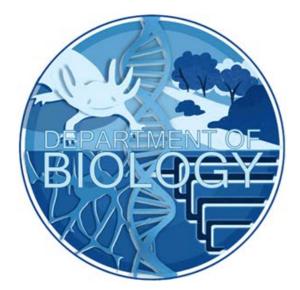
Other STA courses may be accepted at the discretion of your advisor.

#### College of Agriculture, Food and Environment

ABT 460 (3) Introduction to Molecular Genetics (Cross listed as AGR/ASC/ENT 460)

ASC 364 (4) Reproductive Physiology of Animals

ASC 378 (4) Animal Nutrition



- ENT 310 (3) Insect Pets of Field Crops
- ENT 320 (3) Horticultural Entomology
- ENT 402 (3) Forest Entomology (cross listed as FOR 402)
- ENT 460 (3) Introduction to Molecular Genetics (cross listed as ABT/ASC/FOR 460)
- 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 375 (1) Taxonomy of Forest Vegetation
- FOR 402 (3) Forest Entomology\*
- FOR 435 (3) Conservation Biology
- FOR 530 (3) Freshwater Ecology
- FOR 510 (4) Herpetology
- FSC 530 (5) Food Microbiology\*
- NRE 320 (3) Natural Resource and Environmental Analysis
- NRE 420G (4) Taxonomy of Vascular Plants\*
- NRE 450G (3) Biogeochemistry
- NRC 455G (3) Wetland Delineation
- PLS 320 (4) Woody Horticultural Plants\*
- PLS 366 (4) Fundamentals of Soil Science
- PLS 450G (3) Biogeochemistry
- PLS 502 (3) Ecology of Economic Plants
- PLS 566 (3) Soil Microbiology
- PLS 567 (1) Methods in Soil Microbiology (Lab)\*
- PPA 400G (3) Principles of Plant Pathology\*

#### **College of Medicine**

- ANA 410G (3) Neurobiology of Brain Disorders
- ANA 442 (3) Molecular and Cellular Neurobiology
- ANA 511 (5) Introduction to Human Anatomy\*
- ANA 512 (4) Microscopy and Ultrastructure\*
- ANA 516 (3) Anatomy of the Nervous System\*
- 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 494G (3) Immunobiology (same as BIO 494G)
- MI 595 (2) Immunobiology Laboratory\*
- MI 598 (3) Clinical Microbiology (same as PAT 598)
- 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 BIO 430G) (Only for students who started program before Fall 2017)
- PGY 431 (3) Introduction to Neuroendocrinology
- PGY 417 (2) Genomics and Epigenetics
- PGY 512 (3) Evolutionary Medicine
- PGY 560 (1) Pathophysiology
- PGY 590 (4) Cellular and Molecular Physiology
- TOX 509 (3) Biochemical and Environmental 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 (biology@uky.edu)

\*Courses that count as a lab course, to fulfill the required lab for upper-level electives