

# EEB & Biology Major Electives

## Spring 2023

### Organismal

#### Macro-

ACBS 400B- Animal Anatomy & Physiology  
 ACBS 443- Research Animal Methods\*  
 ACBS 456- Aquaculture  
**ECOL 330- Evolution of Animal Form & Function**  
 ECOL 480- Math Models in Biology  
 ECOL 484- Ornithology\*  
*ENVS 475- Freshwater & Marine Algae*  
 ENTO 457- Medical & Veterinary Entomology  
**NROS 381- Animal Brains, Signals, Sex & Social Behavior**  
 PLS 360- Plant Growth and Physiology

#### Micro-

ACBS 403R- Biology of Animal Parasites  
 ACBS 406- Diseases of Companion Animals  
 ECOL 409- Evolution of Infectious Disease  
 ENVS 425- Environmental Micrology  
 MIC 328R - Microbial Physiology  
 MIC 433- Medical & Molecular Virology  
 PLP 428R—Microbial Genetics  
 PLP 428L- Microbial Genetics Lab\*

### Ecology, Evolution & Behavior

**ECOL 330- Evolution of Animal Form & Function**  
 ECOL 346- Bioinformatics\*  
 ECOL 406R- Conservation Biology  
 ECOL 409- Evolution of Infectious Disease  
 ECOL 412A- Ocean Science  
 ECOL 412B- Ocean Science Field Course  
 ECOL 426- Population Genetics  
 ECOL 454- Water Harvesting  
 ECOL 480- Mathematical Models in Biology  
*ECOL 484- Ornithology*  
 ECOL 496R—Species Diversity  
 ENTO 407—Insect Discovery  
 ENVS 477- Ecotoxicology  
*ENVS 475- Freshwater & Marine Algae*  
 GEOS 330- Introduction to Remote Sensing  
**NROS 381- Animal Brains, Signs, Sex & Social Behaviors**  
 RNR 316- Natural Resource Ecology  
 RNR 355- Introduction to Wildland Fire  
 WFSC 445- Population Ecology  
 WFSC 447- Wildlife Conservation Behavior  
 WFSC 454- Water Harvesting

### Physiology

ACBS 400B- Animal Anatomy & Physiology  
 ACBS 409- Environmental PSIO of Domestic Animals  
**ECOL 330- Evolution of Animal Form & Function**  
 ECOL 437- Vertebrate Physiology\*  
 MIC 328R - Microbial Physiology  
 PSIO 380- Fundamentals of Human Psio  
 PLS 360- Plant Growth & Physiology

PSIO 201 and 202 when taken together can count for this requirement and the lab component requirement. Be sure to still complete 42 upper division units when using this option.

### Science & Society

ECOL 406 R- Conservation Biology  
 ECOL 409- Evolution of Infectious Disease  
 EPID 309- Intro to Epidemiology  
 HPS 387- Health Disparities/ Minority Health LAW  
 459- Public International Environmental Law **MCB 404- Bioethics**  
 PA 321- Medical Ethics  
 PHIL 347- Neuroethics  
 PHP 305- Population Health in Digital Age  
 PHP 308- Community Health Ed/Disease Outbreaks  
 PLS 424 R- Plant Biotechnology

### Cell & Molecular Biology

ENVS 477- Ecotoxicology  
 MCB 410- Cellular Biology  
 MCB 416A- Stats Bioinformatics & Genomic Analysis MCB  
 433- Medical and Molecular Virology  
**MCB 473- Recombinant DNA Methods & Applications\***  
 MIC 433- Medical & Molecular Virology  
 NROS 310- Molecular & Cellular Biology of Neurons  
 NROS 430— Neurogenetics  
 PLP 428R—Microbial Genetics  
 PLP 428L- Microbial Genetics Lab \*

### Genetics

ECOL 346- Bioinformatics\*  
 ECOL 426- Population Genetics  
 ECOL 428R- Microbial Genetics  
 ECOL 428L- Microbial Genetics Laboratory\*  
 MCB 416A- Stats Bioinformatics & Genomic Analysis  
 MCB 422- Prob. Solving with Genetic Tools  
**MCB 473- Recombinant DNA Methods & Applications\***  
 NROS 430- Neurogenetics  
 PL P 428R- Microbial Genetics  
 PLP 428L- Microbial Genetics\*  
 PLS 312- Plant & Animal Genetics  
 PLS 340 L- Biotechnology Laboratory\*  
 PLS 449 A- Plant Genetics and Genomics

**BOLD: Writing Emphasis; ITALICS: Field Component; \*: Lab Component**

While some courses are listed in multiple elective categories above, you may only use a course once within your major electives. For example if you take ACBS 400B, it will apply for either an organismal **OR** physiology elective—**NOT BOTH.**

