## Organismal

**Macro-**
- ACBS 400 B: Animal Anatomy & Physiology
- ACBS 443: Research Animal Methods *
- ACBS 456: Aquaculture
- ECOL 330: Evolution of Animal Form & Function
- ECOL 437: Vertebrate Physiology*
- 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 403 R: Biology of Animal Parasites
- ACBS 406: Diseases of Companion Animals
- ECOL 409: Evolution of Infectious Disease
- ENVS 425: Environmental Micrology
- MIC 328 R: Microbial Physiology
- MIC 433: Molecular & Mucrology
- PLP 428R: Microbial Genetics
- PLP 428L: Microbial Genetics Lab *

**Ecology, Evolution & Behavior**

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<th>Course Code</th>
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<tr>
<td>ECOL 330</td>
<td>Evolution of Animal Form &amp; Function</td>
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<tr>
<td>ECOL 346</td>
<td>Bioinformatics *</td>
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<td>ECOL 404 R</td>
<td>Biology of Oceans</td>
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<td>ECOL 406 R</td>
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<td>ECOL 412 A</td>
<td>Ocean Science</td>
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<td>ECOL 426</td>
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<td>ECOL 454</td>
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<tr>
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<td>Mathematical Models in Biology</td>
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<td>ECOL 496</td>
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<td>ENTO 407</td>
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<td>ENVS 477</td>
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<td>ENVS 475</td>
<td>Freshwater &amp; Marine Algae</td>
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<td>GEOS 330</td>
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<td>NROS 381</td>
<td>Animal Brains, Signals, Sex &amp; Social Behaviors</td>
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**BOLD** is writing emphasis, **ITALICS** are field, * is lab

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.

## Physiology

**ACBS 400 B:** Animal Anatomy & Physiology

**ECOL 330:** Evolution of Animal Form & Function

**ECOL 437:** Vertebrate Physiology*

**MIC 328 R:** 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 a lab 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:** Exotoxicology

**MCB 410:** Cellular Biology

**MCB 416 A:** 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 428 L:** Microbial Genetics Lab *

## Genetics

**ECOL 346:** Bioinformatics *

**ECOL 426:** Population Genetics

**ECOL 428 R:** Microbial Genetics

**ECOL 428L:** Microbial Genetics Laboratory *

**MCB 416 A:** 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 428 L:** Microbial Genetics *

**PLS 312:** Plant & Animal Genetics

**PLS 340 L:** Biotechnology Laboratory *

**PLS 449 A:** Plant Genetics and Genomics