**Zoology Courses**

**Courses**

**ZOOL 2406. Vertebrate Zoology.**
Vertebrate Zoology: [TCCN BIOL 1313] A survey of basic classification, functional systems, and biology of vertebrates. MATH 1508 may be taken concurrently with ZOOL 2406. Course fee required.

**Department:** Zoology  
**4 Credit Hours**  
**6 Total Contact Hours**  
3 Lab Hours  
3 Lecture Hours  
0 Other Hours  
**Prerequisite(s):** (BIOL 1107 w/D or better AND BIOL 1305 w/D or better ) AND (BIOL 1108 w/D or better AND BIOL 1306 w/D or better)

**ZOOL 2466. Invertebrate Zoology.**
Invertebrate Zoology: [TCCN BIOL 1413] Survey and laboratory exercises concerning the invertebrates with emphasis on phylogeny. Course fee required.

**Department:** Zoology  
**4 Credit Hours**  
**6 Total Contact Hours**  
3 Lab Hours  
3 Lecture Hours  
0 Other Hours  
**Prerequisite(s):** (BIOL 1107 w/D or better AND BIOL 1305 w/D or better ) AND (BIOL 1108 w/D or better AND BIOL 1306 w/D or better)

**ZOOL 3464. Medical Parasitology.**
Medical Parasitology (3-3) A survey of medically important parasites. Prerequisite: ZOOL 2406, or BIOL 1306 and BIOL 1108. Lab fee required. Replaced ZOOL 3364 and ZOOL 1365.

**Department:** Zoology  
**4 Credit Hours**  
**6 Total Contact Hours**  
3 Lab Hours  
3 Lecture Hours  
0 Other Hours  
**Prerequisite(s):** (ZOOL 2406 w/D or better ) OR (BIOL 1108 w/D or better AND BIOL 1306 w/D or better)

**ZOOL 3468. Entomology.**
Entomology (3-3) Evolution, phylogeny, ecology, physiology, morphology, and systematics of insects. Field trips and an insect collection are required. Prerequisites: BIOL 1306 and BIOL 1108. Fee required.

**Department:** Zoology  
**4 Credit Hours**  
**6 Total Contact Hours**  
3 Lab Hours  
3 Lecture Hours  
0 Other Hours  
**Prerequisite(s):** (BIOL 1108 w/D or better AND BIOL 1306 w/D or better)

**ZOOL 4155. Vertebrate Paleontology Tech.**
Vertebrate Paleontology Techniques (0-3) Collection, preservation, identification and curation of vertebrate fossils. This course is identical to GEOL 4155. Prerequisite: ZOOL 4354. ZOOL 4354 may be taken concurrently with ZOOL 4155. Course fee required.

**Department:** Zoology  
**1 Credit Hour**  
**3 Total Contact Hours**  
3 Lab Hours  
0 Lecture Hours  
0 Other Hours
**ZOOL 4157. Adv Vertebrate Paleontology.**
Advanced Vertebrate Paleontology Techniques (0-3) Collection, preservation, identification, and curation of vertebrate fossils. This course is identical to GEOL 4157. Prerequisite: ZOOL 4356. ZOOL 4356 may be taken concurrently with ZOOL 4157.

**Department:** Zoology  
1 Credit Hour  
3 Total Contact Hours  
3 Lab Hours  
0 Lecture Hours  
0 Other Hours

**ZOOL 4181. Vertebrate Physiology Methods.**
Vertebrate Physiology Methods (0-3) Techniques and instrumentation used in the study of vertebrate function. Prerequisites: CHEM 1306-1106 or CHEM 1408 and (1) BIOL 1306-1108, (2) BIOL 2313-2113, (3) BIOL 3414, or (4) ZOOL 2406. ZOOL 4181 is usually taken concurrently with ZOOL 4380 or with BIOL 4388, and may be a co-requirement with one of these lecture courses for some programs/degrees. Course fee required.

**Department:** Zoology  
1 Credit Hour  
3 Total Contact Hours  
3 Lab Hours  
0 Lecture Hours  
0 Other Hours

**ZOOL 4354. Paleozoic & Mesozoic Vert Pale.**
Paleozoic and Mesozoic Vertebrate Paleontology (3-0) Study of evolution, biologic history, biostratigraphy, and classification of the Paleozoic and Mesozoic vertebrates with emphasis on the lower vertebrates and an introduction to early mammalian development. This course is identical to GEOL 4354. Co-requisite: ZOOL 4155. Prerequisites: GEOL 1302-1102 or ZOOL 2406 or BIOL 1306 and BIOL 1108 and department approval.

**Department:** Zoology  
3 Credit Hours  
3 Total Contact Hours  
0 Lab Hours  
3 Lecture Hours  
0 Other Hours

**Corequisite(s):** ZOOL 4155

**ZOOL 4356. Cenozoic Vertebrate Paleontol.**
Cenozoic Vertebrate Paleontology (3-0) Study of the evolution, biologic history, biostratigraphy, and classification of the Cenozoic vertebrates with major emphasis on the mammals. This course is identical to GEOL 4356. Co-requisite: ZOOL 4157. Prerequisites: GEOL 1302 or ZOOL 2408; or BIOL 1306 and BIOL 1108; and department approval.

**Department:** Zoology  
3 Credit Hours  
3 Total Contact Hours  
0 Lab Hours  
3 Lecture Hours  
0 Other Hours

**Corequisite(s):** ZOOL 4157

**ZOOL 4380. Vertebrate Physiology.**
Vertebrate Physiology (3-0) Vertebrate systemic functions emphasizing nerve action and movement, endocrinology and metabolic controls, osmoregulation, cardiophysiology and respiration. Prerequisites: CHEM 1306 and CHEM 1106, ZOOL 4181, and (1) BIOL 3414 or (2) ZOOL 2406 or (3) BIOL 1306 and BIOL 1108. ZOOL 4181 may be taken concurrently with ZOOL 4380.

**Department:** Zoology  
3 Credit Hours  
3 Total Contact Hours  
0 Lab Hours  
3 Lecture Hours  
0 Other Hours
ZOOL 4384. Cellular Neuroscience.
Neurobiology (3-0) Neural organization in animals. Evolution of nervous system in different phyla, with emphasis on networks and neurochemical mechanisms for information processing. Prerequisites: ZOOL 2406 or ZOOL 4380, or BIOL 1306 and BIOL 1108.

Department: Zoology

3 Credit Hours
3 Total Contact Hours
0 Lab Hours
3 Lecture Hours
0 Other Hours
Prerequisite(s): (ZOOL 2406 w/D or better ) OR (ZOOL 4380 w/D or better ) OR (BIOL 1108 w/D or better AND BIOL 1306 w/D or better)

ZOOL 4476. Fish, Amphibians, and Reptiles.
Fish, Amphibians, and Reptiles (3-3) Classification and natural history of fish, amphibians and reptiles. Prerequisites: BIOL 3106 and BIOL 1108, or ZOOL 2406. Course fee required.

Department: Zoology

4 Credit Hours
6 Total Contact Hours
3 Lab Hours
3 Lecture Hours
0 Other Hours
Prerequisite(s): (BIOL 1108 w/D or better AND BIOL 1306 w/D or better)

ZOOL 4478. Birds and Mammals.
Birds and Mammals (3-3) History of study, literature, and biology of birds and mammals. Prerequisites: BIOL 1306 and BIOL 1108. Course fee required.

Department: Zoology

4 Credit Hours
6 Total Contact Hours
3 Lab Hours
3 Lecture Hours
0 Other Hours
Prerequisite(s): (BIOL 1108 w/D or better AND BIOL 1306 w/D or better)