

# Zoology

## LOWER DIVISION

**ZOOL 110. Introductory Zoology** (4). Structure, function, evolution, and diversity of major groups of animals. [Weekly: 3 hrs lect, 3 hrs lab.]

**ZOOL 113. Human Physiology** (4). Physiological mechanisms of human body. Emphasis: organ level of integration. No credit toward a major in biology, botany, or zoology. [Prereq: BIOL 104 or BIOL 105 with a grade of C- or higher, or equivalent. Intended for kinesiology and child development majors. Weekly: 3 hrs lect, 3 hrs lab.]

**ZOOL 198. Supplemental Instruction** (1). Collaborative work for students enrolled in Introductory Zoology. [CR/NC. Rep.]

**ZOOL 270. Human Anatomy** (4). Gross and microscopic anatomy of human body. Demonstrations on cadavers; microscopic work. Intended for Kinesiology and Pre-Professional Health students. [Weekly: 2 hrs lect, 6 hrs lab.]

## UPPER DIVISION

**ZOOL 310. Animal Physiology** (4). Comparative organ system physiology of animals. Adaptive strategies. [Prereq: BIOL 105, ZOOL 110, CHEM 109, PHYX 106 or PHYX 109; all with grades of C- or higher. Weekly: 2 hrs lect, 6 hrs lab.]

**ZOOL 312. Human Physiology** (4). Physiological chemistry, cell physiology, and physiology of major organ systems of the human body. [Prereq: BIOL 105, and PHYX 118 or PHYX 107 or PHYX 110; all with grades of C- or higher. Rec: ZOOL 110. Weekly: 3 hrs lect, 3 hrs lab.]

**ZOOL 314. Invertebrate Zoology** (5). Comparative functional morphology, life histories, and phylogeny of invertebrates. [Prereq: BIOL 105 and ZOOL 110; all with grades of C- or higher. Weekly: 3 hrs lect, 6 hrs lab.]

**ZOOL 316. Freshwater Aquatic Invertebrates** (3). Identification, behavior, life history. Insects, crustaceans, mollusks. [Prereq: ZOOL 110. Weekly: 2 hrs lect, 3 hrs lab.]

**ZOOL 325 / PSYC 325. Advanced Behavioral Neuroscience** (4). Principles of behavioral neuroscience are reviewed, and then selected topics are covered in detail through lectures and reading original research articles. Required labs provide hands-on experience. [Prereq: (PSYC 242 and PSYC 321) or ZOOL 310 or BIOL 410. Weekly: 3 hrs lect, 2 hrs lab.]

**ZOOL 354. Herpetology** (4). Biology, classification, anatomy, distribution, and life histories of amphibians and reptiles. [Prereq: BIOL 105 and ZOOL 110; all with grades of C- or higher. Weekly: 2 hrs lect, 6 hrs lab.]

**ZOOL 356. Mammalogy** (3). Comparative mammalian biology. Systematics, morphology, behavior, reproduction, physiology, ecology, zoogeography. [Prereq: BIOL 105 and ZOOL 110; all with grades of C- or higher. Weekly: 2 hrs lect, 3 hrs lab.]

**ZOOL 358. General Entomology** (4). Classification, identification, anatomy, physiology, ecology, behavior; control of insects. [Prereq: BIOL 105 and ZOOL 110; all with grades of C- or higher. Weekly: 2 hrs lect, 6 hrs lab/field trip.]


**ZOOL 370. Comparative Anatomy of the Vertebrates** (4). Anatomy of organs/systems of various vertebrate classes and cephalochordates. Evolutionary derivations; adaptive significance. [Prereq: BIOL 105 and ZOOL 110; all with grades of C- or higher. Weekly: 2 hrs lect, 6 hrs lab.]

**ZOOL 430. Comparative Animal Behavior** (4). Vertebrates and invertebrates. Development of modern principles of ethology. [Prereq: BIOL 105 and ZOOL 110. Weekly: 2 hrs lect, 6 hrs lab/field trip.]

**ZOOL 476. Principles of Animal Development** (4). Mechanisms of differentiation at molecular, cellular, and tissue levels. Descriptive morphology of embryonic development in invertebrate and vertebrate model organisms. [Prereq: BIOL 340 and ZOOL 110. Weekly: 3 hrs lect, 3 hrs lab.]

**ZOOL 480/480L. Selected Topics in Zoology** (.5-3). Topics in response to current advances and as demand warrants. [Prereq: IA. Rep once with different topic and instructor.]

## GRADUATE

 **ZOOL 530. Benthic Ecology** (3). Sublittoral marine environment. Original literature on synecological investigations. Field/lab: detailed analysis of benthic communities. [Prereq: BIOL 430 and ZOOL 314, or equivalent. Weekly: 2 hrs lect, 3 hrs lab.]

**ZOOL 552. Advanced Invertebrate Zoology** (3). Typically focuses either on a particular taxon (Crustacea, Mollusca) or special field (behavior, systematics, functional morphology, feeding strategies). [Prereq: ZOOL 314 or equivalent. Weekly: 2 hrs lect, 3 hrs lab.]

**ZOOL 556. Marine Mammalogy** (4). Comparative biology. Systematics, habits, adaptive modifications, history of whaling. Service fee. [Prereq: ZOOL 356 or equivalent. Weekly: 2 hrs lect, 6 hrs lab/field trip.]

**ZOOL 560. Advanced Mammalogy** (4). Assigned readings; field and lab investigations. [Prereq: ZOOL 356. Weekly: 2 hrs lect, 6 hrs lab.]

**ZOOL 580/580L. Selected Topics in Zoology** (1-3). Topics based on current advances and as demand warrants. [Prereq: grad standing and IA. Rep once.]