

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. Weekly: 3 hrs lect, 3 hrs lab.]

ZOOL 198. Supplemental Instruction (3). Collaborative work for students enrolled in introductory zoology. [CR/NC. Rep.]

ZOOL 214. Elementary Physiology (5). Physiological chemistry, cell physiology, and physiology of major organ systems of the human body. Primarily for nursing majors. [Prereq: BIOL 104 or BIOL 105 with a grade of C- or higher. Weekly: 4 hrs lect, 3 hrs lab.]

ZOOL 270. Human Anatomy (4). Gross and microscopic anatomy of human body. Demonstrations on cadaver; microscopic work. Primarily for pre-Nursing 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. Recommended: 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. Original research articles supplement textbook reading. Required labs provide hands-on experience. [Prereq: PSYC 104 and PSYC 321, or BIOL 105 and ZOOL 110.]

ZOOL 352. Natural History of the Vertebrates (4). Ecology, behavior, diversity, evolutionary relationships. Sight recognition; use of keys. Emphases: regional fauna, lower taxonomic levels. [Prereq: BIOL 105 and ZOOL 110; all with grades of C- or higher. Weekly: 2 hrs lect, 6 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. [Prereqs: 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 374. Introduction to Human Anatomy (4). Human gross anatomy, focus on muscles, bones, joints. Demonstrations on cadavers. Primarily for majors in Kinesiology. [Prereq: BIOL 104 or BIOL 105 or ZOOL 110. Weekly: 3 hrs lect, 3 hrs lab.]

ZOOL 399. Supplemental Work in Zoology (1-3). Directed study for transfer student whose prior coursework is not equivalent to corresponding courses at HSU. [Prereq: IA. Rep once.]

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 452. Parasitology (4). Morphology, life histories, physiology, ecology, and taxonomy of parasites. Lab: identification, host examinations, whole mount preparations, host/parasite interaction. [Prereq: BIOL 105 and ZOOL 110. Weekly: 2 hrs lect, 6 hrs lab.]

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.]