

ANIMAL BEHAVIOR (ANBE)

ANBE 266. Animal Behavior. 1 Credit.

Offered Both Fall and Spring; Lecture hours:3

A survey of important theories, issues, and empirical techniques in the interdisciplinary field of animal behavior emphasizing both proximate and ultimate mechanisms and explanations for behavior. Crosslisted as BIOL 266 and PSYC 266.

ANBE 296. Advanced Methods in Animal Behavior. 1 Credit.

Offered Either Fall or Spring; Lecture hours:Varies,Other:3; May require dissection or live animal experimentation

Laboratory and/or field research to accompany ANBE 266, BIOL 266, or PSYC 266. Prerequisites: PSYC 215 or MATH 216, PSYC 216 or BIOL 205 and prerequisite or corequisite ANBE 266, BIOL 266, or PSYC 266. Crosslisted as PSYC 296.

ANBE 2NT. Animal Behavior Non-traditional Study. .5-4 Credits.

Offered Fall, Spring, Summer; Lecture hours:Varies; Repeatable

Non-traditional course in Animal Behavior. Prerequisite: permission of the instructor.

ANBE 307. Conservation Genetics. 1 Credit.

Offered Either Fall or Spring; Lecture hours:3,Other:3

As biodiversity has quickly eroded for the past few centuries, some scientists argue that humans are causing the 6th mass extinction event. This course emphasizes the application of population genetics, molecular phylogenetics, and reproductive genetics to answering biological questions in wildlife conservation. Crosslisted as ANBE 607 and BIOL 307 and BIOL 607.

ANBE 314. Amphibian Biology and Conservation. 1 Credit.

Offered Fall Semester Only; Lecture hours:3,Other:3

The biology of amphibians, including classification, physiology, reproduction, ecology, evolution, and conservation. Laboratory section will include identification of amphibians and field work to identify conservation issues surrounding local amphibian populations. Prerequisites: BIOL 206, BIOL 208 and permission of the instructor. Crosslisted as BIOL 314 and BIOL 614 and ANBE 614.

ANBE 319. Topics in Animal Behavior. .5-1 Credits.

Offered Both Fall and Spring; Lecture hours:3; Repeatable

Occasional seminars on selected topics of current interest in animal behavior. Prerequisites: ANBE 266, BIOL 266, or PSYC 266, junior or senior status and permission of the instructor. Crosslisted as ANBE 619.

ANBE 320. Advanced Topics in Animal Behavior. 1 Credit.

Offered Fall Semester Only; Lecture hours:3

Culminating Experience seminar for senior animal behavior majors covering selected topics of current interest in animal behavior. Crosslisted as ANBE 620. Prerequisites: senior animal behavior major status and permission of the instructor.

ANBE 321. Behavioral Ecology. 1 Credit.

Offered Fall Semester Only; Lecture hours:3

The consideration of behavioral adaptations to various ecological situations. Topics include habitat choice, foraging behavior, defenses against predation, mate choice, and brood care. Prerequisites: BIOL 208 and permission of the instructor. Crosslisted as BIOL 321 and BIOL 621 and ANBE 621.

ANBE 341. Evolution. 1 Credit.

Offered Either Fall or Spring; Lecture hours:3

Survey of evolutionary processes, phenomena, and mechanisms. Topics covered may include natural selection, sexual selection, adaptation, evolutionary constraints, speciation, evolution and development, coevolution, behavioral evolution, and macroevolution. Prerequisites: BIOL 208 and permission of the instructor. Crosslisted as ANBE 641 and BIOL 341 and BIOL 641.

ANBE 342. Neuroethology. 1 Credit.

Offered Either Fall or Spring; Lecture hours:3

A course that integrates neurobiology and behavior in natural contexts. Emphasis on signal detection, recognition, discrimination, localization, orientation, and the control of complex acts. Neuronal and hormonal mechanisms, ontogeny and evolution of behavior will be considered. Prerequisites: BIOL 206 or BIOL 208 and permission of the instructor. Crosslisted as ANBE 342 and ANBE 642 and BIOL 642.

ANBE 354. Tropical Ecology. 1 Credit.

Offered Spring Semester Only; Lecture hours:3

Introduction to tropical ecology including life history strategies of vertebrates and invertebrates, biodiversity management and conservation. Emphasis on class and individual projects, data collection, and journal keeping. Prerequisites: BIOL 208 and permission of the instructor. Crosslisted as ANBE 654 and BIOL 354 and BIOL 654.

ANBE 355. Social Insects. 1 Credit.

Offered Fall Semester Only; Lecture hours:3,Other:3; May require dissection or live animal experimentation

Evolution and genetics of social behavior, caste, communication in foraging and colony defense, queen and worker control over reproduction, social homeostasis, and population dynamics. Occasionally may be taught as a laboratory science. Prerequisites: BIOL 208 and permission of the instructor. Crosslisted as BIOL 355. Juniors and seniors only.

ANBE 356. Plant-Animal Interactions. 1 Credit.

Offered Either Fall or Spring; Lecture hours:3,Other:3

The ecological and evolutionary interactions among plants and animals, covering pollination, herbivory, seed dispersal, human applications, and effects of global change. Crosslisted as BIOL 356, ANBE 656 and BIOL 656.

ANBE 357. Ornithology. 1 Credit.

Offered Occasionally; Lecture hours:3,Other:3

The biology of birds, including evolution, behavior, anatomy, physiology, ecology, and conservation; lab trips focus on identification of birds in the field. Prerequisites: BIOL 206, BIOL 208 and permission of the instructor. Crosslisted as ANBE 657 and BIOL 357 and BIOL 657.

ANBE 370. Primate Behavior and Ecology. 1 Credit.

Offered Fall Semester Only; Lecture hours:3; May require dissection or live animal experimentation

Introduction to research on prosimians, monkeys, and apes with emphasis on the evolutionary origin of diversity, habitat use, social structure, social behavior, and cognitive abilities. Prerequisites: BIOL 122 or BIOL 208 or ANBE 266 or BIOL 266 or PSYC 266 and permission of the instructor. Crosslisted as ANBE 670 and BIOL 370 and BIOL 670 and PSYC 370 and PSYC 670.

ANBE 371. Primate Cognition. 1 Credit.

Offered Alternate Fall or Spring; Lecture hours:3; May require dissection or live animal experimentation

An investigation into the cognitive abilities and capacities of nonhuman primates emphasizing a comparative perspective. Prerequisites: ANBE 266 or BIOL 266 or PSYC 266 and permission of the instructor. Crosslisted as ANBE 671 and PSYC 371 and PSYC 671.

ANBE 372. Comparative Cognition. 1 Credit.

Offered Both Fall and Spring; Lecture hours:3

Advanced seminar exploring cognition and behavior from evolutionary and comparative perspectives. Topics will include social behavior, memory, communication, spatial cognition, learning, and meta-cognition. Prerequisites: ANBE 266 or BIOL 266 or PSYC 266 and permission of the instructor. Crosslisted as ANBE 672 and PSYC 372 and PSYC 672.

ANBE 391. Research. .5-1 Credits.

Offered Fall, Spring, Summer; Lecture hours:Varies,Other:Varies; Repeatable; May require dissection or live animal experimentation

Independent research, with faculty supervision, in the study of animal behavior. Crosslisted as ANBE 691. Prerequisite: permission of the instructor.

ANBE 399. Senior Thesis. 1 Credit.

Offered Fall, Spring, Summer; Lecture hours:2,Other:10; Repeatable; May require dissection or live animal experimentation

Original research leading to a thesis presentation on a topic related to the study of animal behavior. Prerequisite: permission of the instructor.

ANBE 3NT. Animal Behavior Non-traditional Study. 1-2 Credits.

Offered Fall, Spring, Summer; Lecture hours:Varies,Other:Varies

Non-traditional study in Animal Behavior. Prerequisite: permission of the instructor.