

FISH, WILDLIFE SCIENCE & MANAGEMENT (WILD)

WILD 105N - Wildlife & People. 3 Credits.

Offered autumn. Intended for non-wildlife biology majors. Interactions of wildlife and people in today's society.
Gen Ed Attributes: Natural Science

WILD 170 - Fish & Wildlife Interest Group. 1 Credit.

Offered autumn. Discussion section for incoming students.

WILD 180 - Careers in Wildlife Biology. 2 Credits.

Offered autumn and spring. Subject matter and fields of study within wildlife biology conservation and management. Topics to include wildlife ecology, aquatic ecology, human dimensions, conservation and management, and other opportunities for careers in wildlife biology.

WILD 191 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

WILD 230 - Conservation Science. 3 Credits.

Prereq., BIOO 105N or BIOO 101N or BIOB 160N or BIOB 170N or BIOE 172N or consent of instructor. The goal of this class is to introduce students to major issues related to the conservation of biodiversity. Lectures will illustrate how science can be used to identify and solve conservation problems. Lectures will cover current threats to biodiversity (human population growth, extinctions, habitat destruction, degradation and fragmentation, overexploitation, invasive species, global climate change) and discuss how science can be used to help ameliorate these impacts.

WILD 240 - Intro to Biostatistics. 3 Credits.

Offered autumn. Prereq., calculus and consent of instr. Introduction to statistical ecology: distributions, hypothesis testing, and fitting models to data with emphasis on problems in ecological sampling.

WILD 274 - Human Dimensions of Wildlife. 3 Credits.

Offered spring. This course provides a foundation for students to understand the human dimensions of fish and wildlife management. Successful resource management requires an understanding of how people value and interact with wildlife populations. We use contemporary wildlife challenges facing Montana as focal points for learning.

WILD 280 - Fisheries Techniques. 3 Credits.

This course provides an overview of fisheries techniques as they are applied in Montana. Students learn a wide variety of fisheries methods. Case studies and guest lectures expose students to current issues faced by fisheries managers in Montana. Field trips provide hands-on experience.

WILD 291 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

WILD 346 - Wildlife Physiological Ecology. 3 Credits.

Offered autumn. Prereq., BIOB 272. Only open to Wildlife Biology Majors. How physiological and biochemical processes in animals influence behavior and ecology. Application of physiological approaches to wildlife conservation such as assessment of animal health, nutritional condition, and physiological performance.

WILD 370 - Wildlife Habitat Conservation & Management. 4 Credits.

Offered autumn and spring. Prereq., junior/senior standing in wildlife biology, STAT 216 or WILD 240, BIOE 370, BIOE 371, or consent of instr. Application of principles of wildlife biology to conservation and management of wild bird and mammal habitats including statistical and field applications.

WILD 374 - Hunter Check Station. 1 Credit.

(R-2) Offered autumn. Students learn techniques for determining species, age and sex of game animals, then work 3-5 days as volunteers at hunter check stations operated by management agencies.

WILD 391 - Special Topics. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

WILD 392 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Course material appropriate to the needs and objectives of the individual student.

WILD 398 - Internship. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of department. Extended classroom experience that provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

WILD 408 - Advanced Fisheries. 3 Credits.

Offered spring. Prereq., WRIT 101 or equivalent and BIOO 340. Quantitative analysis and interpretation of fish populations and community data for use in management. Selection, application and evaluation of management techniques. Level: Undergraduate-Graduate
Gen Ed Attributes: Advanced Writing

WILD 410 - Wildlife Policy & Biopolitics. 3 Credits.

Offered spring, odd years. Prereq., junior standing. Overview of the laws affecting wildlife and how those laws are initiated, implemented, and enforced; impact of politics, interest groups, and agency jurisdictions. Level: Undergraduate-Graduate

WILD 470 - Conservation of Wildlife Populations. 4 Credits.

Offered autumn and spring. Prereq., WRIT 101 or equivalent, BIOE 370, M 162 or M 171, STAT 216 or WILD 240, and senior standing in Biology, Forestry, Resource Conservation, Recreation Management or Wildlife Biology. Application of population ecology principles and theory to the conservation and management of wildlife populations. Level: Undergraduate-Graduate
Gen Ed Attributes: Advanced Writing

WILD 472 - Wildlife Handling & Chemical Immobilization. 2 Credits.

Offered spring. Principles of wildlife chemical immobilization for researchers and managers. Ethical and legal issues, field organization, animal care and handling, immobilizing drugs, drug delivery systems, animal monitoring and veterinary emergencies. No labs. Level: Undergraduate-Graduate

WILD 480 - The Upshot--Applied Wildlife Management. 3 Credits.

Offered spring. Prereq/Coreq., WILD 370, WILD 408 or WILD 470. Designed for students to apply their knowledge in the development of wildlife management planning. Level: Undergraduate-Graduate

WILD 485 - Aquatic Invertebrate Ecology. 3 Credits.

Offered autumn. This course is designed to provide students an understanding of the life histories, ecology and importance of macroinvertebrates in freshwater aquatic systems. The primary focus will be on insects, although an introduction to other invertebrates will also be included. The lab portion will involve identification of major groups of aquatic macroinvertebrates and participation in an environmental assessment using invertebrates as indicators of stream condition and restoration efficacy. Level: Undergraduate

WILD 491 - Special Topics. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, new courses, or one-time offerings of current topics. Level: Undergraduate-Graduate

WILD 492 - Independent Study. 1-10 Credits.

(R-10) Offered every term. Prereq., consent of instr. Original investigations or problems not related to student's thesis. Level: Undergraduate

WILD 494 - Senior Wildlife Seminar. 1 Credit.

Offered autumn and spring. Prereq., senior standing in wildlife biology or consent of instr. Analysis and discussion led by students of current topics in wildlife biology. Level: Undergraduate-Graduate

WILD 498 - Internship. 1-6 Credits.

Offered every term. Prereq., consent of department. Extended classroom experience that provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation. Level: Undergraduate

WILD 499 - Thesis. 1-3 Credits.

(R-6) Offered autumn and spring. Prereq., consent of instr.; senior standing. Preparation of major paper based on study or research of a topic selected with an advisor according to needs and objectives of student. Level: Undergraduate

WILD 540 - Research Design. 3 Credits.

Offered autumn. Prereq., introductory statistics course or consent of instr. Examination of study designs for experiments, quasiexperiments, observational studies, and sampling surveys with an emphasis on application. Level: Graduate

WILD 541 - Research Design Lab. 1 Credit.

(R-3) Coreq., WILD 540. Students will be expected to learn R programming skills, R data management and R graphing functions as well as an introduction to statistical analysis in R.

WILD 542 - Statistical Applications in Wildlife Biology. 1-2 Credits.

(R-5) Offered autumn odd-numbered years. Explores statistical problems encountered by wildlife biology and ecology graduate students. Students will bring statistical problems of interest to class where, as a group, we will explore analysis options, assumptions, pitfalls, and alternative solutions. Level: Graduate

WILD 545 - Strong Inference Science. 1 Credit.

(R-7) Offered every fall. Graduate level, or consent of instructor for advanced undergraduates. Teach principles and philosophy of conducting strong inference science. Practical application to students own thesis research. Level: Graduate

WILD 562 - Wildlife Habitat Modeling. 4 Credits.

Offered spring, odd years. Prereq., consent of instr. A survey of theory and applications in the study of resource selection by animals. Level: Graduate

WILD 563 - Topics in Habitat Ecology. 1 Credit.

(R-15) Offered every term. Prereq., consent of instr. Discussion of recent scientific papers on advances in ecology, conservation, and population dynamics as related to habitat ecology and conservation. WILD 562 or equivalent strongly recommended. Level: Graduate

WILD 568 - Topics in Aquatic Ecology. 1 Credit.

(R-15) Offered every term. Prereq., consent of instr. Review and synthesis of the scientific literature current issues and analyses in aquatic ecology. We assume a general understanding of fish biology, aquatic ecology, as well as a background in population, community and ecosystem ecological concepts. Level: Graduate

WILD 571 - Estimation of Demographic Parameters. 4 Credits.

Offered autumn of even years. Examines methods for estimating demographic parameters of wildlife populations including survival, fecundity, abundance, and movement. Considers theory of capture-recapture and count-based modeling. Includes maximum likelihood and Bayesian treatments of the problems.

WILD 591 - Special Topics. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

WILD 594 - Graduate Seminar in Wildlife Biology. 1 Credit.

(R-15) Offered autumn and spring. Prereq., graduate standing in wildlife biology or Fish Wildlife Biology or consent of instr. Analysis of selected problems in wildlife biology and conservation. Level: Graduate

WILD 595 - Special Topics. 1-12 Credits.

(R-20) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics. Level: Graduate

WILD 596 - Independent Study. 1-15 Credits.

(R-15) Offered every term. Prereq., graduate standing and consent of instr. Original investigations or problems not related to student's thesis. Level: Graduate

WILD 597 - Research. 1-15 Credits.

(R-15) Offered every term. Prereq., graduate standing in wildlife biology or consent of instr. Graded pass/not pass only. Level: Graduate

WILD 599 - Professional Paper. 1-15 Credits.

(R-15) Offered every term. Prereq., graduate standing in wildlife biology and consent of instr. Professional paper written in the area of the student's major interest based on either primary or secondary research. Subject matter must be approved by graduate committee. Graded pass/not pass only. Level: Graduate

WILD 697 - Research. 1-20 Credits.

(R-20) Offered every term. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate

WILD 699 - Thesis. 1-20 Credits.

(R-20) Offered every term. Prereq., graduate standing in wildlife biology. Preparation of thesis. Level: Graduate