## Wildlife Sciences - WILD

## Courses

WILD 1050 INTRODUCTION TO FIREARMS, HUNTING, AND CONSERVATION (2) LEC. 2. Introduction to firearms, proper and safe use of firearms for hunting, how and why people hunt, the important social, economic, and biological role hunting plays in the conservation of wildlife. Course will provide students with basic technical knowledge of firearms and safe handling practices for completion of the Alabama Hunter Education program.

WILD 1100 WILDLIFE FOOD PLOT ESTABLISHMENT (2) LEC. 2. Fundamental concepts, issues, and concerns related to wildlife food plots and practical procedures for establishment of wildlife food plots.

WILD 1200 HUNTING AND FISHING THE WORLD (3) LEC. 3. Provides students with an introduction to the diversity of hunting and fishing opportunities available worldwide, the types of businesses that cater to these opportunities, and how these recreational activities contribute to game conservation and management.

WILD 1300 WILDLIFE: PEOPLE, ANIMALS, AND THEIR INTERACTIONS (3) LEC. 3. This course offers a general survey of wildlife, including basic ecology, characteristics of wildlife, their habitats, and methods of conserving species. Human interactions with wildlife, as well as the impacts of human activities on wildlife, will be explored.

WILD 1400 BIODIVERSITY IN A CHANGING WORLD (3) LEC. 3. The science of biodiversity focuses on understanding patterns and trends in the variability of life on Earth. This course explores how this diversity arose, the ecological forces that shape it, the consequences of its loss, and the steps we can take to conserve it.

WILD 2050 WILDLIFE CONSERVATION HISTORY AND LAW (3) LEC. 3. The history of wildlife conservation in North America, the conservation problems that have arisen since European settlement, and the laws and practices that have evolved to remedy them.

WILD 2400 SPORTING FIREARMS AND ARCHERY (2) LEC. 2. Provides students with a thorough understanding of the role of sporting firearms and archery equipment in hunting and the wildlife enterprise management field, including the variety of equipment available and their effectiveness with different game species.

WILD 2410 INTRODUCTION TO PISTOL (2) LLB. This course introduces the students to the basic knowledge, skills, and attitude necessary for owning and using a pistol safely. Through this course, the students will learn about pistol parts and operation, ammunition, gun safety, pistol shooting fundamentals, and pistol shooting activities. Instruction will primarily utilize air-powered pistols and move up to .22 rimfire pistols the last few weeks of class.

WILD 2420 INTRODUCTION TO ARCHERY (2) LEC/LLB. This course introduces the students to the basic knowledge, skills, and attitude necessary for owning and using archery equipment safely. Through this course, the students will learn about archery equipment and operation, archery safety, shooting fundamentals, and shooting activities. Instruction will primarily utilize Genesis (compound) and recurve bows.

WILD 3280 WILDLIFE ECOLOGY, CONSERVATION, AND MANAGEMENT (3) LEC. 3. Pr. BIOL 1030 or BIOL 1037. Fundamentals of wildlife management theory, application, and administration.

WILD 3287 HONORS WILDLIFE ECOLOGY, CONSERVATION, AND MANAGEMENT (3) LEC. 3. Pr. Honors College. BIOL 1030 or BIOL 1037. Fundamentals of wildlife management theory, application, and administration.

WILD 3500 OUTDOOR SAFETY AND LIABILITY (1) LEC. 1. Exposes students to the safety and liability risks associated with outdoor activities that are common in the wildlife enterprise industry. Students will learn techniques to meet the needs of clientele, while maximizing revenue and minimizing risks.

WILD 3600 WILDLIFE ENTERPRISE FIELD TECHNIQUES (4) LEC. 3. LAB. 2. Pr. WILD 3280. Equip students majoring in wildlife enterprise management with the technical skills to complete a variety of tasks related to wildlife habitat and population management on private properties used in recreational or lodge enterprises.

WILD 3800 INTRODUCTION TO WILDLIFE MANAGEMENT IN SOUTHERN AFRICA (1) LEC. 1. Pr. WILD 2050 and WILD 3280. Provide students with knowledge of important wildlife management issues in southern Africa. Students will develop an understanding of pressing wildlife management issues in the region and learn how to apply that knowledge to future learning.

WILD 3810 STUDY ABROAD - WILDLIFE MANAGEMENT IN SOUTHERN AFRICA (3) AAB. 60. Pr. WILD 3800. Travel overseas to Swaziland and South Africa to engage in many of southern Africa's most pressing wildlife management issues.

WILD 3920 INTERNSHIP IN WILDLIFE ENTERPRISE MANAGEMENT (3) INT. This class is a supervised work experience in a Wildlife Enterprise Management (WLEM) setting for a minimum of 400 hours for at least 10 consecutive weeks and may be repeated for a maximum of 6 hours credit. The mission of WLEM is to prepare professionally competent individuals who will make a contribution to the Wildlife Enterprise Management industry.

WILD 4340 CONSERVATION GENETICS (3) LEC. 3. Pr. BIOL 1020 or BIOL 1023 or BIOL 1027. The science of how populations genetics have been affected by habitat loss, over-exploitation, or environmental change, with a focus on inheritance and evolution, and with the goal of informing conservation and management.

WILD 4400 PROBLEM SOLVING IN WILDLIFE SCIENCES (2) LEC. 2. Pr. (WILD 3280 or WILD 3287) and P/C WILD 5750. Applied training and tools used to solve problems in wildlife science.

WILD 4500 ADVANCED WILDLIFE ENTERPRISE MANAGEMENT (3) LEC. 3. Pr. (WILD 3280 or WILD 3287) and HOSP 2350. Integration and synthesis of the skills learned throughout the Wildlife Enterprise Management curriculum. Because wildlife enterprises are unique in the business world, students will learn to apply various material from previous courses to managing a wildlife enterprise.

WILD 4750 CONSERVATION BIOLOGY OF THE HAWAIIAN ISLANDS (3) FLD. 1. Pr. BIOL 3060 or WILD 3280 or WILD 3287 or FORY 4230 or FOWS 5220. Hawaii is the endangered species and invasive species capital of the world. As a model system, the course will focus on the management of threatened and endangered species and invasive species. Direct interaction with practitioners and visiting active management locations will be a key component. May need instructor permission.

WILD 4890 WILDLIFE POPULATION SCIENCE (3) LEC. 2. LAB. 2. Pr. (WILD 3280 or WILD 3287) and WILD 5750 and BIOL 3060. WILD 3280 or WILD 3287 & WILD 5750 with a C or better; BIOL 3060. Principles of wildlife population dynamics, estimation of population parameters, and application of these principles and techniques to wildlife conservation and management.

WILD 4910 WILDLIFE SCIENCES SUMMER PRACTICUM (8) PRA. 8. Pr. (WILD 5750 and WILD 4400 and BIOL 3060 and FORY 3100) or (BIOL 5120) and (BIOL 5740 or BIOL 5750 or BIOL 5760 or FISH 5380). Training and tools for wildlife ecology, conservation, and management, with emphasis on applied problem-solving. Summer.

WILD 4920 WILDLIFE MANAGEMENT INTERNSHIP (4) PRA. 4. SU. Departmental approval. Practical job experience under joint supervision of the Internship advisor and appropriate state, federal, or private agency. Training will prepare student for potential career employment.

WILD 4930 DIRECTED STUDIES (1-3) IND. Course may be repeated for a maximum of 6 credit hours.

WILD 4970 SPECIAL TOPICS (1-4) AAB. Course may be repeated for a maximum of 8 credit hours.

WILD 4997 HONORS THESIS (1-6) IND. Pr. Honors College. Departmental approval. Directed research and writing of honors thesis. Course may be repeated for a maximum of 6 credit hours.

WILD 5140 PLANT ECOLOGY (4) LEC. 3. LAB. 4. Pr. (BIOL 1030 or BIOL 1037) and BIOL 3060. Exploration of ecological interactions between plants and their environment. Field trips emphasize Southeastern habitats/plant examples. Includes 3-day weekend field trip.

**WILD 5200 DISEASE ECOLOGY (3)** LEC. 3. Pr. BIOL 1030. An ecological approach to traditional microbiology and parasitology by applying principles of population biology to understand disease dynamics in wildlife. Topics include: classification of infectious diseasecausing agents, their life cycles, and transmission patterns; dynamics at the individual and host levels; ecologically informed strategies to control diseases; and current topics.

WILD 5280 AVIAN ECOLOGY AND MANAGEMENT (2) LEC. 2. Pr. (WILD 3280 or WILD 3287 or WILD 3280 or WILD 3287) and BIOL 3060. Intensive study of the ecology and management of selected waterfowl, galliforms, gruiforms, raptors, shorebirds, doves and pigeons, woodpeckers and neotropical migrants.

WILD 5290 MAMMALIAN ECOLOGY AND MANAGEMENT (2) LEC. 2. Pr. (WILD 3280 or WILD 3287 or WILD 3280 or WILD 3287) and BIOL 3060. WILD 3280 or WILD 3287 (C or better) and BIOL 3060. Intensive study of the ecology and management of selected artiodactyls, rodents, lagomorphs, bats, carnivores, and herps.

WILD 5300 CONSERVATION BIOLOGY OF THE HAWAIIAN ISLANDS (3) FLD. 3. Pr. BIOL 3060 or WILD 3280 or WILD 3287 or FORY 4230 or FOWS 5220. Hawaii is the endangered species and invasive species capital of the world. As a model system, the course will focus on the management of threatened and endangered species and invasive species. Direct interaction with practitioners and visiting active management locations will be a key component. May need instructor permission.

WILD 5350 CONSERVATION GENETICS (3) LEC. 3. Pr. BIOL 1020 or BIOL 1023 or BIOL 1027. The science of how populations genetics have been affected by habitat loss, over-exploitation, or environmental change, with a focus on inheritance and evolution, and with the goal of informing conservation and management.

WILD 5410 HUMAN-WILDLIFE CONFLICTS (3) LEC. 2. LAB. 1. Pr. WILD 3280. Familiarizes students with basic philosophy, biology, and techniques related to managing negative human wildlife interactions.

WILD 5750 ANALYSIS FOR ENVIRONMENTAL AND HEALTH SCIENCES (4) LEC. 3. LAB. 2. Pr. STAT 2010 or STAT 2017 or STAT 2510 or STAT 2513 or STAT 2610 or STAT 3010. Applied training in data analysis tools commonly used in environmental and health sciences.

WILD 5880 WILDLIFE HABITAT ASSESSMENT AND MANAGEMENT (4) LEC. 3. LAB. 4. Pr. (WILD 3280 or WILD 3287 or WILD 3280 or WILD 3287) and BIOL 3060. BIOL 3060 and C or better in WILD 3280 or WILD 3287. The wildlife value, management, and restoration of common southeastern habitats.

WILD 5950 SEMINAR (1) SEM. 1. Pr. BIOL 3060 or WILD 3280 or FORY 4230. Discussion of scientific publications from a selected area in wildlife sciences. Course may be repeated for a maximum of 6 credit hours.

**WILD 6140 PLANT ECOLOGY (4)** LEC. 3. LAB. 4. Exploration of ecological interactions between plants and their environment. Field trips emphasize Southeastern habitats/plant examples. Includes 3-day weekend field trip.

WILD 6200 DISEASE ECOLOGY (3) LEC. 3. An ecological approach to traditional microbiology and parasitology by applying principles of population biology to understand disease dynamics in wildlife. Topics include: classification of infectious disease-causing agents, their life cycles, and transmission patterns; dynamics at the individual and host levels; ecologically informed strategies to control diseases; and current topics.

WILD 6280 AVIAN ECOLOGY AND MANAGEMENT (2) LEC. 2. Pr. WILD 3280. Intensive study of the ecology and management of selected waterfowl, galliforms, gruiforms, raptors, shorebirds, doves and pigeons, woodpeckers and neotropical migrants.

WILD 6290 MAMMALIAN ECOLOGY AND MANAGEMENT (2) LEC. 2. Pr. WILD 3280. Intensive study of the ecology and management of selected artiodactyls, rodents, lagomorphs, bats, carnivores, and herps.

WILD 6300 CONSERVATION BIOLOGY OF THE HAWAIIAN ISLANDS (3) FLD. 3. Pr. FOWS 6220. Hawaii is the endangered species and invasive species capital of the world. Using it as a model system, the focus will be on the management of threatened and endangered species and invasive species. Direct interaction with practitioners and visiting active management locations will be a key component of the course. Instructor permission.

WILD 6410 HUMAN-WILDLIFE CONFLICTS (3) LEC. 2. LAB. 1. This course is designed to familiarize students with the basic philosophy, biology, and techniques related to managing negative human wildlife interactions.

WILD 6750 ANALYSIS FOR ENVIRONMENTAL AND HEALTH SCIENCES (4) LEC. 3. LAB. 1. Applied training in data analysis tools commonly used in environmental and health sciences.

WILD 6880 WILDLIFE HABITAT ASSESSMENT AND MANAGEMENT (4) LEC. 3. LAB. 1. Pr. WILD 3280. C or better in WILD 3280. The wildlife value, management, and restoration of common southeastern habitats.

WILD 6950 SEMINAR (1) SEM. Discussion of scientific publications from a selected area in wildlife sciences. Course may be repeated for a maximum of 6 credit hours.

WILD 7100 APPLIED ECOLOGICAL MODELING (2) LEC. 2. Principles and techniques for modeling ecological systems in applied, management decision oriented contexts.

WILD 7150 ADVANCED ANALYSIS FOR ECOLOGICAL SCIENCES (4) LEC. 3. LAB. 2. Pr. STAT 7000 or AGRI 5010 or AGRI 5013 or AGRI 6010 or AGRI 6013 or WILD 5750 or WILD 6750. Departmental approval. Applied training in advanced analytical procedures commonly used in ecological sciences including modeling of survival, reproduction, habitat selection, population growth, density-dependence, and morphometrics.

WILD 7200 WILDLIFE NUTRITIONAL ECOLOGY (3) LEC. 3. Exploration of the basic nutrient requirements of free-ranging wildlife and comparison of requirements to related domestic species.

WILD 7250 WILDLIFE POPULATION ANALYSIS (3) LEC. 2. LAB. 3. Pr. P/C WILD 7150. Estimation of survival and success rates for wildlife and fisheries populations. Theoretical approaches for model selection and population modeling.

WILD 7300 STRUCTURED DECISION MAKING IN NATURAL RESOURCES MANAGEMENT (1-3) LEC. 2. LAB. 1. Structured Decision Making (SDM) is a common-sense framework for addressing decision problems amenable to logical decomposition and analysis. Through this course, students will become familiar with principles and tools of SDM and begin applying skills and concepts to conservation and management decision problems. This course will build a foundation that increasingly is essential for most professional biologists working in resource management positions or conducting applied field research. The intended audience of this course includes graduate students in wildlife, forestry, natural resources, biology, fisheries, or any other field who work with applied natural resource management issues. Course may be repeated for a maximum of 5 credit hours.

WILD 7310 CURRENT TOPICS IN WILDLIFE HEALTH (1) DSL. This course focuses on free-ranging wildlife and wildlife health topics within the broader context of One Health and functional ecosystems. Course may be repeated for a maximum of 2 credit hours.

WILD 7340 CONSERVATION GENETICS (3) LEC. 3. The science of how populations genetics have been affected by habitat loss, over-exploitation, or environmental change, with a focus on inheritance and evolution, and with the goal of informing conservation and management.

WILD 7400 DEVELOPING AGENT-BASED MODELS FOR WILDLIFE (3) LEC. 2. LAB. 1. Departmental approval. Course will use lecture and hands-on coding exercises designed to introduce students to agent-based models in wildlife sciences. The course lectures will include coding best practices such as organization, archiving, and version control, as well as wildlife and evolution-specific factors to consider when creating a models.

WILD 7650 INTRODUCTION TO BAYESIAN MODELING IN NATURAL RESOURCES (2) LEC. 1. LAB. 1. Pr. WILD 7150. or instructor approval. Bayesian hierarchical modeling of ecological data. Advantages and criticisms of such models. Use of software for hierarchical modeling.

WILD 7930 DIRECTED STUDIES (1-3) IND/LEC. Departmental approval. Directed studies in subject matter not covered by an existing course or to supplement knowledge gained from existing course offerings. Course may be repeated for a maximum of 9 credit hours.

WILD 7970 SPECIAL TOPICS (1-4) IND. Departmental approval. Provides graduate students seeking the master's degree opportunities to work with individual wildlife science professors to investigate timely research topics. Course may be repeated for a maximum of 12 credit hours.

WILD 7990 RESEARCH AND THESIS (1-12) MST. Credit to be arranged.

WILD 8930 DIRECTED STUDIES (1-3) IND. Course may be repeated for a maximum of 9 credit hours.

WILD 8970 SPECIAL TOPICS (1-4) RES. Departmental approval. Provides graduate students seeking the doctoral degree opportunities to work with individual wildlife science professors to investigate timely research topics. Course may be repeated for a maximum of 12 credit hours.

WILD 8990 RESEARCH AND DISSERTATION (1-12) DSR.