

WFSC - WILDLIFE & FISHERIES SCI

WFSC 618 Wildlife Study Design and Analysis

Credits 3. 3 Lecture Hours. Fundamental and advanced aspects of study design applicable to terrestrial animals; analysis and review of the scientific literature related to study design; and the development of study design for written and oral presentations. **Prerequisite:** Graduate classification or approval of instructor.

WFSC 619 Wildlife Restoration

Credits 3. 2 Lecture Hours. 3 Lab Hours. Study of the fundamentals of the restoration of animal populations and the resources they require; factors that control the distribution and abundances of animals in relation to restoration; and how restoration plans for wildlife are developed. **Prerequisite:** Graduate classification or approval of instructor.

WFSC 623 Aquaculture

Credits 4. 3 Lecture Hours. 3 Lab Hours. Principle of fish production for stock enhancement and human food. Species of fish used for production, cross-breeding and selection; feeds and feeding of fish and nutritional and environmental requirements for optimum productivity; effects of fish production on land and water uses as related to conservation. **Prerequisite:** Graduate classification or approval of instructor.

WFSC 627 Ecological Risk Assessment

Credits 3. 3 Lecture Hours. Approaches used to identify, evaluate and manage ecological risks of chemicals on aquatic and terrestrial environments; emphasis on methods useful to assess effects of contaminants on ecosystems; testing techniques, site assessment and monitoring procedures, regulatory requirements and field and laboratory techniques. Only one of the following will satisfy the requirements for a degree: WFSC 627 or WFSC 639.

WFSC 628 Wetland Ecology and Pollution

Credits 3. 3 Lecture Hours. Wetlands as ecological systems that are prime habitats for wildlife and fish; geomorphology, hydrology, limnology, plant and animal communities, and humans use and management; wetlands as ultimate reservoirs of environmental pollutants; distribution, fate and effects of environmental pollutants on aquatic and terrestrial wildlife. **Prerequisite:** Graduate classification or approval of instructor.

WFSC 630 Ecology and Society

Credits 3. 3 Lecture Hours. Study and compare human and natural ecosystems using diversity, interrelations, cycles, and energy as the conceptional organization; central themes of the course are sustainability, stewardship and science. **Prerequisite:** Graduate classification or approval of instructor.

WFSC 636 Wildlife Habitat Management

Credits 3. 3 Lecture Hours. Designed to acquaint with major land use practices on lands that produce wildlife, how these influences wildlife production and alterations or manipulations of habitat used to achieve specific wildlife management goals. **Prerequisite:** Graduate classification or approval of instructor.

WFSC 637/VTMI 631 Wildlife Diseases

Credits 3. 3 Lecture Hours. Overview of diseases that affect populations of wild mammals, birds, amphibians and reptiles; emphasis on diseases that are transmissible to humans or domestic animals and those found in Texas. **Cross Listing:** VTMI 631/WFSC 637.

WFSC 638 Techniques of Wildlife Management

Credits 3. 2 Lecture Hours. 3 Lab Hours. Techniques available to directly and indirectly manipulate wild animal populations to achieve balance between socioeconomic and aesthetic values. **Prerequisite:** Graduate classification or approval of instructor.

WFSC 639 Wildlife Ecotoxicology

Credits 3. 3 Lecture Hours. Distribution, fate, and effects of environmental pollutants on wildlife behavior and reproduction. Global distribution of pollutants and effects on near and remote ecosystems. Field studies, biomarkers, stable isotope and various techniques for evaluating pollutant hazards on wildlife. Only one of the following will satisfy the requirements for a degree: WFSC 627 or WFSC 639. **Prerequisites:** Courses in CHEM and BICH and graduate classification or approval of instructor.

WFSC 641 Sustainable Military Land Management

Credits 3. 3 Lecture Hours. Overview of the Department of Defense (DOD) lands within a temporal, geographic, and environmental context and perspective; major policies/laws impacting military land use and areas critical to mission sustainment; management strategies important to sustaining installations and ranges. **Prerequisite:** Graduate classification or approval of instructor.

WFSC 642 Field Military Land Management

Credit 1. 0 Lecture Hours. 2 Lab Hours. Review of land management practices and challenges on military and adjacent private lands through field visits of select military installations. Field trips required. Previous or concurrent registration in WFSC 636 is strongly encouraged. **Prerequisite:** Graduate classification or approval of instructor.

WFSC 644 Wildlife and Natural Resource Policy

Credits 3. 3 Lecture Hours. Review formation and implementation of major natural resource laws and policies that impact land uses; overview of natural resource laws/policies followed by presentations of a selected case study; current natural resource management (including forestry, air, water, wildlife, climate change and energy) programs and institutions analyzed and related to current natural resource policy challenges.

WFSC 681 Seminar

Credit 1. 1 Lecture Hour. Important current developments in wildlife or fisheries fields with special reference to literature. Students may register up to but no more than two sections of this course in the same semester.

WFSC 684 Professional Internship

Credits 1 to 16. 1 to 16 Other Hours. On-the-job training in fields of wildlife and fisheries sciences. **Prerequisite:** Graduate classification in Wildlife and Fisheries Sciences.

WFSC 685 Directed Studies

Credits 1 to 6. 1 to 6 Other Hours. Individual study and research on selected problem approved by instructor and graduate advisor. Credit adjusted in accordance with requirements of each individual case.

Prerequisite: Approved proposal.

WFSC 689 Special Topics in...

Credits 1 to 4. 1 to 4 Lecture Hours. 0 to 4 Lab Hours. Special topics in wildlife ecology, fisheries ecology, vertebrate systematics, evolutionary biology of vertebrates and conservation education. May be repeated for credit.

WFSC 691 Research

Credits 1 to 23. 1 to 23 Other Hours. Original research on selected wildlife and/or fisheries problem to be used in thesis or dissertation.