Wildlife, Fish, & Conservation Biology
TA Supported Courses

WFC 10 – Wildlife Ecology and Conservation. (F&S) Introduction to the ecology and conservation of vertebrates. Complexity and severity of world problems in conserving biological diversity.

WFC 50 – Natural History of California's Wild Vertebrates. (F&S) Examination of the natural history of CA's wild vertebrates, including their biogeography, systematics, ecology, and conservation status.

WFC 100 – Field Methods in Wildlife, Fish, and Conservation Biology. (S) Introduction to field methods for monitoring and studying wild vertebrates and their habitats, with an emphasis on ecology and conservation. Required weekend field trips.

WFC 103- Wildlifer's Quantitative Toolkit. (W) Fish and wildlife science relies on our ability to enumerate things (animals, habitat, etc.) and explain patterns in those numbers. These patterns help us understand how organisms react to their environment. This course introduces principles of developing research projects, basic probability theory, and statistical estimation and mathematical modeling, in the context of fish and wildlife research. It fosters an understanding of the quantitative nature of this area of research.

WFC 110/110L – Laboratory in Biology and Conservation of Wild Mammals. (S) Laboratory exercises in the morphology, systematics, species identification, anatomy, and adaptations of wild mammals to different habitats.

WFC 111/111L – Laboratory in Biology and Conservation of Wild Birds. (F) Laboratory exercises in bird species identification, anatomy, molts, age and sex, specialized adaptations, behavior, research, with emphasis on conservation of wild birds.

WFC 120/120L – Biology and Conservation of Fishes. (F) Evolution, ecology, and conservation of marine and freshwater fishes. Lab portion teaches morphology, taxonomy, conservation, and identification of marine and freshwater fishes with emphasis on California species.

WFC 122. Population Dynamics and Estimation (4)
Offered every Winter quarter. Offered Spring 2022.
Lecture--3 hours; laboratory--3 hours. Prerequisite: Mathematics 16A-16B; Statistics 13 or the equivalent; an upper division course in ecology. Description of bird, mammal and fish population dynamics, modeling philosophy, techniques for estimation of animal abundance (e.g., mark-recapture, change-in-ratio, etc.), mathematical models of populations (e.g., Leslie matrix, logistic, dynamic pool, stock-recruitment); case histories.

WFC 124- Sampling Animal Populations. (S) Understanding species distribution, habitat use, population size and dynamics is key to wildlife ecology, management and conservation. Learn about state-of-the-art statistical methods to estimate these and other important parameters from typical field survey data, while getting hands-on experience in R.

125. Tropical Ecology and Conservation (4)
Offered Fall quarter in even numbered years. Karp
Lecture--3 hours; discussion--1 hour. Prerequisite(s): EVE 101 or ESP 100. Ecology and natural history of the tropics. Challenges and opportunities associated with tropical conservation. Design and communicate course-based research project. Only 2 units credit allowed to students who have completed EVE 138.

126. Conservation in Working Landscapes (4)
Offered Fall quarter in odd numbered years. Karp
Lecture--3 hours; discussion--1 hour. Prerequisite(s): BIS 002B; (EVE 101 or ESP 100 recommended but not required); or Consent of Instructor. Ecology, natural history, and conservation of working landscapes. Critical evaluation of tradeoffs (and potential synergies) that arise when simultaneously pursuing conservation, food production, and human livelihood objectives in crop fields, pastures, settlements, forestry systems, and patches of semi-natural habitat.

WFC 130 – Physiological Ecology of Wildlife. (W) Principles of physiological ecology, emphasizing vertebrates. Ecological, evolutionary, and behavioral perspectives on physiological mechanisms used by animals to adapt to their environment, in the context of climate-change and other threats to biodiversity. Tropical, temperate, and polar ecosystems are highlighted.

WFC 134/134L- Herpetology Laboratory. (W) Evolution and Ecology 101 or Environmental Science and Policy 100 or equivalent upper division course recommended; course 134 concurrently; consent of instructor. Diagnostic characteristics and functional attributes of amphibians and reptiles, emphasizing ecological, bio-geographic and phylogenetic patterns. Field experience with common species of reptiles and amphibians in the Davis area.

WFC 151 – Wildlife Ecology. (F) Ecology of wild vertebrates, including habitat selection, spatial organization, demography, population growth and regulation, competition, predation, and community dynamics, set in the context of human-caused degradation of environments in North America.

152. Ecology of Human-Wildlife Conflict (3)
Offered Winter quarter in odd numbered years. Van Vuren
Lecture--3 hours. Prerequisite: BIS 002B; Or equivalent. Ecological approaches to managing wild vertebrates that cause problems for agriculture, public health, or conservation of biodiversity.

WFC 154 – Conservation Biology. (W) Introduction to conservation biology and the biological issues and controversies surrounding the loss of species and habitats.

155*. Wildlife Space Use and Habitat Conservation (4)
Lecture--3 hours; discussion--1 hour. EVE 101 or ESP 100; or the equivalent of EVE 101 or ESP 100. Relationships between habitat characteristics and wildlife behavior/ecology, principles of habitat conservation and management.

WFC 168- Climate Change Ecology. (W) Ecological responses of individuals, populations, and communities to environmental variation, with emphasis on climate change.

Wildlife, Fish, & Conservation Biology
Teaching Assistant and Reader Application
Academic Year 2022-2023

Name: _____

Home Address: _____

Telephone: _____

Email: _____

Student ID#: _____

___ Current Full-Time Registered Grad Student

___ Entering Fall 2022

Home Department: _____

Graduate Program: _____

Major Professor: _____

____ I plan to attend TA orientation in September 2021.

____ I have previously completed TA orientation.

List course numbers for which you are qualified and seek appointment, in order of personal priority. Justify each of your choices on the next page.

COURSE and AVAILABILITY

Fall 2022:

Winter 2023:

Spring 2023:

SUMMARY OF ALL TEACHING EXPERIENCE, INCLUDING UCD. Indicate TA or Reader.

Institution	Course	Quarter/Year	Instructor

GPA (minimum 3.00 required; specify institution if other than UCD): UG _____ G _____

List of attachments recommended: (IT IS THE STUDENT'S RESPONSIBILITY TO COMPLETE THIS FILE.)

Graduate and undergraduate transcripts, if available.
Summaries of evaluations from previous teaching experience, as available. Current letters of recommendation, optional.

NOTE: New students need not submit letters of recommendation or transcripts separately from those originally submitted with their application materials. Submit your file to Erica Cefalo at emcefalo@ucdavis.edu

Describe why you are particularly well qualified to teach or read for each of the courses you've identified in this application; you may combine courses with similar requirements. **BE SPECIFIC**. Please include relevant course preparation, field experience, or prior teaching qualifications. Attach additional pages, as needed.