

ZOOLOGY (ZOOLOGY)

ZOOLOGY/BIOLOGY 101 – ANIMAL BIOLOGY

3 credits.

General biological principles. Topics include: evolution, ecology, animal behavior, cell structure and function, genetics and molecular genetics and the physiology of a variety of organ systems emphasizing function in humans. Enroll Info: Not recommended for students with credit already in Zoology/Biology/BOTANY/BIOLOGY/ZOOLOGY 151 or 152

Requisites: None

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Summer 2021

ZOOLOGY/BIOLOGY 102 – ANIMAL BIOLOGY LABORATORY

2 credits.

General concepts of animal biology at an introductory level. The general body plans and strategies used to accomplish the basic tasks of staying alive of 9 major animal groups are studied using preserved and live animals. The diversity within each group of animals is studied by integrating the body plans with the lifestyle and ecology of the animals. The evolutionary relationships between the animals is a major part of the course. Dissections of earthworm, freshwater mussel, squid, sea star, and rat also aid the study of these general principles. Enroll Info: Not recommended for students with credit already in Zoology/Biology/BOTANY/BIOLOGY/ZOOLOGY 151/152

Requisites: None

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Summer 2021

ZOOLOGY/BIOLOGY/BOTANY 151 – INTRODUCTORY BIOLOGY

5 credits.

First semester of a two semester course designed for majors in biological sciences. Topics include: cell structure and function, cellular metabolism (enzymes, respiration, photosynthesis), information flow (DNA, RNA, protein), principles of genetics and selected topics in Animal Physiology. HS chem or concurrent registration in college chemistry strongly advised. Enroll Info: Not recommended for students with credit already in Zoo/Bio 101, 102 or Botany/Bio 130

Requisites: None

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY/BIOLOGY/BOTANY 152 – INTRODUCTORY BIOLOGY

5 credits.

Second semester of a two semester course designed for majors in biological sciences. Continuation of 151. Topics include: selected topics in plant physiology, a survey of the five major kingdoms of organisms, speciation and evolutionary theory, and ecology at multiple levels of the biological hierarchy. Enroll Info: Biology/Botany/ZOOLOGY/BIOLOGY/BOTANY 151. Not recommended for students with credit already in Zoology/BIOLOGY/ZOOLOGY 101,102 or Botany/BIOLOGY/BOTANY 130

Requisites: ZOOLOGY/BIOLOGY/BOTANY 151

Course Designation: Gen Ed - Communication Part B

Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY 153 – INTRODUCTORY BIOLOGY

3 credits.

One-semester course designed for engineering majors including chemical and biological engineering. Topics include: cell structure and function, cellular metabolism (enzymes, respiration, photosynthesis), information flow (DNA, RNA, protein), principles of genetics, and selected topics in Animal Physiology. Enroll Info: Meets with Zoology/Biology/BOTANY/BIOLOGY/ZOOLOGY 151. Engineering students who need a biology course with a lab component should enroll in Zoology/biology/BOTANY/BIOLOGY/ZOOLOGY 151. Concurrent registration in college chemistry strongly advised. Not recommended for students with credit already in Zoo/Bio 101, 102 or Botany/Bio 130

Requisites: Declared in an Engineering program

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY/PL PATH 154 – TINY EARTH: ANTIBIOTIC DISCOVERY RESEARCH

2 credits.

Learn basic methodology in scientific research and discovery, including laboratory techniques, quantitative reasoning, scientific communication, and collaboration. Gain hands-on laboratory experience working with microbes to test original hypotheses concerning the discovery of potential antibiotic compounds while addressing the world's antibiotic resistance crisis by contributing data to the global "Tiny Earth" network of researchers to advance potential drug development. Tiny Earth seeks to encourage students to pursue careers in science through real-world, applied research experiences and aims to address a worldwide health threat of the diminishing supply of effective antibiotics by "student-sourcing antibiotic discovery." Enroll Info: Concurrent enrollment in BIOLOGY/BOTANY/ZOOLOGY 152 is required for permission to enroll.

Requisites: Consent of instructor

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY 199 – DIRECTED STUDY

1-3 credits.

Recommended for Fr and So. Enroll Info: None

Requisites: Consent of instructor

Course Designation: Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Fall 2020

ZOOLOGY/BOTANY/ENVIR ST 260 – INTRODUCTORY ECOLOGY

3 credits.

For nonbiology students: the relationships of organisms and the environment. Population dynamics and community organization, human-environment relationships, action programs. Enroll Info: Open to Freshmen. Does not count toward Botany or Zoology major

Requisites: None

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Sustain - Sustainability

Repeatable for Credit: No

Last Taught: Summer 2021

ZOOLOGY 299 – DIRECTED STUDIES IN ZOOLOGY

1-3 credits.

Intermediate level directed study/independent research. The purpose of this course to introduce undergraduate students to research questions and, facilitate their learning in the field of biology by providing them with guidance and mentorship in a research environment. Enroll Info: None

Requisites: Consent of instructor

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2021

ZOOLOGY 300 – INVERTEBRATE BIOLOGY AND EVOLUTION

3 credits.

Provides an introduction to invertebrate diversity and biology, with emphasis on anatomy, development, and systematic relationships of the main animal phyla. Phyla are discussed in the context of major themes in animal evolution, such as the origin of tissue layers, the diversity of feeding mechanisms, the evolution of terrestrialization, patterns of diversification through time, and the conservation of transcriptional circuitry. The aim of this course is to understand animal diversity from a phylogenetic and developmental perspective. Enroll Info: None

Requisites: ZOOLOGY/BIOLOGY 101 and 102; or ZOOLOGY151 and 152; or BIOCORE 381

Course Designation: Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY 301 – INVERTEBRATE BIOLOGY AND EVOLUTION LAB

2 credits.

Provides an introduction to invertebrate diversity and biology, with emphasis on anatomy, development, and systematic relationships of the main animal phyla, in parallel with the Invertebrate Biology and Evolution lecture course. Phyla are discussed in the context of major themes in animal evolution, such as the origin of tissue layers, the diversity of feeding mechanisms, the evolution of terrestrialization, patterns of diversification through time, and the conservation of transcriptional circuitry. The aim of this course is to understand animal diversity from a phylogenetic and developmental perspective. Enroll Info: None

Requisites: Concurrent enrollment in ZOOLOGY 300

Course Designation: Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2019

ZOOLOGY/ENTOM 302 – INTRODUCTION TO ENTOMOLOGY

4 credits.

Principles including morphology and classification; a general collection of insects required of each student. Enroll Info: An elem course in zoology

Requisites: None

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Sustain - Sustainability

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY 303 – AQUATIC INVERTEBRATE BIOLOGY

3 credits.

This course focuses on the form, function, development, basic physiology and ecology of the freshwater and marine invertebrates in the context of their environment. As a lecture and lab combination students will get a chance to study live invertebrate specimens, their habitat selection, adaptation and diversity. Enroll Info: ZOOLOGY/BIOLOGY 101 and ZOOLOGY/BIOLOGY 102 OR Biology 151 and/or BIOLOGY/BOTANY/ ZOOLOGY 152

Requisites: None

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Summer 2016

ZOOLOGY 304 – MARINE BIOLOGY

2 credits.

Explore the biological and ecological systems of the oceans and marginal seas. Focus on understanding how marine organisms interact with their physical environment and how the biological components of the oceans are interconnected through trophic interactions and habitat selection.

Enroll Info: None

Requisites: (ZOOLOGY/BIOLOGY 101 and 102) or ZOOLOGY/BIOLOGY/BOTANY 152 or BIOCORE 381**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Summer 2021**ZOOLOGY/ENVIR ST 315 – LIMNOLOGY-CONSERVATION OF AQUATIC RESOURCES**

2 credits.

General limnology. Physical, chemical and biological characteristics and processes of lakes. Environmental problems and rehabilitation of lakes.

Enroll Info: Intro course in biol; intro course in chem recommended

Requisites: None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Fall 2020**ZOOLOGY 316 – LABORATORY FOR LIMNOLOGY-CONSERVATION OF AQUATIC RESOURCES**

2-3 credits.

Biological, physical, and chemical characteristics and their interrelationships in Wisconsin lakes and streams. Enroll Info: None

Requisites: ZOOLOGY/ENVIR ST 315 or concurrent enrollment**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Fall 2020**ZOOLOGY/F&W ECOL 335 – HUMAN/ANIMAL RELATIONSHIPS: BIOLOGICAL AND PHILOSOPHICAL ISSUES**

3 credits.

An interdisciplinary approach to our complex and often contradictory relationships with non-human animals, including information about the nature, needs and behavior of human and non-human animals in relation to our personal and professional interactions with them. Enroll Info: None

Requisites: Sophomore standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No**Last Taught:** Spring 2015**ZOOLOGY/ENTOM/M M & I/PATH-BIO 350 – PARASITOLOGY**

3 credits.

The biology of water-borne, food-borne, soil-borne and vector-borne parasites of animals including humans. Parasites are explored in the context of transmission, associated disease, diagnosis and treatment options, and environmental, cultural and socioeconomic drivers of disease epidemiology. Enroll Info: None

Requisites: ZOOLOGY/BIOLOGY 101 and 102, or ZOOLOGY/BIOLOGY/BOTANY 152 or ZOOLOGY 153, or BIOCORE 381**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Spring 2021**ZOOLOGY/ENVIR ST/F&W ECOL 360 – EXTINCTION OF SPECIES**

3 credits.

A comprehensive treatment of the ecology, causes, and consequences of species extinction. Ecology and problems of individual species, habitat alteration and degradation, socio-economic pressures and conservation techniques and strategies. Enroll Info: So st. An intro biology course strongly recommended

Requisites: Sophomore standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Sustain - Sustainability

Repeatable for Credit: No**Last Taught:** Summer 2021**ZOOLOGY/ENTOM 371 – MEDICAL ENTOMOLOGY**

3 credits.

Arthropods of medical and veterinary importance, how they affect their hosts and transmit diseases. Enroll Info: Intro course in zool or vet sci

Requisites: None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Sustain - Sustainability

Repeatable for Credit: No**Last Taught:** Spring 2019**ZOOLOGY 400 – TOPICS IN BIOLOGY**

1-3 credits.

Subject matter, credits and prerequisites vary. Enroll Info: Varies

Requisites: None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions**Last Taught:** Spring 2021

ZOOLOGY 405 – INTRODUCTION TO MUSEUM STUDIES IN THE NATURAL SCIENCES

2-3 credits.

Provides an overview of natural history museums, including history, field collecting, specimen preparation, collection preservation, ethics, education and employment opportunities. At the same time, it introduces students to the natural science museums and library collections located on the UW campus. Enroll Info: Open to Jr, Sr, Grads, Adv special stdts

Requisites: Junior, senior, or graduate standing only**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Fall 2020**ZOOLOGY/ANTHRO/BOTANY 410 – EVOLUTIONARY BIOLOGY**

3 credits.

Evolutionary biology, emphasizing how modern scientists study evolution. Topics include: nature and mechanisms of microevolution, macroevolution, adaptation, speciation; systematics and taxonomy; quantitative genetics and measurement of natural selection; phylogenetic analyses of behavior, physiology, morphology, biochemistry; current controversies in evolution. Enroll Info: An elem course in zool or botany So st; Genetics/Botany/Zool 160 or 466 recommended

Requisites: Sophomore standing and ZOOLOGY/BIOLOGY/BOTANY 151, BOTANY/BIOLOGY 130, ZOOLOGY/BIOLOGY 101, BIOCORE 301, or BIOCORE 381**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No**Last Taught:** Summer 2021**ZOOLOGY 425 – BEHAVIORAL ECOLOGY**

3 credits.

Designed to explore how organisms make decisions and how these decisions affect their survival. These decisions are key aspects of an organism's life, e.g. foraging behavior, mating behavior, anti-predator behavior, and habitat selection. The course approaches these questions with the perspective that understanding the proximal and ultimate basis of behavior requires understanding the ecological and evolutionary context of behavior. Enroll Info: None

Requisites: Enrollment limited to students that have taken one of the following courses: ZOOLOGY/BIOLOGY/BOTANY 151 AND 152; or ZOOLOGY/BIOLOGY 101 AND Botany 130; or Biocore 301 AND 302.**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Spring 2020**ZOOLOGY 430 – COMPARATIVE ANATOMY OF VERTEBRATES**

5 credits.

Basic vertebrate anatomical systems and a consideration of variations, using functional embryological and evolutionary approaches. Lab dissection and study of representative vertebrate material. Two evening practical exams. Enroll Info: Intro crse in zool So st

Requisites: None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Fall 2020**ZOOLOGY/BOTANY 450 – MIDWESTERN ECOLOGICAL ISSUES: A CASE STUDY APPROACH**

2 credits.

This web course explores how ecological principles can be used to address contemporary environmental issues such as water quality, invasive species, and population growth. Emphasis on midwestern issues, practical approaches, the role of history, and geographic context. Enroll Info: Intro biology crse, interest in solving problems

Requisites: None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Summer 2021**ZOOLOGY/BOTANY/F&W ECOL 460 – GENERAL ECOLOGY**

4 credits.

Ecology of individual organisms, populations, communities, ecosystems, landscapes, and the biosphere. The interaction of organisms with each other and their physical environment. These relationships are studied, often in quantitative terms, in both field and laboratory settings; lecture and lab. Enroll Info: Intro course in botany zoology, or Bot/Zoo 151-152, or Biocore 301 or 333; for biol sci majors only

Requisites: None**Course Designation:** Gen Ed - Quantitative Reasoning Part B Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No**Last Taught:** Summer 2021

ZOOLOGY 470 – INTRODUCTION TO ANIMAL DEVELOPMENT

3 credits.

This course introduces students to the major features and mechanisms of early embryonic development in animals, including (1) the major stages of early development, (2) how form arises in the embryo (morphogenesis), (3) how differences arise between cells in the embryo, and (4) how specific genes control these processes. Enroll Info: Zool 101 or Zool 151/152

Requisites: Enrollment limited to students that have taken one of the following courses: ZOOLOGY/BIOLOGY/BOTANY 151; or BOTANY/BIOLOGY 130; or ZOOLOGY/BIOLOGY 101; or BIOCORE 381.

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY/BOTANY/ENTOM 473 – PLANT-INSECT INTERACTIONS

3 credits.

Multiple ways in which arthropods exploit plants, plant traits that deter or augment insects, environmental mediation of these interactions, effects on population dynamics, community ecology and co-evolution, and implications to natural resource management, environmental quality, and sustainable development. Enroll Info: One of the following: Bot/For/Zoo 460, Ent/PI Path/For 500, PI Path/Bot 505, Forestry 550, or Entom 342

Requisites: None

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Sustain - Sustainability

Repeatable for Credit: No

Last Taught: Spring 2020

ZOOLOGY 500 – UNDERGRADUATE NEUROBIOLOGY SEMINAR

1 credit.

Neurobiology seminar for undergraduates. A faculty lead lecture/discussion about a wide range of topics in neurobiology research from molecular neurobiology to integrative systems. Topics discussed by invited UW-Madison faculty researchers in any given semester can include: ion channels and synaptic plasticity, neural development, sensory and cognitive physiology, biological basis of behavioral disorders and cognitive decline. Enroll Info: None

Requisites: Declared in Neurobiology or Biology with the neurobiology option and ZOOLOGY/PSYCH 523 or concurrent enrollment (or NTP 523 prior to Fall 2017)

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2021

ZOOLOGY 504 – MODELING ANIMAL LANDSCAPES

3-5 credits.

This course uses computer and GIS-based modeling to explore how climate, topography, vegetation type, and key animal properties all interact to specify from first principles the energetics and activity constraints of animals on any landscape. It links individual, population and community variables at landscape scales. Enroll Info: Jr st

Requisites: None

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Honors - Accelerated Honors (!)

Repeatable for Credit: No

Last Taught: Spring 2018

ZOOLOGY/ENVIR ST 510 – ECOLOGY OF FISHES

3 credits.

Interactions of fishes with their physical, chemical, and biotic environment; physiological ecology, community ecology and fisheries sciences. Lake Mendota perch fishery and Shedd Aquarium field trips.

Enroll Info: None

Requisites: (ZOOLOGY/BIOLOGY 101 and 102) or ZOOLOGY/BIOLOGY/BOTANY 152 or BIOCORE 381

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY/ENVIR ST 511 – ECOLOGY OF FISHES LAB

2 credits.

Anatomy and taxonomy of Wisconsin fishes and projects in fish ecology.

Enroll Info: None

Requisites: Zoo 511 - needs Zoo 510 or concurrent enrollment

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY/AN SCI/F&W ECOL 520 – ORNITHOLOGY

3 credits.

Introduction to bird biology, ecology, and behavior. Topics include the evolutionary origin of birds and flight, anatomy and physiology, functional morphology, migration, communication, reproductive strategies, ecological adaptations and roles, and biogeographical patterns. Enroll Info: None

Requisites: ZOOLOGY/BIOLOGY 101 and 102, ZOOLOGY/BIOLOGY/BOTANY 152, (BIOCORE 381 and 382), or graduate/professional standing

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY/AN SCI/F&W ECOL 521 – BIRDS OF SOUTHERN WISCONSIN

3 credits.

Outdoor and indoor labs/lectures emphasizing identification of southern Wisconsin birds by sight and vocalization. Two required Saturday field trips in Southern Wisconsin. Enroll Info: None

Requisites: ZOOLOGY/BIOLOGY 101 and 102, ZOOLOGY/BIOLOGY/BOTANY 152, (BIOCORE 381 and 382), or graduate/professional standing

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY/PSYCH 523 – NEUROBIOLOGY

3 credits.

Basic mechanisms in cellular neurophysiology: electrophysiology and chemistry of nerve signals, mechanisms in integration, simple nervous pathways and their behavioral correlates. Enroll Info: None

Requisites: (ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY/BIOLOGY 101, or BIOCORE 485) and (CHEM 104, CHEM 109, or CHEM 116)

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Summer 2021

ZOOLOGY 525 – TROPICAL HERPETOLOGY

1 credit.

This course introduces students to perhaps the least known but most threatened groups of tropical vertebrates, the amphibians and reptiles ("herps"). The course consists of a series of eight two hours lectures that introduce students to the range of tropical habitats and the amphibians and reptiles to be found there, using the current extinction crisis among these animals as an underlying theme. Enroll Info: ZOOLOGY/BIOLOGY 101 and ZOOLOGY/BIOLOGY 102 or BIOLOGY/BOTANY/ZOOLOGY 152 or equivalent

Requisites: None

Course Designation: Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2016

ZOOLOGY/ENTOM 540 – THEORETICAL ECOLOGY

3 credits.

Introduction to theoretical ecology, including hands-on experience in computer modeling. For students with ecology background; does not require a strong math background. 3-credit option requires project and consent of instructor. Enroll Info: 1 year calculus, Zoo/Bot 260, Zoo/Bot/For 460 or equiv, Jr st

Requisites: Junior standing; not open to special students

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Sustain - Sustainability

Repeatable for Credit: No

Last Taught: Fall 2019

ZOOLOGY/GEOSCI 541 – PALEOBIOLOGY

3 credits.

The evolutionary process as interpreted from the fossil record. Topics include: the study of form; tempo and mode of evolution; levels and mechanisms of evolutionary change; extinction in the fossil record; trends and patterns in the history of life; macroevolution. Enroll Info: GEOSCI 304 or 540 or course in introductory biology

Requisites: None

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2016

ZOOLOGY/GEOSCI 542 – INVERTEBRATE PALEONTOLOGY

3 credits.

The evolutionary history, morphology, and ecology of fossil invertebrates. Labs emphasize fossil identification and recognition of basic morphological features. Enroll Info: Geosci 107, 110, 204, or a course in introductory biology

Requisites: None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No**Last Taught:** Fall 2014**ZOOLOGY 555 – LABORATORY IN DEVELOPMENTAL BIOLOGY**

3 credits.

Developmental anatomy and laboratory manipulations of representative animal embryos used extensively for analysis of developmental phenomena (sea urchins, amphibia, annelids, molluscs, ascidians, insects, chicks, fish, mice). Enroll Info: None

Requisites: ZOOLOGY 470 or ZOOLOGY/PSYCH 523 or ZOOLOGY 625 or BIOCORE 587 (or NTP 523 prior to Fall 2017)**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Fall 2020**ZOOLOGY/GENETICS/MD GENET 562 – HUMAN CYTOGENETICS**

2 credits.

Fundamental principles of cytogenetics and special problems of human cytogenetics. Enroll Info: None

Requisites: GENETICS 466, 468, BIOCORE 587, or declared in Master of Genetic Counselor Studies program**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No**Last Taught:** Spring 2019**ZOOLOGY/F&W ECOL/LAND ARC 565 – PRINCIPLES OF LANDSCAPE ECOLOGY**

2 credits.

Landscape ecology emphasizes the importance of spatial patterns at broad scales. Concepts and applications are emphasized, especially for seniors and graduate students in applied natural resource fields. The course is also a prerequisite for Zoology/Forest Ecology 665, Advanced Landscape Ecology. Lecture format with discussion. Enroll Info: Botany/Zoology/Forest 460, or Forest 550, a crse in stats, cons inst

Requisites: None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Sustain - Sustainability

Repeatable for Credit: No**Last Taught:** Spring 2019**ZOOLOGY 570 – CELL BIOLOGY**

3 credits.

Comprehensive course on modern aspects of cell biology. Enroll Info: One yr college biol, one yr chem

Requisites: None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Fall 2020**ZOOLOGY 603 – ENDOCRINOLOGY**

3-4 credits.

An introduction to the role that hormones play in a variety of physiological processes and behaviors from a molecular to a systems level. Topics include hormonal involvement in growth, development, homeostasis, reproduction, and behavior, with an emphasis on vertebrate systems. Enroll Info: Background in biochem cell-molecular biol recommended, but not required

Requisites: None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No**Last Taught:** Fall 2020

ZOOLOGY 604 – COMPUTER-BASED GENE AND DISEASE/DISORDER RESEARCH LAB

2 credits.

In recent years, a large number of open access biological and biomedical databases have become available for on-line, computer based research. Among these databases are the National Center for Biotechnology Information, Allen Brain Atlas, NIH DAVID, Genemania, ToppClusterPhenopedia, GeneNetwork, GWAS Central, and Broad Institute's MSIGDB. Within these and other sites is a wealth of information regarding genes, gene expression, gene pathways, behavioral characteristics, and disorders or diseases, such as autism, arthritis, bipolar disorder, and schizophrenia. Learning to navigate the various sites to take advantage of the information and push scientific discovery forward is a valuable skill to develop for any student interested in a career in science or medicine. In the early part of this laboratory course, students will be guided through a range of databases and shown how to extract information to develop new ideas. A key part of the course is that each student will pick a disease or disorder of interest (e.g., autism, arthritis, epilepsy, schizophrenia) and use multiple databases to develop new ideas on which genes may be playing important, but previously underappreciated or unknown roles. Enroll Info: None

Requisites: ZOOLOGY/BIOLOGY 101 or ZOOLOGY/BIOLOGY/BOTANY 151 or BIOCORE 381

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY 611 – COMPARATIVE AND EVOLUTIONARY PHYSIOLOGY

3 credits.

Course examines general physiological principles by comparing taxa from diverse evolutionary histories and ecological adaptations. Examples include adaptation to environments differing in salinity, temperature, altitude, pressure, or pollution, and examines how nervous and endocrine systems evolved to support the adaptations. Enroll Info: Elem crse in Botany or Zoology

Requisites: In order to enroll, student must have taken one of the following: ZOOLOGY/BIOLOGY 101; or BOTANY/BIOLOGY 130; or ZOOLOGY/BIOLOGY/BOTANY 151; or ZOOLOGY/BIOLOGY/BOTANY 152; or Biocore 301

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY 612 – COMPARATIVE PHYSIOLOGY LABORATORY

2 credits.

Recommended for majors. Enroll Info: None

Requisites: Zoo 612 - needs Zoo 611 or concurrent enrollment

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY/NEURODPT/NTP 616 – LAB COURSE IN NEUROBIOLOGY AND BEHAVIOR

4 credits.

Independent experimental modules exploring neurophysiology and behavior will be completed in groups. Learn techniques and develop investigations into three separate areas of neurobiology. Enroll Info: None

Requisites: ZOOLOGY/PSYCH 523 and PSYCH 454

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2017

ZOOLOGY/ANTHRO/NTP/PSYCH 619 – BIOLOGY OF MIND

3 credits.

Origins and structures of mind, brain, and consciousness. Transitions from early mammalian through primate to hominid intelligence. Genetics and plasticity in brain development. Modern studies of human brain mechanisms and consciousness. Enroll Info: None

Requisites: Junior standing; not open to special students

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Fall 2018

ZOOLOGY/NTP 620 – NEUROETHOLOGY SEMINAR

2 credits.

A group discussion of primary literature articles relevant to the neural basis of behavior with a purpose to understand the neural basis of behavior in animals, to learn to read papers critically and improve discussion leading skills. Enroll Info: None

Requisites: PSYCH/ZOOLOGY 523 or graduate/professional standing

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2020

ZOOLOGY/ENTOM/GENETICS 624 – MOLECULAR ECOLOGY

3 credits.

Basic principles of molecular ecology. Lecture topics include population genetics, molecular phylogenetics, rates and patterns of evolution, genome evolution, and molecular ecology. Enroll Info: None

Requisites: GENETICS 466, 467, BIOCORE 383, or graduate student standing

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Sustain - Sustainability

Repeatable for Credit: No

Last Taught: Spring 2019

ZOOLOGY 625 – DEVELOPMENT OF THE NERVOUS SYSTEM

2 credits.

Survey of the principles guiding neuronal development. Course will cover descriptive and experimental analyses of developmental mechanisms underlying the formation of both vertebrate and invertebrate nervous systems. Enroll Info: One intermed level crse in biol; background in development neurobiol recommended

Requisites: None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Spring 2018**ZOOLOGY/BIOCHEM/PHMCO-M 630 – CELLULAR SIGNAL TRANSDUCTION MECHANISMS**

3 credits.

Comprehensive coverage of human hormones, growth factors and other mediators; emphasis on hormone action and biosynthesis, cell biology of hormone-producing cells. Enroll Info: None

Requisites: (BIOCHEM 501 or 507) and (BIOCORE 383, ZOOLOGY/BIOLOGY 101, or ZOOLOGY 570) or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No**Last Taught:** Fall 2020**ZOOLOGY/BOTANY/ENVIR ST/F&W ECOL 651 – CONSERVATION BIOLOGY**

3 credits.

Application of ecological principles and human dimensions to the conservation of biological diversity. Topics: biodiversity science; conservation planning; population ecology; habitat loss, species exploitation, invasive species, pollution; human attitudes and activities as they affect the biosphere; approaches to monitoring interventions. Enroll Info: An ecology crse (eg, Botany/ZOOLOGY/BOTANY/F&W ECOL 460)

Requisites: None**Course Designation:** Gen Ed - Quantitative Reasoning Part B

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No**Last Taught:** Summer 2021**ZOOLOGY 655 – MODELING NEURODEVELOPMENTAL DISEASE**

3 credits.

Systematically explores current animal models of human diseases that affect the central nervous system. Topics will include birth defects that disrupt normal brain architecture (holoprosencephaly and neural tube closure defects), birth defects affecting the visual system, and postnatal disease, e.g. neurodegeneration and stroke. Enroll Info: None

Requisites: GENETICS 466, ZOOLOGY 523, ZOOLOGY 470, or 570**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No**Last Taught:** Spring 2021**ZOOLOGY/F&W ECOL 660 – CLIMATE CHANGE ECOLOGY**

3 credits.

The evidence that the Earth's climate is changing at unprecedented rates is now overwhelming. Environmental tipping points are being crossed and many species are adapting or failing to adapt. Climate change poses a significant problem for conserving and managing wildlife and their habitats. In this class, students will be introduced to climate change and its ecological impacts through engaging class discussions, online climate exercises, and group projects aimed at developing climate change adaptation plans. Enroll Info: Junior or Senior standing as a Forest Science or Wildlife Ecology major; graduate student standing; FW Ecol/Zoology/BOTANY/F&W ECOL/ZOOLOGY 460; or consent of instructor

Requisites: Declared in Forest Science or Wildlife Ecology major with junior standing, or ZOOLOGY/BOTANY/F&W ECOL 460, or graduate standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Sustain - Sustainability

Repeatable for Credit: No**Last Taught:** Fall 2020**ZOOLOGY/BOTANY/F&W ECOL 672 – HISTORICAL ECOLOGY**

2 credits.

Historical Ecology is an area of ecology that considers the importance of past events for current ecosystems. Concepts and applications are emphasized. Multidisciplinary emphasis, for seniors and graduate students in biological sciences, social studies, and humanities.

Discussion format. Enroll Info: Graduate or senior standing and consent of instructor

Requisites: None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No**Last Taught:** Spring 2018

**ZOOLOGY/NEURODPT/PSYCH 674 – BEHAVIORAL
NEUROENDOCRINOLOGY SEMINAR**

2 credits.

Behavior results from a complex interplay among hormones, the brain, and environmental factors. Behaviors and their underlying neural substrates have evolved in response to specific environmental conditions, resulting in vast species diversity in behavioral and neuroendocrine solutions to environmental problems. Designed to explore the primary literature on the neuroendocrine underpinnings of behavior spanning from feeding to sex differences in complex social behaviors. A range of taxonomic groups will be discussed, including (but not limited to) mammals, birds, and fish. Enroll Info: None

Requisites: ZOOLOGY/BIOLOGY 101, ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 383 or graduate/professional standing

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Fall 2019

ZOOLOGY 677 – INTERNSHIP IN ECOLOGY

2 credits.

A seminar course to provide support and structure for undergraduates interested in gaining hands-on experience working as a volunteer with local environmental, ecological or conservation groups. Enroll Info: Recommended for Jr Sr; graded on a letter basis

Requisites: None

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY 681 – SENIOR HONORS THESIS

1-6 credits.

Independent research. Topic selected, if possible, before the close of the junior year. Enroll Info: Senior standing

Requisites: Consent of instructor

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2021

ZOOLOGY 682 – SENIOR HONORS THESIS

1-4 credits.

Independent research. Topic selected, if possible, before the close of the junior year. Enroll Info: Senior standing

Requisites: Consent of instructor

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY 691 – SENIOR THESIS

1-6 credits.

Independent research. Topic selected, if possible, before the close of the junior year. Enroll Info: Senior standing

Requisites: Consent of instructor

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Fall 2020

ZOOLOGY 692 – SENIOR THESIS

1-4 credits.

Independent research. Topic selected, if possible, before the close of the junior year. Enroll Info: Senior standing

Requisites: Consent of instructor

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY 698 – DIRECTED STUDY

1-6 credits.

Selected research projects. Recommended for Jr and Sr. Enroll Info: None

Requisites: Consent of instructor

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2021

ZOOLOGY 699 – DIRECTED STUDIES IN ZOOLOGY

1-6 credits.

Selected research projects. Recommended for Jr and Sr. Enroll Info:

Recommended for Jr Sr; graded on a lettered basis; requires written cons inst

Requisites: Consent of instructor

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Summer 2021

ZOOLOGY/BOTANY 725 – ECOSYSTEM CONCEPTS

3 credits.

Scope and objectives of ecosystem ecology; roles of theory, long-term studies, comparative studies, and large-scale experiments; scaling problems; ecosystem services and ecological economics; adaptive ecosystem assessment and management. Enroll Info: Grad st. Experience in modeling, programming, or stats

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2017

ZOOLOGY/ATM OCN/ENVIR ST/GEOSCI 750 – PROBLEMS IN OCEANOGRAPHY
3 credits.

Introduction to techniques used in the study of the biology, chemistry, geology, and physics of the marine environment. Enroll Info: None

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Fall 2018

ZOOLOGY/NEURODPT/NTP 765 – DEVELOPMENTAL NEUROSCIENCE
3 credits.

Analysis of neural development with emphasis on experimental approaches. Combination of lectures and discussions of primary literature. Topics include neural induction, patterning, mechanisms of axon guidance, neural crest cell migration and differentiation, cortical development, and synapse formation and elimination. Enroll Info: None

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2021

ZOOLOGY 799 – INDEPENDENT STUDY
1-6 credits.

Advanced zoology, project related; not covered in regular courses. Enroll Info: None

Requisites: Consent of instructor

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2021

ZOOLOGY/BOTANY/ENTOM/GENETICS 820 – FOUNDATIONS OF EVOLUTION
2 credits.

Explore some of the most important themes and debates that have permeated evolutionary biology over the last 50 years. Read key papers related to each controversial topic, debate the pros and cons of competing viewpoints, and reflect on the relevance of the issue to contemporary evolutionary biology. Enroll Info: None

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Fall 2020

ZOOLOGY/BOTANY/F&W ECOL 879 – ADVANCED LANDSCAPE ECOLOGY
3 credits.

Landscape ecology emphasizes spatial patterning—its development and importance for ecological processes—and often focuses on large regions. Concepts, methods, and applications of landscape ecology will be learned through lectures, readings, exercises in quantitative approaches, and an independent project. Enroll Info: None

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2020

ZOOLOGY/ATM OCN/BOTANY/CIV ENGR/ENVIR ST/GEOSCI 911 – LIMNOLOGY AND MARINE SCIENCE SEMINAR
1 credit.

Sections in various fields of zoological research. Enroll Info: Grad st in limnology marine sci grad prgm or cons inst

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2021

ZOOLOGY/ENTOM/PSYCH 950 – INTERDISCIPLINARY SEMINAR IN ANIMAL BEHAVIOR
1 credit.

Research methods in animal behavior studies in many disciplines. Enroll Info: None

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2013

ZOOLOGY/AGRONOMY/ATM OCN/BOTANY/ENTOM/ENVIR ST/ F&W ECOL/GEOG 953 – INTRODUCTION TO ECOLOGY RESEARCH AT UW-MADISON
1-2 credits.

Introduces new graduate students to the diversity of ecologists across the UW-Madison campus. Includes discussions of key topics in professional development, research presentations by faculty members, and discussions of assigned papers with senior graduate students. Enroll Info: None

Requisites: Graduate/professional standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Fall 2020

ZOOLOGY/AN SCI/OBS&GYN 954 – SEMINAR IN ENDOCRINOLOGY-REPRODUCTIVE PHYSIOLOGY

0-1 credits.

Promotes scientific and professional development. Presenters develop and deliver research presentations to a scientific audience, field questions, and receive critiques about their presentation style and scientific approach. Additional presentations include professional development, career advancement opportunities, and topics of interest to the endocrinology and reproduction community at large. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2021

ZOOLOGY 955 – SEMINAR-LIMNOLOGY

1 credit.

Sections in various fields of zoological research. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2021

ZOOLOGY 956 – SEMINAR-ECOLOGY

1 credit.

Sections in various fields of zoological research. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2021

ZOOLOGY 957 – SEMINAR-EVOLUTION

1 credit.

Sections in various fields of zoological research. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2020

ZOOLOGY 958 – SEMINAR-BIOPHYSICAL AND PHYSIOLOGICAL ECOLOGY

1 credit.

Sections in various fields of zoological research. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2017

ZOOLOGY 960 – SEMINAR IN CELLULAR BIOLOGY

1 credit.

Sections in various fields of zoological research. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2021

ZOOLOGY 962 – SEMINAR-ETHOLOGY

1 credit.

Sections in various fields of zoological research. Enroll Info: Grad st written cons inst
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Spring 2021

ZOOLOGY/ATM OCN/BOTANY/ENVIR ST/F&W ECOL/GEOG/GEOSCI 980 – EARTH SYSTEM SCIENCE SEMINAR

1 credit.

Topics in earth system science. Emphasis on the coupling between atmospheric, oceanic and land surface systems, involving physical geochemical and biological processes, and including interactions with human systems. Enroll Info: None
Requisites: Graduate/professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2016

ZOOLOGY 990 – RESEARCH

1-9 credits.

Enroll Info: None
Requisites: Consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Summer 2021