

# ZOOLOGY

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Not all courses are offered every semester. Refer to the schedule of courses for each term's specific offerings.

More Info (<https://one.ufl.edu/soc/>)

*Unless otherwise indicated in the course description, all courses at the University of Florida are taught in English, with the exception of specific foreign language courses.*

## Department Information

The Department of Biology studies life at all levels from molecules to the biosphere to understand the evolution, structure, maintenance and dynamics of biological systems. The department's teaching and research provide the integrative and conceptual foundations of the life sciences.

**Website** (<https://biology.ufl.edu/>)

### CONTACT

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Map (<http://campusmap.ufl.edu/#/index/0747>)

### Curriculum

- Biology UF Online
- Biology | CALS
- Biology | CLAS
- Botany Minor
- Botany | CALS
- Botany | CLAS
- Combination Degrees
- Zoology
- Zoology Minor

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## Courses

Please note that a complete list of all courses offered by the Department of Biology can be found here ([http://catalog.ufl.edu/UGRD/courses/biological\\_sciences/](http://catalog.ufl.edu/UGRD/courses/biological_sciences/)).

### AST 2037 Life in the Universe 3 Credits

**Grading Scheme:** Letter Grade

The origin of life on Earth and the possibility of life elsewhere. A multidisciplinary approach is followed. Conditions for life to form and the likelihood that such conditions may exist elsewhere in the universe are discussed. Also considered are schemes proposed for the search for extraterrestrial intelligence (SETI). (P)

**Attributes:** General Education - Physical Science

### BSC 3402 Theory and Practice in the Biological Sciences 2 Credits

**Grading Scheme:** Letter Grade

Presents the scientific method, in its many formulations, from historical, philosophical and sociological perspectives. Explores generation and presentation of data, formulation of hypotheses and theories and dissemination of results. Also examines the ethical implication of biological research.

### GLY 3603C Paleontology 4 Credits

**Grading Scheme:** Letter Grade

Investigation of the history of life on earth, including aspects of invertebrate and vertebrate paleontology, micropaleontology and paleobotany.

**Prerequisite:** refer to the department.

**PCB 3063 Genetics 4 Credits**

**Grading Scheme:** Letter Grade

Fundamental properties of inheritance in eukaryotic organisms emphasizing examples in humans. Develops basic concepts for the nature, organization, transmission, expression, recombination, and function of genetic materials, and principles derived for genetically characterizing populations.

**Prerequisite:** BSC 2011 and BSC 2011L, or equivalent, with minimum grades of C and general chemistry.

**PCB 3713C Cellular and Systems Physiology 4 Credits**

**Grading Scheme:** Letter Grade

How cells, organs, and higher level systems are integrated and coordinated in the functions of humans and other animals. Emphasizes the use of model organisms, mathematical models, and the physical sciences to understand the mechanistic basis of normal physiology and dysfunction.

**Prerequisite:** BSC 2010 and (CHM 2046 or CHM 2047 or CHM 2051 or CHM 2096) and (PHY 2048 or PHY 2060), all with minimum grades of C.

**Corequisite:** PHY 2049 or PHY 2061.

**PCB 4043C General Ecology 4 Credits**

**Grading Scheme:** Letter Grade

Ecological processes and organization in terrestrial and aquatic habitats. Laboratory and field exercises emphasize techniques of ecological analysis.

**Prerequisite:** BSC 2011 and 2011L, or equivalent, with minimum grades of C.

**PCB 4674 Evolution 4 Credits**

**Grading Scheme:** Letter Grade

Processes and mechanisms of evolution, including population genetics, speciation, patterns of evolution and molecular evolution.

**Prerequisite:** BSC 2011 and BSC 2011L, or equivalent, with minimum grades of C;

**Corequisite:** one semester of calculus; PCB 3063 recommended.

**PCB 4712 Comparative Biomechanics 3 Credits**

**Grading Scheme:** Letter Grade

Reviews physical principles governing the form and function of organisms.

**Prerequisite:** (BSC 2011 and BSC 2011L or equivalent with minimum grades of C) and PHY 2048 and PHY 2053L and PCB 4674 and ZOO 3713C.

**PCB 4723C Physiology and Molecular Biology of Animals 4 Credits**

**Grading Scheme:** Letter Grade

Processes and mechanisms of maintenance, activity, and integration in animals with emphasis on vertebrates. Laboratory experience in quantitative methods and techniques of physiological investigation.

**Prerequisite:** BSC 2011 and (CHM 2046 or CHM 2047) with a minimum grades of C. Recommended: ((PHY 2053 and PHY 2054) or (PHY 2060 and PHY 2061)) and PCB 3063 and PCB 4674.

**ZOO 3513C Animal Behavior 4 Credits**

**Grading Scheme:** Letter Grade

The causes, origins and evolution of animal behavior emphasizing field observations and experiments on the behavior of a variety of animal groups.

**Prerequisite:** BSC 2011 and BSC 2011L, or equivalent, with minimum grades of C, and PCB 4674.

**ZOO 3603C Evolutionary Developmental Biology 4 Credits**

**Grading Scheme:** Letter Grade

Analysis of embryonic development, underlying genetic mechanisms and how these processes have driven the evolutionary diversification of animal body plans.

**Prerequisite:** BSC 2011 and BSC 2011L, or equivalent, with minimum grades of C.

**ZOO 3713C Functional Vertebrate Anatomy 4 Credits**

**Grading Scheme:** Letter Grade

The form and function of chordates accompanied by laboratory work dealing with a selected series of chordates.

**Prerequisite:** BSC 2011 and BSC 2011L, or equivalent, with minimum grades of C.

**ZOO 4205C Invertebrate Biodiversity 4 Credits**

**Grading Scheme:** Letter Grade

Comparative biology of invertebrates, emphasizing morphology, evolution, ecology and life history.

**Prerequisite:** BSC 2011 and BSC 2011L with minimum grades of C.

**ZOO 4307C Vertebrate Biodiversity 4 Credits**

**Grading Scheme:** Letter Grade

Comparative biology of vertebrates, emphasizing morphology, evolution, ecology and behavior.

**Prerequisite:** BSC 2011 and (BSC 2011L or ISC 2401L) with minimum grades of C.

**ZOO 4403C Marine Biology 4 Credits**

**Grading Scheme:** Letter Grade

Survey of major marine taxa, systematics of local marine fauna and flora, with familiarization of the marine environment. Laboratory emphasizes field work and independent projects.

**Prerequisite:** BSC 2011 and BSC 2011L, or equivalent, with minimum grades of C.

**ZOO 4472C Avian Biology 4 Credits**

**Grading Scheme:** Letter Grade

The basic biological characteristics of birds, which, as exceptionally unique flying vertebrates, are confronted with a spectrum of problems in terms of anatomy, physiology, behavior, migration and population ecology.

**Prerequisite:** BSC 2011 and BSC 2011L, or equivalent, with minimum grades of C, and PCB 4674 (recommended).

**ZOO 4905 Individual Studies in Zoology 1-4 Credits**

**Grading Scheme:** Letter Grade

Qualified students and the instructor concerned may choose a particular topic or problem for study.

**Prerequisite:** BSC 2011 and BSC 2011L, or equivalent, with minimum grades of C, and instructor permission.

**ZOO 4911 Undergraduate Research in Zoology 0-3 Credits**

**Grading Scheme:** Letter Grade

Provides firsthand, supervised research. Projects may involve inquiry, design, investigation, scholarship, discovery, or application.

**ZOO 4926 Special Topics in Zoology 1-4 Credits**

**Grading Scheme:** Letter Grade

Lectures, conferences or laboratory sessions covering selected topics of current interest in zoology.

**Prerequisite:** BSC 2011 and BSC 2011L, or equivalent, with minimum grades of C, and instructor permission.

**ZOO 4940 Practical Experience in Teaching Zoology 2 Credits**

**Grading Scheme:** S/U

Participation in teaching approved Zoology courses with practical experience in instructional procedures, testing and grading, course and laboratory preparation, and laboratory assistance. Cannot be used to satisfy the minimum credit requirement for Zoology majors.

**Prerequisite:** BSC 2011 and BSC 2011L, or equivalent, with minimum grades of C, one zoology laboratory-based course, senior status or higher and instructor permission.

**ZOO 4956 Overseas Studies 1-18 Credits**

**Grading Scheme:** Letter Grade

Provides a mechanism by which coursework taken as part of an approved study abroad program can be recorded on the UF transcript and counted toward graduation.

**Prerequisite:** BSC 2011 and BSC 2011L with minimum grades of C and undergraduate advisor permission.