

ZOOLOGY

Undergraduate Requirements, B.S. Degree

The Zoology major program is designed to meet the needs of students who plan to enter graduate school in the biological sciences, to enter medical, dental or veterinary college, or to work in specialized paramedical fields, environmental programs, or other careers in which zoology would serve as an academic background. Students who elect this program are urged to work closely with their advisor to plan an appropriate program to meet their goals.

The University and College of Arts and Sciences requires 124 hours of college work with at least 2.0 grade average and 48 hours of coursework at the 3000 level or above. Within these credits, a Zoology degree requires at least 30 hours of major coursework (*exclusive of Zoology 1114 and 1121*) with a grade of C or better in each course.

REQUIRED COURSES IN ZOOLOGY

- ___ 1114 Introductory Zoology
- ___ 1121 Introductory Zoology Laboratory
- ___ 3013 Evolution
- ___ 3333 Genetics

and at least **one** of the following two courses:

- ___ 2094 Invertebrate Zoology
- ___ 2204 Comparative Vertebrate Anatomy

and at least one course from each of the following core groups:

POPULATIONS

- ___ 3083 Animal Behavior
- ___ 3403 Principles of Ecology (includes lab)

ORGANISMAL

- ___ 3103 Principles of Physiology
- ___ 3203 Animal Development

CELLULAR

- ___ 3113 Cell Biology
- ___ 4843 Introduction to Molecular Biology

___ At least **one** 4000 or 5000 level course not included in core is required.
(Independent study courses are not acceptable.)

___ At least **two** upper division courses with laboratories are required.
(Independent study courses are not acceptable.)

Some examples are: ZOO 3092, Animal Behavior Laboratory; ZOO 3101, Principles of Physiology Laboratory; ZOO 3201, Animal Development

Laboratory; ZOO 3342, Genetics Laboratory. This requirement can also be met by many of our field-based courses or upper division courses with an integrated lab section.

___ 4983 Senior Seminar

RECOMMENDED COURSES IN BIOLOGY:

At least one field course and participation in the summer program of the O.U. Biological Station, Lake Texoma, are strongly recommended.

Note: Geology 3513, Fundamental-Invertebrate Paleontology, will count for major credit in Zoology.

REQUIRED COURSES IN RELATED SCIENCES:

___ Math 1823 Calculus I OR* Math 1743 Calc. I-Bus./Soc. Sci.

___ Physics 2414 or 2514 General Physics

___ Physics 2424 or 2524 General Physics

___ Chemistry 1315 General Chemistry

___ Chemistry 1415 General Chemistry

___ Chemistry 3013 Organic Chemistry

___ Chemistry 3012 Organic Chemistry

OR** All of the following 3 courses:

___ Chemistry 3053 Organic Chemistry

___ Chemistry 3153 Organic Chemistry

___ Chemistry 3152 Organic Chemistry Laboratory

___ BOT 1114 General Botany OR MBIO 2815 Intro. to Microbiology OR

MBIO 3813 Fund. Of Microbiology

___ HSCI 3013 History of Science to the Age of Newton OR HSCI 3023 History of Science since 1700

___ PSY 2003 Understanding Statistics OR PSY 2113 Research Methods I: Statistics

OR ZOO 2913 Intro. to Quantitative Methods in Biology OR ZOO 4913

Quantitative Biology

A computer science course is strongly recommended.

Zoology 1005 (Concepts in Biology), Zoology 1203 (Age of Dinosaurs), Zoology 2124 (Human Physiology), Zoology 2255 (Human Anatomy), Zoology 2343 (Human Heredity) and Zoology 3823 (Physiology of Exercise) may not be counted for major credit.

*Math 1743 is usually recommended, unless student expects to go into mathematical biology, biostatistics or some areas of physiology or genetics.

**Pre-professional students must take Chemistry 3053, 3153 and 3152. Zoology majors contemplating graduate work are also advised to take these.

FOR INQUIRIES—Zoology Advisory Office, Richards Hall, Room 209B (405)325-5661