BI - BIOLOGY (BI)

*Course Fees are Per Credit Hour

BI 521. Ecology. (4 Credits)
Relationships between organisms and their environment, including the structure and function of populations, communities, and ecosystems. A research project and/or paper will be required. Prerequisites: BI 200W or similar course.
Course Fees: $60

BI 523. Aquatic Ecology. (4 Credits)
Freshwater habitats and their biotas. Qualitative and quantitative techniques for studying lakes, streams, and wetlands will be included. A research project and/or paper will be required. Prerequisite: BI 200W or similar course.
Course Fees: $60

BI 533. Embryology. (4 Credits)
The development of animals including the molecular and cellular basis for differentiation, with selected vertebrates used to illustrate the development of tissues, organs, organ systems, and body form. A research project and/or paper will be required.
Course Fees: $60

BI 541. Biochemistry. (3 Credits)
Chemical interpretations of biological phenomena; compounds of biological significance as related to metabolism; carbohydrates, lipids, proteins, nucleic acids, and enzymes. A research project and/or paper will be required.
Course Fees: $60

BI 551. Ornithology. (3 Credits)
Biology and classification of birds with emphasis on field identification of local species. A research project and/or paper will be required.
Course Fees: $60

BI 552. Entomology. (3 Credits)
Morphology, physiology, and taxonomy of insects, including collection, preservation, and identification of those occurring in the local area. A research project and/or paper will be required.
Course Fees: $60

BI 553. Southeastern Fishes. (4 Credits)
Biology and taxonomy of fishes, including field collections of local species. Three class periods; one 3-hour laboratory period per week. A research project and/or paper will be required. Prerequisites: BI 112. (Summer)
Course Fees: $60

BI 560. Plant Physiology. (3 Credits)
Physiological processes in plants and their relationship to structure and environment with emphasis on vascular plants. A research project and/or paper will be required.
Course Fees: $60

BI 571. Parasitology. (4 Credits)
Morphology, taxonomy, life history, and ecology of parasites of humans and other animals. A research project and/or paper will be required.
Course Fees: $60

BI 572. Histology. (4 Credits)
Animal tissues and microscopic structure of the various organs of higher vertebrates. A research project and/or paper will be required.
Course Fees: $60

BI 599. Special Topics in Biology. (3 Credits)
A detailed study of a particular topic of special interest. Topics will vary but will be listed in the Schedule of Classes when offered, and on the students' transcripts. Course number may be repeated as different topics in Biology are offered. A research project and/or paper will be required.
Course Fees: $60

BI 601. Problems in Marine Biology. (1-4 Credits)
The University of North Alabama is a member of the Marine Environmental Sciences Consortium. The resident staff of the consortium offers various marine biology courses on the graduate level at the Sea Laboratory at Dauphin Island, Alabama. These graduate courses are available to eligible students under this course number and title which may be repeated for different courses. Special requirements and prerequisites.
Course Fees: $60

BI 602. Modern Ideas in Biology. (3 Credits)
Survey of those most significant and unifying ideas in biology today. Recent advances in the study of genes and gene action, cell biology, development, phylogeny, and evolution are considered. The student is expected to make a survey of the literature bearing upon the various fields covered in the lectures. Three class periods per week.
Course Fees: $60

BI 615. Developmental Biology for Teachers. (3 Credits)
Designed for elementary and secondary teachers. Covers such topics as genetics, including appropriate hereditary and environmental influences; reproduction and development, including dysgenesis; and current biomedical ethical problems.
Course Fees: $60

BI 617. Ecology for Teachers. (3 Credits)
The relationships of plants and animals with their environment, with emphasis on ecological principles most suitable for elementary and secondary teachers.
Course Fees: $60

BI 619. Physiology for Teachers. (3 Credits)
The structure and fundamental physiological processes of animals beginning at the cellular level, with emphasis on human physiology appropriate for elementary and secondary teachers.
Course Fees: $60

BI 653. Southeastern Fishes. (4 Credits)
Biology and taxonomy of fishes, including field collections of local species. Three class periods; one 3-hour laboratory period per week. A research project and/or paper will be required. Prerequisites: BI 112. (Summer)
Course Fees: $60

BI 690. Special Topics in Biology. (2-4 Credits)
Courses on a variety of topics are available to eligible graduate students under this course number and title as the need arises. Course number may be repeated as different topics in biology are offered. Special requirements and prerequisites.
Course Fees: $60

BI 696. Directed Research. (2 Credits)
Research project in the student's area of interest and specialization supervised by the student's advisor. Encompasses the study and development of experimental techniques and methods, collection and evaluation of data, and writing the report. Conferences and laboratories as required.
Course Fees: $60