

BIOLOGY (BIOL)

BIOL 101 - Biological Principles I (3 Credits)

Introductory survey of macromolecules, cell structure and function, genetics, and molecular biology.

Carolina Core: SCI

BIOL 101A - Biological Principles I (3 Credits)

Introductory survey of macromolecules, cell structure and function, genetics, and molecular biology. Three lecture hours per week. Restricted to students who have credit for BIOL 101L but lack the lecture.

Prerequisites: BIOL 101L.

BIOL 101L - Biological Principles I Laboratory (1 Credit)

(Recommended concurrent with BIOL 101). Experimental examination of basic principles of cell biology, genetics and metabolism. Three hours per week.

Carolina Core: SCI

BIOL 102 - Biological Principles II (3 Credits)

Introductory survey of plant and animal development, physiology, ecology, and evolution. Three lecture hours per week.

Prerequisites: C or better in BIOL 101.

Corequisite: BIOL 102L.

Carolina Core: SCI

BIOL 102L - Biological Principles II Laboratory (1 Credit)

Experimental examination of structure and function of plant and animal systems, biodiversity, ecology. BIOL 101, 102, 101L and 102L must be completed prior to enrolling in 300-level or above Biology courses.

Prerequisites: C or better in BIOL 101 and BIOL 101L; recommended concurrent with BIOL 102.

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BIOL 110 - General Biology (4 Credits)

Basic biological concepts and issues for non-biology majors. Credit may not be given for both this course and BIOL 120. Three lecture, two laboratory hours per week.

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BIOL 120 - Human Biology (3 Credits)

Fundamental principles of human biology. Credit may not be given for both BIOL 110 and BIOL 120. Three lecture hours per week. Not for major credit.

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BIOL 120L - Laboratory in Human Biology (1 Credit)

Exercises dealing with basic concepts of human biology. Not for major credit.

Prerequisite or Corequisite: BIOL 120.

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BIOL 200 - Plant Science (3 Credits)

An introduction to plant science for the non-major. This course does not carry major credit, and is not designed as a

Prerequisites: for other biology courses. Plant development, physiology, genetics, evolution, and ecology will be considered. Three lecture hours per week.

BIOL 200L - Plant Science Laboratory (1 Credit)

Laboratory exercises, demonstrations, and audio-visual supplements to BIOL 200. Not for major credit. Two hours per week.

Prerequisite or Corequisite: BIOL 200.

BIOL 206 - Genetics and Society (3 Credits)

(Designed for non-major students.) Genetic principles, emphasizing human heredity. Relevance of recent advances in genetics. Three lecture hours per week.

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BIOL 243 - Human Anatomy and Physiology I (3 Credits)

Functional anatomy and physiology of the human body, including the integumentary, skeletal, muscular, and nervous systems. Not available for biology major credit. Three lecture hours per week.

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BIOL 243L - Human Anatomy and Physiology Laboratory (1 Credit)

The principles of anatomy and physiology as demonstrated by microscopic studies, animal dissection, and physiological experiments. One three-hour laboratory per week.

Prerequisite or Corequisite: BIOL 243.

Carolina Core: SCI

BIOL 244 - Human Anatomy and Physiology II (3 Credits)

Functional anatomy and physiology of the human body, including the cardiovascular, endocrine, excretory, reproductive, digestive, and respiratory systems. Not available for biology major credit. Three lecture hours per week.

Prerequisites: BIOL 243.

Carolina Core: SCI

BIOL 244L - Human Anatomy and Physiology Laboratory (1 Credit)

A continuation of BIOL 243L. One three-hour laboratory per week.

Corequisite: BIOL 244

Carolina Core: SCI

BIOL 250 - Microbiology (3 Credits)

An introduction to bacteria and viruses, emphasizing structure, metabolism, and pathogenesis. Discussion of infectious diseases, antigen-antibody relationships, and anti-microbial agents in chemotherapy. Not available for biology major credit. Three lecture hours per week.

Prerequisites: College-level Biology and Chemistry.

Corequisite: BIOL 250L.

BIOL 250L - Microbiology Laboratory (1 Credit)

Not available for biology major credit. Three hours per week.

Prerequisite or Corequisite: BIOL 250.

BIOL 260 - Physiology (3 Credits)

Physiology of human systems especially susceptible to disturbance: immunobiology, circulation, excretion, metabolism, endocrinology, and muscle physiology. Not for biology major credit. Intended for pharmacy students.

Prerequisites: BIOL 102.

BIOL 270 - Introduction to Environmental Biology (3 Credits)

Basic ecological principles and the impacts of human population growth and technology. Not for major credit.

Carolina Core: SCI

BIOL 270L - Introduction to Environmental Biology Laboratory (1 Credit)

Demonstrations, data analyses, discussions, and films relating to human ecology, resource use, and environmental impact. Not for major credit.

Two hours per week.

Prerequisite or Corequisite: BIOL 270.

Carolina Core: SCI

BIOL 301 - Ecology and Evolution (3 Credits)

Concepts of evolution, populations, and population interactions; communities and ecosystems. Three lecture hours per week.

Prerequisites: BIOL 102 or MSCI 311.

Graduation with Leadership Distinction: GLD: Research

BIOL 301L - Ecology and Evolution Laboratory (1 Credit)

Experiments, exercises, and demonstrations. Three hours per week.

Prerequisite or Corequisite: BIOL 301.

BIOL 302 - Cell and Molecular Biology (3 Credits)

Principles of eukaryotic cell structure, molecular organization, and physiology. Genome organization and expression. Cell growth, division, and cell-cell interactions. Three lecture hours per week.

Prerequisites: BIOL 102 or MSCI 311.

Prerequisite or Corequisite: CHEM 333.

Graduation with Leadership Distinction: GLD: Research

BIOL 302L - Cell and Molecular Biology Laboratory (1 Credit)

Experiments, exercises, and demonstrations. Three hours per week.

Prerequisite or Corequisite: BIOL 302.

BIOL 303 - Fundamental Genetics (3 Credits)

Basic principles of transmission and molecular genetics; quantitative inheritance; recombination; biochemical aspects of gene function and regulation; developmental genetics and population genetics. Three lecture hours per week.

Prerequisites: BIOL 102 or MSCI 311.

BIOL 398 - Laboratory Teaching Experience (1 Credit)

Participation in preparation and teaching of undergraduate biological sciences laboratories.

Experiential Learning: Experiential Learning Opportunity