

BIOLOGY (BIOL)

BIOL 95 0.5 UNITS

Individualized Biology Instruction

Class Hours: 2.0 Laboratory

Total Contact Hours: 36 Laboratory

Corequisite: Enrollment in any BIOL course

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BIOL 100 1.0 UNITS

Natural History Of Southern California

Class Hours: 0.5 Lecture / 1.5 Laboratory

Total Contact Hours: 9 Lecture / 27 Laboratory

This is a field trip and seminar class in Biology and Geology of selected areas in Southern California. Minerals, geology, landforms, plants, animals, ecology, human use, and recreation value will be studied.

Transfer Credit: CSU

BIOL 105 3.0 UNITS

Humans and the Environment

Class Hours: 3.0 Lecture

Total Contact Hours: 54 Lecture

Recommendation: Courses taught at the level of Introduction to College Composition with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process with eligibility for ENG 100 or ENGL 100S.

This course is designed to help both science and nonscience majors to develop a better scientific understanding of important environmental problems facing the world today. The nature and implications of subjects such as loss of genetic variability, pollution problems, overpopulation, and the use and abuse of natural resources, will be studied. There will be an emphasis on the interrelatedness of these problems and how an understanding of environmental principles can help us to live on this planet more intelligently and more successfully.

Transfer Credit: CSU; UC

BIOL 110 3.0 UNITS

California Animals and Plants

Class Hours: 2.0 Lecture / 3.0 Laboratory

Total Contact Hours: 36 Lecture / 54 Laboratory

Prerequisite: BIOL 120 or equivalent with a grade of "C" or higher or "Pass".

The common plants and animals of California are studied with emphasis upon those local forms which can be readily collected or observed. The lecture is designed to familiarize the student with the life history and identification of local species of plants and animals and to aid in the understanding of the relationship of these organisms to their environment. The laboratory and field work emphasize ecological principles and taxonomic identification.

Transfer Credit: CSU; UC*

*UC: credit limits may apply. No credit for BIOL 110 if taken after BOT 120.

BIOL 115 3.0 UNITS

Marine Biology

Class Hours: 2.0 Lecture / 3.0 Laboratory

Total Contact Hours: 36 Lecture / 54 Laboratory

This introductory course in marine biology is concerned with the adaptations, ecological relationships, economic importance, and identification of marine animals and plants. Emphasis is on the intertidal and offshore communities of California with frequent field trips to observe live specimens and study the marine environment.

Transfer Credit: CSU; UC

BIOL 120 4.0 UNITS

Introduction To Biological Science

Class Hours: 3.0 Lecture / 3.0 Laboratory

Total Contact Hours: 54 Lecture / 54 Laboratory

Prerequisite: Courses taught at the level of Introduction to College Composition with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process with eligibility for ENG 100 or ENGL 100S. This course is designed for non-biological science majors. It covers basic principles of life science, including cellular biology, the plant and animal kingdoms, ecology, genetics, and evolution. Emphasis is also placed on human biology as it relates to everyday living.

Transfer Credit: CSU; UC*

*UC: credit limits may apply. No credit for BIOL 120 if taken after 200.

BIOL 180L 1.0 UNITS

Life Science Preparations

Class Hours: 3.0 Laboratory

Total Contact Hours: 54 Laboratory

Prerequisite: BIOL 120 or equivalent with a grade of "C" or higher or "Pass".

This course is designed for pre-teaching, life science majors. The student will learn the use and care of laboratory apparatus through actual experience in the classroom. The student will assist the instructor in the laboratory by performing such jobs as helping to prepare demonstrations, designing displays, and aiding individuals in the class.

Transfer Credit: CSU

BIOL 200 5.0 UNITS

Principles of Biology

Class Hours: 3.0 Lecture / 6.0 Laboratory

Total Contact Hours: 54 Lecture / 108 Laboratory

Prerequisite: BIOL 120 or ZOOL 120 or BOT 120 or equivalent with a grade of "C" or higher or "Pass"

Prerequisite: Courses taught at the level of Intermediate Algebra with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process. The course provides a basic survey of major groups of organisms (Kingdoms Monera, Protista, Plants, and Animals) within a context of unifying themes of evolution and ecology. Emphasis will be on structure and function of organisms with consideration given to phylogeny, taxonomy, adaptations, and interactions among organisms and their environment. Animal behavior and select vertebrate organ systems will be included. This course is designed as one semester of a two part series (coordinating with BIOL 201) for biology/medical majors.

Transfer Credit: CSU; UC

C-ID: BIOL 140

BIOL 201**5.0 UNITS****Principles of Biology**

Class Hours: 3.0 Lecture / 6.0 Laboratory

Total Contact Hours: 54 Lecture / 108 Laboratory

Prerequisite: CHEM 111 or equivalent with a grade of "C" or higher or "Pass" and (BIOL 120 or ZOOL 120 or BOT 120) or equivalent with a grade of "C" or higher or "Pass".

The principles of modern biology are discussed at the molecular, cellular, and organismic levels. Integrated within the course will be units on biochemistry, cell biology, origin of life, physiology of excitable tissues, genetics, molecular biology, biotechnology, immunology and developmental biology.

Transfer Credit: CSU; UC

C-ID: BIOL 190

BIOL 202**4.0 UNITS****Molecular Biology/Genetics**

Class Hours: 4.0 Lecture

Total Contact Hours: 72 Lecture

Prerequisite: BIOL 201 and CHEM 211 or equivalents with grades of "C" or higher or "Pass".

BIOL 202 is an extension of the study of molecular biology, cell biology and genetics introduced in BIOL 201. This course examines the structure and function of nucleic acids and proteins in the living cell, as well as how these molecules are studied and manipulated in the laboratory. Topics include regulation of gene expression, recombinant DNA technology, chromosome mapping and viral and prokaryotic genetics.

Transfer Credit: CSU; UC

BIOL 250L**1.0 UNITS****Special Topics In Biology**

Class Hours: 3.0 Laboratory

Total Contact Hours: 54 Laboratory

Prerequisite: BIOL 120 or equivalent with a grade of "C" or higher or "Pass".

This course is designed primarily for biological science majors. Individual research problems are explored using materials, equipment, and techniques not available to larger classes.

Transfer Credit: CSU; UC TBD after admission

BIOL 298**1.0 UNITS****Directed Studies**

A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department. With the guidance of the faculty member, students prepare and carry out a written learning agreement describing the purposes and outcomes of the project. Students should expect to meet with the supervising faculty member one to two hours each week for conferences. Credit is based upon the number of hours in the semester expected to complete the project (1 unit for 54 hours). This course may be taken a maximum of 2 times. For selected disciplines, UC transfer credit may be possible after admission to a UC campus, pending review of appropriate course materials by UC staff. See a counselor for an explanation.

Transfer Credit: CSU

BIOL 299**2.0 UNITS****Directed Studies**

A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department. With the guidance of the faculty member, students prepare and carry out a written learning agreement describing the purposes and outcomes of the project. Students should expect to meet with the supervising faculty member one to two hours each week for conferences. Credit is based upon the number of hours in the semester expected to complete the project (2 units for 108 hours). This course may be taken a maximum of 2 times.

Transfer Credit: CSU