Biology

The WVC Biology Department is committed to offering comprehensive courses that promote understanding of life in all its forms. Courses range from those designed for the non-science major to Allied Health prerequisites & Biology major transfer students. The department offers a wide variety of courses designed to meet the general educational, pre-professional and overall academic goals of WVC students.

Biology Classes

BIOL& 100: Survey of Biology

Covers the basic biological principles and processes for the non-science major. Includes a basic survey of cell biology, inheritance, reproduction, genetics, classification, evolution, ecology and principles of living systems. Includes laboratory.

Credits 5
Weekly Contact Hours 6
Meets Degree Requirements For
Natural Science with Lab

BIOL& 211: Majors Cellular

Covers the structure and function of cells, metabolism, energetics, cell reproduction, and Mendelian and molecular genetics. Includes an introduction to the basic principles of bioinformatics. Recommended for science majors, preprofessional students and allied health majors. Includes lab component.

Credits 5
Weekly Contact Hours 6
Meets Degree Requirements For
Natural Science with Lab

BIOL& 212: Majors Plants

Covers the structure and function of plants: plant anatomy, plant physiology, plant morphology, plant systematics and plant ecology. Plant evolution and diversity integrated throughout. Recommended for science majors and preprofessional students. Includes laboratory.

Credits 5
Weekly Contact Hours 6
Meets Degree Requirements For
Natural Science with Lab
Prerequisites
BIOL & 211 with grade of "C" (2.0) or better

BIOL& 213: Majors Animals

Covers the structure and function of animals. Evolution and ecology of animals introduced in the beginning, then integrated throughout in a survey of the major animal systems. Animal anatomy, physiology, ecology and evolution emphasized. Recommended for science majors, especially biology and pre-professional majors. Includes laboratory.

Credits 5
Weekly Contact Hours 6

Meets Degree Requirements For Natural Science with Lab **Prerequisites**

BIOL & 211 with grade of "C" (2.0) or better

BIOL& 221: Majors Ecology/Evolution

Major topics include the physical environment, how organisms interact with each other and their environment, evolutionary processes, population dynamics, communities, energy flow and ecosystems, human influences on ecosystems, and the integration and scaling of ecological processes through systems ecology.

Credits 5 **Weekly Contact Hours** 5 Meets Degree Requirements For **Natural Science Prerequisites** BIOL & 211 or BIOL & 212 or BIOL & 213

BIOL& 241: Human Anatomy & Physiology I

Includes study of cells, tissues, and the skeletal, muscular, integumentary and nervous systems. Designed primarily for allied health majors. Includes laboratory.

Credits 5 **Weekly Contact Hours** 6 **Meets Degree Requirements For** Natural Science with Lab **Prerequisites** BIOL & 211 with grade of "C" (2.0) or better

BIOL& 242: Human Anatomy & Physiology II

Continuation of Biology 241. Systematic treatment of special senses and endocrine, circulatory, respiratory, digestive, urinary and reproductive systems. Includes laboratory. Designed primarily for allied health majors.

Credits 5 **Weekly Contact Hours** 6 Meets Degree Requirements For Natural Science with Lab **Prerequisites** BIOL 241 with grade of "C" (2.0) or better

BIOL& 260: Microbiology

Introduction to the biology of microorganisms. Emphasis on the relationship of microbes to disease, including prevention, immunology and treatment. Designed primarily for allied health majors. Includes laboratory.

Credits 5 **Weekly Contact Hours** 6 Meets Degree Requirements For Natural Science with Lab **Prerequisites** BIOL & 211 with grade of "C" (2.0) or better

BIOL 103: Salmon, Ecosystems and Society

Examines the ecological relationships between pacific salmon, the environment, and people. Students will learn core biological and ecological concepts using salmon as a framework. Students will also learn about the historical and contemporary human dimensions related to pacific salmon biology, ecology, and management with an emphasis on Indigenous People.

Credits 5
Weekly Contact Hours 5
Meets Degree Requirements For
Diversity, Natural Science

BIOL 106: Introduction to Marine Biology

An introductory course about marine life found in the ocean depths, at the polar extremes, in coral reefs, estuaries and in the open sea. The course includes a survey of plankton, marine plants and marine animals. In addition, marine communities, resources and human impacts on marine ecosystems will be covered.

Credits 5
Weekly Contact Hours 5
Meets Degree Requirements For
Natural Science

BIOL 125: Environmental Science

An introductory ecologically oriented biological sciences laboratory course studying, from an interdisciplinary perspective, the environmental problems confronting humanity. An understanding of the nature of the ecological crisis and their global implications will be emphasized. Includes laboratory.

Credits 5
Weekly Contact Hours 6
Meets Degree Requirements For
Natural Science with Lab

BIOL 126: Survey of Genetics

Investigation into the continuity of life, including Mendelian genetics, reproduction, population genetics, evolutionary processes, and environmental influences on individuals and populations. Emphasis is on human congenital conditions, reproduction and evolution. Includes laboratory.

Credits 5
Weekly Contact Hours 6
Meets Degree Requirements For
Natural Science with Lab

BIOL 127: Northwest Environments

Field-oriented course exploring the animal life and vegetation of the Pacific Northwest. Local forests, rivers, lakes and deserts examined with emphasis on ecology and plant and animal identification. Includes extensive field work. Includes laboratory. Prerequisites: Interest in our local flora and fauna.

Credits 5
Weekly Contact Hours 6

Meets Degree Requirements For

Natural Science with Lab

BIOL 185: Insects & Ecosystems

This course is designed to create an awareness and appreciation of arthropods (insects and their relatives) and their role in the health of the local ecosystem. Course concentrates on the identification, biology, natural history, and the interaction of arthropods in their environments. Course designed for biologists, collectors and gardeners. Includes laboratory.

Credits 5
Weekly Contact Hours 6
Meets Degree Requirements For
Natural Science with Lab

BIOL 186: Survey of Plants of The Pacific Northwest

Identification and the natural history of plants in regional ecosystems of the Pacific Northwest. Students will be introduced to the principles of plant identification and survey techniques while studying the local plant communities of the region. Taxonomic and pictorial keys will be used to identify the plants and their role in their plant community will be stressed. Includes laboratory.

Credits 5
Weekly Contact Hours 6
Meets Degree Requirements For
Natural Science with Lab

BIOL 216: Plant Classification

Identification, classification and natural history of native plants in our regional ecosystems. Principles of plant classification and nomenclature will be introduced while studying the local native flora of the area. Includes laboratory and field study.

Credits 5
Weekly Contact Hours 6
Meets Degree Requirements For
Natural Science with Lab
Prerequisites
College-level biology course or Instructor Permission

BIOL 217: Introduction to Ornithology

Study of birds: flight, classification, behavior (migration, breeding, communication), habitats and distribution, and populations and conservation. Lab emphasizes observation and identification skills. Includes laboratory and field work.

Credits 5
Weekly Contact Hours 6
Meets Degree Requirements For
Natural Science with Lab

BIOL 218: Insect Classification

Identification, classification and biology of adult insects represented in our local fauna. Includes basic insect biology, external anatomy, keying, sight identification, and collecting and preserving skills. includes lecture, lab and field work. Prerequisites: recent college-level biology course or instructor's signature.

Credits 5
Weekly Contact Hours 6
Meets Degree Requirements For
Natural Science with Lab
Prerequisites
College-Level Biology course or Instructor Permission

BIOL 230: Ethnobotany

Survey of native plants of the Okanogan and their cultural, medicinal, and ecological importance to the First People and ecosystems of the Plateau Region.

Credits 5
Weekly Contact Hours 6
Meets Degree Requirements For
Natural Science with Lab