

# Biology

## BIOL& 100

### Survey of Biology W/ Lab [M/S] • 5.0 Credits

Formerly BIO 100, BIOL& 100

An introductory course in basic biological principles and processes. The lab illustrates the basic concepts discussed in lecture and acquaints students with general laboratory procedures. Primarily for non-science majors. \$25 science fee.

## BIOL 140

### Fundamentals of Botany W/ Lab [M/S] • 5.0 Credits

Formerly BIO 140, BIOL 140

An introductory course in the plant sciences. Includes structure and function of plant cells, tissues, organs; growth, reproduction, diversity, evolution, and ecology. Emphasis on local flora and ecology. Primarily for non-science or agriculture majors. \$25 science fee.

## BIOL 148

### Plant Identification W/ Lab [M/S] • 5.0 Credits

Formerly BIO 148, BIOL 148

Spring wildflowers of eastern Washington with emphasis on the Columbia Basin Region. Techniques in identification, collection, preservation, mounting of preserved specimens, and ecological principles. During the latter part of the quarter, attendance at all-day Saturday field trips is required. \$25 science fee.

## BIOL& 160

### General Biology W/ Lab [M/S] • 5.0 Credits

Formerly BIO 105, BIOL& 160

An introduction to basic cell structure and physiology with emphasis on: function and structure of cell membranes; metabolism and enzyme function; genetics and protein synthesis; genetics of viruses, prokaryotes, and eukaryotes; cell signaling and communication. The use of models, microscope slides, and physiological experiments illustrate cellular structure and function. This course does not satisfy the prerequisite for BIOL& 212 or 213. It is strongly recommended that students complete high school chemistry or CHEM& 121 or higher prior to enrollment, or be concurrently enrolled in CHEM& 121. \$25 science fee.

## BIOL& 175

### Human Biology W/ Lab [M/S] • 5.0 Credits

Formerly BIO 110, BIOL& 175

The biology of the human organism. Evolution, ecology, the functioning of cells, tissues, and the major organ systems form the core of the class. Emphasis is placed on providing students with sufficient background to make informed decisions relating to the biological aspects of the human species. Primarily for non-science majors. \$25 science fee.

## BIOL 199

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$25 science fee.

## BIOL 201

### Soils W/ Lab [M/S] • 5.0 Credits

Formerly AG 201, BIO 201, BIOL 201

A course offering students a general background and understanding of soils, soil formation processes, soil origins with an emphasis on soil origins in the Pacific Northwest, soil taxonomy, organic matter, water relationships, pH, and biological relationships. \$25 science fee.

**Prerequisite: This course is cross-listed with AG 201. Students completing BIOL 201 may not receive graduation credit for AG 201.**

## BIOL& 211

### Majors Cellular W/ Lab [M/S] • 5.0 Credits

Formerly BIO 111, BIOL& 211

An introductory cell biology lecture and lab course for biology majors, pre-medical, pre-dental, pre-pharmacy, pre-physical therapy, and other pre-professional students planning to transfer to a four-year university. This is the first of a three-quarter series with an emphasis on cell chemistry, structure, metabolism, energetics, cell division, cell signaling, the molecular basis of inheritance and development, and the basis of genetic engineering. Health Science majors are advised to take BIOL& 160. \$25 science fee. **Prerequisite: Completion of CHEM& 121 or higher with a grade of 2.0 or better, or concurrent enrollment in CHEM& 161.**

## BIOL& 212

### Majors Plant W/ Lab [M/S] • 5.0 Credits

Formerly BIO 112, BIOL& 212

Includes the concept of evolution; the origin of life; a survey of prokaryotes, protists, plants, and fungi; plant anatomy and function. Primarily for science majors. \$25 science fee. **Prerequisite: Completion of BIOL& 211 with a 2.0 or better.**

## BIOL& 213

### Majors Animal W/ Lab [M/S] • 5.0 Credits

Formerly BIO 113, BIOL& 213

A survey of the invertebrate and vertebrate animals covering their diversity, structure, and function of organ systems, and the interactions between organisms and the environment. Primarily for science majors. \$25 science fee. **Prerequisite: Completion of BIOL& 211 with a grade of 2.0 or better.**

## BIOL& 241

### Human A&P 1 W/ Lab [M/S] • 6.0 Credits

Formerly BIO 221, BIOL& 241

The structure and functions of systems of the human body; integumentary, skeletal, muscular, and nervous. The use of human models and animals illustrate the systems. \$25 science fee. **Prerequisite: A grade of 2.0 or better in BIOL& 160 or BIOL& 211. It is recommended that students also complete CHEM& 121 prior to enrollment.**

## BIOL& 242

### Human A&P 2 W/ Lab [M/S] • 6.0 Credits

Formerly BIO 222, BIOL& 242

Continuation of BIOL& 241: endocrine, digestive, respiratory, circulatory, lymphatic, urinary, and reproductive systems. \$25 science fee. **Prerequisite: Completion of BIOL& 241 with a 2.0 or better.**

## BIOL 252

### Insects of Economic Importance W/ Lab [M/S] • 5.0 Credits

Formerly AG 252, BIO 252, BIOL 252

A study designed to introduce students to the breadth and diversity of the science of entomology and an in-depth study of insects including: their diversity; the basics of systematic entomology; insect societies; insect physiology and structures; their ecological relationships with their physical and biotic environments; their population and community level ecology; their effects on human welfare through applied disciplines of medical and agricultural entomology; and the methods by which humans attempt to manage insect populations. \$25 science fee. **Prerequisite: This course is cross-listed with AG 252. Students completing BIOL 252 may not receive graduation credit for AG 252.**

## BIOL 253

### Plant Pathology W/ Lab [M/S] • 5.0 Credits

Formerly BIO 253, BIOL 253

# Biology

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An introduction to the organisms causing plant diseases, their identification, and control technologies. Material presented covers the basic principles necessary to develop an adequate understanding of plant disease processes in natural, urban, commercial, and industrial situations. Emphasis is placed on diseases encountered in the Pacific Northwest. \$25 science fee.

## **BIOL& 260**

### **Microbiology W/ Lab [M/S] • 6.0 Credits**

Formerly BIO 260, BIOL& 260

Basic principles, concepts, and techniques in the study of bacteria, protists, fungi, and viruses. Concepts of immunity and the role of micro-organisms in medicine. \$25 science fee. **Prerequisite: Completion of BIOL& 160 or BIOL& 211 with a grade of 2.0 or better. It is also strongly recommended that students complete CHEM& 121, BIOL& 241, and BIOL& 242 (for nursing majors), or BIOL& 212 and BIOL& 213 (for biology majors) prior to enrollment.**

## **BIOL 299**

### **Special Studies • 1.0–15.0 Credits**

A class used to explore new coursework. \$25 science fee.