

## BIOLOGY and BOTANY

### BIOL 121 INTRODUCTORY BIOLOGY

A course emphasizing scientific inquiry through selected concepts of biology including: chemical and cellular organization, function, genetics, evolution and ecology. Biological issues with personal and social implications will be introduced to enable students to make informed decisions. Laboratory required. (IAI L1 900L) (4 credit, 3 lecture, 2 lab)

### BIOL 141 ENVIRONMENTAL SCIENCE

A course that examines ecological principles in relation to environmental problems. Emphasizes basic ecological principles, current environmental issues and possible solutions. Laboratory required. (IAI L1 905L) (4 credit, 3 lecture, 2 lab)

### BIOL 161 BASIC ANATOMY & PHYSIOLOGY

An overview of the anatomy and physiology of the 11 organ systems that compose the human body. Anatomical terminology, cellular structure and function, metabolism, and tissues are also included. The course is geared toward pre-practical nursing and allied health majors, but will provide a solid introduction to all students interested in learning human anatomy and physiology. (3 credit, 3 lecture, 0 lab)

### BIOL 221 GENERAL BIOLOGY I

Cellular and Molecular Biology. An introduction to Biochemistry, molecular genetics, cell structure, function and processes. Laboratory required. Pre-requisite: High school biology; previous or concurrent enrollment in CHEM 121. (IAI L1 910L, BIO 910) (4 credit, 3 lecture, 2 lab)

### BIOL 222 GENERAL BIOLOGY II

Organismal Biology, Ecology, and Evolution. An introduction to structure and function of major groups of microorganisms, fungi, animals and plants; structure and function of representative organ systems in animals and plants. Topics will also include evolutionary relationships and ecological principles. Laboratory required. Prerequisite: BIOL 221 (IAI L1 910L, BIO 910) (4 credit, 3 lecture, 2 lab)

### BIOL 242 MICROBIOLOGY

Basic concepts of microbiology. Topics include: cell structures, growth requirements, diversity and classification of microbes, bacterial genetics, pathology, and immunology. Laboratory required. Pre-requisite: "C" in high school chemistry or CHEM 123 or CHEM 121 (4 credit, 3 lecture, 2 lab)

### BIOL 261 HUMAN ANATOMY AND PHYSIOLOGY I

A comprehensive study of the human anatomy and physiology of the integumentary, skeletal, muscular, nervous and sensory systems. Foundation topics discussed as a preface include: organization of the body, biological chemistry, cells, metabolism and tissues. Laboratory required with dissection a component. Pre-requisite: "C" in high school chemistry or CHEM 123 or CHEM 121. (4 credit, 3 lecture, 2 lab)

## BIOL 262 HUMAN ANATOMY AND PHYSIOLOGY II

A comprehensive study of the endocrine, cardiovascular, lymphatic, digestive, respiratory, renal and reproductive systems. Additional topics include: nutrition, electrolytes, acid-base balance, embryology, growth and genetics. Laboratory required with dissection a component. Pre-requisite: BIOL 261 (4 credit, 3 lecture, 2 lab)

## BOT 121 PLANTS AND SOCIETY

Emphasizes scientific inquiry through selected biological concepts using plants as the study organism. Special attention will be given to the personal and social implications of plants in human affairs. Topics include: The scientific method, molecular biology, cell biology, plant structure & function, plant genetics & heredity, evolution, ecology and plants & society. Laboratory required. (IAI L1 901L) (4 credit, 3 lecture, 2 lab)