

Credit Hours: 3

An introduction to wheel throwing techniques and advanced hand-building. Emphasis will be placed on traditional and sculptural applications of clay. This course is intended to be a continuation of Ceramics I. Instruction will be based on class discussion, lecture, and lab work.

ART 113 (1030) Sculpture

Prerequisite: None

Credit Hours: 3

An introduction to the special problems and techniques of three-dimensional sculptural form and design including clay modeling, molding, and casting. Emphasis will be placed on additive and subtractive processes. Instruction will be based on lecture, class discussion, and lab work.

ART 115 (1021) Painting I

Prerequisite: None

Credit Hours: 3

An introduction and exploration of various painting materials, techniques, and subject matter. The use of oils, color theory, value, and stylistic techniques will be emphasized. Instruction will be based on class discussion and lab work.

ART 116 (1022) Painting II

Prerequisite: ART 115 Painting I

Credit Hours: 3

A continuation of material covered in Painting I. Emphasis will be placed on individual special problems in painting. Students will work on independent projects. Instruction will be based on class discussion, individual conference, and lab work.

ART 130 (1011) Art Appreciation KRSN ART1010\*\*

Prerequisite: None

Credit Hours: 3

This course is designed to give students a broad background in art history and an appreciation of art. The primary focus will be on the principles and philosophies of the visual arts. In addition, we will look at how art relates to and enriches our society. Instruction will be based on video and slide presentations, lecture, selected readings, class discussion, and hands-on projects.

EDUC 154 (831) Art Education

Prerequisite: None

Credit Hours: 3

This course is designed to help art education and elementary education concentrations build an understanding of children's art and develop an art curriculum for their classroom that provides quality art experiences for every child. Emphasis will be placed on lab work and experimentation of various art materials suitable for the classroom. Instruction is based on lecture, class discussion, and lab work.

## Biology

All 5 Credit Hour Biology courses include a Lab

BIOL 120 (0431) General Biology KRSN BIO1010\*\*

Prerequisite: None

Credit Hours: 5

This course presents a study of the basic concepts of living organisms using an evolutionary approach with emphasis on classification, inheritance, and the ecology of plants and animals. This course is intended for students whose concentration is biology and related disciplines with emphasis on knowledge of the scientific method and the chemical components and functions of cells, and tissues and organisms' structure and function. Laboratory exercises are designed to emphasize and support the course concepts and stress the scientific method of investigation.

\*Refer to the Placement Testing Procedure 3.22, page 24 \*\*Refer to Course Transfer, page 19

**BIOL 122 (0404) Environmental Life Science**

Prerequisite: None

Credit Hours: 5

This natural science course provides an overview of life science with emphasis placed on basic principles and unifying concepts of environmental science. This course includes general biology concepts in relation to human interaction with the world around them.

Students will gain the scientific foundation and tools needed to apply critical thought to contemporary environmental issues.

**BIOL 128 Principles of Biology I KRSN BIO1020\*\***

Prerequisite: A semester of college chemistry is strongly recommended.

Credit Hours: 5

A course organized around concepts fundamental to the better understanding of living organisms for the biology majors who will take advanced biology courses, and for those entering the medical and related fields. Content covered will include nature of science, basic chemistry, biochemistry, cellular structure and function, metabolism, energy transfer, cell division, Mendelian and molecular genetics, and gene expression. Laboratory experiments are selected to complement the material covered in lecture to enhance student understanding.

**BIOL 129 Principles of Biology II KRSN BIO1030\*\***

Prerequisite: BIOL 128 Principles of Biology I, or permission of instructor.

Credit Hours: 5

A course specifically designed for the biology majors. The course is organized around concepts fundamental to an understanding of the principles of organismal biology. Topics of Classification, taxonomy, evolution, evolutionary relationships, kingdoms, phyla, life cycles, plant anatomy and physiology, animal anatomy and physiology, biological basis of behavior, and ecological interactions are discussed in the course. Laboratory studies include the culture and growth of bacteria and examine their ubiquity, different protists, fungi, plant structures, and animal dissection.

**BIOL 130 (0412) Anatomy and Physiology KRSN BIO2020\*\***

Recommended Prerequisite: High School Biology with an A or B, BIOL 101 Biology (3 credit hour) or BIOL 120 General Biology (5 credit hour)

Credit Hours: 5

This course is designed for one semester and is a comprehensive discipline of Biology. Anatomy and Physiology (A&P) involves both lecture and laboratory study of the human body. The course covers the competencies for anatomy and physiology at the college level as set forth by the State of Kansas Core Competency Committee. The course will integrate the structure and function of the human body. This course meets the requirements for those interested in nursing, respiratory therapy, radiography, physical education, biology majors, minors, and for other health sciences. Lectures and labs are presented in a logical sequence by body systems

**BIOL 201 (0411) Microbiology**

Recommended as a Prerequisite: BIOL 101 Biology (3 credit hour) or BIOL 120 General Biology (5 credit hour) or BIOL 130 Anatomy &amp; Physiology (5 credit hour)

Credit Hours: 5

This course presents a study of microorganisms along with their morphological, physiological, and biochemical characteristics. It offers a comprehensive study of prokaryotic cell structure, microbial metabolism, microbial growth, methods of disinfection and sterilization, microbial genetics, classification, principles of disease and epidemiology, microbial mechanisms of pathogenicity, innate and adaptive immunity, and antimicrobial drugs. Though the main emphasis is on bacteria and virus, but protozoans, fungi and algae are also discussed. Fundamental theories and laboratory techniques related to bacterial cell morphology, bacterial growth in different culture media, isolation, pure culture techniques, staining, and identification are illustrated throughout the semester.

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\*Refer to the Placement Testing Procedure 3.22, page 24 \*\*Refer to Course Transfer, page 19