BIOLOGY (BIOL)

BIOL 111 Concepts of Biology (4 credits)
This is an introductory level course for non-science majors, and includes basic concepts in biology, natural history, and bio-social interactions.
Lab Required.

BIOL 150 General Biology I (4 credits)
A general course including major concepts concerning the cell, genetics, plant biology, basic human anatomy and physiology and ecological adaptation in plants and animals.
Lab Required.

BIOL 151 General Biology II (4 credits)
A course in the biological sciences including expansion on the core principles of physiology, anatomy, genetics, ecology and other life processes in plants, vertebrates and invertebrates.
Prerequisite/s: BIOL 150
Lab Required.

BIOL 170 Zoology (4 credits)
This course is the study of the evolution, identification, classification, anatomy, distribution, and behavior of species in Kingdom Animalia. The course examines the diversity of animals in terrestrial and aquatic habitats, with emphasis on common animal species of this region.
Lab Required.

BIOL 202 Microbiology (4 credits)
A general survey of the function and anatomy of the human body. The emphasis is on introductory topics of cell and tissue structure and function; anatomical terminology and integumentary; skeletal and muscular systems.
Lab Required.

BIOL 220 Anatomy & Physiology I (4 credits)
A general survey of the function and anatomy of the human body. The emphasis is on introductory topics of cell and tissue structure and function; anatomical terminology and integumentary; skeletal and muscular systems.

BIOL 224 General Ecology (4 credits)
The course will be an introduction to the basic concepts of ecological theory as it is related to the world around us. The examination of energy flow, nutrient cycles, and population ecology will form the basis of the course.
Prerequisite/s: BIOL 150
Lab Required.

BIOL 230 Anatomy & Physiology II (4 credits)
A general survey of the structure and function of the human body with emphasis placed on reproductive and maintenance systems including circulatory, respiratory, digestive, urinary, nervous, endocrine, lymphatic and reproductive.
Prerequisite/s: BIOL 220
Lab Required.

BIOL 258 Birds and Culture (4 credits)
This course will focus on techniques used for identifying and studying bird species, written and oral histories about bird lore, and traditional uses of bird parts. Emphasis is placed on species with strong cultural significance. Laboratory exercises will be conducted indoors and outdoors.
Lab Required.

BIOL 431 Grassland Ecology (3 credits)
This course will focus on factors such as soils, climate, and disturbance that developed the habitats of the Great Plains region. Students will study the biodiversity, plant ecology, animal ecology, and ecosystem processes of North American grasslands. Students will evaluate threats to grasslands such as invasive species, climate change, and habitat loss. Conservation and restoration efforts in grasslands will also be examined.

BIOL 450 Mammology (3 credits)
This course is a study of the evolution, identification, classification, anatomy, distribution, behavior and ecology of mammals. Emphasis is placed on common species of this region, particularly grassland mammal species. Species with strong cultural significance such as buffalo, bear, and wolves will also be studied.

BIOL 455 Herpetology: Reptiles & Amphibians (3 credits)
This course examines the biology of reptiles and amphibians (herpetiles). Students will study the evolution, identification, classification, anatomy, distribution, behavior, and ecology of reptiles and amphibians. Grassland and wetland species of this region will be the main focus of study. Emphasis is placed on cultural connections to herpetiles.

BIOL 456 Ornithology (3 credits)
This course is a study of the evolution, identification, classification, anatomy, distribution, behavior, and ecology of birds. Emphasis is placed on common bird species of this region, particularly grassland species. Species with strong cultural significance such as raptors and corvids will also be emphasized.

BIOL 458 Birds and Culture (4 credits)
This course will focus on techniques used for identifying and studying bird species, written and oral histories about bird lore, and traditional uses of bird parts. Emphasis is placed on species with strong cultural significance. Laboratory exercises will be conducted indoors and outdoors.
Lab Required.