COURSES

PDF BIOLOGY

BIOL100 General Biology for Non-Science Majors 3 Credits

Prerequisites: None. Recommended: MATH120, MATH126 or higher Covers fundamental concepts and theories of life science. Major topics include cellular/molecular biology, anatomy, physiology, genetics, evolutions and ecology. Includes four laboratory experiences.

BIOL113 Life in the Oceans 3 Credits Introduces the plants, animals and microorganisms of the oceans with an emphasis on important marine ecosystems such as intertidal zones, estuaries and coral reefs.

BIOL135 Introduction to Ornithology **3 Credits**

Prerequisites: None Introduction to the biology of birds with a focus on avian biology, behavior, ecology, mechanism of flight, and migration; along with opportunities for field identification of birds common to Western Nevada. Includes classroom lectures, hands-on activities, four laboratory experiences and field trips.

BIOL190 Intro to Cell & Molecular Biology 4 Credits Prerequisite: Math 124 or higher with a grade of C- or higher. Covers the structure and functions

of cells. Includes the major molecules of life, composition and physiology of cellular organelles, cellular metabolism, reproduction, motility, gene function and related topics. Meets for a total of 45 lab hours and 45 lecture hours. Note: BIOL 190 plus BIOL 191 transfer to UNR as fulfilling BIOL 190, 191 and 192 requirements.

BIOL191 Introduction to **Organismal Biology** 4 Credits

Prerequisite: None. Combines the principles of botany and zoology into one course emphasizing levels of organization and life processes common to all organisms. Topics range from nutrient processing and homeostasis to reproduction. Meets for a total of 45 lecture hours and 45 lab hours. Note: BIOL 190 plus BIOL 191 transfer to UNR as fulfilling BIOL 190, 191 and 192 requirements.

BIOL198	Special	Topics	in
	Biology	1 (Credit
Prerequisites: N	one Includes	short course	es and
experimental cla	sses covering	a variety of su	bjects.

BIOL200 of Elements Human Anatomy & Physiology 3 Credits

Provides students with an intense descriptive overview of anatomy and physiology with related, illustrative pathology and microbiology.

BIOL204 of Elements Human Anatomy & Physiology Lab 1 Credit

Corequisites: BIOL200 Provides students with intense laboratory exercises about anatomy and physiology with related, illustrative pathology and microbiology.

BIOL208

3 Credits Genetics Prerequisites: BIOL190 and 190L Offers a

basic science (Mendelian genetics, cytogenetics, molecular genetics) and detailed clinical case study and correlation-oriented (pedigree analysis, gene cloning, inborn errors of metabolism) course that demonstrates the principles of genetics/ heredity in human health and disease. Strongly recommended for those pursuing per-medical studies. Three hours lecture.

BIOL212 Introduction to Human **Genetics Lab** 1 Credit

Corequisites: BIOL 208 Provides an opportunity to learn how to extract and amplify genomic DNA using the polymerase chain reaction; apply concepts of chemistry and evolutionary biology to study an organism they choose; identify a question involving their chosen organism and answer it using DNA technology; research and identify protocols and materials such as M-SAT primers specific to the organism they choose; subject data to statistical analysis and relate their findings to concepts of evolution. Three hours laboratory.

BIOL223 Human Anatomy and Physiology I 4 Credits Prerequisite: BIOL 190 with lab, or BIOL 190/190L with grade of C or better. May be repeated a maximum of two times within the last five years. Offers detailed study of histology and the integumentary, skeletal, muscular, and nervous systems. Primary for physical education, prenursing and other pre-health majors. Three hours lecture/three hours laboratory. NOTE: For programs that require BIOL 223 and 224, both courses must be completed at the same institution if taken outside Nevada.

BIOL224 Human Anatomy and Physiology II 4 Credits

Prerequisites: BIOL 223 with a grade of C or better. May be repeated a maximum of two times within the last five years. Offers a detailed study of the anatomy and physiology of the circulatory, immune, respiratory, digestive, urinary, endocrine and reproductive systems. Primarily for physical education, pre-nursing and other prehealth majors. Three hours lecture/three hours laboratory. NOTE: For programs that require BIOL 223 and 224, both courses must be completed at the same institution if taken outside Nevada.

BIOL251 **General Microbiology** 4 Credits

Prerequisites: BIOL 190 with Lab with a grade of C or better or BIOL 190 & 190L with a grade of C or better or CHEM 121 with a grade of C or better. May be repeated a maximum of two times with the past five years. Emphasizes the distribution, form, structure and physiology of microorganisms in laboratory. Develops the student's skills in aseptic procedures, isolation and identification. Three hours lecture/three hours laboratory per week.

BIOL273 **Research Experience** 1 Credit

Prerequisites: BIOL 190 & 190L or CHEM 121 with a grade of C or better and instructor consent. Research intensive course designed to foster competency in experimental design, laboratory

Introduction to Human techniques, problem-solving information through open-ended investigation.

BIOL299	Special	Topics in
	Biology	1 Credit