

Biology

BIO 105

Nutrition..... 3.00 credits

This course will focus on the functions of Macronutrients (carbohydrates, protein and fat) and Micronutrients (vitamins and minerals) and how they are digested, absorbed, and metabolized. The relationships between nutrition and wellness/disease, energy intake and energy expenditures, weight control, physical activity and diets will be examined. Food safety and food biotechnology will also be covered in this course. Students will analyze their own diets based on the material covered in the course. PowerPoint software may be required for group projects. Recommended Prerequisite(s): High school Biology.

BIO 130

Human Biology with Lab..... 4.00 credits

This course will focus on the structure and function of the human organism and the issues facing humans in today's world. It is intended to give students a better understanding of our place in nature. Emphasis will be placed on the biochemical, cellular, tissue, organ, and organ-system levels of development. The online lab emphasizes the application of scientific method, basic laboratory methods, and principles of human anatomy and physiology. This lab component will parallel the lecture content and use cooperative learning and technology in laboratory activities.

BIO 212

Anatomy & Physiology..... 3.00 credits

This course will focus on the structure and functions of cells, tissues, organs, and organ systems of the human body. The human body organ systems covered in the course are integumentary, skeletal, muscular, respiratory, endocrine, nervous, lymphatic, immune, cardiovascular, digestive, urinary, and reproductive systems. Diseases and disorders of the organ systems and their treatments are also emphasized. Prerequisite(s): BIO 130.

BIO 215

Pathophysiology..... 3.00 credits

This course will focus on a basic study of the functioning of human body organ systems, their disorders, and diseases. This includes symptoms, causes, diagnosis, diagnostic tests, treatment and management, and invasive and non-invasive surgical techniques. Other topics include pharmacology and commonly used drugs, the genetic basis of diseases and disorders, and the use of gene therapy in curing them. The role of nutrition as a cause and treatment of diseases is also highlighted. (Formerly: BIO 414.) Prerequisite(s): ENG 101, ENG 102, BIO 212.