EXS

EXS 102 Resistance Training Methods 3.0 UNITS

This course introduces students to simple and complex movements using free weights and machines. Students learn the principles underlying strength training and its relationship to human movement patterns. Students learn how to design personal resistance training programs that safely strengthen musculature. Lab activities apply lecture material and focus on safe and effective resistance training principles, basic functional anatomy, muscular strength and endurance, and basic nutrition.

EXS 115 Sports Nutrition 3.0 UNITS

This course is an introductory study of nutrition. Sports nutrition incorporates the principles of biochemical and physiological processes related to cells and tissue responses to exercise. This course includes specific applications of nutritional theory to help individuals reach and maintain maximum sports performance. Students learn the basics of sports nutrition and how to apply this knowledge to their own active lifestyles. Additionally, this course examines vitamins, nutritional supplements, body composition, weight management and eating disorders in both male and female athletes.

EXS 101 Intro to Exercise Science 2.0 UNITS

This course provides an overview of exercise physiology, sport and exercise psychology, biomechanics, motor behavior, sociocultural aspects of sport and exercise, sports nutrition, and other related topics. Various aspects of careers, requirements for advanced study and learning, certifications, and license necessary for professions in Exercise Science fields are explored.

EXS 103 Aerobic Training 3.0 UNITS

Students learn a variety of formats for cardiovascular exercises and training. Self-assessment and development of realistic programs using specific training methods and equipment provide the student with a broad spectrum of options in cardiovascular training. Through lecture and laboratory exercises, students are introduced to both the practical and physiological aspects of a safe and effective workout program.

EXS 201 Biomechanics 3.0 UNITS

This course emphasizes the analysis of the principles of movement through anatomical design. Major joints of the body, their actions, and muscles that do those actions are stressed. Application to physical exercise is stressed in lab work on strength, endurance and potential motion of major joints.

EXS 202 Exercise Physiology 3.0 UNITS

This course includes the study of human responses and adaptations to exercise of varying levels of stress and intensity. Major topics include bioenergetics, the physiology of the circulatory, respiratory, muscular and nervous systems as they apply to exercise, and the underlying physiological basis of fitness. Laboratory experiences illustrate the practical application of theoretical content with hands-on experiences to measure and apply the concepts learned in lecture.

EXS 203 Exercise Measurement and Prescription 4.0 UNITS

This course stresses the appropriate measurement of various aspects of human exercise. Measurement of body composition, cardiovascular efficiency, muscular strength and endurance, flexibility and other physiological parameters are explored and practiced. Students learn how to develop individualized and properly designed exercise prescriptions for adults, including special populations.

EXS 110 Fitness Training Methods 3.0 UNITS

This course introduces students to the five health-related fitness components. Students learn a variety of formats, modalities, and equipment used for each fitness component. Laboratory activities apply lecture material and focus on performing various exercises safely and properly. Self-assessment of fitness in each of the categories allows students to create realistic fitness goals. Students learn the principles of fitness training and how to design a safe and effective personalized training program. Concepts introduced during lectures are reinforced during laboratory hours.

EXS 224 Principles of Athletic Injuries 3.0 UNITS

This course introduces students to common athletic injuries and illnesses, prevention measures, signs and symptoms, emergency management, and common treatments. Emphasis is placed on prevention and emergency management of acute and overuse injuries common to active lifestyles. Pre-requisites: BIO-211, ENG-101.