

# EXERCISE SCIENCE (EXSC)

## **EXSC 151 - Yoga, Relaxation and Stress Reduction 1 Credit**

Prerequisite(s): Exercise Science majors only. Provides for the development of basic skills in the performance and teaching of hatha yoga and basic neuromuscular relaxation. Each student will be able to plan and implement stress reduction programs for individuals in a one-to-one counseling situation and teach sessions in a classroom format. Previous course PEMJ 151 effective through Winter 2012. 1.5 hours lab.

## **EXSC 231 - Fitness Assessment and Exercise Prescription 4 Credits**

Prerequisite(s): PEMJ 131 and Exercise Science majors only. This course provides the student with the knowledge and basic skills necessary to effectively perform a variety of fitness evaluations prior to the development of individualized exercise recommendations tailored to the needs and goals of each client. Students will be exposed to all aspects of equipment and instrumentation commonly used in the fitness industry to determine cardiovascular and neuromuscular fitness. In addition, assessment protocols for estimating body composition and flexibility will also be reviewed. Meets the University Writing Requirement for majors in Exercise Science. Previous course PEMJ 231 effective through Winter 2012. 3 hours lecture, 1.5 hours lab.

## **EXSC 233 - Leadership in Aerobic Exercise 3 Credits**

Prerequisite(s): PEMJ 131; and Exercise Science, Physical Education w/ conc: Adult Fitness majors only. Students will acquire skills in performing, demonstrating, and teaching aerobic activities. Previous course PEMJ 233 effective through Winter 2012. 2 hours lecture, 2 hours lab.

## **EXSC 234 - Leadership in Anaerobic Exercise 3 Credits**

Prerequisite(s): PEMJ 131 and Exercise Science majors only. Students will acquire skills in performing, demonstrating, and teaching strength training and anaerobic conditioning. Previous course PEMJ 234 effective through Winter 2012. 2 hours lecture, 1 hour lab.

## **EXSC 300 - Seminar I in Exercise Science 2 Credits**

Prerequisite(s): EXSC 231 and EXSC 233 and EXSC 234 and Exercise Science majors only. This course provides the student with the knowledge and basic skills necessary to evaluate potential career choices in the exercise science and fitness industries. Students will visit and observe a variety of fitness related work sites and then apply this knowledge as they engage in real and practical leadership experiences while under the supervision of a fitness professional. 2 hours lecture.

## **EXSC 420 - Theories in Strength and Conditioning 3 Credits**

Prerequisite(s): PEMJ 320 and PEMJ 321; and Exercise Science majors only. An advanced course about the scientific principles, concepts, and theories of strength training and conditioning and their application to athletic performance. Students examine the effects of both acute and chronic anaerobic training on several physiological systems. Students also investigate the bioenergetics, biomechanics, and administrative concerns of anaerobic training. Additionally, students analyze the effects of age, sex, performance-enhancing substances, nutrition, and psychology on athletic performance. 3 hours lecture.

## **EXSC 430 - Exercise for Special Populations 3 Credits**

Prerequisite(s): PEMJ 320 and Exercise Science majors only and departmental approval. This course provides the student with the knowledge to apply principles of personalized fitness to individuals in special populations. Students examine responses to exercise and special considerations for individuals of varying age (children, older adults) and clinical conditions other than heart disease (arthritis, diabetes, dyslipidemia, hypertension, metabolic syndrome, obesity, osteoporosis, pregnancy, pulmonary disease). Emphasis is placed on preparing students to develop safe and effective exercise programs for individuals with special needs. 3 hours lecture.

## **EXSC 475 - Foundations and Practices in Cardiac Rehabilitation 3 Credits**

Prerequisite(s): PEMJ 320 and Exercise Science majors only and departmental approval. This course provides the student with the knowledge and basic skills necessary for patient care in a cardiac rehabilitation setting. Students examine the underlying pathology of coronary disease and learn to apply concepts of exercise testing and exercise prescription to patients in this population. Substantial time is allotted to developing student competences in electrocardiographic interpretation necessary for patient monitoring during exercise. Previous course PEMJ 375 effective through Winter 2012. 3 hours lecture.

## **EXSC 476 - Seminar II in Exercise Science 3 Credits**

Prerequisite(s): EXSC 300 and EXSC 420 and EXSC 430 and EXSC 475 and Exercise Science majors only. This course is specifically designed to allow the Exercise Science major to synthesize information from a series of background topics. Presented in a seminar format, this course will include discussions regarding: the role of the exercise practitioner, critical health issues as they relate to exercise, evaluation of criteria for individual and group exercise programs in a variety of settings, individual factors which influence participation and adherence to exercise programming and professional preparation for employment in health and fitness industry. 3 hours lecture.

## **EXSC 480 - Internship in Exercise Science 8-9 Credits**

Prerequisite(s): EXSC 300 and EXSC 476 and Exercise Science majors only. The internship offers the student an opportunity to work as a trainee with professionals in organizations and/or agencies. Previous course PEMJ 380 effective through Winter 2012. 8 hours internship.