# **KINESIOLOGY (KIN)**

KIN 191S - Special Topics. 1-6 Credits.

# KIN 201 - Basic Exercise Prescription. 3.000 Credits.

Offered every term. Theory, principles, and practice of exercise prescription for aerobic and resistance exercise programs for health, fitness and performance. Students must register for the lecture and a linked lab.

# KIN 205 - Foundations of HHP. 3 Credits.

Offered autumn and spring. An overview of the foundational principles comprising the field of HHP with special emphasis on the historical and philosophical foundations, and the evolution of the unity of mind/body concept. Includes an overview of program options, analysis of future directions, and career choices.

#### KIN 248 - Principles Optimal Performance for Athletes. 2 Credits.

Offered autumn and spring. Introduction to an optimal performance model, with focus upon specific physical, psychological, and environmental factors that contribute to human performance.

#### KIN 292 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of advisor and instr. Course material appropriate to the needs and objectives of the individual student.

#### KIN 310 - Strength Training & Cond. 2 Credits.

This course is designed to introduce students to the fundamentals of aerobic exercise and resistance training related to health, fitness and performance. Subject matter will include, but is not limited to maximizing student involvement in the understanding of physical training and the designing of exercise programs for health (both physical and mental), fitness and performance. This course will lay a basic practical foundation for students to design training programs, understand and design programs for athletic performance and to develop the fundamental theories of training for future coaches.

# KIN 320 - Exercise Physiology. 3 Credits.

Offered every term. Prereq., BIOH 370 or BIOH 211N, KIN 201; coreq., KIN 321. Investigation of the physiological changes and the significance of these changes as they occur during physical work, activity and exercise. Focus on basic energy, musculosketal, nervous, cardiovascular and respiratory systems as they relate to aerobic and anaerobic exercise. Emphasis will be placed on the response of these systems to both acute exercise, and the adaptations to chronic exercise. Credit not allowed toward graduate degree in the exercise science option in Health and Human Performance.

# KIN 321 - Exercise Physiology Lab. 1 Credit.

Offered autumn and spring. Prereq., BIOH 370 or BIOH 211N; coreq., KIN 320. Laboratory session examining the physiological effect of the physical work, activity and exercise on the functions of the human body. Credit not allowed toward graduate degree in the exercise science option in Health and Human Performance.

# KIN 322 - Kinesiology. 3 Credits.

Offered autumn. Prereq., BIOH 211N or BIOH 370; coreq., KIN 323. Anatomy and kinesiology of the neuromusculoskeletal system and body cavities in relation to movement and function.

# KIN 323 - Anatomical Kinesiology Lab. 1 Credit.

Offered autumn. Prereq., BIOH 211N or BIOH 370; coreq., KIN 322. Anatomy and kinesiology of the neuromusculoskeletal system and body cavities in relation to movement and function.

#### KIN 330 - Motor Learning and Control. 3 Credits.

Offered autumn and spring. Prereq., BIOH 201N or BIOH 365. Focused on developing an understanding of the anatomy and physiology within the nervous system necessary for movement. Establishes an understanding of the basic science involved in the control of motor tasks, and uses this foundation to evaluate case studies that will focus on sport performance, clinical deficits, age-related alterations, learning of motor tasks following injury, and other motor-related tasks.

# KIN 410 - Advanced Strength Training & Cond. 3 Credits.

Offered spring. Prereq., KIN 320, senior or graduate student status. Advanced resistance and aerobic exercise testing and prescription for both healthy and clinical populations.

#### KIN 425 - Biomechanics. 3 Credits.

Offered spring. Prereq., KIN 320 & M 115 or higher and major in health and human performance or athletic training. Description and analysis of the fundamental principles of human movement. Includes quantitative study of the Newtonian mechanics governing biological motion and the roles of the musculo-skeletal, nervous and cardio-vascular systems during human activity.

# KIN 440 - Sport Psychology. 3 Credits.

Offered autumn. Prereq., upper-division or graduate status. Course content is focused on the historical development of sport psychology, with emphasis upon the major principles and tactics of the discipline, including motivation, confidence, imagery, leadership, and team building.

# KIN 447 - Analytical & Communicative Techniques. 3 Credits.

Offered every term. Prereq., WRIT 101, WRIT 121 or WRIT 201. Analysis and communicative critique of literature, cinema, and other forms of popular media that contain allegorical life themes. Substantial reading, speaking and writing component. Emphasis on improving and maintaining communication skills.

Gen Ed Attributes: Writing Course-Advanced

# KIN 460 - ECG Assessment. 2 Credits.

Offered autumn. Prereq., junior, senior, or graduate status. Laboratory sessions combined with class sessions to understand electrocardiography and the assessment of electrocardiograms, both at rest and during exercise.

# KIN 480 - Teaching Anatomy, Physiology. 4 Credits.

(R-4) Offered every term. Prereq., student must have received at least a ?B? in Human Anatomy and Physiology and consent of instructor. Students assist in preparation and grading of demonstrations and laboratory assignments, and provide laboratory instruction of undergraduate students enrolled in BIOH 201N/202N-211N/212N. Students are given advanced instruction in principles of human anatomy and physiology.

#### KIN 483 - Exercise Disease & Aging. 3 Credits.

Offered spring. Prereq., KIN 320,321, 460; coreq. KIN 484. Focus on guidelines for exercise testing and prescription for individuals with chronic disease including heart disease, diabetes, hypertension, arthritis, osteoporosis, elderly and pulmonary disease. Class requires 25 assigned hours of service learning. Covers material necessary for ACSM clinical certification exam when combined with KIN 201, 320, 321, 460, and 484.

# KIN 484 - Exercise Disease & Aging Lab. 1 Credit.

Offered spring. Prereq., KIN 320, 321; coreq., KIN 483. Laboratory sessions focus on practical exercise testing and prescription for individuals with chronic disease including coronary heart disease, diabetes, hypertension, arthritis, osteoporosis, elderly and pulmonary disease; basic ECG testing and analysis. Covers material necessary for ACSM clinical certification exam when combined with KIN 201, 320, 321, 460, and 483.

#### KIN 490 - Undergraduate Research. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student.

#### KIN 492 - Independent Study. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

# KIN 498 - Internship. 2-6 Credits.

(R-6) Offered every term. Prereq. all HHP options minimum junior standing and ECP 120/121 (or equivalent). Prereqs per option. Exercise Science Applied: KIN 320/321. If internship is coaching or strength & conditioning must also have completed KIN 410 and COA 405. Exercise Science Pre-Professional: KIN 320/321. If internship is cardiac rehab must also have completed KIN 460/483/484. Community Health: CHTH 335. Supervised field experiences with private businesses, public agencies, or institutions. 45 hours of internship site work = 1 credit. A maximum of 6 credits of Internship 498 may count toward graduation. Students should not be registered for more than 14 credits their internship semester.

#### KIN 499 - Capstone. 1-3 Credits.

(R 6) Offered autumn. Prereq., consent of instr. Independent work under the University omnibus option. See index.