

# KINESIOLOGY (KINE)

## **KINE 5306 Sport Nutrition**

### **3 Semester Credit Hours (3 Lecture Hours)**

This course is designed to provide scientific evidence for the use of nutrient ingestion to enhance sport performance and maintain optimal health. Special emphasis will be placed on the chemical and biological changes caused by the ingestion of specific nutrients. In this course the student will learn to utilize current nutrition research to enhance the athlete's energy systems within various categories of sport.

## **KINE 5307 Research Design in Kinesiology**

### **3 Semester Credit Hours (3 Lecture Hours)**

The application of fundamental research methods to the design and development of a research proposal in kinesiology.

## **KINE 5308 Leadership in Kinesiology**

### **3 Semester Credit Hours (3 Lecture Hours)**

This course assists students in identifying and defining leadership in formal and non-formal kinesiology settings. The theoretical foundations interweaves: (a) formation of self-identification and self-awareness as a leader, (b) development of applied knowledge and skills, and (c) real-world application of effectively functioning as both a follower and a leader, thus developing a more complete and holistic leadership framework.

## **KINE 5309 Scientific Foundations of Strength and Conditioning**

### **3 Semester Credit Hours (3 Lecture Hours)**

This course is designed to examine the acute and chronic adaptations to anaerobic and aerobic training programs, as well as the bioenergetics of exercise and training. KINE 2325 or equivalent approved by KINE Graduate Coordinator.

**Prerequisite:** KINE 2325.

## **KINE 5311 Statistics in Kinesiology**

### **3 Semester Credit Hours (3 Lecture Hours)**

A study of basic statistical concepts and their application to research problems in kinesiology. Topics include issues related to descriptive and inferential statistics. Recommended

**Prerequisite:** KINE 4311.

## **KINE 5312 Sport Physiology**

### **3 Semester Credit Hours (3 Lecture Hours)**

This course expands basic undergraduate exercise physiology principles and focuses on the role of exercise physiology in sports performance, applied and research settings. Recommended

## **KINE 5313 Athletic Testing**

### **3 Semester Credit Hours (3 Lecture Hours)**

An advanced assessment course designed to provide techniques for physiological, athletic, and sport-specific tests associated with athletic performance. Test selection, test administration, data analysis, and appropriate evaluation techniques will be presented.

## **KINE 5314 Applied Principles of Strength and Conditioning**

### **3 Semester Credit Hours (3 Lecture Hours)**

The purpose of this course is to provide theoretical and practical knowledge of the physiological, biomechanical, and administrative aspects of designing and supervising strength and conditioning programs for various populations.

## **KINE 5325 Program Design for Resistance Training**

### **3 Semester Credit Hours (3 Lecture Hours)**

This course presents information on the process of designing scientifically based resistance training programs, modifying and adapting programs to meet the needs of special populations, and understanding how designing programs works in the real world.

## **KINE 5327 Sport Biomechanics**

### **3 Semester Credit Hours (3 Lecture Hours)**

This course provides an exploration of movement kinetics and kinematics through the framework of sports, physical activity, and associated injury mechanisms. Further emphases will be on identifying viable research questions and appropriate methods (including instrumentation) to pursue those questions. Recommended

## **KINE 5338 Motor Development in Sport**

### **3 Semester Credit Hours (3 Lecture Hours)**

This course address the theory and application of human motor development as it relates to the acquisition of motor skills, with a focus on sport performance. The course emphasizes how professionals in the field of sport science should utilize this understanding to serve various client populations throughout the lifespan.

## **KINE 5340 Sport Psychology**

### **3 Semester Credit Hours (3 Lecture Hours)**

A study of the theory and application of psychology as it applies to human behavior in sport and physical activity.

## **KINE 5394 Professional Field Experience I**

### **3 Semester Credit Hours**

A graduate-level field-based experience to provide the student the opportunity to apply knowledge and theory related to exercise and sport science. This course is an elective course and listed in the Supplemental Course section of the degree plan. This course may also be taken at any time during the student's degree with approval of their faculty mentor.

## **KINE 5395 Professional Field Experience II**

### **3 Semester Credit Hours**

A graduate-level field-based experience specific to the field of strength and conditioning. This experience provides the student the opportunity to apply knowledge and theory related to sport and exercise science as well as prepare the student for professional certifications required for hiring.

## **KINE 5397 Graduate Research Project in Kinesiology**

### **1-3 Semester Credit Hours (1-3 Lecture Hours)**

The research project is an alternative to the thesis and three semester hours of credit. The project should be completed in one semester of work with the possibility of more time depending upon the student's topic and design. This is an involved process and the final product includes: 1) Journal Abstract; 2) Journal Manuscript (choice of journal is decided by project chair); 3) Poster Presentation; and 4) Power Point Presentation (Defense). Unlike the thesis, all students that are fully accepted to the program automatically are eligible for the research project.

**Prerequisite:** KINE 5307 and 5311.

## **KINE 5690 Professional Seminar**

### **1-6 Semester Credit Hours (1-6 Lecture Hours)**

PROFESSIONAL SEMINAR Contemporary issues in Kinesiology: topics vary with professional identification of participants.

## **KINE 5696 Directed individual Study**

### **1-6 Semester Credit Hours**

Thesis in progress requires departmental approval. Investigative study on selected problems by students with particular needs. May be repeated when topics vary.

**KINE 5698 Thesis in Progress**

**3-6 Semester Credit Hours (3-6 Lecture Hours)**

Students are required to successfully complete a thesis under the direction and supervision of their thesis chair and committee members. The thesis will require a minimum of two semesters of work and possibly more depending upon their topic and design, thus students will be allowed to register for three hours each semester. The thesis option is designed for students that want to gain extensive experience in research and/or greater knowledge about a specific topic area. It is also designed for those that anticipate more advanced research (e.g., Ph.D.). Upon completion of their work there is a thesis defense. The final product includes: 1) Journal Abstract; 2) Journal Manuscript (choice of journal is decided by thesis chair); 3) Poster Presentation; and 4) Power Point Presentation (Defense).

**Prerequisite:** KINE 5307 and 5311.