

# KINESIOLOGY, MINOR

## Program Description

The department allows minors in the 3 specializations (EC-12 Physical Education Certification, Exercise Science, and Sport Management).

### EC-12 PE Certification Minor

The minor is designed to serve education students that have or are pursuing a major in another teaching discipline and aspire to achieve an additional certification in Physical Education after issuance of initial teaching certificate. However, non-teaching majors who are interested in supplementing their major area of study with an added knowledge of physical education may also pursue this minor. A minimum of twelve hours must be taken at Texas A&M University-Corpus Christi. For additional information, contact an academic advisor in the College of Education and Human Development.

### Exercise Science Minor

The minor is designed to serve students who are interested in supplementing their major area of study with an added knowledge of exercise science. A minimum of twelve hours must be taken at Texas A&M University-Corpus Christi. For additional information, contact an academic advisor in the College of Education and Human Development.

## Program Requirements

### EC-12 PE Certification Minor

Code	Title	Hours
<b>Required Courses</b>		
KINE 2317	Re-inventing Games	3
KINE 2375	Nutrition for Human Performance	3
KINE 3338	Motor Development/Motor Learning	3
KINE 3339	Elementary Physical Education Programs <sup>^</sup>	3
KINE 3341	Secondary Physical Education Programs <sup>^</sup>	3
KINE 4339	Special Populations in Kinesiology	3
<b>Total Hours</b>		<b>18</b>

<sup>^</sup> Blended offering

### Exercise Science Minor

Code	Title	Hours
<b>Required Courses</b>		
KINE 2375	Nutrition for Human Performance	3
KINE 3312	Physiology of Exercise	3
KINE 3112	Physiology of Exercise Lab	1
KINE 3337	Sport and Exercise Psychology	3
KINE 4325	Kinetic Anatomy	3
KINE 4327	Biomechanics	3
KINE 4127	Biomechanics Lab	1
KINE 4311	Measurement and Evaluation	3
<b>Total Hours</b>		<b>20</b>

## Courses

### KINE 1106 Weight Training

#### 1 Semester Credit Hour (1 Lab Hour)

The study and practice of physiological principles related to training programs for the development of muscular strength and endurance.

### KINE 1108 Strength Conditioning for Women

#### 1 Semester Credit Hour (1 Lab Hour)

The study and practice of physiological principles relating to training programs for the development of muscular strength and endurance for women.

### KINE 1110 Individual/Dual/Lifetime Sports

#### 1 Semester Credit Hour (1 Lab Hour)

Instruction, participation, and practice in a variety of individual, dual, and lifetime sports.

### KINE 1112 Personal Self Defense

#### 1 Semester Credit Hour (1 Lab Hour)

Instruction and practice of contemporary techniques of self protection.

### KINE 1116 Ranger Leadership Laboratory

#### 1 Semester Credit Hour (1 Lab Hour)

Practical leadership and teamwork training in rappelling, rope bridges, weapons firing, map reading and land navigation, water safety, patrolling, and other ranger skills. Includes a weekend field trip where the techniques learned will be applied in competitive events. Cross listed with MSCI 1172.

### KINE 1131 Yoga

#### 1 Semester Credit Hour (1 Lecture Hour)

Instruction and practice of Yoga postures, breathing, meditation and relaxation.

### KINE 1133 Tai Chi

#### 1 Semester Credit Hour (1 Lab Hour)

Instruction and practice in a short Taijiquan form and exercises. Solo and partner practice. An introduction to Chinese martial arts theory and practice. Introductory Qigong meditation practices for martial applications and health benefits.

### KINE 1135 Army Physical Fitness Training

#### 1 Semester Credit Hour (3 Lab Hours)

Instruction and practice of the skills, techniques and fitness activities that are germane to typical Army training.

### KINE 1136 Pilates

#### 1 Semester Credit Hour (3 Lab Hours)

Instruction and practice in the skills, techniques, and principles of Pilates with emphasis on the Classical Pilates matwork.

### KINE 2215 First Aid and Safety

#### 2 Semester Credit Hours (2 Lecture Hours)

Basic CPR and first aid instruction leading to American Red Cross certification.

### KINE 2225 Sports Conditioning

#### 2 Semester Credit Hours (2 Lecture Hours)

This course addresses the principles and practice of sports conditioning from a coaching perspective. Topics will include athletic needs evaluation, exercise programming, and program implementation. Issues regarding resistance exercise, speed, endurance, explosiveness training, and agility will be addressed.

**KINE 2313 Foundations of Kinesiology****3 Semester Credit Hours (3 Lecture Hours)**

An overview of the field of physical education which includes the history, philosophy, principles, current concepts of physical education and career options. For kinesiology majors this course must be taken prior to any senior level (4000) kinesiology courses.

**TCCNS:** PHED 1301

**KINE 2317 Re-inventing Games****3 Semester Credit Hours (3 Lecture Hours)**

This course is designed to introduce a framework for the development of games, sports, and activities through an inclusive and developmentally appropriate process of change, challenge, and choice. A wide array of sports, sports-related games and activities are introduced, deconstructed for their current exclusivity and then reconstructed through a framework which seeks to change the existing exclusivity of the rules, to challenge participating students of all cognitive and physical abilities, and then build in a choice component into the activity. This course is recommended prior to enrolling in KINE 3339 and KINE 3341.

**KINE 2321 Resistance Training and Conditioning Lab****3 Semester Credit Hours (3 Lab Hours)**

This is a hands-on course designed to teach students to safely and properly perform a variety of muscle-strengthening exercises. Emphasis is placed on the introduction and review of the fundamental principles of physiology and kinesiology underlying the ability to properly perform a wide variety of muscular strength and conditioning exercises. Additionally, students will be taught to properly instruct individuals of varying ages and physical abilities through a variety of muscular strength and conditioning exercises. This course will include exercises using a variety of resistance equipment (including but not limited to) free weights, machines, light dumbbells, tubing, stability balls, and one's body weight to enhance muscular strength, endurance, power, and hypertrophy, while also reducing one's risk for developing musculoskeletal injuries. Students will be guided in the development of techniques and skills critical to safe, effective, and motivating instruction of strength and conditioning exercises. Several core competencies identified for the NSCA Certified Strength and Conditioning Specialist and Certified Personal Trainer examinations will be addressed.

**KINE 2325 Physiological Aspects of Kinesiology****3 Semester Credit Hours (3 Lecture Hours)**

An introduction to the fundamental principles of human physiology and their application to kinesiology.

**KINE 2326 Essentials of Professional Fitness Training****3 Semester Credit Hours (3 Lecture Hours)**

This course is designed to provide theoretical knowledge and practical skills in preparation for a national certification exam in personal training. Topics include guidelines for instructing safe, effective, and purposeful exercise, essentials of the client-trainer relationship, conducting health and fitness assessments, and designing and implementing appropriate exercise programming.

**KINE 2375 Nutrition for Human Performance****3 Semester Credit Hours (3 Lecture Hours)**

This course is an introduction to the physiological, anatomical, and psychological aspects of nutrition in relation to human performance and optimal health. Special emphasis is placed on sport and fitness enhancement and achievement of peak training levels, through proper nutrient ingestion.

**KINE 3112 Physiology of Exercise Lab****1 Semester Credit Hour (1 Lab Hour)**

The required laboratory course with KINE 3312. Demonstration and hands-on learning will introduce students to the scientific basis, techniques, and methods used in exercise physiology. Lab activities will complement lecture materials from KINE 3312. KINE 3112 must be taken concurrently with KINE 3312.

**KINE 3301 Outdoor Adventure Programs****3 Semester Credit Hours (3 Lecture Hours)**

An introduction to a variety of outdoor adventure activities and basic outdoor skills. In addition to skill acquisition and assessment, this course covers such topics as: history and philosophy of outdoor adventure programs, risk and legal liability and trip planning.

**KINE 3312 Physiology of Exercise****3 Semester Credit Hours (3 Lecture Hours)**

This course is an application of anatomy and physiology that allows for the understanding of the effects of various forms of exercise and the environment on the body systems and performance. Lab activities will complement lecture materials.

**Prerequisite:** (KINE 2325 or BIOL 2401) and KINE 2313.

**Co-requisite:** KINE 3112.

**KINE 3318 Prevention and Care of Athletic Injuries****3 Semester Credit Hours (3 Lecture Hours)**

Provides the general knowledge and general application of theory, principles, and skills used in the prevention, care, and rehabilitation of athletic injuries.

**KINE 3320 Introduction to Therapeutic Interventions****3 Semester Credit Hours (3 Lecture Hours)**

Provides the student with the general knowledge of current theory and application of various therapeutic interventions used in the treatment of musculoskeletal injuries, including thermal therapy, cryotherapy, manual therapy, and therapeutic exercises.

**Prerequisite:** KINE 3318.

**KINE 3337 Sport and Exercise Psychology****3 Semester Credit Hours (3 Lecture Hours)**

This course provides general knowledge of the psychological factors that are associated with participation and performance in sport, exercise, and other types of physical activity with emphasis on motivational techniques, personality dynamics, and mental health serving as focal points.

**KINE 3338 Motor Development/Motor Learning****3 Semester Credit Hours (3 Lecture Hours)**

A study of the fundamental principles related to human motor development and the scientific principles related to motor learning.

**KINE 3339 Elementary Physical Education Programs****3 Semester Credit Hours (3 Lecture Hours)**

The application of the fundamental principles related to human motor development, physical fitness, locomotor skills, non-locomotor skills, manipulative skills, and rhythmical activities with children at the elementary school level. Recommended

**Prerequisite:** KINE 2317 and 3338.

**KINE 3341 Secondary Physical Education Programs****3 Semester Credit Hours (3 Lecture Hours)**

The application of the fundamental principles related to human motor development, physical fitness, sports related activities and dance with children at the secondary school level. Recommended

**Prerequisite:** KINE 3338 and 3339.

**KINE 3343 Program Design in Strength and Conditioning**  
**3 Semester Credit Hours (3 Lecture Hours)**

This course educates and trains students in the process of designing strength and conditioning, plyometric, speed and agility, and aerobic training programs. These programs are complex and require the recognition and manipulation of different variables and training principles to optimize physiological adaptations. Effective training programs involve the coordination of many variables in a systematic fashion that enables the human body to adapt and perform at an optimal level.

**Prerequisite:** BIOL 2401 and 2402.

**KINE 4127 Biomechanics Lab**  
**1 Semester Credit Hour (1 Lab Hour)**

The required laboratory course with KINE 4327. The demonstration and application of mechanical factors and principles affecting human motion. Qualitative and quantitative analysis of human motion with emphasis on sport and fitness activities. KINE 4127 must be taken concurrently with KINE 4327.

**Prerequisite:** KINE 4327\*.

\* May be taken concurrently.

**KINE 4311 Measurement and Evaluation**  
**3 Semester Credit Hours (3 Lecture Hours)**

Use and function of the various tests used in kinesiology together with the purpose, scope and techniques of test construction. Development of statistical techniques necessary for manipulation and interpretation of physical performance data.

**Prerequisite:** KINE 2313.

**KINE 4325 Kinetic Anatomy**  
**3 Semester Credit Hours (3 Lecture Hours)**

An analysis of the skeletal, muscular, and neurological structure and functional aspects of human movement with emphasis on sport and fitness activities.

**Prerequisite:** (KINE 2325 or BIOL 2401) and KINE 2313.

**KINE 4327 Biomechanics**  
**3 Semester Credit Hours (3 Lecture Hours)**

An analysis of the mechanical factors and principles influencing human motion with emphasis on sport and fitness activities. Recommended

**Prerequisite:** (KINE 2325 or BIOL 2401) and KINE 2313.

**Co-requisite:** KINE 4127.

**KINE 4329 Essentials of Strength and Conditioning I**  
**3 Semester Credit Hours (3 Lecture Hours)**

This course is designed to provide a comprehensive overview of strength and conditioning. Emphasis is placed on the exercise sciences (including anatomy, exercise physiology, and biomechanics) and nutrition, exercise technique, program design, organization and administration, and testing and evaluation. Additionally, this course is designed to prepare students for either the nationally accredited Certified Strength and Conditioning Specialist (CSCS) or the NSCA Certified Personal Trainer (CPT) exams.

**Prerequisite:** BIOL 2401, 2402 and KINE 2313.

**KINE 4330 Essentials of Strength and Conditioning II**  
**3 Semester Credit Hours (3 Lecture Hours)**

This course is designed to provide a comprehensive overview of strength and conditioning. Emphasis is placed on the exercise sciences (including anatomy, exercise physiology, and biomechanics) and nutrition, exercise technique, program design, organization and administration, and testing and evaluation. Additionally, this course is designed to prepare students for either the nationally accredited Certified Strength and Conditioning Specialist (CSCS) or the NSCA-certified personal trainer (CPT) exams.

**Prerequisite:** BIOL 2401, 2402, KINE 2313 and 4329.

**KINE 4339 Special Populations in Kinesiology**  
**3 Semester Credit Hours (3 Lecture Hours)**

A course designed to direct kinesiology educators toward meeting the program needs of the exceptional individual in physical education or kinesiology professional setting. Practical teaching application with exceptional individuals is stressed.

**Prerequisite:** KINE 2313.

**KINE 4340 Exercise Testing and Prescription**  
**3 Semester Credit Hours (3 Lecture Hours)**

This course provides classroom and hands on experience addressing all facets of exercise testing and prescription ranging from health appraisal, physical fitness testing, principles of exercise prescription, clinical exercise physiology, and special populations.

**Prerequisite:** (KINE 2325 or BIOL 2401) and KINE 2313 and 3312.

**KINE 4390 Seminar in Exercise and Sport**  
**1-3 Semester Credit Hours (1-3 Lecture Hours)**

Contemporary issues in Exercise and Sport; topics vary with the individual. May be repeated for credit when topic varies.

**KINE 4693 Professional Field Experience I**  
**6 Semester Credit Hours (6 Lecture Hours)**

This course is a field-based experience (minimum of 150 hours) to provide the student the opportunity to apply knowledge and theory related to the student's specialization in kinesiology (e.g. Exercise Science and Pre-Allied Health Professional). Students must enroll in both KINE 4693 and KINE 4694 at the same time. To enroll students must have departmental approval as well as a kinesiology GPA of 2.75. The field experience is for seniors only and they should enroll during their last semester. Students are allowed to enroll in other coursework but not to exceed the 18-hour university limit.

**KINE 4694 Professional Field Experience II**  
**6 Semester Credit Hours (6 Lecture Hours)**

This course is in conjunction with Professional Field Experience I. A minimum of 150 hours is required for this portion of the internship for a total of 300 hours. Students must enroll in both KINE 4693 and KINE 4694 at the same time. All of the requisites and limitations of KINE 4693 apply to this course as well.

**KINE 4696 Directed Individual Study**  
**1-6 Semester Credit Hours**

Investigative study on selected problems by students with particular needs through special permission of the Department Chair and Dean. May be repeated for credit when topic varies.