Course List for the Bachelor of Science in Exercise Science - Health Fitness and Wellness
2020-2021 Academic Year | Department of Kinesiology, UTA College of Nursing

Resources
For official course lists, descriptions and degree requirements please refer to the UTA Catalog. The College of Nursing makes every effort to keep this list accurate, but this list is unofficial and provided for convenience only. UTA Catalog: UTA Catalog, Undergraduate Kinesiology Programs
Do you have questions, or would you like to speak with someone about applying to the program? Our academic advisors are ready to meet with you: Kinesiology Academic Advising

Courses

KINE 1300
Intro to Kinesiology
Introduction to key concepts concerning the anatomical, motor, biomechanical, and physiological basis of exercise science. The student is introduced to cardiovascular responses to training, analysis of human and motor behavior, and basic principles of exercise prescription.
| No Prerequisites | 3 Credit Hours

KINE 1100
Lab Skills for Kinesiology
The course is designed to provide basic lab measurement and testing experiences for Kinesiology and Exercise Science students.
| Prerequisite: KINE 1300 or concurrent enrollment | 1 Credit Hour

KINE 3300
Functional Anatomy
A study of the musculoskeletal anatomy to include bony landmarks, muscle origin, insertion and action, as well as nerve innervation. Knowledge of the functional anatomy is crucial to the understanding of sports performance, the design of strength training programs, and injury prevention.
| Prerequisites: KINE 1300, 1100, BIOL 2457 | 3 Credit Hours

KINE 2330
Care and Prevention of Athletic Injuries
An introduction to the profession of Athletic Training. Common sports-related injuries and illnesses will be discussed with an emphasis on the proper methods for prevention, recognition, and immediate care.
| No Prerequisites | 3 Credit Hours

KINE 3401
Biomechanics of Human Movement
Quantitative and qualitative analyses of human movement. Emphasis is on the application of the principles of human movement, with consideration of functional anatomy, kinesiology and mechanical concepts to exercise, sport, and activities of daily living.
| Prerequisites: KINE 1300, 1100, BIOL 2457, MATH 1302 | 4 Credit Hours

KINE 3415
Physiology of Exercise
Provides the physiology background necessary for an understanding of the acute and chronic effects of exercise on the body. Physiological concepts and their relationship to exercise, sport, and health programs are examined. Laboratory experiences are designed for evaluating physiological responses to exercise.

Revision: December 2020
College of Nursing and Health Innovation,
The University of Texas at Arlington
Prerequisites: KINE 1300, 1100, BIOL 2457, 2458, MATH 1302 | 4 Credit Hours

KINE 3325
Undergrad Research Methods
Current practices in the conduct of quantitative research, measurement, and evaluation processes applied to programs related to exercise science, pedagogical kinesiology, athletic training and related fields will be examined. Enrolled students will develop and conduct a research project based on their declared discipline
Prerequisites: KINE 1300, 1100, MATH 1302, 1308 | 3 Credit Hours

HEED 3301
Sports Nutrition
Overview of nutrients necessary for healthful living and nutritional impact on reducing risk factors of lifestyle diseases. Application of nutrient recommendations for sports and exercise activities, including fluid replacement, sports supplements, and ergogenic aids.
No Prerequisites | 3 Credit Hours

KINE 3302
Sport and Exercise Psychology
Analysis of exercise and sport activities in terms of psychological skills and strategies. Topics include motivation, arousal regulation, focus, concentration, group cohesion & imagery.
No Prerequisites | 3 Credit Hours

KINE 4329
Strength and Conditioning in Sport and Performance
This course covers the physiology and biomechanics of strength training and conditioning. Additional topics include: testing and evaluation of athletes, resistance training techniques, training program design, and organization administration of a strength training facility. This course is designed to prepare students to take the CSCS, Certified Strength and Conditioning Specialist, certification examination.
Prerequisites: MATH 1302, 1308, BIOL 2457, 2458, KINE 3300, 3415, 3325 | 3 Credit Hours

KINE 4331
Obesity and Weight Management
This course is a review of the scientific literature on the causes and consequences of obesity. Topics include: techniques for assessing body composition, metabolic factors promoting obesity, the role of obesity in metabolic and cardiovascular disease, traditional and non-traditional weight loss programs, economic consequences and contributors of obesity, and psychosocial consequences and contributors of obesity.
Prerequisites: KINE 3415, 3325 | 3 Credit Hours

KINE 4415
Fitness Assessment/Programming
Classroom and laboratory experiences provide the student with an opportunity to become familiar with the assessment of physical fitness including graded exercise testing, metabolic studies, basic ECG interpretation, and body composition. The student will also learn risk factor identification and exercise prescription.
Prerequisites: KINE 3325, 3415 | 4 Credit Hours

KINE 4330
Program Design and Administration
The development and operation of health/wellness programs and facilities will be presented, including: program design and administration, facility design, organizational development, management theory, marketing, financial management, legal issues, strategic planning, and evaluation models. The student will participate in all phases of program and facility development, such as budget development, recruiting and retaining employees and clients, market niche, and conflict resolution.
Prerequisites: KINE 3415, 3325 | 3 Credit Hours

Revision: December 2020
College of Nursing and Health Innovation,
The University of Texas at Arlington
KINE 4490
Exercise Science Internship
Individualized academic training in an external professional exercise science setting (e.g., hospital, physical therapy, cardiac rehabilitation, fitness center) under the direct supervision of an exercise science professional or licensed therapist. Proof of sufficient professional liability insurance is required for enrollment. A minimum of 180 hours in the field is required for completion of the course. | Prerequisites: KINE 4415 or concurrent enrollment| 4 Credit Hours