

KINESIOLOGY - KIN

KIN 502 Essentials of Performance Enhancement 3 Credits

This course is the application of program design for sport-specific clients. Students will be able to design cardiorespiratory training programs, power OPT™ programs, and programs for clients who participate in individual competition or team sports. Students will apply principles of reactive neuromuscular training (plyometric) and integrated speed training to help clients achieve their established goals. Students completing this course will be prepared to take National Academy of Sports Medicine's Performance Enhancement Specialization credentialing examination.

Offered: every fall.

KIN 506 Essentials of Corrective Exercise Training 3 Credits

This course will present an evidence-based approach to corrective exercise, the components of a comprehensive solution, and the practical know-how to develop and implement integrated strategies to improve common movement impairments. Students completing this course will be prepared to take National Academy of Sports Medicine's Corrective Exercise Specialist credentialing examination.

Offered: every spring.

KIN 507 Clinical Health Behavior Change 3 Credits

This course will explore health behavior theories to facilitate the adoption of healthful behaviors to various groups. It will include motivational interviewing, practice of nonverbal, active listening, goal assessment and group counseling. It will also explore the evaluation of nutrition education interventions.

Offered: every fall, online only.

KIN 522 Exercise Psychology 3 Credits

This course will cover topics such as eating disorders among athletes, female athlete triad, and weight management. It will provide students with skills to counsel athletes as well as sports teams. The course will also cover performance enhancement, motivation, and stress management of athletes. Students will develop an understanding of behavioral change theory as it relates to sports psychology.

Offered: every spring, online only.

KIN 565 Electrocardiography and Clinical Stress Testing 3 Credits

This course is designed to present the theoretical principles of electrocardiography. Topics include a review of cardiac physiology including the normal sequence of cardiac muscle depolarization and repolarization, determination of heart rate and rhythm, electrical axis and the diagnosis of cardiac rhythm in 12-lead ECG. Special emphasis will be placed on myocardial ischemia, myocardial infarction, treatment and clinical evaluation. Pharmacological interventions and the impact of the ECG, as well as exercise will be discussed.

Offered: every spring.

KIN 583 Advanced Movement Analysis 3 Credits

In this course, students will learn how to perform functional movement screens to evaluate movement patterns. Students will also learn how to interpret and analyze movement patterns to identify muscular weaknesses/ imbalances as well as areas where flexibility limits proper execution of a movement. Finally, students will learn to customize an exercise/stretching routine to address the limitations of the athlete to both improve their athletic performance and reduce the risk of injury.

Offered: every spring.

KIN 602 Clinical Exercise Science 3 Credits

Details the functions of the cardiovascular and respiratory systems emphasizing normal function, pathophysiology, initiation and progression of disease and current treatment. special reference will be made to the role of exercise as a therapeutic modality.

Prerequisite: an introductory course in anatomy and physiology.

Offered: every fall, online only.

KIN 603 Internship I 3 Credits

A supervised part-time internship in clinical and non-clinical exercise programs or in clinical exercise testing laboratories. Includes clinical exercise testing, exercise prescription and/or exercise leadership experiences. Requires students to complete a minimum of 120 hours.

Prerequisite: permission of program director & associate dean.

Offered: fall, spring & summer.

KIN 615 Statistics in Exercise Science 3 Credits

Descriptive statistical methods including central tendencies, dispersion standard scores, correlation, and probability theory will be addressed. The elements of test construction: table of specifications, reliability, validity and item analysis will be considered. Candidates will become familiar with norm referenced, criterion referenced and performance instruments and will study the diagnostic teaching model of instruction. Technology will be used to simulate evaluation and statistical analysis.

Offered: every fall.

KIN 622 Sports and Fitness Nutrition 3 Credits

This course will focus on understanding the specific role of energy and nutrients in fitness and athletic performance. Additional topics will include the role of fluid and electrolytes, ergogenic aids, and special diets in physical activity. Tools for assessing body position (body fat, muscle mass), unique dietary concerns across the lifespan and in special population groups (heart disease, diabetes, obesity) and the effect of diet on endurance will be explored.

Offered: every fall, online only.

KIN 680 Research Methods in Exercise Science 3 Credits

Identification and delineation of research problems, survey of related literature and detailed examination of various research methods. Attention given to the presentation of research in both written and oral form.

Offered: occasionally.

KIN 689 Master's Project 3 Credits

The master's project is designed as a rigorous scholarly activity that provides an opportunity to integrate theoretical knowledge with research.

Prerequisite: permission of program director.

Offered: fall, spring & summer.