KINESIOLOGY (KIN)

KIN 501 Research Methods in Kinesiology 3 Hours

An examination of the methods, materials, techniques, and planning of research studies used and conducted in the various disciplines of kinesiology. (To be taken in the first term of enrollment.) *Recent Term*(s) Offered: fall 2022; spring 2024

KIN 503 Advanced Motor Learning and Control 3 Hours

Theories and principles of learning as they apply to the acquisition of gross motor skills. Emphasizes the interpretation and practical application of experimental data. *Recent Term*(s) Offered: fall 2022; fall 2023

KIN 504 Advanced Exercise Physiology 3 Hours

A comprehensive study of the acute responses and chronic adaptations resulting from exercise or other stressors on the physiological function of the human body. Particular attention will be given to applied learning, as well as to review and critique current research. *Recent Term*(s) Offered: fall 2022; spring 2024

KIN 505 Foundations of Curriculum Construction 3 Hours

Principles, procedures, and criteria for curriculum construction and revision, course building, and lesson planning. *Recent Term*(s) *Offered: None*

KIN 508 Adaptive Physical Education 3 Hours

In-depth study of instruction of disabled children in mainstream and/ or special physical education classes. Knowledge and skills necessary to assess, plan intervention, and instruct mild, moderate, severely/ profoundly disabled children in physical education. *Recent Term(s) Offered: None*

KIN 509 Sport in Multicultural Society 3 Hours

An examination/understanding of the role of sport in America, its impact on the social structure and the leadership behaviors needed to ensure that the societal impact of sport is congruent with traditional American values.

Recent Term(s) Offered: None

KIN 512 Advanced Strength & Conditioning 3 Hours

Designed to develop advanced knowledge of strength and conditioning principles and practices. The aim of the course is to understand the process behind development, implementation, and evaluation of strength and conditioning programs for elite, collegiate, high school, and/or recreational athletic populations. The course will include professional writing and a hands-on learning component with professionals in the field of strength & conditioning.

Recent Term(s) Offered: spring 2022; fall 2023

KIN 513 Coaching Theory 3 Hours

The theory and analysis of leadership behavior in interscholastic athletics with an emphasis on developing leadership knowledge, personal behavior qualities and job related skills applicable in diverse interscholastic athletic settings.

Recent Term(s) Offered: None

KIN 514 Lab Methods in Exercise Physiology 3 Hours

Theory and application of laboratory techniques germane to research in Exercise Physiology. Includes musculoskeletal, cardiovascular, metabolic, and human performance testing.

Recent Term(s) Offered: spring 2022; spring 2023; spring 2024

KIN 515 Advanced Measurement and Evaluation 3 Hours

Study and application of assessment tools and statistical techniques commonly used in kinesiology research. Includes regression modeling, single and multi-factor analysis of variance, and repeated measures designs.

Recent Term(s) Offered: None

KIN 516 Administrative Practice in KRS 3 Hours

Provide useful information and techniques related to the administration of physical education programs in both school and other settings. Students will focus on leadership that enhances the organization, management, planning and implanting programs and facilities. *Recent Term(s) Offered: None*

KIN 518 Advanced Statistics in Kinesiology 3 Hours

Study and application of statistical techniques commonly used in kinesiology research. Includes regression modeling, single and multifactor analysis of variance, and repeated measures designs. **Restriction(s):** Enrollment is limited to students in Kinesiology (0454) *Recent Term(s) Offered: fall 2023; fall 2024*

KIN 520 Teaching Strategies in Physical Education 3 Hours

Study and application of teaching strategies utilized in the elementary and secondary physical education setting. *Recent Term(s) Offered: None*

KIN 521 Analysis and Criticism of Professional Literature in Physical Education 3 Hours

Analysis and critical evaluation of professional literature in the field of physical education and exercise science. Recent Term(s) Offered: None

KIN 522 Advanced Exercise Testing and Prescription 3 Hours

Focuses on the use of exercise in the treatment and diagnosis of various major disease states. Provides the student with an advanced understanding of electrocardiogram (ECG) monitoring, interpretation, graded exercise testing, blood pressure measurement, interviewing skills, screening, risk stratification, and pharmacology. Emphasizes exercise prescription for clinical populations, such as those with endocrinological/ metabolic disorders, cardiovascular disease, respiratory disease, and neuromuscular disorders.

Recent Term(s) Offered: spring 2022; fall 2023

KIN 523 Seminar in Exercise Physiology 3 Hours (repeatable max of 6 hrs)

Advanced study of contemporary knowledge and current professional research centering on various selected topics to the field of exercise science.

Recent Term(s) Offered: fall 2022; spring 2023; fall 2024

KIN 524 Applied Biomechanics 3 Hours

Advanced study of the mechanical, neuromuscular, and anatomical bases of human movement.

Recent Term(s) Offered: fall 2022; spring 2023; fall 2024

KIN 525 Fitness Management 3 Hours

The course will provide content addressing the current industry standards and guidelines for operating private, corporate and clinical fitness facilities and fitness management scenarios and case studies will be used to apply the course content to the field setting. **Restriction(s):** Enrollment is limited to students in Kinesiology (0454) *Recent Term(s) Offered: None*

KIN 528 Dynamics of Injury Management 3 Hours

Integrates the knowledge, skills and values that Certified Athletic Trainers must possess to evaluate and treat athletic injuries and refer to appropriate medical personnel.

Restriction(s): Enrollment is limited to students in Recreation and Sport Admin (095)

Recent Term(s) Offered: None

KIN 530 Independent Investigation in Kinesiology 1-3 Hours

(repeatable max of 3 hrs) Research problems or projects in the scientific, organizational, administrative, or supervisory areas of kinesiology. *Recent Term*(s) Offered: fall 2022; summer 2023

KIN 536 Applied Sport Science 3 Hours

Comprehensive exploration of sports science essentials to make datadriven decisions to optimize athlete performance. Students will acquire a deep understanding of the intricate and multifaceted nature of athletic performance, equipping them to effectively evaluate and communicate their insights.

Recent Term(s) Offered: None

KIN 596 Internship in Exercise Physiology 1-6 Hours (repeatable max of 6 hrs)

Work and/or laboratory experience in Exercise Physiology practical settings in progression towards completion of the graduate program. Liability insurance is required.

Recent Term(s) Offered: spring 2022; spring 2023

KIN 598 Capstone Research Experience in Exercise Physiology 1-6 Hours (repeatable max of 6 hrs)

Designed for non-thesis students in the master's program in kinesiology to gain appropriate research experience prior to completing the program. Taken in the final semester of the program.

Restriction(s): Enrollment is limited to students in Kinesiology (0454) Recent Term(s) Offered: None

KIN 599 Thesis Research/Writing 1-6 Hours (repeatable max of 6 hrs) The master's thesis is to be directed by a member of the Graduate Faculty of the Department. (Each semester)

Recent Term(s) Offered: spring 2022; spring 2023; fall 2023; spring 2024

KIN 600 Maintain Matriculation 1-6 Hours (repeatable max of 6 hrs) Continued enrollment for thesis completion.

Recent Term(s) Offered: spring 2022; summer 2023; summer 2024