

# KIN - KINESIOLOGY

<p>KIN 105 Fnd of Exercise Science. <span style="float: right;">3 Credits</span>            Term Typically Offered: Fall, Spring, Summer            Corequisite(s): KIN 106.            Extends and applies understanding to the use of life science in promoting healthy lifestyles to students' lives. The exercise sciences of physiology, kinesiology, biomechanics, and motor learning are integrated through didactic and laboratory instruction that focuses students on the fundamental importance of exercise science in healthy living.            Lecture Hours 3            Department: Health &amp; Human Performance</p>	<p>KIN 321 Exercise Physiology Lab. <span style="float: right;">1 Credit</span>            Term Typically Offered: Fall, Spring            Corequisite(s): KIN 320.            (1.5 lab/wk) Complements topics presented in exercise physiology lecture. Labs involve physical activity, investigation, and application of clinical assessment skills. Research teams investigate, collect, and analyze data, and present results in oral and written formats.            Lab Hours 1            Department: Health &amp; Human Performance</p>
<p>KIN 106 Fndtns of Exercise Science Lab. <span style="float: right;">1 Credit</span>            Corequisite(s): KIN 105.            Provides laboratory experiences in exercise science to complement student learning in the classroom. By its nature, exercise science involves lab activities dependent upon physical activity.            Lab Hours 1            Department: Health &amp; Human Performance</p>	<p>KIN 322 Kinesiology. <span style="float: right;">3 Credits</span>            Term Typically Offered: Fall            Prerequisite(s): KIN 105 and KIN 106.            Corequisite(s): KIN 323.            Provides an in-depth exploration into musculoskeletal anatomy and functional movement patterns as they apply to human performance.            Lecture Hours 3            Department: Health &amp; Human Performance</p>
<p>KIN 205 Foundations in HHP. <span style="float: right;">3 Credits</span>            Term Typically Offered: Fall            Introduces fundamentals of scientific basics in human movement. Included areas of study are basic human bone and muscle anatomy, principles of biomechanical movement, and basic principles of exercise physiology. The relationship between Health/Physical Education and Education is introduced as well as historical background facts, discipline interrelationships, career opportunities, elementary principles of fitness and nutrition, and professional challenges.            Lecture Hours 3            Department: Health &amp; Human Performance</p>	<p>KIN 323 Anatomical Kinesiology Lab. <span style="float: right;">1 Credit</span>            Term Typically Offered: Fall            Prerequisite(s): KIN 105 and KIN 106.            Corequisite(s): KIN 322.            Examines the anatomical structures and mechanical aspects of human motion. Laboratory exercises concentrate on the role of muscle and joint action during basic movements and the adaptations that can result from pathologic conditions. Students will be required to apply their knowledge of anatomy towards understanding individual joint function as well as the integrated function of several joints during complex activities such as normal human locomotion.            Lab Hours 1            Department: Health &amp; Human Performance</p>
<p>KIN 210 Prncpls Strength Conditioning. <span style="float: right;">3 Credits</span>            Term Typically Offered: Spring            Prerequisite(s): KIN 105 and KIN 106.            Provides the foundation of resistance exercise and conditioning. Students will gain an understanding of the scientific basis of resistance exercise; will examine various methods of strength and conditioning techniques; and will design and apply programming to improve strength, fitness, and sports performance.            Lecture Hours 3            Department: Health &amp; Human Performance</p>	<p>KIN 325 Biomechanics. <span style="float: right;">3 Credits</span>            Term Typically Offered: Spring            Prerequisite(s): KIN 105, KIN 106, KIN 322, KIN 323.            Corequisite(s): KIN 328.            Emphasizes the effects of structure, motion, and forces, and their effects on and within the human body using both qualitative and quantitative analyses. Additional emphasis will be placed on the development of critical thinking skills associated with biomechanics-related research and interpretation.            Lecture Hours 3            Department: Health &amp; Human Performance</p>
<p>KIN 294 Seminar/Workshop. <span style="float: right;">1-6 Credits</span>            Department: Health &amp; Human Performance</p>	<p>KIN 327 Kinesiology &amp; Biomechanics. <span style="float: right;">3 Credits</span>            Term Typically Offered: Fall, Spring            Prerequisite(s): KIN 105.            Corequisite(s): KIN 328.            Examines the anatomy and mechanics of human motion with the goal of improving efficiency in sport, dance, and exercise.            Lecture Hours 3            Department: Health &amp; Human Performance</p>
<p>KIN 320 Exercise Physiology. <span style="float: right;">3 Credits</span>            Term Typically Offered: Fall, Spring            Prerequisite(s): KIN 105.            Corequisite(s): KIN 321.            Provides the physiological fundamentals needed to understand skilled movement. The course focuses on the responses of the human body during exercise with emphasis on professional interventions in various education, health promotion, and human performance settings. Various body systems (i.e., cardiovascular, respiratory, metabolic, musculo-skeletal, endocrine) are studied to understand the adaptations associated with physical fitness, sport, and healthy lifestyle activities.            Lecture Hours 3            Department: Health &amp; Human Performance</p>	<p>KIN 328 Biomechanics Lab. <span style="float: right;">1 Credit</span>            Term Typically Offered: Fall, Spring            Prerequisite(s): KIN 105, KIN 106, KIN 322, KIN 323.            Corequisite(s): KIN 325.            Examines the mechanical aspects of human motion. Laboratory exercises focus on the effects of structure, motion, and force related to exercise, sport, and physical activity.            Lab Hours 1            Department: Health &amp; Human Performance</p>

KIN 330 Motor Learning and Control. 3 Credits

Term Typically Offered: Fall, Spring

Prerequisite(s): KIN 105.

Corequisite(s): KIN 331.

Focuses on the basic principles of motor control and learning, examining the mechanisms by which the nervous system plans, initiates, and executes movements (both involuntary and voluntary) as well as accomplished sensory-motor integration and the means for maximizing the learning and performance of movement skills including how to design practice conditions and how to optimize arousal, attention, motivation, feedback, and transfer so to optimize skilled motor performance.

Lecture Hours 3

Department: Health & Human Performance

KIN 331 Motor Learning and Control Lab. 1 Credit

Term Typically Offered: Fall, Spring

Corequisite(s): KIN 330.

Includes laboratory exercises in motor control fundamentals of nervous system functions, sensory-motor integration, and methods for maximizing the learning and performance of movement skills.

Lab Hours 1

Department: Health & Human Performance

KIN 364 Rsrch Meths in Hlth Hmn Prfrm. 3 Credits

Term Typically Offered: Fall, Spring

Prerequisite(s): KIN 105, KIN 106, STAT 216, or consent of instructor.

Provides students with experience and knowledge which will allow them to critically analyze and evaluate completed research in health and human performance. Examines methods of assessment, prescription, and evaluation in health and human performance activities.

Lecture Hours 3

Department: Health & Human Performance

KIN 415 Adv Exercise Test & Prescrip. 3 Credits

Term Typically Offered: Fall, Spring

Prerequisite(s): KIN 320.

Explores basic techniques in the assessment of physical fitness, prescription of exercise for healthy and unhealthy adults, and promotion of physical activity within communities.

Lecture Hours 3

Department: Health & Human Performance

KIN 462 Evidence Based Assessment. 3 Credits

Term Typically Offered: Fall, Spring

Provides the foundation for evidence-based practice in exercise science by establishing scientific evidence as the basis for clinical decision making. Clinical practices are questioned and evaluated for alignment with evidence-based decision making. Commonly accepted hierarchies of evidence are used to evaluate the level of scientific support for both assessment and treatment techniques used in exercise science. Objective outcome measures that determine level of success in individual client scenarios in a wide array of exercise applications are used to provide evidence of intervention effects.

Lecture Hours 3

Department: Health & Human Performance