KIN - KINESIOLOGY

KIN Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/KIN/)

Courses

KIN 100 Development Activities  credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/KIN/100/)
Skills and knowledge essential for leisure-time activities which are classified as developmental activities. Prerequisites and descriptions for each developmental activity are provided in the Class Schedule. More than one activity (Sections A through Z) may be taken in the same term. Additional fees may apply. See Class Schedule. May be repeated to a maximum of 2 hours.

KIN 101 Dance Activities  credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/101/)
Skills and knowledge essential for leisure-time activities which are classified as dance activities. May be repeated; more than one activity (Sections A through Z) may be taken in the same term. Prerequisite: See Class Schedule for prerequisites for each dance activity.

KIN 102 Individual and Dual Activities  credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/102/)
Skills and knowledge essential for leisure-time activities which are classified as individual and dual activities. Prerequisites for each individual or dual activity are provided in the Class Schedule. More than one activity (Sections A through Z) may be taken in the same term. Additional fees may apply. See Class Schedule.

KIN 103 Indoor Court Activities  credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/103/)
Skills and knowledge essential for leisure-time activities which are classified as indoor court activities. Prerequisites for each indoor court activity are provided in the Class Schedule. More than one activity (Sections A through Z) may be taken in the same term.

KIN 104 Skating Activities  credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/104/)
Skills and knowledge essential for leisure-time activities which are classified as skating activities. Prerequisites for each skating activity are provided in the Class Schedule. Additional Ice Skating Rink Facility charges are required and provided in the Class Schedule. More than one activity (Sections A through Z) may be taken in the same term. Additional fees may apply. See Class Schedule.

KIN 107 Aquatic Sport Activities  credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/107/)
Skills and knowledge essential for leisure-time activities which are classified as aquatic sport activities. Prerequisites for each aquatic sport activity are provided in the Class Schedule. More than one activity (Sections A through Z) may be taken in the same term. Additional fees may apply. See Class Schedule.

KIN 108 Stress Management  credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/KIN/108/)
Stress, a feeling of physical, mental, or emotional tension, is common amongst college students. This course explores the concepts of stress from a holistic approach, emphasizing identification of sources of stress, understanding physical and emotional consequences, and developing techniques for dealing with stress. This course will help students begin to identify and recognize common stressors in their own personal environments, and formulate a personalized strategic plan to relieve and manage stress.

KIN 109 Team Sport Activities  credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/109/)
Skills and knowledge essential for leisure-time activities which are classified as team sport activities. Prerequisites for each team sport activity are provided in the Class Schedule. More than one activity (Sections A through Z) may be taken in the same term.

KIN 110 Intro to the Health Sciences  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/110/)
Same as CHLH 110. See CHLH 110.

KIN 111 Prescribed Exercise  credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/111/)
Prescribed exercises adapted to individual needs, capacities, and interests; open to persons with paraplegia, permanently disabled, and individuals with significant temporary disabilities who will require long term rehabilitation. Students must be registered or eligible to register with DRES. May be repeated to a maximum of 4 hours. Prerequisite: Enrollment restricted to students with permanent disabilities or disabilities which are long-term in nature. Student should be registered or eligible to register with DRES.

KIN 120 Injuries in Sport  credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/KIN/120/)
Emphasizes injury mechanisms, means of injury prevention, and emergency care applied to various types of sport injuries; laboratory sessions emphasize preventive and therapeutic taping and emergency first aid. Additional fees may apply. See Class Schedule.

KIN 121 Survey of Sports Medicine  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/121/)
Introduction to sports medicine for non-kinesiology majors; includes discussion of training, conditioning, preparation for sports, injury aspects of sports, and rehabilitation.

KIN 122 Physical Activity and Health  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/122/)
Provides the scientific evidence of physical activity in preventing disease and optimizing quality of life. Teaches behavioral change strategies to achieve an active lifestyle.

KIN 125 Orientation KIN & Comm Health  credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/KIN/125/)
Serves as an introduction to the Kinesiology and Community Health Department and provides an overview of the Kinesiology and Community Health curricula, areas of study, and opportunities available for a career in the field. Enrollment required for Kinesiology freshmen and transfer students. Credit is not given for both KIN 125 and CHLH 125.

KIN 130 Analysis of Basic Movement  credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/KIN/130/)
Introduction to human movement through development of skills and knowledge relative to structure and function of the human body in selected physical activities including: basic postural and locomotion patterns and fundamental throwing patterns; also studies developmental aspects of typical and atypical movement skills. Emphasizes performance and qualitative analysis of movement skills.

KIN 140 Social Sci of Human Movement  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/140/)
Introduction to the social scientific aspects of human movement including sport; particular emphasis on concepts derived from the social sciences (including psychology) that are appropriate to human movement. Additional fees may apply. See Class Schedule. This course satisfies the General Education Criteria for: Social Beh Sci - Soc Sci
KIN 142 Contemporary Issues in Sport  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/142/)
Examines current issues in sport relative to competition, economics, race, sex, youth, educational institutions, deviant behavior, religion, psychology, and the media.

KIN 150 Bioscience of Human Movement  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/150/)
Integrates anatomical and physiological aspects of human movement; emphasizes how the body moves, physiological responses to exercise stress, physical conditioning and physical fitness. Additional fees may apply. See Class Schedule.
This course satisfies the General Education Criteria for: Social Beh Sci - Soc Sci

KIN 160 Introduction to Kinesiology  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/160/)
Kinesiology is the interdisciplinary study of physical activity that includes a number of sub-disciplines. This course will examine these areas of study within Kinesiology from scientific, applied, and experiential perspectives. Students will study fundamental/introductory concepts associated with each area of Kinesiology, explore those concepts within research and applied contexts, and complete activities in which they experience various dimensions of those concepts.

KIN 199 Undergraduate Open Seminar  credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/KIN/199/)
Topics will vary each semester. Please see section topic. Approved for Letter and S/U grading. May be repeated.

KIN 201 Physical Activity Research Methods  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/201/)
This course provides an introduction of physical activity measurement and methods. The course will focus on (a) defining physical activity and associated terms and concepts; (b) providing detailed understanding of approaches and tools for measuring physical activity; and (c) facilitating understanding of scientific methods for physical activity research (e.g., experimental and non-experimental designs). This course satisfies the General Education Criteria for: Quantitative Reasoning II

KIN 230 Diversity in Recreation, Sport, and Tourism  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/230/)
Same as HDFS 263 and RST 230. See RST 230.
This course satisfies the General Education Criteria for: Cultural Studies - US Minority

KIN 247 Intro to Sport Psychology  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/247/)
Analysis of the competitive sport process, with study of how personality and situational variables affect motivation, anxiety, and aggression in sport. Attention is given to the psychological skills needed by coaches and athletes for successful and enjoyable sports participation.

KIN 249 Sport & Modern Society  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/249/)
The sociological analysis of sport in modern societies with regard to social class, politics, community, education, and collective behavior. This course satisfies the General Education Criteria for: Social Beh Sci - Soc Sci

KIN 259 Motor Development and Control  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/259/)
This course provides students with an overview of motor development across the life span as well as an introduction to the discipline of motor behavior/control. Specifically, it focuses on the concepts and principles of coordination, the control of movement, and development of skilled action throughout the life span. The course focuses on such topics as the development of fundamental movement activities; movement control processes; acquisition, retention and transfer skill; and the role of constraints to action. Same as HDFS 259. Additional fees may apply. See Class Schedule. Credit is not given for both KIN 259 and KIN 257.
This course satisfies the General Education Criteria for: Social Beh Sci - Beh Sci

KIN 260 Teaching Activities I  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/260/)
An activity-based course focusing on skills, knowledge, and teaching progressions related to territorial and net sports for school age students. Students will develop knowledge of the basic skills and teaching progressions related to the activities covered in the class.

KIN 261 Teaching Activities II  credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/KIN/261/)
An activity-based course focusing on skills, knowledge, and teaching progressions related to target sports, rhythms, dance and fitness activities, and adventure education activities for school age students. Students will develop knowledge of the basic skills and teaching progressions related to the activities covered in the class.

KIN 262 Motor Develop, Growth & Form  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/262/)
Examination of the concepts of motor development, physical growth, and body form throughout the lifespan. Major emphasis is on the period of birth through adolescence. Same as HDFS 262.
This course satisfies the General Education Criteria for: Social Beh Sci - Beh Sci

KIN 268 Children's Movement  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/268/)
Introduction and overview of kinesiology principles and physical activity related to children. Laboratory portion of class focuses on the application of information to teaching physical activity to elementary school children. Prerequisite: For non-kinesiology majors.

KIN 340 Social & Psychological Aspects of Physical Activity  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/340/)
Discusses how social and psychological processes and constraints affect human action in physical activity environments. Attention is given to socialization, personal dynamics, stratification, and ideological and economic constraints upon the manifestations of physical activity. Prerequisite: KIN 140 or PSYC 100 and completion of the Campus Composition I general education requirement.
This course satisfies the General Education Criteria for: Advanced Composition

Information listed in this catalog is current as of 02/2022
KIN 342  Health Behaviors and Cognition  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/342/)
Examines the relationship between health behaviors (diet and physical activity) and cognitive health across the lifespan. The main focus of the course is on human cognitive function, in particular a subset referred to as executive functions (e.g., inhibition, working memory, and cognitive flexibility), and the interaction with different behavior/health-related factors. We will also cover broader topics areas, such as contemporary dietary and physical activity patterns as well as cognitive development and aging, to provide relevant context to better understand how health behaviors may support cognitive health.

KIN 345  Sport and Society  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/345/)
Same as HIST 390. See HIST 390.

KIN 346  Case Study: Endless Summer  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/346/)
The 1966 classic film –The Endless Summer– and related films and literature are used as lenses for the historical-cultural study of human movement in the form of riding waves of water. Surf culture and films are global phenomena and by using such as unique cases, students gain mastery in cultural-interpretive theories, themes, and vocabulary, and in articulating perspectives on social roles, knowledge, and power. Same as RST 346 and MACS 346.

KIN 352  Bioenergetics of Movement  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/352/)
Study of the nature of energy transfer during physical activity; mechanisms of metabolic control, force production, cardiorespiratory support and adaptation relative to physical activity. Additional fees may apply. See Class Schedule.

KIN 355  Biomechanics of Human Movement  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/355/)
Studies the biological and mechanical principles of human motor performance; analyzes selected movement skills in depth. Additional fees may apply. See Class Schedule.

KIN 360  Adapted Physical Education  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/360/)
Organization, administration, and conduct of physical education programs for the most prevalent types of medical conditions found in school settings; emphasis on analyzing motoric needs and prescribing programs of motor activity for special populations, including individuals with mental retardation and learning disabilities Prerequisite: Junior standing or above and enrollment in the Teacher Certification program or consent of instructor.

KIN 361  Curriculum in Grades K-6  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/361/)
Examines the theoretical and philosophic curricular principles necessary to the development of a sound, professionally grounded, and research-based curriculum for children in grades K-6. Requires planning a variety of developmentally appropriate learning activities that are taught to children during micro-teaching experiences in the field. Prerequisite: Junior standing or above and enrollment in the Teacher Certification program or consent of the instructor.

KIN 362  Curriculum in Grades 7-12  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/362/)
Provides students with theoretical knowledge and professional practice in secondary physical education curriculum and instruction. This research-based course emphasizes effective teaching, development of content, and analysis of curricular models in grades 7-12. Prerequisite: Junior standing or above and enrollment in the Teacher Certification program or consent of instructor.

KIN 363  Instructional Strategies in PE  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/363/)
Analyzes the teaching-learning process, emphasizing the identification of instructional strategies specific to the development of skilled performance in movement activities. Prerequisite: Junior standing or above and enrollment in the Teacher Certification program.

KIN 364  Exper in the Common School  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/364/)
Supervised practice in observing, assisting, and teaching children in elementary, junior high school, and senior high school. Emphasis is on understanding motor behavior, teacher-learner behavior, and interrelatedness with other aspects of the learning environment. May be repeated to a maximum of 6 hours. Prerequisite: Junior standing or above and enrollment in the Teacher Certification program or the instructor.

KIN 365  Civic Engagement in Wellness  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/365/)
Provides scholarly knowledge and practical experience related to environmental, intellectual, physical, psychological, spiritual, and social wellness. Students acquire leadership and real-world skills while working in teams to develop and implement projects that facilitate health and well-being in the population of adults living in the community. Projects emphasize integrative learning and are showcased in both written and oral formats. Same as AHS 365, CHLH 365, RST 365, and SHS 370.

KIN 369  Coaching Strategies  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/369/)
Examination of philosophy, ethics, strategies, motivational techniques, performance analysis, program organization, contest administration, and equipment and facility management related to coaching.

KIN 370  Comm Partners & Health  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/370/)
Same as AHS 375 and SHS 370. See SHS 375.

KIN 375  Exper in Kinesiology Research  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/375/)
Supervised laboratory experiences in kinesiology research; individual work under the supervision of members of the faculty in their respective fields. The student assists with data collection, processing, and analysis for research in progress. May be repeated to a maximum of 12 hours. Prerequisite: Consent of instructor.

KIN 385  Exercise Instruction & Elderly  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/KIN/386/)
This course is designed to offer practical experience opportunities to undergraduate Kinesiology students aspiring to work in applied exercise fields with a diverse aged population. It will entail extensive “on the job” training through the Lifetime Fitness Program, an older adult service program of the Department of Kinesiology. Additionally, students will gain training in current program management practices. May be repeated to a maximum of 6 hours. Prerequisite: KIN 352 or consent of instructor is required. A current CPR is required at the beginning of the term and certification must remain current.
KIN 387 Exper in the Agency Setting credit: 3 Hours. ([https://courses.illinois.edu/schedule/terms/KIN/387/](https://courses.illinois.edu/schedule/terms/KIN/387/))
Supervised practical experience in leadership roles in nonschool agency settings; emphasis on observing, planning, and conducting physical activity programs for children and/or adults in preschool, recreation, or other social agencies. May be repeated for a maximum of 6 hours.

KIN 390 Honors credit: 2 Hours. ([https://courses.illinois.edu/schedule/terms/KIN/390/](https://courses.illinois.edu/schedule/terms/KIN/390/))
Course is restricted to James Scholars pursuing the Civic Commitment and Leadership Tracks. Designed to support completion of the James Scholar honors project. Same as CHLH 390 and RST 390. May be repeated to a maximum of 6 hours. Prerequisite: James Scholar standing.

KIN 391 Special Project-Problems credit: 2 or 3 Hours. ([https://courses.illinois.edu/schedule/terms/KIN/391/](https://courses.illinois.edu/schedule/terms/KIN/391/))
Special projects in research and independent investigation in any phase of health, kinesiology, physical education, and related areas selected by the students. May be repeated to a maximum of 6 hours. Prerequisite: Junior or senior standing; grade-point average of 2.5; consent of instructor.

KIN 393 Honors Thesis credit: 3 Hours. ([https://courses.illinois.edu/schedule/terms/KIN/393/](https://courses.illinois.edu/schedule/terms/KIN/393/))
Planning, researching and writing of an honors thesis, under supervision of a faculty member, on a problem of appropriate scope and character. Paper will be presented at a suitable meeting and/or seminar. May be repeated to a maximum of 6 hours. Prerequisite: Senior standing when enrolling; minimum grade point average (total, University and Kinesiology prefix courses) of 3.25; a minimum of one full year (2 semesters) remaining at the University of Illinois, Urbana-Champaign campus; and submission of a written proposal.

KIN 401 Measure & Eval in Kinesiology credit: 3 or 4 Hours. ([https://courses.illinois.edu/schedule/terms/KIN/401/](https://courses.illinois.edu/schedule/terms/KIN/401/))
Examines the concepts of observation, measurement, and evaluation of human motor performance and functioning in physical activity contexts. 3 undergraduate hours. 4 graduate hours. Prerequisite: KIN 140 and KIN 150, or graduate standing, or consent of instructor. This course satisfies the General Education Criteria for: Quantitative Reasoning II

KIN 407 Disability, Culture & Society credit: 3 or 4 Hours. ([https://courses.illinois.edu/schedule/terms/KIN/407/](https://courses.illinois.edu/schedule/terms/KIN/407/))
Same as ANTH 404, CHLH 407, and REHB 407. See CHLH 407.

KIN 420 Physiological Basis of Strength & Conditioning credit: 3 or 4 Hours. ([https://courses.illinois.edu/schedule/terms/KIN/420/](https://courses.illinois.edu/schedule/terms/KIN/420/))
The physiology and training principles behind high performance consist of a complex blend of factors. This course provides an overview of the theories and principles of program design for athletic populations. Methods and techniques of the elements that comprise program design will be emphasized through applied laboratory experiences. This course will help prepare students for certification as a Strength and Conditioning Specialist, if so desired. 3 undergraduate hours. 4 graduate hours. Prerequisite: Graduate section restricted to graduate students.

KIN 442 Body, Culture & Society credit: 3 or 4 Hours. ([https://courses.illinois.edu/schedule/terms/KIN/442/](https://courses.illinois.edu/schedule/terms/KIN/442/))
Analysis of the significant social aspects of the human body including anthropological, historical, psychological and sociological perspectives. Places emphasis on cross-culture and cross-national studies of bodily behavior with particular stress on exercise, health and sport practices. Same as GWS 442. 3 undergraduate hours. 4 graduate hours. Prerequisite: KIN 249 or SOC 249, or graduate standing; or consent of instructor.

KIN 443 Psychophysiology in Ex & Sport credit: 3 or 4 Hours. ([https://courses.illinois.edu/schedule/terms/KIN/443/](https://courses.illinois.edu/schedule/terms/KIN/443/))
Designed to give the student an understanding of the interaction between psychological processes and physiological parameters in exercise and sport. Examines psychophysiological exercise and sport research with particular attention to relevant models and theories. Same as PSYC 443. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior or senior standing, KIN 340, or graduate standing, or consent of instructor.

KIN 444 Physical Activity and Chronic Diseases credit: 3 or 4 Hours. ([https://courses.illinois.edu/schedule/terms/KIN/444/](https://courses.illinois.edu/schedule/terms/KIN/444/))
Focuses on the scientific evidence regarding the health benefits of exercise, physical activity, and physical fitness in the prevention and management of chronic diseases. 3 undergraduate hours. 4 graduate hours.

KIN 447 Psych of Sport Performance credit: 3 or 4 Hours. ([https://courses.illinois.edu/schedule/terms/KIN/447/](https://courses.illinois.edu/schedule/terms/KIN/447/))
Outlines the social psychological parameters which influence behavior and performance in sport; emphasizes the impact of social influences upon the individual within the sport context, including such factors as achievement motivation, competition, anxiety, aggression, and personality. Same as PSYC 447. 3 undergraduate hours. 4 graduate hours. Prerequisite: KIN 140, KIN 247, or PSYC 201, or graduate standing, or consent of instructor.

KIN 448 Exercise & Health Psychology credit: 3 or 4 Hours. ([https://courses.illinois.edu/schedule/terms/KIN/448/](https://courses.illinois.edu/schedule/terms/KIN/448/))
Examines the psychological determinants and consequences of exercise and physical activity as a health promoting behavioral process. Same as CHLH 448. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior standing or above, or graduate standing, or consent of instructor.

KIN 449 Rehabilitation Biomechanics credit: 3 or 4 Hours. ([https://courses.illinois.edu/schedule/terms/KIN/449/](https://courses.illinois.edu/schedule/terms/KIN/449/))
This course is for students who are interested in occupational therapy, physical therapy, and prosthetics and orthotics. General principles for application in injury prevention and rehabilitation will be taught. Students will learn how to use biomechanical models to estimate joint compression forces and muscle forces, and use this information to design training and rehabilitation programs for people with musculoskeletal and neuromuscular injury. 3 undergraduate hours. 4 graduate hours.

KIN 450 Biochemistry of Exercise credit: 3 or 4 Hours. ([https://courses.illinois.edu/schedule/terms/KIN/450/](https://courses.illinois.edu/schedule/terms/KIN/450/))
Introduces the metabolic and biochemical adaptation of the body in response to acute and chronic physical activity. Primary focus is given to the subcellular and enzymatic regulation and integration during exercise. Substrate metabolism, bioenergetics, hormonal action and nutritional influences as related to exercise are emphasized. 3 undergraduate hours. 4 graduate hours. Prerequisite: KIN 352 or MCB 450; or consent of instructor.

KIN 451 Skeletal Muscle Physiology credit: 3 or 4 Hours. ([https://courses.illinois.edu/schedule/terms/KIN/451/](https://courses.illinois.edu/schedule/terms/KIN/451/))
Offers basic information on skeletal muscle anatomy, physiology and function which will provide a basis for understanding changes in muscle structure and function during periods of increased or decreased use. Knowledge gained in this course can be used in areas such as design of training programs, physical therapy, or injury prevention. 3 undergraduate hours. 4 graduate hours. Prerequisite: KIN 352 or prior consent of the instructor.

Information listed in this catalog is current as of 02/2022
Prerequisite: physiological consequences of endocrine adaptation to exercise, and exercise training to regulate chemical messengers, and 3) the glands that secrete chemical messengers, 2) the ability of acute exercise and exercise training to regulate chemical messengers, and 3) the physiological consequences of endocrine adaptation to exercise. Clinical disorders associated with endocrine dysfunction will also be discussed when relevant. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: KIN 352.

KIN 453 Nutrition for Performance credit: 3 or 4 Hours. (https://courses.illinois.edu schedule/terms/KIN/453/)
Nutrition for performance is the fusion of two disciplines, nutrition and exercise physiology, which provides the knowledge-base to support and optimize training, performance, and recovery. This course will provide information regarding the use of nutrition to increase performance in athletes training for strength or endurance. Same as FSHN 453. 3 undergraduate hours. 4 graduate hours.

KIN 457 Motor Learning & Control credit: 3 or 4 Hours. (https://courses.illinois.edu schedule/terms/KIN/457/)
Discussion and analysis of scientific principles related to the learning and control of motor skills; review of related literature and research in motor learning and control. The focus of the course is on mechanisms for the control of movement and recent theories of how movements are acquired and performed. 3 undergraduate hours. 4 graduate hours. Prerequisite: Graduate standing or consent of instructor.

KIN 458 Neurobio of Aging credit: 0 to 4 Hours. (https://courses.illinois.edu schedule/terms/KIN/458/)
Same as PSYC 451 and NEUR 451. See PSYC 451.

KIN 459 Physical Activity & Aging credit: 3 or 4 Hours. (https://courses.illinois.edu schedule/terms/KIN/459/)
Examines aging and age-related changes in the cells, tissues, organs, and systems of the human body; emphasizes the role of physical activity and other lifestyle choices in modifying the aging process and in influencing the onset and progression of the chronic diseases which accompany aging. Same as HDFS 459. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior, Senior, or graduate standing or consent of instructor.

KIN 460 Technology & Pedagogical KINES credit: 3 or 4 Hours. (https://courses.illinois.edu schedule/terms/KIN/460/
Promotes mastery of technology skills and complex computer applications through the analysis of research and critical issues related to technology in Kinesiology. The completion of technology modules, requiring problem solving and the collection and analysis of assessment data, will culminate in an interactive, multimedia project. 3 undergraduate hours. 4 graduate hours. Prerequisite: Junior standing.

KIN 470 Exercise Endocrinology credit: 3 or 4 Hours. (https://courses.illinois.edu schedule/terms/KIN/470/)
The objective of this course is to gain a better understanding of the endocrine system and its response to physical exercise. Therefore, this course will provide a basic review of 1) the major glands and tissues that secrete chemical messengers, 2) the ability of acute exercise and exercise training to regulate chemical messengers, and 3) the physiological consequences of endocrine adaptation to exercise. Clinical disorders associated with endocrine dysfunction will also be discussed when relevant. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: KIN 352.

KIN 473 Skill Acquisition Strategies credit: 3 or 4 Hours. (https://courses.illinois.edu schedule/terms/KIN/473/)
Examines theory and practice related to structuring practice conditions to maximize the acquisition and performance of motor skills. The nature of skill, activities, and strategies for enhancing skill are discussed with particular emphasis placed on strategies that instructors, teachers, and/or coaches can use to enhance skill acquisition and performance. 3 undergraduate hours. 4 graduate hours. Prerequisite: KIN 257 or graduate standing or consent of instructor.

KIN 474 Tech-Driven Health Intervention credit: 3 or 4 Hours. (https://courses.illinois.edu schedule/terms/KIN/474/)
Course will review and critique the state of the science of technology-driven health behavior interventions. A broad scope of technologies and health behaviors will be covered and students will acquire an understanding of current uses of technology for facilitating health behavior change and maintenance. Students will examine the efficacy and potential for large-scale adoption and dissemination; and develop skills necessary to apply technology-based solutions to address public health problems. 3 undergraduate hours. 4 graduate hours.

KIN 485 Clinic Exper in Sports Medicine credit: 2 to 8 Hours. (https://courses.illinois.edu schedule/terms/KIN/485/)
Clinical experiences in medical supervision of sports programs, in the areas of therapeutic exercises, fitness programming, and cardiac rehabilitation. 2 to 8 undergraduate hours. 2 to 8 graduate hours. May be repeated to a maximum of 8 hours. Prerequisite: Consent of instructor.
KIN 543  Physical Activity & Cognition  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/543/)
Examines the relationship between physical activity and fitness on brain and cognition across the lifespan. The psychobiology of physical activity effects on cognition is emphasized. Other areas of study include aging, development, and psychosocial factors. Methodological issues as well as human and animal models of research will be studied.

KIN 551  Sci Basis of Phys Performance  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/551/)
Contemporary trends in the study of human performance and exercise stress; analysis of the research literature, experimental strategies, and research instrumentation. Lecture-discussion and laboratory.

KIN 552  Adv Skeletal Muscle Physiology  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/552/)
Course provides an in-depth understanding of skeletal muscle anatomy, cell biology, and physiology. Classroom discussions of primary literature and other activities will focus on muscle structure and function. Information will also be provided on the molecular and cellular basis for adaptations that occur with increased use, such as endurance or strength training, or periods of disuse, such as injury and disease.

KIN 553  Circulorespiratory Physiology  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/553/)
Aerobic performance responses to short-term, intermittent, and prolonged physical activity; special consideration given to endurance training methods and assessment techniques, ergogenic aids, and problems associated with growth, environmental influences, and competitive sport. Prerequisite: KIN 551 or consent of instructor.

KIN 555  Stress Immunology  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/555/)
This course will examine the role of stress in modulating immune function and the pathobiological mechanisms resulting in disease. An emphasis will be placed upon the reciprocal communication pathways that exist between the central nervous, endocrine and immune systems. Prerequisite: Consent of the instructor. It will be assumed that students will have introductory knowledge in biochemistry, endocrinology, and immunology.

KIN 556  Teaching in the Professoriate  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/556/)
Provides scholarly knowledge and practical experience necessary for effectively assuming the roles of teaching, mentoring, and presenting in the professoriate. Students will team teach an undergraduate course with an assigned faculty mentor, give a scholarly research presentation, and attend a series of theoretically grounded lectures focusing on instructional design, learner characteristics, and successfully conveying information to others. Same as CHLH 565, RST 560, and SHS 565.
Prerequisite: Must be a PhD student in the College of Applied Health Sciences.

KIN 557  Stress Immunology  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/557/)
Preparation of theses in kinesiology. Approved for S/U grading only. May be repeated.

KIN 558  Seminar  credit: 1 Hour.
Lectures, discussions, and critiques on kinesiology and community health related subjects by faculty members and visiting professional leaders; presentation and criticism of student research. Approved for S/U grading only. May be repeated in subsequent terms as topics vary.

KIN 559  Special Topics  credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/559/)
Lecture course in topics of current interest; specific subject matter announced in the Schedule. May be repeated.

KIN 560  Research on Teacher Education  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/560/)
Critically examines advanced theories, trends, problems, and implications of research on teacher education in Kinesiology. Students will complete a series of written assignments that are grounded in theory, illustrate critical thinking skills, and demonstrate extensive knowledge of the literature. Prerequisite: Graduate standing.

KIN 561  Qualitative Research Methods  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/KIN/561/)
Introduces students to qualitative methodology in the educational and health-related professions settings. Students will learn to interpret qualitative research, understand its theoretical underpinnings, acquire interviewing and observation skills, design and evaluate a community-based group research project, learn to collaborate with others, and critically assess the contributions to the project of self and peers.