Kinesiology

KIN 100  Concepts of Health and Fitness  3 cr
An introductory course designed to show students to contributions of physical activity, nutrition, weight control, stress control, environmental conditions, and injury prevention to preventive health. Students learn how to evaluate themselves, their physical and nutritional needs and how to design individual programs for healthy living.

KIN 166  Movement-Rhythms and Dev Act  3 cr
Movement exploration experiences, developmental games, rhythmic and dance activities are explained, developed and practiced. Clinical or field experience required.

KIN 201  Orientation to Kinesiology  3 cr
An overview of the field of Health, Physical Education, and Exercise Science. An introduction to the Department of HKS followed by survey of philosophical and historical aspects, and professional preparations standards of the specific fields.

KIN 231  ARC Lifeguard Training  3 cr
Prepares the student for American Red Cross Lifeguard, CPR for the professional rescuer, and first aid certification. Emphasis is placed on emergency action plans, lifeguarding techniques and all forms of victim rescue. Prerequisites: Strong swimmers ONLY.

KIN 278  Sport and Human Behavior  3 cr
A study of the psychological and sociological aspects of sport and the relationship to human behavior.

KIN 282  Intro to Athletic Training  3 cr
Survey of the basic techniques and practices of athletics training. Study includes prevention, recognition, care, and treatment of athletic injuries. Development of basic athletic training skills in the use of preventive and protective techniques of adhesive tape applications.

KIN 351  Sports Skills  3 cr
The development of skills and the understanding of fundamentals and strategies in selected individual, dual, and team sports. Field experiences required. Proof of background check, fingerprinting and liability insurance is required. PE (P-12) majors only. Instructor permission is required.

KIN 370  Basic Motor Learning  3 cr
Study of the psychological, experimental, and social aspects of learning in the psychomotor domain.

KIN 372  Coaching Gymnastics  3 cr
History, theory, and fundamentals of coaching and officiating gymnastics.

KIN 373  Coaching Volleyball  3 cr
History, theory, and fundamentals of coaching and officiating volleyball.

KIN 374  Coaching Soccer  3 cr
History, theory, and fundamentals of coaching and officiating soccer.

KIN 375  Coaching Football  3 cr
History, theory, and fundamentals of coaching and officiating football.

KIN 376  Coaching Basketball  3 cr
History, theory, and fundamentals of coaching and officiating basketball.

KIN 377  Coaching Baseball  3 cr
History, theory, and fundamentals of coaching and officiating baseball.

KIN 378  Coaching Track and Field  3 cr
History, theory, and fundamentals of coaching and officiating track and field.

KIN 380  Kinesiology  3 cr
Theory and application of the mechanical and anatomical principles of human movement. Pre-requisite: BMD 114 Minimum Grade of D or BMD 110 Minimum Grade of C or BMD 251 Minimum Grade of C.

KIN 381  Eval and Measurement in HPE  3 cr
Statistical procedures, evaluation, and interpretation, and use of tests and other measurement devices in health and physical education.

KIN 429  School Lab Experience-PE  0 TO 3 cr
Professional laboratory experiences involving observation and participation at local public schools. Admission to teacher candidacy required. Co-requisite: KIN 452

KIN 450  Student Teaching-Hlth and PE  9 cr
Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the 6-12 Health Education and P-12 Physical Education programs. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Admission to teacher candidacy and completion of program and college prerequisites required. Pre-requisite: PRAXIS-Health Education 154 and PRAXIS-Phys Edu Cont Knowledge 149 and KIN 351 Minimum Grade of C and KIN 452 Minimum Grade of C and KIN 429 Minimum Grade of S and HS 460 Minimum Grade of C and HS 429 Minimum Grade of S and HS 340 Minimum Grade of C and HS 430 Minimum Grade of S.

KIN 452  Methods of Teaching PE-W  3 cr
Organizing materials and developing methods of teaching physical education in elementary, middle, and high schools. Field experiences required. Practical mini-teaching experiences in peer labs and local schools. Prerequisite: Admission to teacher candidacy. Co-requisite: KIN 429. Co-requisite: KIN 429
KIN 460  Student Teaching Secondary  1 TO 9 cr  
Observation and supervised teaching with opportunity for study and discussion of problems encountered in secondary schools. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Admission to teacher candidacy and completion of program and college prerequisites required. 
Pre-requisite: PRAXIS-Phys Edu Cont Knowledge 149 and KIN 351 Minimum Grade of C and KIN 452 Minimum Grade of C and HS 460 Minimum Grade of C.

KIN 461  PE for Atypical Child-Youth  3 cr  
Principles and techniques for adapting physical education activities for children with special needs. Field experience required.

KIN 470  Student Teaching P-12 Program  1 TO 12 cr  
Observation and supervised teaching with opportunity for study and discussion of problems encountered in the P-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Admission to teacher candidacy and completion of program and college prerequisites required. 
Pre-requisite: PRAXIS-Phys Edu Cont Knowledge 149 and KIN 351 Minimum Grade of C and KIN 452 Minimum Grade of C and HS 460 Minimum Grade of C.

KIN 473  Problems in Health and PE  3 cr  
Special problems in health and physical education are assigned to individuals and to groups of students. 
Pre-requisite: PRAXIS-Phys Edu Cont Knowledge 149 and KIN 351 Minimum Grade of C and KIN 452 Minimum Grade of C and HS 460 Minimum Grade of C.

KIN 474  Sport and Fitness Conditioning  3 cr  
Study of the theory, principles, methods, and techniques in the development, implementation, and evaluation of various strength and conditioning programs designed to enhance athletic performance and improve physical fitness. The conditioning needs of various populations with disease and degenerative conditions will be examined.

KIN 475  Org-Admin Hlth and PE-W  3 cr  
Planning, policies, administrative/management functions and duties in health and physical education programs.

KIN 476  Exercise Physiology  3 cr  
The study of the body's physiological responses and adaptations to exercise and training. 
Pre-requisite: BMD 114 Minimum Grade of D or BMD 110 Minimum Grade of C or BMD 251 Minimum Grade of C.

KIN 477  Water Safety Instructor  3 cr  
Trains prospective candidates for American Red Cross Water Safety Instructor certification. Candidates will learn how to teach all levels of swimming and basic diving to students of all ages. How to organize classes, use lesson plans and practice teaching skills. Prerequisite: Proficient swimmer in all seven strokes. See Instructor for specific skill requirements.

KIN 478  Coaching Theory  3 cr  
Introduction to profession of coaching. Topics include: physical, mental and organizational preparation, teaching strategies (individual and team aspects), legal liability, officiating, and national guidelines.

KIN 479  Fit Assess-Exercise Prescript  3 cr  
Through didactic study and laboratory participation, the student will develop knowledge base and clinical skills to assess physical fitness and plan exercise prescriptions for apparently healthy individuals. 
Pre-requisite: KIN 476 Minimum Grade of D or PE 476 Minimum Grade of D.

KIN 480  Therapeutic Exercise  3 cr  
Theory, current research, principles, application and techniques of rehabilitation used to treat injuries to athletes and the physically active across the life span are studied. Psychological and physical parameters of rehabilitation and exercise conditioning are presented.

KIN 482  Advanced Athletic Training  3 cr  
Advanced and contemporary topics, issues, and applications in athletic training. Admission to candidacy required. 
Pre-requisite: KIN 470 Minimum Grade of D.

KIN 484  Apps in Sports Conditioning  3 cr  
Through didactic study and physical activity participation, the student will develop the knowledge base and skills in fundamental and advanced exercise theory and techniques in sport and fitness conditioning with application to program design and periodization of training. 
Pre-requisite: KIN 474 Minimum Grade of D or PE 474 Minimum Grade of D.

KIN 486  Advanced Exercise Physiology  3 cr  
Detailed analysis of the underlying principles of the physiological and biochemical responses of the human body to exercise and adaptations to exercise training. 
Pre-requisite: PE 476 Minimum Grade of C or KIN 476 Minimum Grade of D.

KIN 490  Special Topics  3 cr  
A varying content course treating different aspects of health, kinesiology, and sport. May be repeated for credit when courses content varies.

KIN 494  Directed Studies  1 TO 3 cr  
Directed research and/or project. No more than two directed studies can be counted towards the bachelor's degree, HKS advisor approval required.

KIN 495  Internship  1 TO 12 cr  
Observation and supervised practicum experiences in a professional setting. May be repeated for credit not to exceed 12 hours. HKS advisor approval required.
KIN 499  Senior Honors Thesis-H  3 TO 6 cr
Experiences in planning, conducting, and reporting a research project relevant to the fields of Health, Kinesiology, and Sport. The project, mentored by HKS faculty, is required for Honors recognition and may be repeated for up to six credit hours. Prerequisites: Participant in Honors Program and approval of Department and Project Chairs required.

KIN 500  Admin of Hlth & Phys Ed & Sprt  3 cr
A study of the principles, techniques, and methods used in management and supervision of health and physical education and sport in schools and colleges.

KIN 503  Evaluation of Teach and Learn  3 cr
Measurement and evaluation of student progress and teaching effectiveness in the psychomotor domain.

KIN 505  Research Methods - HKS  3 cr
This course provides opportunities for critical interdisciplinary evaluation of current research trends and controversies, research methodology and evaluation with emphasis on the elements of the research process, and the examination of landmark research studies in the fields of Health, Kinesiology, and Sport.

KIN 506  Physical Education Curriculum  3 cr
An overview of the physical education curriculum, its foundations, critical issues, and modern trends. It explores curriculum content areas of scheduling administration, teaching methods, and various standards and procedures for evaluation.

KIN 516  Exercise Physiology  3 cr
Advanced study of theories, current research, and under-lying principles of the physiological responses and adaptations of the human body to exercise and training.

KIN 521  Motor Learning  3 cr
Theories and applications of the foundations of learning motor skills and presented.

KIN 530  Seminar in Health and Phys Ed  3 cr
Professional growth through in-depth experiences in the presentation of problems and formal papers, with emphasis on guided discussions and research criticism.

KIN 540  Cardiovas Resps Adapt Excerc  3 cr
Concentrated study of cardiovascular and respiratory systems including their structure, regulation, and integration with emphasis on physiological responses and adaptations to exercise and training, optimization of performance, overtraining and environmental influences, and aerobic exercise program design.

KIN 550  Perceptual-Motor Dev Children  3 cr
Designed to give the classroom teacher, special educator and physical educator a background in perceptual-motor development and training in infants and children.

KIN 560  Biochemical and Molecular Exer  3 cr
This graduate level course is designed to provide study of the oxidative and non-oxidative pathways which provide energy during acute exercise within skeletal muscle. Emphasis will be placed on how these biochemical pathways utilize major fuel molecules (fat, carbohydrate, protein) to produce energy for work; how these pathways adapt to exercise training; and how the pathways are affected by exercise intensity, duration, and feeding state. The course will also include topics regarding lactate formation and utilization, whole-body metabolism, lipolysis within adipose cells, and blood glucose maintenance. Further, an overview of molecular biology concepts of gene transcription and protein synthesis in relation to exercise adaptation will be integrated into the course.

KIN 570  Stress Testing-Ex Prescription  3 cr
The development of competencies necessary to administer graded exercise tests and prescribe appropriate exercise programs for various populations, based upon clinical observations and physiological data.

KIN 571  Exer Mgt Chronic Disease/Disab  3 cr
This course is designed to provide a problem-oriented approach to exercise testing and prescription/programming for special needs populations.

KIN 572  App of Biomechanics  3 cr
An examination of the relationship of fundamental neuromuscular and mechanical principles of human movement as applied to sport performance, fitness, and injury prevention through observation of common activities.

KIN 574  Sport and Fitness Conditioning  3 cr
Advanced study of the scientific theory, principles, methods, and techniques in the development, implementation, and evaluation of various strength and conditioning programs designed to enhance athletic performance. Instructor permission is required.

KIN 579  Fitness Assessment-Exer Presc  3 cr
Fitness Assessment and Exercise Prescription reviews the advanced principles of exercise testing and prescription for at risk and health adult populations including health appraisal, risk assessment, and interpretation of data. Assessment results are utilized in designing training programs and recommending lifestyle changes for enhancing health, fitness, and performance. The ACSM Exercise Guidelines are emphasized. This course is dually listed with an equivalent 400 level course (KIN 479). Instructor permission is required.

KIN 590  Special Topics-  3 TO 6 cr
A varying-content course treating various aspects of health, kinesiology, and sport. May be repeated for credit when course content varies.
KIN 594  Directed Study and Research  1 TO 3 cr
Students explore, through directed study and research, problems and issues of special interest or significance in Health, Kinesiology, and Sport. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree program.

KIN 595  Internship  3 TO 6 cr
A supervised learning experience in a health, kinesiology, or sport setting. Provides the student an opportunity to apply theories and concepts learned during the graduate program. No more than six semester hours may be taken. HKS advisor approval required.

KIN 599  Thesis  1 TO 9 cr
A student selects a project, study, or investigation in health and/or kinesiology. Such project forms the basis for the thesis. A committee will give guidance during the investigation and the writing of the thesis.

KIN 601  Biomech Found Human Movement  3 cr
This course is designed to provide students with an understanding of how to use various technologies in a biomechanics lab for measuring kinematics. Along with making measurements, students will also learn how to perform the calculations involved in analysis.

KIN 602  Techniques of Supervision PE  3 cr
Course is designed to familiarize the student with the principles, problems, and techniques, involved in supervision.

KIN 603  Adv Measurement-Eval in HKS  3 cr
Measurement and evaluation in the areas of strength, body composition, flexibility, endurance, general motor capacity, perceptual motor-functions, and anthropometrics.

KIN 694  Directed Study and Research  1 TO 3 cr
Through directed study and research, problems and issues of special interest or significance in health and/or kinesiology are explored. No more than three semester hours of any department 694 courses can be accepted toward a degree program.

KIN 695  Internship  3 TO 9 cr
A supervised field study investigation in a candidate's work setting. The student will conduct an investigation, apply concepts and skills learned during the program.

KIN 699  Research Project  1 TO 6 cr
A supervised research project or investigation. The student will conduct a research project or investigation applying concepts and skills applicable to Health, Kinesiology, and Sport. May be taken more than one semester; total cannot exceed six semester hours.