Kinesiology

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Programs Offered

The Bachelor of Science in Kinesiology offers the following two concentration areas:

The Exercise Science concentration prepares students for fields of study in the health sciences, such as physical therapy, occupational therapy, and cardiovascular rehabilitation. Students will also be prepared for graduate studies in exercise physiology, biomechanics, and exercise science. With an Exercise Science concentration, students are prepared for fitness and wellness professions, such as fitness training and instruction, corporate wellness, sports and strength coaching, and fitness and wellness center management. Program outcomes align with the standards of key professional associations such as the American College of Sports Medicine (ACSM) and the National Strength and Conditioning Association (NSCA).

The Physical Education Teacher Education (P-12) concentration prepares students to obtain the license required to teach physical education in Alabama. Students meet all Alabama Quality Teaching Standards and specific physical education standards established by the Alabama State Department of Education (ALSDE). These standards are aligned with the Society of Health and Physical Educators (SHAPE) teacher education standards and the Alabama Course of Study for Physical Education. Students who choose the Physical Education concentration must satisfy the requirements for admission to the UAH Teacher Education Program as outlined in the Unit Assessment System of the Institutional Report submitted by the Department of Education to CAEP.

The Bachelor of Science in Sport and Fitness Management

The Sport and Fitness Management degree program is designed for those students interested in the administrative aspect of sports and fitness. The purpose of the Sport and Fitness Management degree is to prepare students for both graduate studies and entry into management, marketing, and administrative positions in educational and sport business settings. Sport and Fitness Management graduates will also earn a minor in Business Administration.

Academic Advising

Students who are interested in the kinesiology degree program should contact the Department of Kinesiology at (256) 824-6007 to consult our advisor about program admission, curricular, and degree requirements.

Please contact Liz Redding at liz.redding@uah.edu.

- Kinesiology, Bachelor of Science - Exercise Science Concentration (http://catalog.uah.edu/undergrad/colleges-departments/education/kinesiology/exercise-science/)
- Kinesiology, Bachelor of Science - Physical Education Teacher Education Concentration (http://catalog.uah.edu/undergrad/colleges-departments/education/kinesiology/pe/)
- Sport and Fitness Management, Bachelor of Science (http://catalog.uah.edu/undergrad/colleges-departments/education/kinesiology/sport-fitness-management/)

Coaching (http://catalog.uah.edu/undergrad/colleges-departments/education/kinesiology/coaching-minor/)

Health and Nutrition (http://catalog.uah.edu/undergrad/colleges-departments/education/kinesiology/health-nutrition-minor/)

KIN 200 - CONTEMPORARY NUTRITION
Semester Hours: 3

Introduction to the principles of nutrition as they relate to the growth, development, and maintenance of the human body throughout the lifespan. Emphasis is placed on the classes of nutrients, weight management, and nutritional planning.

KIN 205 - FIRST AID & CPR
Semester Hour: 1

Students will focus on recognizing emergency situations. First Aid and CPR also provides skills and knowledge necessary in caring for injuries or sudden illness.
KIN 210 - ATHLC INJURY PREVENTION & CARE  
Semester Hours: 3

Presents the knowledge and techniques necessary to prevent and/or care for common athletic injuries. For coaches, athletes, and those working in recreation, physical education, or athletics.

KIN 215 - FIRST RESPONDER/PROFESSION'L CPR  
Semester Hours: 2

Learn the concepts and skills needed to function as a First Responder and Professional Rescuer. Emphasis is placed on preparing for, recognizing, and providing emergency care in various situations where needed. Additionally, this course fully addresses the objectives in the U.S. Department of Transportation's National Standards Curriculum.

KIN 240 - HEALTH & WELLNESS CONCEPTS  
Semester Hours: 3

This course provides students with an overview of individual and societal health and wellness and the impact of lifestyle choices. Laboratory experiences provide opportunity for assessment of individual health and fitness behaviors. Topics covered include: wellness, physical fitness, behavior modification, weight management, stress management, disease prevention, addictive behavior and sexual health.

KIN 250 - ESSENTIALS OF PERSONAL TRAINING  
Semester Hours: 2

This course is designed to provide theoretical knowledge and practical skills in preparation for a national certification exam in personal training. Topics include guidelines for instructing safe, effective, and purposeful exercise, essentials of the client-trainer relationship, conducting health and fitness assessments, and designing and implementing appropriate exercise programming.

KIN 260 - FOUNDATIONS OF KINESIOLOGY  
Semester Hours: 3

An introductory course for students in the Kinesiology major. The course will provide an overview of the Kinesiology field, including all subdisciplines and an in-depth discussion of teacher v non-teacher career choices. The history and development of physical education, exercise science, and sport studies will be covered, as well as issues and trends in physical education, exercise science, and sport studies.

KIN 265 - INTRO TO SPORT MGMT  
Semester Hours: 3

This 3 hour course provides the student with the knowledge of sport management and administration in both athletics and leisure-based sports. Topics include management concepts, roles and responsibilities, fiscal management, fundraising, legal issues, event scheduling, and decision making.

KIN 290 - EX TECHNIQUES & LEADERSHIP  
Semester Hours: 3

This course provides a practical guide in leadership for group and individual exercise settings. Critical evaluation of a safe fitness environment, adult physical activity programs to promote health, and exercise techniques according to the American College of Sports Medicine and National Strength and Conditioning Association are included.

KIN 300 - NUTRITION FOR FITNESS & SPORT  
Semester Hours: 3

Explores the theoretical and applied nutritional sciences as they relate to fitness and sport. Students will develop practical skills applicable to solving nutritional problems in exercising populations. Nutritional requirements and practices related to general fitness, athletic performance, and special needs individuals will also be covered.

KIN 315 - STRENGTH TRNG & CONDITION  
Semester Hours: 3

This course provides a comprehensive overview of strength and athletic conditioning. Emphasis is placed on the exercise sciences (including anatomy, exercise physiology, and biomechanics) and exercise technique, program design, organization and administration, and testing and evaluation. Additionally, this course is designed to prepare students for the nationally accredited Certified Strength and Conditioning Specialist (CSCS) certification exam. Prerequisites: KIN 210, KIN 290, KIN 327 (C or better).

KIN 327 - EXERCISE PHYSIOLOGY  
Semester Hours: 3

An introduction to the response and adaptations of the body systems to exercise and physical activity. Prerequisites: KIN 260, BYS 215 and BYS 216 with a grade of C- or better Co-requisite: KIN 328.
KIN 328 - EXERCISE PHYSIOLOGY  
Semester Hour: 1  
Exercise physiology lab experience to accompany the introduction to exercise physiology course lectures. The course meets two hours weekly for one credit hour. Co-requisite: KIN 327.

KIN 340 - SCHOOL AND COMMUNITY HEALTH  
Semester Hours: 3  
Obtain information and skills related to school and community health programs with an emphasis on health instruction, strategies, and resources. Survey the components of a school health program: school health services, healthful school environment, principles of physical and movement education, nutrition services, counseling and social services, parent/community involvement, health promotion for staff. Examine the core functions of public health, prevention of diseases and injuries, health needs of special populations, and functions of various organizations.

KIN 351 - EXER TEST & PRECR HEALTHY POP  
Semester Hours: 3  
Provides students with techniques that evaluate aerobic capacity, muscular strength and endurance, flexibility, and body composition. The development of exercise prescriptions based on evaluation results will be emphasized. Prerequisites: KIN 327 (C- or better grade) and KIN 328.

KIN 352 - EXER TEST & PRECR SPECIAL POP  
Semester Hours: 3  
This advanced-level course integrates both lecture and laboratory to prepare students with the knowledge and skills necessary to conduct fitness evaluations, exercise prescriptions, and risk stratification of at-risk individuals. Specific emphasis will be placed on the administration of safe fitness testing using protocols published by ACSM for the health related components of physical fitness. Prerequisites: KIN 351.

KIN 361 - TEACHING TEAM SPORTS  
Semester Hours: 3  
Teaching methods and strategies of sports that require more than one participant. While knowledge of how to play the sport will be taught, emphasis will be placed on the organization, management, and assessment of skills in activities such as, but not limited to soccer, handball, and basketball.

KIN 362 - TEACHING INDIVIDUAL ACTIVITIES  
Semester Hours: 3  
Teaching methods and strategies for games involving individuals rather than a team. Emphasis will be placed on the organization, management, and assessment of skills in activities including, but not limited to, aerobic dance, cross country/trail running, and tumbling/gymnastics.

KIN 363 - TEACHING FITNESS & WELLNESS  
Semester Hours: 3  
Learn to perform and instruct a variety of fitness activities. Emphasis will be placed on performing fitness skills and on the methods and techniques for instructing and teaching specific fitness activities. Techniques for evaluating the knowledge and skills of the activities will also be stressed.

KIN 370 - ADAPTED PHYSICAL EDUCATION  
Semester Hours: 3  
Develop knowledge of current concepts and trends in adapted physical education as well as the ability to plan and implement a physical education program designed to meet the unique needs of individuals.

KIN 371 - ADAPTED FITNESS  
Semester Hours: 3  
Develop knowledge of current concepts and trends in adapted physical fitness as well as the ability to plan and implement fitness and wellness programs designed to meet the unique needs of individuals, particularly those with disabilities and special needs. Prerequisite: KIN 260.

KIN 381 - FACILITIES AND EQUIPMENT MGT  
Semester Hours: 3  
This course will provide theories for the design, development, operation, maintenance, and management of sport and fitness facilities. Prerequisite: KIN 260.

KIN 382 - SPORT LEADERSHIP  
Semester Hours: 3  
This course focuses on the role of leadership in general, with a specific application to a sport setting. We will focus on the numerous approaches to leadership that have been used, and emphasize illustrating and applying them to different aspects of sports. Prerequisites: KIN 260.
KIN 383 - SOCIOMETRY IN SPORT
Semester Hours: 3
This course is designed to study the role sport plays as a social institution. Additionally, we will identify what social institutions are most affected by sport and how these institutions are created. Topics will include the definition of sport as well as why and how it is studied, the effect of sport on society, sport as an institution, and sport and culture. Prerequisite: SOC 100.

KIN 384 - EVENT MANAGEMENT
Semester Hours: 3
This course investigates event management (in a planning and administration of sports events context) using a secondary objective model for planning, implementation management of events. This ‘management’ of an event will include aspects such as event planning, event promotion, event sponsorship, recruiting & managing volunteers, event risk management, and event facilitation. The financial elements of sports event management will be investigated such as: the ability to plan, develop and implement budgets, and to produce a profit/loss statement. The ability to effectively integrate and satisfy the needs of external stakeholders, such as sponsors, media and community will be investigated. This course uses an integrated mix of lecture/seminar and workshop formats for learning. Your learning is complemented with experiential learning opportunities that are supported with accepted theory and practice in planning and administrating sports events. Learning outcomes are met with time spent in preparing for, and completing, assessment tasks, time spent in general study/event management delivery, evaluation and reflection. Students will consider how and why events building community (i.e., investigating how the event promotes health and well-being, and how risks can be managed, identifying why sports and recreation events are an important element for building prosperous progressive communities). Students are expected to work inclusively in all learning activities. Classroom as Organisation learning approach will be used to develop competency. Prerequisite: KIN 265.

KIN 400 - NUTRITION IN HEALTH & DISEASE
Semester Hours: 3
This course will provide students an opportunity to examine the role of epigenetics in disease development, the impact of weight stigma on health and the makeup of a healthy relationship with food and exercise. Having knowledge on the complex components that make up a person's body shape and size will allow students to more accurately assess health status. Prerequisite: KIN 200 (C- or better).

KIN 418 - STRUCTURE/FUNCTIONAL KIN
Semester Hours: 3
This course will provide development of knowledge of anatomic systems related to purposeful movement of the human body. Thorough instruction of the structure and function of musculoskeletal system will be provided. Prerequisites: BYS 215 and BYS 216.

KIN 419 - EXERCISE & SPORT BIOMECHANICS
Semester Hours: 3
This course will provide an advanced understanding of biomechanical conditions of human movement as well as knowledge and skills needed to analyze and evaluate human motor performance in order to prescribe appropriate interventions for optimized application to rehabilitation and sports performance. Students will learn to appropriately represent kinematic and kinetic quantities as vectors and use vectors, vector addition, and vector resolution to enhance the understanding of basic mechanical concepts. Prerequisites: BYS 215, BYS 216, and PH 101; and either KIN 418 or BYS 402.

KIN 421 - INST APP TO SPORT PEDAGOGY
Semester Hours: 3
This class is designed to expand and enrich the teaching repertoire. Special emphasis will be given to how selected models of teaching can be used to achieve multiple outcomes of teaching in physical education and other contexts (e.g., physical activity programs & youth sport). Additionally, the course will increase awareness in other instructional areas related to the profession (teaching underserved youth, youth sports programs, etc.). Prerequisites: KIN 361 or KIN 362 or KIN 363.

KIN 427 - ENVIRONMENTAL EXERCISE PHYSIOL
Semester Hours: 3
KIN 427 will examine how the human body responds and adapts to diverse forms of environmental stress during exercise. The course will focus on the responses and adaptations that occur from performing exercise under various environmental conditions. Prerequisite: KIN 327.

KIN 440 - MGT SPORT & PHYSICAL EDUCATION
Semester Hours: 3
This course provides the student with the knowledge of sport management and administration in both athletic and leisure-based sports. Topics include management concepts, roles and responsibilities, fiscal management, fund-raising, legal issues, event scheduling, and decision making.

KIN 442 - INTRO TO SPORT LAW
Semester Hours: 3
This course is designed to introduce students to the legal doctrines, major statutes, standards, and case law that establish legal responsibilities, rights, privileges and controls related to the field of exercise and sport sciences. Prerequisite: KIN 260.
KIN 443 - SP TOPICS IN SPORT ADMIN
Semester Hours: 3

This course will address a variety of topics based on emerging trends in Sport Administration. Potential course offerings will include coach education, advanced legal issues, sport sociology, sport finance and accounting and globalization of sport. Course content will be offered in rotation as needed. Prerequisite: KIN 260.

KIN 445 - PRINCIPLES OF COACHING
Semester Hours: 3

Gain knowledge and skills specific to coaching: developing a coaching philosophy and objectives, motivating athletes, managing a team. Emphasis is placed on sport at the high school and club level with consideration given to coaching youth, recreational, and intercollegiate. Coursework provides preparation for the American Sport Education Program (ASEP) Coaching Principles exam which is required by the Alabama High School Athletic Association (AHSAA).

KIN 450 - EXERCISE PHYSIOLOGY INTERNSHIP
Semester Hour: 1

Designed to provide on-site practical experience in a wellness/fitness program, physical therapy clinic, and/or a cardiac rehabilitation facility for Kinesiology-Exercise Science majors. Prerequisites: KIN 351.

KIN 451 - RESEARCH EXERCISE SCIENCE I
Semester Hours: 3

Initial capstone course (part of a two-course sequence) providing a broad and balanced background in various types of research methods and the development of a research proposal. Development of a research question, hypothesis, and research methodology. Application of computers will be used to search databases for relevant literature. Completion of an Institutional Review Board application is required. Prerequisites: KIN 351.

KIN 452 - RESEARCH EXERCISE SCIENCE II
Semester Hours: 3

Final capstone course (part of a two-course sequence) in which students must integrate and apply skills acquired throughout the program to complete a comprehensive research project. The student will complete the research project proposed in KIN 451 by recruiting research participants to collect data, writing the results and conclusions for a manuscript. Results will be prepared for publication and presented in a professional setting. Prerequisites: KIN 451 and PY 300 (with concurrency).

KIN 455 - MOTOR LEARNING
Semester Hours: 3

Study the principles and practices that affect the learning and development of motor skills; theories of motor learning, motor control, and development; lifespan motor development perspective related to performing motor and sport skills; and professional applications of motor learning and development in exercise science, athletic training, and physical education.

KIN 457 - MEASUREMNT & EVAL IN PHYS ACTV
Semester Hours: 3

Measure and evaluate learning or skill improvement based on accepted standards. Gain an understanding of the logic behind measurement instruments in order to better interpret and implement results and to achieve improved learning or physical fitness improvement. These methods of measurement and evaluation are important skills in health, physical education, and exercise science fields. Prerequisite: KIN 351 or permission of instructor.

KIN 460 - SPECIAL TOPICS KINESIOLOGY I
Semester Hours: 3

This course is intended to cover a variety of topics based on emerging topics in Kinesiology. Potential course offerings will include environmental exercise physiology, cardiovascular exercise physiology, childhood and adolescent exercise physiology, emerging topics in sport & fitness management, and expanded nutrition content. Prerequisites: KIN 327 or instructor permission.

KIN 461 - SPECIAL TOPICS KINESIOLOGY II
Semester Hours: 3

This course is developed to cover a variety of topics based on emerging topics in Kinesiology. Potential course offerings will include environmental exercise physiology, cardiovascular exercise physiology, childhood and adolescent exercise physiology, emerging topics in sport & fitness management, and expanded nutrition content. Course content will be offered in rotation. Prerequisites: KIN 327 or instructor permission.
KIN 462 - TEACHING PHYS ED IN ELEM SCH  
Semester Hours: 3  
Physical education teacher candidates will acquire the ability to understand, recognize, analyze, and demonstrate the range of teaching skills employed by successful physical educators in the preschool and elementary setting. Emphasis is placed on understanding the theoretical implications of different teaching skills and the contexts in which they are effective. Teacher candidates will design lessons that allow for maximum student participation while remaining aligned with Alabama Consent Standards. Field experience is required. Candidates will observe, participate in, and teach lessons in physical education classrooms. Prerequisite: Admission to the Teacher Education Program. Prerequisite: KIN 370. 

KIN 463 - PSYCHOLOGICAL ASPECTS SPORT  
Semester Hours: 3  
Provides students with an introductory experience in sport, exercise, and fitness psychology based on the latest research and practice. Practical examples and case studies for individual and group sports are provided. The aim is to bridge science and practice to teach students the role of a sport and fitness psychologist. Prerequisites: KIN 327. 

KIN 464 - HEALTH/PE FOR ELEM TEACHERS  
Semester Hours: 2  
The purpose of this course is to help the future elementary classroom teacher learn to appreciate, plan, organize, and conduct (if called upon to do so) a quality physical education program for children in grades pre-K-5. The pre-service teacher (PT) will be provided background knowledge about physical education content, skill themes and movement concepts, how to teach skill themes and movement concepts, and fitness concepts. 

KIN 465 - TEACHING SECONDARY PE  
Semester Hours: 3  
Physical education teacher candidates will acquire the ability to understand, recognize, analyze, and demonstrate the range of teaching skills employed by successful educators in the secondary setting. 

KIN 470 - SPORT MARKETING  
Semester Hours: 3  
Sport Marketing presents an overview of the various techniques and strategies used in meeting the wants and needs of consumers in the sport industry as well as the understanding how sport can be used to assist in the marketing of other companies and products. Areas to be addressed are the uniqueness of sport marketing in comparison with traditional marketing, an overview of the segments of the sport industry, the importance of market research and segmentation in identifying the right sport consumer, the issue of data-based marketing in researching the sport consumer, an overview of the marketing mix as individual units and the relationship between those units, and the development of sponsorship and endorsement packages. Prerequisite: MKT 301. 

KIN 471 - SPORT FINANCE  
Semester Hours: 3  
This course examines the financial tools that sports managers use to run their sport businesses. As such, it explores traditional and innovative methods of revenue acquisition and financial management in sports organizations, the financial business structure of sports organizations, and the financial planning and forecasting processes that make organizations effective. Various other aspects of finance are discussed as they relate to sports organizations, including the time value of money, capital structuring, stocks and bonds, inventory management, and taxation. Prerequisite: FIN 301. 

KIN 472 - ETHICS IN SPORT  
Semester Hours: 3  
This course prepares students to take a more critical view of sport, as well as reflect on their own personal ethical and competitive orientations. A central focus of the course is to view sport and competition from social justice and diversity perspectives. More specifically, sport is discussed from a socio-cultural context regarding how dominant and non-dominant groups (racial, ethnic, or socio-economic) have used sport to preserve or change their societal status. This includes such areas as racial identity and equity, gender identity and equity, cultural and ethnic stereotyping, sexual orientation, hazing and bullying, religion and sport, and individuals with disabilities. This course will also look at how to become an agent for change by using social capital to promote ethical equity and diversity. Prerequisite: KIN 265. 

KIN 473 - SPORT & FITNESS MANAGEMENT  
Semester Hours: 3  
The course is an in-depth analysis of the relationship of sport and management. The study of sport includes sporting goods manufacturers; fitness centers; recreation departments; broadcasting; Little League teams; and high school, NCAA, and professional leagues. The study of management follows the four functions of management: planning, organizing, leading, and controlling. Prerequisite: KIN 265. 

KIN 490 - EXERCISE SCIENCE INTERNSHIP  
Semester Hours: 6  
Designed to provide on-site practical experience in a wellness/fitness program, physical therapy clinic, and/or a cardiac rehabilitation facility for Kinesiology-Exercise Science majors. Prerequisites: KIN 351, senior standing.
KIN 491 - SPORT & FITNESS MGT INTERNSHIP
Semester Hours: 6

Sport Administration Internship will introduce and promote professionalism through a hands-on experience with a local company. The student will be guided by a faculty member and company representative to achieve a strong overall work experience pertaining to the student's interests. Prerequisites: KIN 265.