

# KINESIOLOGY (KINE)

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## **KINE 1301. Foundations of Kinesiology. 3 Hours.**

This course explores the broad spectrum of kinesiology as an academic discipline, fundamental concepts of movement, and physical activity. Specifically, this course is an introduction to the fundamental principles of human movement and their relationship to fitness and activity. The class also introduces students to the subdisciplines of Kinesiology that relate to Sport Psychology/Sociology, Motor Behavior/Motor Learning, Biomechanics, Exercise Physiology, Sport History, and Sport Pedagogy. The course is intended for entry-level students with career interests in human movement as it relates to motor performance, physical fitness, and sport-related activity.

## **KINE 1354. Concepts of Physical Activity. 3 Hours.**

This course emphasizes the fundamental concepts of physical activity with a focus on the relationships of health, fitness, exercises, and athletic performance. Topics include information related to the need for continuing physical activity and its contribution to well-being, including procedures for assessing fitness levels in the various components of physical fitness and techniques used in developing physical fitness and optimal lifelong health and wellness among students. Physical activity is required.

## **KINE 2350. Physical Activity Skills I: Conditioning, Individual, and Dual Sports. 3 Hours.**

The purpose of this course is to develop the techniques for sports conditioning and fundamental skills used in teaching individual/dual sports, recreational, and physical fitness activities. This course also focuses on the various stages of game skills development for a variety of activities. Physical participation is required.

## **KINE 2351. Physical Activity Skills II: Team Sports. 3 Hours.**

The purpose of this course is to develop the techniques utilized in fundamental skills for team sports. Emphasis will be on developing the basic skills through observation, participation, and analysis of movement patterns appropriate for various skill levels. Students will be introduced to the basic skills of the selected team sports. Teaching considerations will be introduced throughout the semester regarding the instruction of team sports in physical education settings. Physical participation is required.

## **KINE 289. Individual Study. 1-4 Hours.**

This course provides individual instruction. Students may repeat the course when topics vary.

## **KINE 300. Sports Strength & Conditioning. 3 Hours.**

This course is designed to provide students with in depth understanding of the theory and practical knowledge associated with sports training to enhance strength and conditioning. The course provides an overview of strength and conditioning related to the exercise sciences, anatomy, exercise physiology, and biomechanics, nutrition, exercise technique, training program design, and testing and evaluation. Upon completion of the course, students should be able to apply scientific knowledge to train athletes and clients to improve their strength and physical fitness.

## **KINE 301. Sports Nutrition. 3 Hours.**

Sports Nutrition is designed to provide students with an understanding of the fundamental principles of nutrition as they apply to physical activity and sports performance. This course will cover topics such as macronutrients, micronutrients, hydration, supplementation, and dietary strategies for optimizing athletic performance and recovery.

## **KINE 314. Teaching Methods in Physical Education I. 3 Hours.**

A study of the movement approach to teaching physical education to elementary children with emphasis on developing content and methodology, teaching theories, and practices related to the learning of children's movement skills are discussed. Contents include the scientific basis for motor skill performance, curricular organization, and pedagogical methodology related to the elementary school physical education program. Students will engage in pre-practicum experience with children in an on-campus setting, focusing on improving teaching strategies and curriculum and teaching material development. Prerequisite: Junior/Senior standing.

## **KINE 315. Teaching Methods in Physical Education II. 3 Hours.**

This is a course designed to enable the student to learn the processes of movements and skill acquisition of students in middle/secondary schools. Using state standards, it provides information related to curriculum selection and implementation of middle/secondary public school physical education programs. Students will demonstrate competencies in presentations utilizing various instructional strategies. Prerequisite: KINE 314 and Junior/Senior standing.

## **KINE 316. Administration of Kinesiology and Sports Programs. 3 Hours.**

This course provides students with an understanding of the complexity involved in sport facility, event, and program management. An integrated study of the administration of traditional and contemporary kinesiology and athletic programs will be discussed. Philosophies and principles of the administration of kinesiology and athletic programs are applied to important areas such as personnel policies, leadership, facilities, equipment, record keeping, finance, legal implications, and program promotion. Prerequisite: Junior or Senior standing.

## **KINE 325. Exercise and Sport Psychology. 3 Hours.**

This course is designed to give students an introduction to the important issues within the field of sports and exercise psychology. Students will obtain knowledge of theories, concepts, and intervention techniques of sport and exercises psychology. Topics covered will include the history of sport psychology, behavioral principles, anxiety and motivation theory applied to sport, team dynamics, psychological skills training, the psychology of sport injury, and psychological factors that can affect performance in sport, physical education, and exercise settings. In addition, students will be taught about psychological strategies and techniques that can be applied to prevent or enhance the impact of psychological and emotional factors in an exercise and sport context. Prerequisite: Junior status or instructor approval.

**KINE 331. Motor Development. 3 Hours.**

This course focuses on human motor development including motor pattern characteristics, human growth, perceptual motor development, and fitness development across the lifespan. Socio-cultural influences on motor development will also be discussed. Theories and models of motor development are also featured in this course. Topics include physical factors that influence growth, maturation, and aging, process underlying perceptual-motor performance, and the interpretation and applications of motor research to human movement. The course will engage students through lecture, laboratory work, and problem-based learning activities. Prerequisite: Junior standing.

**KINE 332. Program Development/Management in Fitness Industries. 3 Hours.**

This course provides students with skills needed to develop, implement, and manage programs in fitness industry. Emphasis will be placed on the knowledge and strategies essential to the development of successful health and fitness programs. The course also provides an overview of the principles and practices of promotions and marketing in corporate, commercial, and institutional fitness industry. Topics include sport marketing planning, market segmentation, and identification of target market, motivational techniques, and administrative considerations. Prerequisites: Junior standing.

**KINE 334. Test and Measurement in Kinesiology. 3 Hours.**

This course is designed to provide students with the basic concepts in statistics, measurement, and evaluation in the physical education and exercise sciences. The course incorporates the application and interpretation of descriptive and inferential statistics for quantitative research, school grading, and children's fitness evaluation. Students will utilize computer based statistical programs for statistics analysis. In addition, knowledge of general considerations for test selection, construction, and evaluation will also be covered. The course will engage students through lecture and laboratory experiences. Prerequisite: Junior standing.

**KINE 343. Exercise Physiology. 4 Hours.**

This course studies physiological responses and adaptations to acute and chronic bouts of exercise with an emphasis on training techniques and enhanced physical performance. Topics include aerobic and anaerobic energy sources for muscular activity, physiology of muscle contraction, strength, and flexibility. The role of nervous system control of muscular activity will be explored along with pulmonary and circulatory physiology, gas exchange and transport, body composition, and weight control, as well as pediatric exercise physiology. Physiological effects of various physical activities on the human body will also be addressed. The course will engage students through lecture, laboratory experiences, and problem-based learning activities. Prerequisite: BIOL 2401 and Junior standing.

**KINE 400. Sports Officiating. 3 Hours.**

Sports Officiating is designed to introduce students to the principles and practices of officiating various sports. This course will cover topics such as rules interpretation, game management, communication skills, and ethical considerations in officiating. Through both theoretical instruction and practical application, students will develop the knowledge and skills necessary to officiate sports effectively and fairly.

**KINE 401. Sociology and Public Relations in Sports. 3 Hours.**

Sociology and Public Relations in Sports is designed to explore the intersection between sociology and public relations within the context of sports. This course will examine the social dynamics, cultural influences, and communication strategies that shape the perception and representation of sports in society. Through theoretical analysis, case studies, and practical applications, students will gain insight into the sociological aspects of sports, as well as the role of public relations in shaping public perceptions and managing organizational image in the sports industry.

**KINE 402. Sports Coaching Methodology and Practice Series I. 3 Hours.**

This course aims to develop students' sports skills and competence in performing and coaching the selected individual, dual and team sports (e.g., Track, Tennis, basketball, football, volleyball, handball and baseball etc.). The course will provide students with theoretical and practical opportunities for students to physically engage to the sports training settings, and assist in coaching different sports, which includes the coaching methods and sports skills. As an important learning experience, students are expected to engage in the training and competition settings for the required practical hours.

**KINE 403. Sports Coaching Methodology and Practice Series II. 3 Hours.**

This course aims to develop students' sports skills and competence in performing and coaching the selected individual, dual and team sports (e.g., Track, Tennis, basketball, football, volleyball, handball and baseball etc.). The course will provide students with theoretical and practical opportunities for students to physically engage to the sports training settings, and assist in coaching different sports, which includes the coaching methods and sports skills. As an important learning experience, students are expected to engage in the training and competition settings for the required practical hours.

**KINE 431. Introduction to Kinesiology Research Methods. 3 Hours.**

This course is designed to familiarize students with major research methods that are applicable to health, physical education, and sports science. Research design, data collection, analysis, validity, research procedures, and report writing will be covered. The course satisfies both the laboratory requirement for sports science and physical education experience. Knowledge acquired in this course will assist students in understanding the nature of the research process and various types of research methods. Students will develop the skills necessary for conducting a research project in health, physical education, and sports science. The format of the course will be a mixture of lecture, discussion, reading, and writing. Students are expected to be able to use various research methods to successfully complete a small individual or group research project. Prerequisite: Junior standing.

**KINE 432. Kinesiology and Biomechanics. 3 Hours.**

This course will equip participants with knowledge of the essential mechanical concepts and principles that govern human movement within a context of physical education and sports science. Through lecture, laboratory experience, problem-solving activities, and other forms of learning in and outside the classroom, students will acquire practical biomechanical knowledge through the integration between the mechanical principles and the efficiency of human movement and interrelationships of biomechanics, musculoskeletal anatomy, and neuromuscular physiology. Prerequisite: BIOL 2401 and BIOL 2402.

**KINE 433. Coaching Paralympics Game for Athletes with Disabilities. 3 Hours.**

This course is designed to provide students with theoretical-practical experiences in the Paralympics sports and recreational activities for individuals with disabilities. The methods and approaches utilized for carrying out this course are to help students to understand the theoretical and practical knowledge of various sports in Paralympics and Special Olympics games. The rules of each sport, training/coaching strategies, adapted activities and special equipment used for athletes with different disabilities will be introduced. The modified Paralympic sports will be introduced through individual/group projects to stimulate students' active participation in and learning various Paralympics sports. Students will gain the knowledge of teaching and coaching Paralympics sports and activities for school and community settings.

**KINE 434. Sports Injury and Prevention. 3 Hours.**

Sports Injury and Prevention is designed to provide students with an understanding of common sports-related injuries, their causes, prevention strategies, and rehabilitation techniques. This course will cover topics such as the anatomy of injury, biomechanics, injury assessment, emergency care, and methods for reducing the risk of injuries in athletes. Through theoretical instruction, case studies, and practical application, students will develop the knowledge and skills necessary to recognize, prevent, and manage sports injuries effectively.

**KINE 435. Exercise and Chronic Diseases. 3 Hours.**

This course is designed to study individuals with chronic and acute health problems that interfere with participating in physical education and leisure activities. Special exercise testing and exercise program design/implementation considerations for individuals with common chronic diseases and disabilities will be discussed. Basic pathophysiologies of various chronic diseases will be explored and studied. Prerequisite: KINE 343.

**KINE 436. Motor Skills for Special Populations. 3 Hours.**

This is an experiential course designed to introduce students to the world of adapted physical activity, leisure, and sports for individuals with special needs. Students will gain an overview of the various sports, recreational, and physical activities available in kinesiology setting. Students will be introduced to the basic theoretical and practical knowledge for adapting activities/equipment appropriately to meet the unique needs of a variety of special populations. Principles, guidelines and strategies for motor skill, and activity instruction will be gleaned through hands-on participation, class discussions, and individual/group project. Practical considerations for conducting motor skills programs for individuals of all ages with disabilities will also be included.

**KINE 437. Internship in Kinesiology (EL). 3 Hours.**

The student internship is designed to help students to integrate and apply the knowledge and skills they have gained in earlier stages of the program to the real-life workplace environment and requirements. As an important learning experience, students will be expected to engage in reflection and analysis on their internship experience with regard to kinesiology and sports science. The internship provides practical experience of the challenges faced in the workplace and will assist students in making decisions regarding their career path. The students and the university supervisors will develop a contractual agreement which provides for a minimum of 120 clock hours of specific learning experiences on or off campus. Prerequisite: Senior standing.

**KINE 443. Exercise Testing and Prescription. 4 Hours.**

This course provides the knowledge of how to assess aerobic capacity, cardiorespiratory endurance, muscular strength and endurance, flexibility, body fat, pulmonary function, and blood pressure and evaluate the results. Emphasis is placed on design and implementation of exercise programs for healthy and special populations based upon appropriate screening and evaluation procedures. The application of both laboratory and field-based tests will be covered in lectures and laboratories. The theory and practice of designing individualized and group exercise prescription is covered. The course includes clinical observation and laboratory experiences. Prerequisite: KINE 343.

**KINE 489. Individual Study. 1-4 Hours.**

This course provides individual instruction. Students may repeat the course when topics vary.

**KINE 501. Issues of Diversity and Inclusion in APA. 3 Hours.**

The aim of this course is to sensitize students to the fact that diversity is part of life in our society, and teachers need to recognize and understand these differences. Pedagogical methods for including students into regular physical education settings, such as inclusion techniques for students with a disability, diverse games, and appropriate modification techniques, will be addressed. Appropriate intervention programs for various individuals with disabilities will be introduced and discussed.

**KINE 502. Teaching and Service Delivery in Adapted PE. 3 Hours.**

This course focuses on teaching strategies and approaches to motor skill acquisition for individuals with disabilities in EC-12 settings and community exercises programs. Instructional strategies and best practices of early childhood, elementary, middle/secondary, and community programs for people with disabilities in adapted physical education are covered. Emphasis is on collaboration among professional service providers such as special educators, general physical educators, and related service personnel (e.g., occupational, physical, and recreational therapists), as well other community agency staff. Practical based teaching is included during lectures, along with guest presentations on related disciplines and programs. Students are required to complete several onsite observation and case analysis for the semester. Prerequisite: admission to Master of Science of C&I program or other master degree program.

**KINE 503. Assessment in Adapted PE. 3 Hours.**

This course is designed to teach students assessment procedures of standardized tests and batteries. Eleven formal test and assessment instruments including, but not limited to, assessing the gross motor development, motor skill performance, and health-related physical activity/fitness of persons with disabilities, will be selected and introduced to students. The authentic procedures for assessing individuals with disabilities will be addressed. Students will learn to select, administer, and interpret assessment results, and how to use assessment results to develop the individualized education programs (IEPs) as the basis for instructional programs for individuals with disabilities. Functional assessment, program development and lead to the service delivery process will be also studied. Prerequisite: admission to Master of Science of C&I with specialization in Adapted Physical Education.

**KINE 504. PA, Health and Fitness in Special Populations. 3 Hours.**

This course aims at advancing participants' knowledge in physical activity as an important means of preventing health-related diseases and achieving lifelong health benefits for school children. Through lectures and self-directed laboratories, participants will engage in advanced study of evidence-based contemporary issues related to physical activity, health and fitness and growth and development. Emphasis will be placed on various theories and strategies for school leaders to promote physical activity through innovative curricular programming, implementing and evaluating.

**KINE 505. Analysis of Clinical Experiences in APA. 3 Hours.**

This course is designed to provide opportunities for students to use quantitative and qualitative techniques to gather and analyze information about teaching, coaching and PT clinical treatments. Students are required to complete three different clinical settings, and clinical experiences may include pre-school or early childhood programs, motor development and physical fitness programs for persons with disabilities, and school-based adapted physical education programs, including different local Olympic sports programs (volunteer or assistant coaching). Three credits of clinical experiential learning are required in the adapted physical education setting for those graduates who are in the EC-12 Physical Education Teacher Education Program.

**KINE 506. Sport for People with Disabilities. 3 Hours.**

This course is designed to give students content knowledge, pedagogical knowledge and practical experience with sports for individuals with disabilities. This course addresses how to modify the traditional sports and exercises specifically for persons with different disabilities. Various adaptations and modification techniques for the sports events in both Paralympic sports and Special Olympics will be introduced and practiced. Course content includes the legal aspects and health enhancing benefits for sport participation for persons with disabilities, developmental sport models (e.g. University model for Special Olympics), disability sport organizations, sport skill development, school and community advocacy and involvement, and interscholastic adapted sport programs. Out of class clinical/local sports competition experiences (either volunteer coaching or volunteer referee) are required for the course. Prerequisite: admission to Master of Science of C&I or other master degree program.

**KINE 507. Advanced Topics in Physical Education and Sport Science. 3 Hours.**

This course is a required course in the adapted physical education major emphasis. This course provides an opportunity for those students who select the non-thesis option to study a contemporary/controversial problem in Adapted Physical Education or Sport Science. The course consists of a study of important topics in adapted physical education, health, sport science, and teaching innovations. Students propose, develop, and analyze an issue or problem in the adapted physical education profession, and will conduct an in-depth analysis of the issue/problem. The course will be under an instructors' supervision; and, as the main form of evaluation, a research paper and an oral presentation are required to complete for this course.

**KINE 589. Individual Study. 1-4 Hours.**

This course provides individual instruction. Students may repeat the course when topics vary.