

KINE - KINESIOLOGY (KINE)

KINE 120 The Science of Basic Health and Fitness

Credit 1. 1 Lecture Hour. 1 Lab Hour. Overview of the human body; scientific fundamentals of stress, fitness, nutrition, disease and drug use; interdisciplinary focus on wellness and longevity; integrated physical activity experiences centering on principles and applications of the scientific basis of conditioning; not open to students who have taken KINE 223; also taught at Galveston campus.

KINE 121 Physical and Motor Fitness Assessment

Credits 2. 1 Lecture Hour. 2 Lab Hours. Assessment of individual physical fitness and motor ability profiles for students majoring in kinesiology.
Prerequisite: Kinesiology major.

KINE 175 Gender Neutral Partnering

Credit 1. 2 Lab Hours. Explores the fundamental principles of partnering; explores the properties of momentum, weight sharing, contact improvisation, breath, timing and trust; develops movement phrases on the principles of impromptu and partnering.

KINE 198 Health and Fitness Activity

Credit 1. 2 Lab Hours. Half lecture; half activity; student choice of designated fitness or strength related activities; lecture portion covers current health topics.

KINE 199 Required Physical Activity

Credit 1. 2 Lab Hours. (Any 1-hour PHED activity course) Required Physical Activity. Selection from a wide variety of activities designed to increase fitness and/or encourage the pursuit of lifetime activity; also taught at Galveston campus.

KINE 210 The Art of Movement

Credits 3. 3 Lecture Hours. Introductory course that examines and appreciates movement as expressed by every culture; movement is a function driven by context, whether practical or artistic; this course examines how dance is used to advance personal, social expression via design, patterning, connoted meaning, and inter-connectivity of form; in-class discussions, applications, and presentations, students attend and critique off-campus dance productions to enhance perspective, experience and appreciation of dance movement; Galveston campus; also taught at College Station campus.

KINE 213 Foundations of Kinesiology

Credits 3. 3 Lecture Hours. (PHED 1301) Foundations of Kinesiology. History, principles, objectives, current concepts of kinesiology.

KINE 214/HLTH 214 Health and Physical Activity for Children

Credits 3. 3 Lecture Hours. (PHED 1331) Health and Physical Activity for Children. Coordinated school health and physical activity programs appropriate for elementary aged children; focus on the content of the curriculum and the philosophical underpinnings of programming related to health and physical activity. **Cross Listing:** HLTH 214/KINE 214.

KINE 215 Fundamentals of Coaching

Credit 1. 1 Lecture Hour. (PHED 1321) Fundamentals of Coaching. Study modern theories and applications related to coaching; philosophies, styles, techniques, team organization, liability and administration.
Prerequisite: Kinesiology majors and coaching minors only.

KINE 216/HLTH 216 First Aid

Credits 2. 2 Lecture Hours. (PHED 1306) First Aid. Basic first aid instruction leading to University Level, first aid course completion recognition. **Cross Listing:** HLTH 216/KINE 216.

KINE 223 Introduction to the Science of Health and Fitness

Credits 3. 2 Lecture Hours. 2 Lab Hours. Overview of the human body systems; interdisciplinary focus on wellness, fitness, nutrition, disease, drug use; integrated physical activity centering on principles and applications of conditioning; collect data, evaluate information, formulate plans based on findings; experience with pedometers, heart rate monitors, bioelectrical impedance devices, software and other technology; also taught at Galveston campus.

KINE 240/HLTH 240 Computer Technology in Health and Kinesiology

Credits 3. 3 Lecture Hours. Application of current technology in the areas of health and kinesiology; fundamentals of computers and their use; application of commercial software to health and kinesiology settings; use of computer networks for communications and research.
Prerequisite: Freshman or sophomore classification in health, kinesiology or sport management. **Cross Listing:** HLTH 240/KINE 240.

KINE 282 Culture of Wellness

Credits 3. 2 Lecture Hours. 2 Lab Hours. Explore the dimensions of wellness across worldwide cultures; analyze, compare and contrast wellness choices and their impact on the individual and society; investigate a global region and its wellness practices; integrate physical activity experiences that are centered on the history and culture of a focus activity that originated outside the United States; also taught at Galveston campus.

KINE 285 Directed Studies

Credits 0 to 4. 0 to 4 Other Hours. Work on a specified topic with the intent of promoting independent reading, research and study; supplement existing course offerings or subjects not presently covered. **Prerequisites:** Freshman or sophomore classification; approval of instructor.

KINE 289 Special Topics in...

Credits 0 to 4. 0 to 4 Lecture Hours. Selected topics in an identified area of kinesiology. May be repeated for credit.

KINE 291 Research

Credits 0 to 4. 0 to 4 Other Hours. Research conducted under the direction of faculty member in kinesiology. May be repeated 4 times for credit. **Prerequisites:** Freshman or sophomore classification and approval of instructor.

KINE 302 Applied Exercise Physiology for Coaches

Credit 1. 1 Lecture Hour. Survey of the physiology of exercise with an emphasis on topics in applied physiology that coaches should understand in working with student athletes of both genders and different ages. **Prerequisites:** Grade of C or better in KINE 306 or concurrent enrollment; junior or senior classification or approval of instructor.

KINE 305 Sport Nutrition

Credits 3. 3 Lecture Hours. 0 Lab Hours. Optimal nutritional intake in support of peak performance in sport and dance; food as fuel and which fuels are most important to specific sport/dance activities; the role nutritional supplements can play; fluid balance; weight management for athletes and dancers. **Prerequisites:** NUTR 202 or equivalent or approval of instructor; junior or senior classification.

KINE 306 Functional Anatomy for Coaches

Credit 1. 2 Lab Hours. Introduction to musculoskeletal anatomy and movement analysis and the applications of these topics to basic sport skills. **Prerequisite:** Junior or senior classification or approval of instructor.

KINE 307 Lifespan Motor Development

Credits 3. 3 Lecture Hours. Developmental characteristics and contemporary issues associated with motor behavior across the lifespan. **Prerequisite:** Junior or senior classification or approval of instructor.

KINE 308 Integrated Adventure Education

Credits 3. 2 Lecture Hours. 3 Lab Hours. Philosophy of outdoor education in a physical education program; designing and implementing outdoor adventure activities in an experiential and interdisciplinary manner for reinforcing the Texas Essential Knowledge and Skills. **Prerequisites:** Junior or senior classification or instructor approval.

KINE 311 Fundamental Rhythms and Dance

Credits 3. 2 Lecture Hours. 3 Lab Hours. Appreciation of rhythms and dance movements in a cultural context; analysis of dance performance; basic understanding of the various dance components. **Prerequisite:** Approval of instructor.

KINE 312 Coaching of Baseball

Credits 2. 1 Lecture Hour. 2 Lab Hours. Theory and practice of coaching fundamentals in baseball. **Prerequisite:** Grade of C or better in KINE 215.

KINE 314 Coaching of Soccer

Credits 2. 1 Lecture Hour. 2 Lab Hours. Study of modern theories and applications related to coaching soccer. **Prerequisites:** Grade of C or better in KINE 215.

KINE 317 Coaching of Football

Credits 2. 1 Lecture Hour. 2 Lab Hours. Theory and practice of coaching fundamentals in football. **Prerequisite:** Grade of C or better in KINE 215.

KINE 318 Athletic Injuries

Credits 3. 3 Lecture Hours. Overview of the profession of athletic training; comprehensive analysis of the theories and practices in preventing, recognizing and treating common athletic injuries. **Prerequisite:** Grade of C or better in BIOL 319 or KINE 302; junior or senior classification.

KINE 320 Advanced Athletic Injuries

Credits 3. 3 Lecture Hours. Principles and procedures of therapeutic modalities, therapeutic exercise and rehabilitation as they relate to physical education, athletic training and physical therapy. **Prerequisites:** KINE 318 and approval of instructor.

KINE 321 Coaching of Volleyball

Credits 2. 1 Lecture Hour. 2 Lab Hours. Coaching fundamentals in volleyball. **Prerequisites:** Grade of C or better in KINE 215.

KINE 324 Career Development in Coaching and Youth Development

Credits 3. 3 Lecture Hours. Topic relevant to and career options in the coaching profession; preparation of future coaches and youth development professionals for successful careers; exploration and development of skills and knowledge to lead and manage individuals and teams. **Prerequisites:** Junior or senior classification; approval of instructor.

KINE 325 Event and Tournament Operations for Coaches

Credits 2. 2 Lecture Hours. Develop knowledge and skills related to event and tournament organization; working with sport governing bodies, school officials, comprehending risk management, financial management; classroom experiences, observations and field-based experiences to link theory into practice.

KINE 334 Coaching in Personal Training

Credits 2. 1 Lecture Hour. 2 Lab Hours. An overview of the knowledge, skills, and expectations associated with being a competent personal trainer or fitness professional; fundamentals in addressing an individual's health, medical and fitness status, along with comprehending fitness concepts including nutrition, bioenergetics, biomechanics and applied anatomy. **Prerequisite:** Grade of C or better in KINE 215.

KINE 335 Coaching in Group Fitness

Credits 2. 1 Lecture Hour. 2 Lab Hours. An overview of the knowledge, skills and expectations associated with being a competent group fitness instructor; creation, application and adaptation of a variety of group fitness classes based on population size, skill level, equipment available and facility space; basic business practices and professional certification procedures that are required of a fitness professional. **Prerequisite:** Grade of C or better in KINE 215.

KINE 340 Essentials of Strength and Conditioning

Credits 3. 3 Lecture Hours. Current principles and procedures essential to strength training and conditioning practices; emphasis on development and practical applications of scientific based anaerobic conditioning, flexibility, mobility, muscular strength, power and aerobic endurance program designs. **Prerequisites:** Junior or senior classification; grade of C or better in KINE 318 or KINE 320; recommend KINE 199 Majors Aerobic Movement, KINE 199 Majors Resist Flex prior to registering.

KINE 351 Coaching of Basketball

Credits 2. 1 Lecture Hour. 2 Lab Hours. Theory of fundamental skills needed to coach basketball with emphasis on knowledge of rules, strategies and skill analysis. **Prerequisites:** Grade of C or better in KINE 215.

KINE 355 Coaching of Track

Credits 2. 1 Lecture Hour. 2 Lab Hours. Theory and practice of coaching fundamentals in track and field events. **Prerequisite:** Grade of C or better in KINE 215.

KINE 386 Sport Physiology

Credits 3. 3 Lecture Hours. Scientific physiological principles as they relate to sport and exercise in the preparation of current and future coaches; emphasis on cognitive, physiological knowledge and practical applications necessary to earn a creditable national certification; safely and effectively train athletic, fitness and general populations. **Prerequisites:** KINE 121 and KINE 213; grade of C or better in KINE 302.

KINE 404 Coaching Psychology

Credits 3. 3 Lecture Hours. Mental aspects of coaching for performance improvement in athletic and exercise settings; focus on coaching applications of theoretical concepts including individual differences, motivation, team and group dynamics, leadership, performance enhancement, positive and negative health behaviors and youth development. **Prerequisite:** Junior or senior classification, or approval of instructor.

KINE 406 Motor Learning and Skill Performance

Credits 3. 3 Lecture Hours. Learning in psychomotor domain; motor learning theories, physiological bases of skill behavior, motor and skill learning, state of performer and application of instructional techniques in motor learning and skill performance. **Prerequisite:** Grade of C or better in BIOL 319 and PHYS 201; concurrent enrollment BIOL 320; junior or senior classification.

KINE 407 Motor Control and Learning Lab

Credit 1. 2 Lab Hours. Collection and analysis of measures of human performance; study of how humans control voluntary actions; extension of basic knowledge of behavioral and cognitive processes. **Prerequisites:** Junior or senior classification; grade of C or better or concurrent enrollment in KINE 406.

KINE 425 Tests and Measurements

Credits 3. 3 Lecture Hours. Comprehensive examination of the conceptual and theoretical aspects of measurement and evaluation in the field of kinesiology; emphasis on the application of statistical techniques germane to measurement and evaluation. **Prerequisites:** Junior or senior classification; or approval of instructor for non-majors.

KINE 426 Exercise Biomechanics

Credits 3. 3 Lecture Hours. An integrated, mechanistic study of biomechanics of human motion during physical activity and exercise; biology and mechanical properties of the human movement system including bones, tendons, ligaments, cartilage, skeletal muscles, joints and whole body systems investigated. **Prerequisite:** Grade of C or better in PHYS 201, BIOL 319, and BIOL 320; junior or senior classification.

KINE 427 Therapeutic Principles

Credits 3. 3 Lecture Hours. Examination of human tissue types, characteristics, and physiology pertaining to injury, pain transmission, and the healing process; study of common therapeutic modalities such as ultrasound and electricity with emphasis on physiological mechanisms of effect. **Prerequisite:** Grade of C or better in BIOL 319, BIOL 320, and PHYS 201; junior or senior classification.

KINE 428 Exercise Biomechanics Laboratory

Credit 1. 2 Lab Hours. Applied development of the mechanistic concepts of biomechanics of human motion during physical activity, performance and exercise; investigation of the biological and mechanical properties of the human movement system including bones, tendons, ligaments, cartilage, skeletal muscles, joints and whole body system. **Prerequisites:** Grade of C or better in KINE 426 or concurrent enrollment; grade of C or better in PHYS 201; junior or senior classification.

KINE 429 Adapted Physical Activity

Credits 3. 2 Lecture Hours. 2 Lab Hours. Kinesiology for individuals with handicapping conditions; emphasis on cognitive recognition of such handicaps as postural deviations, emotional disturbances, convulsive disorders, vision and auditory problems, and other learning disability conditions. **Prerequisite:** Grade of C or better in HEFB 222/KNFB 222 or KNFB 222/HEFB 222; grade of C or better in BIOL 107 or BIOL 111; grade of C or better in PHYS 201 or CHEM 119; junior or senior classification.

KINE 431 Ropes Course and Group Process

Credits 3. 2 Lecture Hours. 2 Lab Hours. Techniques of group facilitation for initiatives of ropes/challenge course events; activity presentation and sequencing, safety techniques and construction principles, and processing experiences for transfer of learning. **Prerequisite:** Junior or senior classification; approval of instructor.

KINE 433 Physiology of Exercise

Credits 3. 3 Lecture Hours. Physiological bases of exercise and physical conditioning; measurement of metabolic efficiency during exercise, neuromuscular efficiency and body composition. **Prerequisite:** Grade of C or better in PHYS 201, BIOL 319, and BIOL 320; junior or senior classification.

KINE 435 Physiology of Exercise Lab

Credit 1. 2 Lab Hours. Utilization of up-to-date equipment to provide a comprehensive understanding of the physiology relating to cardio-pulmonary, skeletal muscle and metabolic responses to aerobic and anaerobic exercise. **Prerequisite:** Grade of C or better in KINE 433 or concurrent enrollment; junior or senior classification.

KINE 439 Exercise Evaluation and Prescription

Credits 4. 3 Lecture Hours. 3 Lab Hours. Theory and techniques for evaluation of human performance and cardiovascular disease risk factors in healthy and diseased populations; exercise prescription for disease prevention and rehabilitation. **Prerequisite:** Grade of C or better in KINE 433 or concurrent enrollment; junior or senior classification.

KINE 440 Planning and Conduct of Human Subjects Research

Credits 3. 3 Lecture Hours. Principles of practical issues associated with human subjects research from a multidisciplinary approach with consideration of gender, race, ethnicity and vulnerable subjects on study design; discussion of the basics of clinical trial study design, recruitment materials, informed consent and assent procedures, questionnaires, and assessments, and case report forms; importance of medical oversight and participant safety. **Prerequisite:** Junior or senior classification.

KINE 482 Seminar

Credit 1. 1 Lecture Hour. Acquaint students with current research and the research process in their chosen field of study (kinesiology). May be taken four times for credit. Must be taken on a satisfactory/unsatisfactory basis. **Prerequisites:** Grade of C or better in BIOL 319 and BIOL 320, or KINE 302 and KINE 306; junior or senior classification.

KINE 483 Practicum in Kinesiology

Credits 0 to 3. 0 to 2 Lecture Hours. 0 to 2 Lab Hours. Participation and study in the areas of fitness assessment, exercise and/or sport programming, and fitness/sport administration; acquisition and practice of professional and/or clinical skills in kinesiology and/or coaching. **Prerequisite:** Senior classification; approval of instructor.

KINE 484 Internship in Kinesiology

Credits 0 to 12. 0 to 12 Other Hours. Supervised internship with corporate fitness centers, rehabilitation centers, hospitals, recreation centers and similar agencies and organizations. **Prerequisites:** Grade of C or better in KINE 483; completion of all coursework.

KINE 485 Directed Studies

Credits 0 to 4. 0 to 4 Other Hours. Special problems in kinesiology assigned to individual students or to groups. **Prerequisites:** Junior or senior classification; approval of instructor.

KINE 489 Special Topics in...

Credits 0 to 4. 0 to 4 Lecture Hours. 0 to 4 Lab Hours. Selected topics in an identified area of kinesiology; also taught at Galveston campus. May be repeated for credit.

KINE 491 Research

Credits 0 to 4. 0 to 4 Other Hours. Research conducted under the direction of faculty member in kinesiology. May be repeated 4 times for credit. **Prerequisites:** Junior or senior classification and approval of instructor.