

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 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

Credits 3. 3 Lecture Hours. (PHED 1321) Fundamentals of Coaching. Preparation of prospective coaches by gaining competence in coaching in today's environment; emphasis on developing the athlete, creating an effective practice environment, utilizing game management strategies, and skill analysis; research of successful coaches to develop coaching philosophy. **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 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 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:** Junior or senior classification.

KINE 307 Lifespan Motor Development

Credits 3. 3 Lecture Hours. Comprehensive study of biological, neurological, and physiological changes that influence motor behavior across the human lifespan; focus on heredity, neural development, physical growth, motor skill changes, and the impact of sociocultural settings; application of ecological and information processing models, and use of assessment tools to evaluate motor development in typical and atypical populations from prenatal stages through older adulthood. **Prerequisites:** 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 Care of the Athlete

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:** Junior or senior classification.

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 Administrative and Athletic Operations for Coaches

Credits 3. 3 Lecture Hours. Development of knowledge and skills related to event and tournament organization, sport governing bodies, school officials; comprehension of risk management, financial management; includes classroom experiences, observations and field-based experiences to link theory into practice. **Prerequisites:** Junior or senior classification.

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; recommend KINE 199 Majors Aerobic Movement or Majors Resist Flex.

KINE 345 Coaching of Weight Training

Credits 2. 1 Lecture Hour. 2 Lab Hours. Overview of the knowledge, skills, and expectations associated with being a competent resistance training coach; fundamentals in addressing training facility etiquette and safety, along with gaining proper knowledge for exercise technique and improvement of athletic performance; specific, real-world information about the knowledge, skills, and expectations associated with a competent coach and specific skills gained during weight training sessions. **Prerequisites:** Grade of C or better in KINE 215.

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 353 Coaching of Softball

Credits 2. 1 Lecture Hour. 2 Lab Hours. Theory of fundamental skills needed to coach softball 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 370 Basic Biology of Performance for Coaches

Credits 3. 3 Lecture Hours. Fundamental knowledge in motor neuroscience, biomechanics, cardiovascular and skeletomuscular physiology, strength and conditioning and sport nutrition from an applied perspective for coaches. **Prerequisites:** Junior or senior classification.

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 and control in the psychomotor domain focusing on the study of neurophysiological processes involved in physical or motor activity, sensorimotor interactions, and diseases/disabilities limiting motor activity; instruction of central and peripheral neural anatomy, muscular anatomy, and function, as related to the performer and instructional techniques (body training, practice, exercise) that influence motor skill learning at the level of cognitive, neural, and muscular processes. **Prerequisites:** 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. Study of control and learning of physical or motor activity; collection of behavioral and neurophysiological measures of human performance, muscle activity, sensorimotor interactions, cognitive processes; assessment of the influence of instructions, body training and practice on skill performance; development of graphing and scientific writing skills. **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. **Prerequisites:** Grade of C or better in KINE 121, KINE 213, PHYS 201, BIOL 319, and BIOL 320; junior or senior classification.

KINE 427 Therapeutic Principles

Credits 3. 3 Lecture Hours. Focused on anatomy and physiology of human tissue injury, degeneration, and regeneration including biochemistry and molecular biology of corresponding cell signaling events; comparative physiology to describe composite tissue regeneration with particular emphasis placed upon the role of the immune system and tripartite crosstalk of muscles, blood vessels, and nerves; overview of therapeutic modality physics and physiology pertaining to human tissue regeneration. **Prerequisites:** Grade of C or better in KINE 121, KINE 213, 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 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. **Prerequisites:** Grade of C or better in KINE 121, KINE 213, PHYS 201, BIOL 319, and BIOL 320; junior or senior classification.

KINE 435 Physiology of Exercise Lab

Credit 1. 2 Lab Hours. Assessment of systemic physiological responses to exercise; contemporary laboratory equipment used to assess physiological responses to aerobic and anaerobic exercise; emphasis on physiology relating to bioenergetics/ fuel utilization, skeletal muscle function, and cardio-respiratory responses to exercise. **Prerequisites:** 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 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.