

DEPARTMENT OF KINESIOLOGY

Chair: Dr. Emily Roper (936) 294-1169

Website: The Department of Kinesiology (<http://www.shsu.edu/academics/health-sciences/kinesiology/>)

Mission

The mission of the Department of Kinesiology is to advance students' understanding of relationships among movement, exercise, and skill that occur in the contexts of development, learning, rehabilitation, and training. The programs in the Department of Kinesiology seek to prepare future professionals for movement-related fields such as athletic training, teaching, coaching, training, fitness, and sport management. Learning occurs through the study of movement, exercise processes, and/or sport industry settings within a framework that emphasizes the clinical and practical implications of theory and research.

Highlights

- Excellent field-based opportunities.
- Wide variety of laboratory and practical experiences.
- Excellent professional networks.
- Online courses are available.
- Outstanding faculty and staff with extensive experience.

Career Opportunities

- Corporate fitness
- Commercial fitness
- Hospital-based wellness
- Pre-professional programs for Occupational Therapy and Physical Therapy
- Cardiac rehabilitation
- Assistants to chiropractors and physical therapists
- Collegiate, community, and/or professional sport industry professionals
- Event management, marketing, and sales positions with professional sport franchises
- Event management, marketing, compliance, and development opportunities within college athletics
- Program management, marketing, community relations, and event management with community sport organizations

Programs

- Master of Science in Athletic Training (<http://catalog.shsu.edu/archives/2020-2021/graduate-and-professional/college-departments/health-sciences/kinesiology/ms-athletic-training/>)(as of Summer 2021)
- Master of Science in Kinesiology - (Sport and Human Performance) (<http://catalog.shsu.edu/archives/2020-2021/graduate-and-professional/college-departments/health-sciences/kinesiology/kinesiology-ma/>)
- Master of Science in Sport Management (<http://catalog.shsu.edu/archives/2020-2021/graduate-and-professional/college-departments/health-sciences/kinesiology/ms-sport-management/>)

Athletic Training

ATTR 5111. Lower Extremity Injuries Lab. 1 Hour.

Students apply practical skills in the areas of evaluation, diagnosis, care, and referral of lower-extremity musculoskeletal pathologies. Course content includes evaluation skills and clinical decision-making that allow for the development of a clinical diagnosis, appropriate referral strategy, and a plan of care for lower-extremity injuries and conditions. Co-requisite: ATTR 5311.

Prerequisite: ATTR 5310.

ATTR 5112. Upper Extremity Injuries Lab. 1 Hour.

Students apply practical skills in the areas of evaluation, diagnosis, care, and referral of upper-extremity orthopedic injuries. Course content includes evaluation skills and clinical decision-making that allows for the development of clinical diagnoses procedures including the assessment of various musculoskeletal conditions, the selection of appropriate referral strategies, and the development of plans of care for upper-extremity injuries and conditions. Co-requisite: ATTR 5312.

Prerequisite: ATTR 5310, ATTR 5311, and ATTR 5111.

ATTR 5115. Non-Orthopedic Pathologies Lab. 1 Hour.

Students apply practical skills and techniques required to assess, manage, and refer non-orthopedic pathologies that occur in active populations. Course content includes evaluation skills and clinical decision-making that allow for the development of clinical diagnoses procedures including the assessment of various non-orthopedic conditions, the selection of appropriate referral strategies, and the development of plans of care for the conditions that may occur in the cardiovascular, respiratory, endocrine, gastrointestinal, genitourinary, integumentary, and reproductive body systems. Co-requisite: ATTR 5315.

Prerequisite: ATTR 5300, ATTR 5310, and ATTR 5320.

ATTR 5130. Therapeutic Intervention I Lab. 1 Hour.

Students apply practical skills in the areas of therapeutic modalities and pharmacological interventions used to treat impairments due to injury or illness. Students demonstrate skills related to cryotherapy, thermotherapy, electrical stimulation, ultrasound, diathermy, light therapy, low level laser, traction, intermittent compression, and pharmacological interventions. Co-requisite: ATTR 5330.

ATTR 5131. Therapeutic Intervention II Lab. 1 Hour.

Students apply practical skills in the areas of therapeutic exercise and manual therapies to treat impairments due to injury or illness. Students demonstrate clinical techniques and related therapeutic interventions used to treat pain, and deficiencies in movement, strength, endurance, speed, neuromuscular control, coordination, agility, cardiorespiratory fitness, and activity specific skills. Co-requisite: ATTR 5331.

Prerequisite: ATTR 5330 and ATTR 5130.

ATTR 5210. Clinical Experiences in Athletic Training I. 2 Hours.

Students demonstrate skill proficiency in a practice setting under the supervision and guidance of a clinical preceptor. Clinical skills practiced and evaluated in the course include injury prevention and protective strategies, care and management of acute injuries and emergency situations, and assessment of lower extremity pathologies. This course prepares students for the level-one designation to enable them to practice skills in real-patient contexts. The clinical placement of students must be coordinated and approved by the Athletic Training Clinical Education Coordinator prior to beginning the required 250 hours of the clinical experience. Students cannot progress to the subsequent level in the Master of Science in Athletic Training Program until all course program retention requirements are met.

Prerequisite: Admission to the Athletic Training Program, ATTR 5300, ATTR 5310, ATTR 5320, ATTR 5311, and ATTR 5111.

ATTR 5220. Clinical Experiences in Athletic Training II. 2 Hours.

Students demonstrate skill proficiency in practice settings under the supervision and guidance of a clinical preceptor. Clinical skills practiced and evaluated in the course include injury prevention and protective strategies, care and management of acute injuries and emergency situations, assessment of lower and upper extremity pathologies, and integration of therapeutic modalities and medications. This course prepares students for the level-one designation to enable them to practice skills in real-patient contexts. The clinical placement of students must be coordinated and approved by the Athletic Training Clinical Education Coordinator prior to beginning the required 250 hours of the clinical experience.

Prerequisite: Admission to the Athletic Training Program, ATTR 5300, ATTR 5310, ATTR 5320, ATTR 5311, and ATTR 5111.

ATTR 5230. Clinical Experiences in Athletic Training III. 2 Hours.

Students demonstrate skill proficiency in practice settings under the supervision and guidance of a clinical preceptor. Clinical skills practiced and evaluated in the course include injury prevention and protective strategies, care and management of acute injuries and emergency situations, assessment of lower and upper extremity pathologies, assessment of head and face injuries, and integration of therapeutic interventions. This course prepares students for the level-two designation to enable them to practice skills in real-patient contexts. The clinical placement of students must be coordinated and approved by the Athletic Training Clinical Education Coordinator prior to beginning the required 250 hours of the clinical experience.

Prerequisite: Admission to the Athletic Training Program, ATTR 5350, KINE 5374, ATTR 5220, ATTR 5331, ATTR 5131, and ATTR 5313.

ATTR 5240. Clinical Experiences in Athletic Training IV. 2 Hours.

Students demonstrate skill proficiency in practice settings under the supervision and guidance of a clinical preceptor. Clinical skills practiced and evaluated in the course include injury prevention and protective strategies, care and management of acute injuries and emergency situations, assessment of lower and upper extremity pathologies, assessment of head, face, spine and pelvis injuries, and integration of therapeutic interventions. This course prepares students for the level-two designation to enable them to practice skills in real-patient contexts. The clinical placement of students must be coordinated and approved by the Athletic Training Clinical Education Coordinator prior to beginning the required 250 hours of the clinical experience.

Prerequisite: Admission to the Athletic Training Program, ATTR 5350, KINE 5230, ATTR 5314, ATTR 5374, and HLTH 5371.

ATTR 5300. Injury Prevention and Protective Strategies. 3 Hours.

Students examine athletic training through a public health lens and explore injury prevention and protection through data collection and implementation of evidence-based strategies. Course content includes strategies used in athletic training such as the application of protective equipment, taping, bracing, splinting, and casting.

ATTR 5310. Clinical Evaluation and Assessment Fundamentals. 3 Hours.

Students learn skills required for the effective palpation of anatomical structures, assessment of range of motion and strength, neurological screens, and functional assessment screens including qualitative postural and gait analysis. The skills, techniques, and processes taught in the course prepare students for successful completion of clinical examinations.

ATTR 5311. Lower Extremity Injuries. 3 Hours.

Students learn the skills and techniques required to conduct a patient evaluation, develop a clinical diagnosis, refer the patient to appropriate health care providers, and design a plan of care for patients with common lower-extremity injuries and conditions. Co-requisite: ATTR 5111.

Prerequisite: ATTR 5310.

ATTR 5312. Upper Extremity Injuries. 3 Hours.

Students participate in a comprehensive overview of common musculoskeletal injuries and conditions related to the anatomical upper-extremity including the shoulder, elbow, wrist, hand, and fingers. Course content includes the proper evaluative procedures and assessments of various pathologies, the development of clinical diagnoses, the appropriate referral of patients, and the formation of plans of care for common upper-extremity injuries and conditions. Co-requisite: ATTR 5112.

Prerequisite: ATTR 5310, ATTR 5311, and ATTR 5111.

ATTR 5313. Head and Facial Injuries in Sport. 3 Hours.

Students examine head and facial injuries and related pathologies experienced in sport and exercise contexts. Course content focuses on the impact of guiding laws, rules, and current scientific evidence that influence the assessment, care, and return to activity decisions for patients.

Prerequisite: ATTR 5300, ATTR 5310, and ATTR 5320.

ATTR 5314. Spine and Pelvis Injuries. 3 Hours.

Students develop the skills and techniques required to assess and manage injuries to the spine, thorax, abdomen, and pelvis. Students perform patient evaluations and interventions to care for the spine and pelvic injuries most often associated with athletic injuries.

Prerequisite: ATTR 5310, ATTR 5311, ATTR 5111, ATTR 5312, ATTR 5112, and ATTR 5313.

ATTR 5315. Non-Orthopedic Pathologies in Sport and Exercise. 3 Hours.

Students examine the practical skills and techniques required to conduct an evaluation of the condition, develop a clinical diagnosis, appropriately refer, and develop a plan of care for non-orthopedic conditions experienced in active populations. Course content includes the following body systems: cardiovascular, respiratory, endocrine, gastrointestinal, genitourinary, integumentary, and reproductive. Co-requisite: ATTR 5115.

Prerequisite: ATTR 5300, ATTR 5310, and ATTR 5320.

ATTR 5320. Acute and Emergency Care in Athletic Training. 3 Hours.

Students learn the practical skills and techniques required to provide immediate care and appropriately manage acute and emergency conditions. Course content focuses on acute and emergency conditions that arise in sport and exercise contexts.

ATTR 5330. Therapeutic Interventions I. 3 Hours.

Students examine the theories and principles involved in the use of therapeutic modalities, as well as pharmacological interventions used in treating pathologies in an active population. Students are prepared with the skills and theoretical knowledge required to formulate plans of care for injuries and determine the appropriate therapeutic care for patients. Co-requisite: ATTR 5130.

ATTR 5331. Therapeutic Interventions II. 3 Hours.

Students examine the techniques and timing protocols associated with the recommended therapeutic interventions for pathologies that typically occur in active populations. Course content includes the instruction of procedures required to effectively implement, progress, and regress therapeutic exercises during the patient healing and recovery phases. Co-requisite: ATTR 5131.

Prerequisite: ATTR 5330 and ATTR 5130.

ATTR 5340. Administration in Athletic Training. 3 Hours.

Students investigate the organizational, professional, and management skills required to work in the athletic training profession. Course content includes risk management, budgeting, policy development, facility design, electronic medical records, medical billing, and management strategies.

Prerequisite: ATTR 5300, ATTR 5320, HLTH 5371, and HLTH 5378.

ATTR 5350. Immersive Clinical Experiences in Athletic Training. 3 Hours.

Students demonstrate skill proficiency in a practice setting under the supervision and guidance of a clinical preceptor. The practice-intensive clinical experience allows students to experience the totality of patient care provided by practicing Athletic Trainers. Students are required to complete a minimum of 375 contact hours under the supervision of a Certified Athletic Trainer, or Licensed Physician in the course. Clinical placement must be coordinated and approved by the Athletic Training Clinical Education Coordinator.

Prerequisite: Admission to the Athletic Training Program, ATTR 5210 and ATTR 5220.

KINE 5097. Special Topics in Kine. 3 Hours.**KINE 5334. Graduate Internship. 3 Hours.**

Students engage in an internship experience in a personal working environment or organizational setting. Supervisory assistance by project staff occurs at frequent intervals.

KINE 5362. Legal Issues in Sports. 3 Hours.

Students examine legal factors affecting Physical Education, amateur athletics, and professional sport. Their analysis involve teachers, coaches, officials, spectators, medical personnel, owners of sports teams, and commercial suppliers of equipment and products used within an activity setting.

KINE 5363. Leadership in Sport Management. 3 Hours.

This course is designed for the individual who will assume some type of supervisory position in health promotion or sport management. The course's focal point involves exposure to administrative skills required of those who serve in a leadership capacity.

KINE 5367. Adv Physiology of Exercise. 3 Hours.

Students explore advanced content reflecting the scientific principles underlying the physiology of exercise. Students are required to conduct an applied research project on a topic of their choice.

Prerequisite: Graduate Standing.

KINE 5368. Research in Sport & Human Perf. 3 Hours.

Students focus on current research trends in Sport and Human Performance (SHP). Research on a variety of current topics in the field are analyzed and discussed. In the course, students discuss media presentation and their application to the profession. Additionally, students develop and present a proposal for a research project.

Prerequisite: Graduate Standing.

KINE 5370. Sport Mkt: Theory & Practice. 3 Hours.

Students cover the essentials of sport marketing which includes planning, promotions, operations, and market analysis. The fundamental principles used in the marketing of sport, products, events, and the importance of service quality will also be examined. Students are exposed to the latest research in the field and will interact with industry professionals.

KINE 5371. Sport Finance and Sales. 3 Hours.

Students learn financial concepts associated with franchise operations, stadium funding proposals, budgets, and bond referendums. In addition, franchise revenue streams are discussed in detail. Students are exposed to a variety of different sales strategies and tactics that can be applied to the sport industry and are also exposed to the latest research and professional trends in the field.

KINE 5372. Youth Fitness. 3 Hours.

Students are provided with specific background and knowledge in how to appropriately plan programs geared to improving the fitness of youth. Central to this course is the development of an attitude that perceives youth fitness as a significant part of the school curriculum. Students are prepared to promote youth fitness in an effective and scientific manner.

KINE 5373. Event & Facility Management. 3 Hours.

Students examine the practical application of the principles and theory related to planning, organization, and execution of sport. In addition, entertainment events are addressed. Fund raising and charity management are considered, as will the management of small and large scale facilities and event venues. Site visits and interactions with local sport organizations also take place.

KINE 5374. Appld Rsrch Mthd-Kin & Spt Mgt. 3 Hours.

Students study research techniques, identification of problems, research designs and data gathering procedures. In addition, students develop a proposal for a research project.

KINE 5375. Statistical Design in KINE. 3 Hours.

Students explore principles of advanced statistical techniques and measurement theory, with emphasis upon their application to Health, Kinesiology, and related areas.

KINE 5377. Independent Studies. 3 Hours.

This course is adaptable to the needs and interests of the individual student. Students with specific interests are provided the opportunity to investigate and make application in theoretical, laboratory, or field experience approaches to their area of concentration. A proposal is submitted to the faculty sponsor and the Chair of the Health and Kinesiology Graduate Committee the semester before the student plans to register for this course. A proposal is submitted to the faculty sponsor and the Chair of the Health and Kinesiology Graduate Committee the semester before the student plans to register for this course.

Prerequisite: KINE 5374.

KINE 5378. Applied Motor Dev in PE. 3 Hours.

Students focus on the principles that will enable graduate students to effectively apply motor development concepts to teaching, rehabilitation, and training. In addition, students apply current research and literature to the study of the changes of human motor behavior over the lifespan, the processes that underlie these changes, and the factors that affect them. This course emphasizes the administration, collection, and analysis of data in the motor domain.

KINE 5379. Mgt Adult Fitness Programs. 3 Hours.

Students analyze factors associated with the management of commercial, corporate and hospital-based wellness programs. Special attention is given to the purpose, development, and maintenance of such programs.

KINE 5380. Ethics in Sport Management. 3 Hours.

Students examine ethical theory and moral decision making as related to the management of sport. Graduate students review research findings and current literature relevant to issues affecting concepts of ethics and morality in the management of sport. Through introspection, students develop and express their philosophy toward ethics and morality.

KINE 5381. Clinical Exercise Physiology. 3 Hours.

Students are introduced to a detailed study of the human physiological responses to activity and exercise in the presence of chronic disease. Students are provided with fundamental knowledge of disease-specific pathology and treatment guidelines. Students are guided through the physiology associated with exercise testing and physical training of patients with chronic disease.

Prerequisite: Graduate standing.

KINE 5382. Community and Media Relations in Sport. 3 Hours.

Students engage in an intensive study of media in sport management addressing community relations, press conferences, news releases, media-athlete relations, print journalism, television contracts, web-based content and public relations. Emphasis is placed on media management, athlete representation, and crisis management with the goal of positively representing organizational interests.

KINE 5383. Sport Consumer Behavior. 3 Hours.

Students investigate sport consumer psychology and sport consumer behavioral patterns. An understanding of both sport spectator and sport participant consumption behaviors, with marketing and event management implications is emphasized. Students apply these concepts in advanced sport consumer marketing and sport event management scenarios.

Prerequisite: Graduate standing.

KINE 5384. Revenue Generation in Sport. 3 Hours.

Students develop an in-depth knowledge of how professional sport organizations and intercollegiate athletic departments generate the revenue needed to sustain successful business operations. Students focus on various strategies and execution methods related to sales, sponsorships, management, and marketing. Additionally, this course provides students with an opportunity to combine theory with practice.

Prerequisite: Graduate standing.

KINE 5385. Biomechanics of Injury. 3 Hours.

Students examine the biomechanics of musculoskeletal injury. Specific topics to be addressed are the biomechanics of tissue and how biomechanical factors impact injuries to the lower-extremity, upper-extremity, and head, neck, and trunk.

Prerequisite: Graduate Standing .

KINE 5386. EKG/Cardiac Conditions. 3 Hours.

Students in this course develop an advanced understanding of cardiac anatomy and how electrical activity of the heart can be properly interpreted in order to detect abnormalities in the cardiovascular system. Emphasis is placed on identifying criteria for abnormal heart rhythms including conduction disturbances, and ventricular and supraventricular arrhythmias. Other topics to be addressed include systematic EKG interpretation techniques, myocardial ischemia and infarction, and the role of pharmacological agents and electrolytes on the EKG.

Prerequisite: Graduate Standing.

KINE 5389. Sports in American Culture. 3 Hours.

Students explore North American sport from a viewpoint that sport is a microcosm of society. Social structures, sub-cultures, and ethics are explored.

KINE 5390. Exercise Science Lab Practicum. 3 Hours.

Students study advanced laboratory methods typically utilized in applied exercise science. The student gains understanding of equipment used for assessment and evaluation of persons with varying needs. A research project is a major component of this course.

Prerequisite: Graduate standing.

KINE 5391. Motor Control in Practice. 3 Hours.

Students identify principles of motor control with emphasis on the application of these principles to Sport and Human Performance (SHP). Students investigate how motor control affects everyday movement and performance, and review and synthesize current literature and present the findings to their peers. Prerequisite: Graduate Standing.

Prerequisite: Graduate Standing.

KINE 5393. Adv Studies in Psy of Sport. 3 Hours.

Students engage in an advanced study of the psychological factors that affect, and are influenced by, sports participation. Both the coach and the athlete are considered in this analysis.

KINE 5394. Exercise for Critical Populations. 3 Hours.

Students study the methodologies for populations needing advanced knowledge for exercise testing and prescription. The students learn techniques for managing dysfunction associated with chronic disease as well chronic inactivity and poor movement patterns. Specific attention is given to managing musculoskeletal dysfunction.

Prerequisite: Graduate standing.

KINE 5395. Advanced Biomechanics. 3 Hours.

Students study the mechanical analysis of motion as it applies to the human musculoskeletal system. The course stresses advanced concepts of functional anatomy, linear and angular kinetics and kinematics, and application of those concepts in a laboratory/research setting. Emphasis is placed on data collection and evaluation in a semester research project.

Prerequisite: Graduate Standing.

KINE 5396. Aerobic and Anaerobic Training. 3 Hours.

Students engage in a detailed study of training techniques for competitive athletes are presented. Evaluation of the competitive athlete, including test selection, administration, and integration into training programs, are presented, as well. Students learn to design effective training and conditioning programs based on the specific needs of the competitive athlete.

Prerequisite: Graduate standing.

KINE 5397. Current Issues in Kinesiology. 3 Hours.

Students study topics and specific issues germane to current concerns in the areas of Physical Education, health-related wellness, sport on the professional level, and interscholastic and intercollegiate athletics. Students are required to complete a research project requiring data collection and analysis.

KINE 5398. Significance of Motor Learning. 3 Hours.

Students are presented the theoretical and experimental bases for the understanding of human behavior in movement. Areas of study include feedback manipulation, motor programming, dynamic systems theory, generalizability of schema, forgetting, and compatibility analysis. Students are required to plan and conduct a research study testing a motor learning postulate of their own choosing.

Prerequisite: KINE 2363 or permission of instructor.

KINE 5399. Wksp Kin Recreation & Sport. 3 Hours.

Students engage in an intensive laboratory-oriented experience for practitioners seeking to upgrade teaching, coaching, or leadership competencies in areas related to Kinesiology, Coaching, and Athletics. May be repeated for credit with approval of the Kinesiology Graduate Coordinator.

KINE 6098. Thesis I. 1-3 Hours.

This phase of the thesis investigation includes the completion of the review of the related literature, formulation of the research design and procedures and related pilot studies. Some data collection may also occur, and the thesis symposium must be completed to the satisfaction of the advisor and members of the thesis committee. Variable Credit (1-3).

KINE 6099. Thesis II. 1-3 Hours.

This phase of the thesis includes the completion of the data collection, as well as the actual writing and defense of the thesis. Variable Credit (1 to 3).

KINE 6399. Thesis. 3 Hours.

This phase of the thesis includes the completion of the data collection, as well as the actual writing and defense of the thesis.

Director/Chair: **Emily A Roper**

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