SCHOOL OF KINESIOLOGY, APPLIED HEALTH AND RECREATION

Dr. Doug Smith, PhD—Professor and School Head

The School of Kinesiology, Applied Health and Recreation (KAHR) offers undergraduate and graduate programs in Applied Exercise Science, Physical Education, Recreation Management and Recreational Therapy, and Leisure Studies. These programs provide excellence in graduate and undergraduate education through current academic relevance and proven standards. Candidates are encouraged to engage in scholarly inquiry and research productivity to benefit the people of Oklahoma and beyond. Areas of service extend through involvement with the university, community, state and nation. The commonality in programs within the KAHR provides unique opportunities for program interaction and collaboration for both faculty and students.

Course Prefixes

Course prefixes in KAHR include HHP (Health and Human Performance); RMRT (Recreational Management and Recreational Therapy), and LEIS (Leisure Studies).

Applied Exercise Science

Jason Defreitas, PhD—Assistant Professor and HHP Coordinator

The program in Applied Exercise Science at OSU prepares students through coursework such as biomechanics, exercise physiology, exercise psychology, exercise testing, sports nutrition, cardiac rehabilitation, strength and conditioning, and overall fitness for both healthy individuals and those with special needs. The Degree offers two options: Pre-Professional and Strength and Conditioning. The Pre-Professional concentration is designed for undergraduates interested in careers in Clinical Exercise Physiology, Cardiac/Stroke Rehabilitation, Physical Therapy, Occupational Therapy, Athletic Training, and graduate school. The Strength and Conditioning concentration is designed for students interested in careers in Strength and Conditioning, Personal Training, Fitness Instructor, Coaching, Fitness Facility Management, etc. This degree would also serve to prepare the student for various professional certification examinations, such as Certified Strength and Conditioning Specialist (CSCS), Certified Special Population Specialist (CSPS), Certified Personal Trainer (NSCA=CPT), Physical Therapist (CPT), Certified Health Fitness Specialist (HFS), Certified Exercise Physiologists (EP-C), etc.

Physical Education

Patricia Hughes, PhD—Associate Professor and Program Coordinator

The undergraduate program includes a curriculum designed for professional preparation as a certified teacher of physical education, PK-12. Core courses for all physical education students include science-based courses, teaching methods, health and content-specific courses. Students engage in two formal field-based experiences: (1) a 45-hour practicum consisting of on-site observational experiences in one or more public school settings; and (2) a clinical experience (student teaching) in elementary and secondary schools during the final semester. A minor in Coaching Science is also offered, for which a student does not need to be a Physical Education major.

Recreation Management and Recreational Therapy

Tim Passmore, EdD, CTRS/L—Associate Professor and Program Coordinator

The program in Recreation Management and Recreational Therapy Program prepares students at the undergraduate and graduate levels for careers in recreation management and recreational therapy. The undergraduate program in Recreational Therapy is accredited through the Commission on Accreditation of Recreational Therapy Education by the Commission on Accreditation of Allied Health Programs. Students completing the Recreational Therapy program are eligible to sit for the National Council for Therapeutic Recreation Certification (CTRS) and apply for Medical Licensing in the State of Oklahoma through the Oklahoma Medical Licensing Board. Recreational Therapy prepares students to work in a variety of settings including hospitals, rehabilitation centers, day programs, institutions and within the community. Recreational Therapy is a valued part of the health care and human services. Individuals with illness, disabilities or limitations are helped to restore, enhance or maintain their health, independence and well-being through recreational therapy.

Those students completing the Recreation Management program are eligible to sit for the Certified Park and Recreation Professional. Recreation Management prepares students for employment in a variety of settings such as municipal, commercial, and corporate recreation; state and national park services; YMCAs and YWCAs; and armed services recreation. Recreation Management is a growing field and is a multi-billion dollar industry. Non-majors may complete a 21-credit minor in Recreation Management.

Sports & Coaching Science

Program Area Faculty: Tim Baghurst, PhD—Associate Professor

The Sports & Coaching Science degree prepares students at the undergraduate level for careers in athletic coaching and ancillary fields. The curriculum prepares professionals for certification via various sports organizations relevant to their specific sport of interest (e.g., United States Tennis Association, National Football League, United States Volleyball Association), or prepares them to successfully achieve other sport and exercise-based certifications such as personal training. The degree will also prepare students for the many graduate programs available nationwide in coaching science and education.

The Sports & Coaching Science Program prepares students for work and further study in a variety of settings including: professional, collegiate, or secondary school sport organizations; elite training facilities; athletic league officiating; small businesses (e.g., karate, cheer, gymnastics); sport psychology; athletic training; strength and conditioning; and sports management.

Programs/Areas of Emphasis Degrees

Degrees offered through KAHR programs include Bachelor of Science (BS), Master of Science (MS) and Doctor of Philosophy (PhD).

Applied Exercise Science

• Applied Exercise Science
  • Pre-Professional - BS
  • Strength and Conditioning - BS
Health and Human Performance
• Health and Human Performance - MS
• Health, Leisure and Human Performance - PhD
• Leisure Studies - MS
• Physical Education
  • Teaching - BS

Recreational Management and Recreational Therapy
• Recreational Management and Recreational Therapy
  • Recreation Management - BS
  • Recreational Therapy - BS

Sports and Coaching Science
• Sports and Coaching Science - BS

Courses
HHP 1713 Introduction to Athletic Training
Prerequisites: Admission to the athletic training program.
Description: An introduction to the profession of athletic training. The principles of injury prevention and care relative to athletic injuries and development of essential skills and competencies needed to perform selected athletic training procedures. Theory-based course with required laboratory experiences.
Credit hours: 3
Contact hours: Lecture: 2 Lab: 2
Levels: Undergraduate
Schedule types: Lab, Lecture, Combined lecture and lab
Department/School: Kinesiology, Appl Health, Rec

HHP 1753 Introduction to Physical Education
Description: The nature, scope and significance of physical education. Historical and philosophical foundations, major sub-disciplines and their interrelationships, and career opportunities. Previously offered as PE 1753.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 1823 Pedagogy of Non-Traditional Activities, Rhythm, and Movement
Prerequisites: HHP and RMRT majors and minors only.
Description: Introduction of activities typically taught to supplement individual or team sports in addition to basic fundamentals and methods of movement skills for rhythms including social, creative, developmental, and multicultural dance and activities. Content includes teaching strategies, assessments, skills analysis, skill components, concepts, terms, safety issues, selection of developmentally appropriate activities, and scope and sequencing of skill components by grade level.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 1833 Pedagogy of Team Activities
Prerequisites: HHP majors and Coaching Science minors only or permission of instructor.
Description: Introduction of activities typically taught as team or group activities. Instructional strategies (methodologies) of team sports, scope and sequencing of skill components, assessment, terms, safety issues, lesson structure, and writing performance objectives. Previously offered as HHP 1832.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 2222 Introduction to Health Aspects of Gerontology
Description: An introductory course of the physical and physiological aspects of aging combined with common pathology and intervention.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 2451 Athletic Training Practicum
Prerequisites: Full admission into athletic training program.
Description: Directed observation in supervised introductory laboratory and clinical experiences in athletic training. Course previously offered as HHP 2450.
Credit hours: 1
Contact hours: Lab: 2
Levels: Undergraduate
Schedule types: Lab
Department/School: Kinesiology, Appl Health, Rec

HHP 2461 Athletic Training Practicum II
Prerequisites: Successful completion of HHP 2451, HHP 2844.
Description: Directed observation in supervised introductory laboratory and clinical experiences in athletic training.
Credit hours: 1
Contact hours: Lab: 2
Levels: Undergraduate
Schedule types: Lab
Department/School: Kinesiology, Appl Health, Rec
HHP 2553 Basic Athletic Injury Management
Prerequisites: HHP 2654.
Description: Identification of emergency medical situations and application of basic care for injury occurring in school and athletic setting.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 2602 First Aid
Description: A competency- and performance-based first aid course. Course previously offered as HLTH 2602.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 2654 Applied Anatomy
Prerequisites: BIOL 1114.
Description: Action and location of individual muscles and muscle groups. Anatomy as applied to a living person. Common anatomical injuries and diseases will be presented with each joint structure. Lab sections will be structured around specific content area for students’ discipline. Course previously offered as HHP 2653 and HLTH 2653.
Credit hours: 4
Contact hours: Lecture: 3 Lab: 2
Levels: Undergraduate
Schedule types: Lab, Lecture, Combined lecture and lab
Department/School: Kinesiology, Appl Health, Rec

HHP 2664 Mechanism and Management of Musculoskeletal Pathology
Description: Appropriate prevention of injury and administration of medical care. Didactic theory and practical experience regarding many aspects of health care. Preparation for future health-care professionals to identify and care for injury occurring during physical activity. Course previously offered as HHP 2663 and HLTH 2663.
Credit hours: 4
Contact hours: Lecture: 3 Lab: 2
Levels: Undergraduate
Schedule types: Lab, Lecture, Combined lecture and lab
Department/School: Kinesiology, Appl Health, Rec

HHP 2712 Psychomotor Development
Description: Fundamental aspects of motor development for infants, children, youth and adults. Course previously offered as PE 2712.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 2733 Procedures in Athletic Training
Prerequisites: HHP 1713, HHP 2654, HHP 2664.
Description: Introduction to the psychomotor skills required in the profession of athletic training. Procedures relative to injuries and development of essential skills and competencies needed to perform selected athletic training procedures. Theory-based course with required lab experience.
Credit hours: 3
Contact hours: Lecture: 2 Lab: 2
Levels: Undergraduate
Schedule types: Lab, Lecture, Combined lecture and lab
Department/School: Kinesiology, Appl Health, Rec

HHP 2802 Medical Terminology for the Health Professions
Description: Basic knowledge and understanding of medical language and terminology used in allied health and health professions.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 2844 Clinical Examination and Diagnosis I
Prerequisites: HHP 2654 and HHP 2664 and HHP 2733.
Description: Advanced knowledge and skills related to the recognition, diagnosis and appropriate medical referral of injuries to the lumbar spine, pelvis and lower extremities. Course previously offered as HHP 2843.
Credit hours: 4
Contact hours: Lecture: 3 Lab: 2
Levels: Undergraduate
Schedule types: Lab, Lecture, Combined lecture and lab
Department/School: Kinesiology, Appl Health, Rec

HHP 2854 Clinical Examination and Diagnosis II
Prerequisites: HHP 2654 and HHP 2664 and HHP 2733 and HHP 2844.
Description: Advanced knowledge and skills related to the recognition, diagnosis and appropriate medical referral of injuries to the head, cervical and thoracic spine, upper extremities, abdominal and thoracic regions. Course previously offered as HHP 2853, HLTH 3653, and HHP 3653.
Credit hours: 4
Contact hours: Lecture: 3 Lab: 2
Levels: Undergraduate
Schedule types: Lab, Lecture, Combined lecture and lab
Department/School: Kinesiology, Appl Health, Rec

HHP 3010 Health and Human Performance Workshop
Description: Concentrated study of selected areas of health and human performance, including problems in instruction and administration not usually addressed in the undergraduate curriculum. Course previously offered as HPEL 3010. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.
Credit hours: 1-3
Contact hours: Other: 1
Levels: Undergraduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec
HHP 3112 Radiography Evaluation and Assessment  
**Prerequisites:** Full admission into ATEP clinical or pre-professional option.  
**Description:** Introduction to the fundamental principles, equipment, and common methods and procedures of radiography.  
**Credit hours:** 2  
**Contact hours:** Lecture: 2  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec  

HHP 3114 Physiology of Exercise  
**Prerequisites:** MATH 1513  
**Description:** A study of the various bodily systems, including major organs and tissues, and how they respond to acute and chronic exercise of varying intensity, duration and frequency. Course previously offered as PE 3114.  
**Credit hours:** 4  
**Contact hours:** Lecture: 3 Lab: 2  
**Levels:** Undergraduate  
**Schedule types:** Lab, Lecture, Combined lecture and lab  
**Department/School:** Kinesiology, Appl Health, Rec  

HHP 3123 Principles of Personal Training  
**Description:** To develop an understanding of the basic skills and competencies in personal training and evaluation and prepare for the National Strength and Conditioning Association (NSCA) personal trainer certification exam. A detailed study of personal training inclusive of musculoskeletal and cardiorespiratory anatomy, resistance training, aerobic exercises, nutrition, health appraisal, fitness testing, flexibility, and plyometric training. The role of the personal trainer will also be addressed.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec  

HHP 3133 Sport Supplements For Human Performance  
**Description:** To develop an understanding of the proper selection and administration of sport supplements, risk factors involved in consuming supplements, and discussion of how specific supplements may or may not affect performance.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec  

HHP 3223 Motor Learning  
**Description:** An in-depth study of motor learning and motor performance. Special emphasis on skilled performance, motor learning theory, motor abilities and individual differences in motor learning. Course previously offered as PE 3223.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec  

HHP 3233 General Medical Concepts  
**Prerequisites:** HHP 2654, HHP 2664, and ZOOL 3204, CHEM 1314, HHP 3673.  
**Description:** Specific pathologies, medical conditions, and possible avenues for treatment of non-orthopedic conditions. Based in current medical research, theory and practical outcomes.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec  

HHP 3333 Ethics in Sports Administration and Coaching  
**Description:** Exploration of the ethical, legal, and professional dilemmas that occur in athletic administration and coaching.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec  

HHP 3433 Early Laboratory Clinical Experiences in Physical Education  
**Prerequisites:** HHP 1753 or consent of the instructor.  
**Description:** The initial pre-professional clinical experience for schools, kindergarten through grade twelve, with primary duties including assisting in physical education classes. Required for full admission to Professional Education. Graded on a pass-fail basis. Previously offered as HHP 3431.  
**Credit hours:** 3  
**Contact hours:** Lecture: 1 Lab: 4  
**Levels:** Undergraduate  
**Schedule types:** Lab, Lecture, Combined lecture and lab  
**Department/School:** Kinesiology, Appl Health, Rec  

HHP 3443 Psychosocial Aspects of Sport and Coaching  
**Description:** Examination of the psychological aspects of sport that impact the performances of coaches and athletes.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec  

HHP 3451 Athletic Training Practicum III  
**Prerequisites:** Successful completion of HHP 2461, HHP 3802, HHP 3902.  
**Description:** Directed observation in supervised intermediate laboratory and clinical experiences in athletic training.  
**Credit hours:** 1  
**Contact hours:** Lab: 2  
**Levels:** Undergraduate  
**Schedule types:** Lab  
**Department/School:** Kinesiology, Appl Health, Rec  

HHP 3461 Athletic Training Practicum IV  
**Prerequisites:** Successful completion of HHP 3451, HHP 3924.  
**Description:** Directed observation in supervised intermediate laboratory and clinical experiences in athletic training.  
**Credit hours:** 1  
**Contact hours:** Lab: 2  
**Levels:** Undergraduate  
**Schedule types:** Lab  
**Department/School:** Kinesiology, Appl Health, Rec
HHP 3553 Theory and Practice of Coaching  
**Description:** The purpose of the course is to introduce and analyze the essential concepts and knowledge concerned with coaching in sports and related areas. This course provides a platform from which deeper knowledge in specific sub disciplines can be acquired through class specialization.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3663 Biomechanics  
**Prerequisites:** HHP 2654.  
**Description:** The study of anatomical mechanical phenomena underlying human motion. Application of biomechanical concepts to a wide variety of exercise, fundamental movement, sport and physical activity. Course previously offered as PE 3663.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3673 Pathology and Pharmacology in Sports Medicine  
**Prerequisites:** HHP 2664, CHEM 1314, ZOOL 3204.  
**Description:** Principles of cellular inflammation, immunopathology, tissue growth and circulation. Examination of physiological drug activity in the body, drug disposition and pharmacokinetics in sports medicine.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3753 Methods in Teaching Elementary Physical Education  
**Prerequisites:** HHP 1753, HHP 1823, HHP 1833, HHP 3433.  
**Description:** Instructional styles, implementation of behavioral goals and objectives through unit and lesson preparation, teaching methods and classroom management. Course previously offered as PE 3753.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3773 Methods in Teaching Secondary Physical Education  
**Prerequisites:** HHP 1753, HHP 1823, HHP 1833, HHP 3433.  
**Description:** Instructional styles, implementation of behavioral goals and objectives through unit and lesson preparation, teaching methods and classroom management. Course previously offered as PE 3773.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3902 Therapeutic Modalities for Injury I  
**Prerequisites:** HHP 2654, HHP 2664, CHEM 1314 and concurrent enrollment ZOOL 3204.  
**Description:** Discussion and application of common thermal and mechanical interventions used in the treatment of acute and chronic injuries to the musculoskeletal systems. Course previously offered as HHP 2902.  
**Credit hours:** 2  
**Contact hours:** Lecture: 1 Lab: 2  
**Levels:** Undergraduate  
**Schedule types:** Lab, Lecture, Combined lecture and lab  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3902 Therapeutic Modalities for Injury II  
**Prerequisites:** HHP 3902.  
**Description:** Discussion and application of common electronic and physiologic devices used in the treatment of acute and chronic injuries to the musculoskeletal systems. Course previously offered as HHP 3903, HHP 4903, HLTH 4902, and HHP 3904.  
**Credit hours:** 2  
**Contact hours:** Lecture: 1 Lab: 2  
**Levels:** Undergraduate  
**Schedule types:** Lab, Lecture, Combined lecture and lab  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3924 Therapeutic Exercise  
**Prerequisites:** HHP 3802.  
**Description:** Scientific methods used in therapeutic exercise and rehabilitation of injuries. Investigation of mechanisms of injury, anatomical structures involved and methodological approach in designing rehabilitative programs. Course previously offered as HHP 3923, HHP 4923, and HLTH 4922.  
**Credit hours:** 4  
**Contact hours:** Lecture: 3 Lab: 2  
**Levels:** Undergraduate  
**Schedule types:** Lab, Lecture, Combined lecture and lab  
**Department/School:** Kinesiology, Appl Health, Rec
HHP 3993 Building and Sustaining a Successful High School Wrestling Program
Description: Students learn the skills and to impart information necessary to build a successful and sustainable high school wrestling program.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 4010 Directed Study
Prerequisites: Written approval by department head.
Description: Supervised readings, research or independent study of trends and issues related to the area of health, physical education or leisure services. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.
Credit hours: 1-3
Contact hours: Other: 1
Levels: Undergraduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

HHP 4123 Principles of Strength and Conditioning
Description: Designing and implementing safe and effective strength training and conditioning programs and apply exercise prescription principles for training, injury prevention, and reconditioning. This course is also designed to prepare students for the National Strength and Conditioning Association (NSCA) Certified Strength and Conditioning Specialist (CSCS) exam.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 4243 Research Methods in Athletic Training
Prerequisites: STAT 2013.
Description: Interactive study of importance and process of conducting ethical research in athletic training and the healthcare professions. Emphasis placed on research design, ethics, collection of data, and the dissemination of results.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 4443 International Perspectives of Coaching
Prerequisites: Permission of the Instructor.
Description: Students will acquire experiential coaching opportunities in an international environment, and will design and deliver coaching across a variety of sports and across multiple age groups.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 4451 Athletic Training Practicum V
Prerequisites: Successful completion of HHP 3461.
Description: Directed observation in supervised advanced laboratory and clinical experiences in athletic training.
Credit hours: 1
Contact hours: Lab: 2
Levels: Undergraduate
Schedule types: Lab
Department/School: Kinesiology, Appl Health, Rec

HHP 4461 Athletic Training Practicum VI
Prerequisites: Successful completion of HHP 3233, HHP 4451.
Description: Directed observation in supervised advanced laboratory and clinical experiences in athletic training.
Credit hours: 1
Contact hours: Lab: 2
Levels: Undergraduate
Schedule types: Lab
Department/School: Kinesiology, Appl Health, Rec

HHP 4480 Internship in Health and Human Performance
Prerequisites: Last semester senior standing with cumulative GPA of 2.50.
Description: Supervised experience in school (physical education and health), community worksite or athletic training settings in order to qualify or prepare for appropriate teaching and professional certification. Course previously offered as PE 4480. Offered for variable credit, 1-12 credit hours, maximum of 12 credit hours.
Credit hours: 1-12
Contact hours: Other: 1
Levels: Undergraduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

HHP 4530 International Athletic Training
Description: Explore and experience the techniques of prevention and care of athletic injuries in a culture outside of the United States. Course previously offered as PE 4480. Offered for variable credit, 1-12 credit hours, maximum of 6 credit hours.
Credit hours: 1-3
Contact hours: Lecture: 1
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 4643 School Health and Safety for Physical Educators
Description: Health and safety content for which physical educators are held responsible.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 4643 School Health and Safety for Physical Educators
Description: Health and safety content for which physical educators are held responsible.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 4723 Assessment in Physical Education
Prerequisites: Full admission to professional education.
Description: Evaluation techniques commonly used by physical educators and health professionals to measure knowledge, attitudes, sport skill proficiency and physical fitness. Course previously offered as PE 4723.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
HHP 4733 Organization, Administration and Curriculum in Physical Education and Athletics  
Prerequisites: HHP 3753, HHP 3773 or concurrent enrollment; full admission to professional education.  
Description: Curricular design and management of physical education (P-12) and athletic programs. Course previously offered as PE 4733.  
Credit hours: 3  
Contact hours: Lecture: 3  
Levels: Undergraduate  
Schedule types: Lecture  
Department/School: Kinesiology, Appl Health, Rec  

HHP 4773 Principles of Exercise Testing and Prescription  
Prerequisites: HHP 3114.  
Description: Study of principles of exercise testing including submaximal and maximal tests, exercise and basic electrocardiography, and guidelines for recommending exercise as related to health promotion and exercise science. Course previously offered as HLTH 4773.  
Credit hours: 3  
Contact hours: Lecture: 3  
Levels: Undergraduate  
Schedule types: Lecture  
Department/School: Kinesiology, Appl Health, Rec  

HHP 4793 Adapted Physical Education  
Prerequisites: HHP 3753, HHP 3773, full admission to Professional Education.  
Description: Cognitive and psychomotor characteristics of disabling conditions, needs and challenges of educating the exceptional learner in the regular physical education program. Course previously offered as PE 4793.  
Credit hours: 3  
Contact hours: Lecture: 3  
Levels: Graduate, Undergraduate  
Schedule types: Lecture  
Department/School: Kinesiology, Appl Health, Rec  

HHP 4901 Rehabilitation Seminar  
Prerequisites: HHP 2844, HHP 2854, HHP 3673, HHP 3904, HHP 3924 and HHP 4451.  
Description: Capstone course using patient problems to develop clinical decision-making incorporating preceding course work in pathology assessment, therapeutic modalities, exercise and pharmacology.  
Credit hours: 1  
Contact hours: Lecture: 1  
Levels: Undergraduate  
Schedule types: Lecture  
Department/School: Kinesiology, Appl Health, Rec  

HHP 4933 Administration and Organization of Athletic Training Programs  
Prerequisites: HHP 4451.  
Description: The administration and organization of athletic training programs including planning and implementation, certification procedures, code of professional practice, safety standards and resource management. Course previously offered as HLTH 4933.  
Credit hours: 3  
Contact hours: Lecture: 3  
Levels: Undergraduate  
Schedule types: Lecture  
Department/School: Kinesiology, Appl Health, Rec  

HHP 4983 Current Issues in Athletic Training  
Prerequisites: HHP 3663, HHP 4451 and admission to athletic training program.  
Description: Development of competencies set by the National Athletic Trainers Association Board of Certification. Current issues facing athletic trainers and the role in today's health care systems.  
Credit hours: 3  
Contact hours: Lecture: 3  
Levels: Graduate, Undergraduate  
Schedule types: Lecture  
Department/School: Kinesiology, Appl Health, Rec  

HHP 5000 Master's Thesis  
Description: Independent research required of candidates for master's degree. Credit awarded upon completion of thesis. Course previously offered as HPEL 5000. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.  
Credit hours: 1-6  
Contact hours: Other: 1  
Levels: Graduate  
Schedule types: Independent Study  
Department/School: Kinesiology, Appl Health, Rec  

HHP 5010 Seminar  
Description: Selected topics from the profession not covered in other courses. Presentation and critique of research proposals and results. Course previously offered as HPEL 5010. Offered for variable credit, 1-2 credit hours, maximum of 4 credit hours.  
Credit hours: 1-2  
Contact hours: Other: 1  
Levels: Graduate  
Schedule types: Independent Study  
Department/School: Kinesiology, Appl Health, Rec  

HHP 5020 Health and Human Performance Workshop  
Description: Workshop in selected areas of health and human performance. Course previously offered as HPEL 5020. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.  
Credit hours: 1-3  
Contact hours: Lecture: 1  
Levels: Graduate  
Schedule types: Lecture  
Department/School: Kinesiology, Appl Health, Rec  

HHP 5030 Field Problems in Health and Human Performance  
Description: Individual investigations of issues in the areas of health and human performance. Course previously offered as HPEL 5030. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.  
Credit hours: 1-3  
Contact hours: Other: 1  
Levels: Graduate  
Schedule types: Independent Study  
Department/School: Kinesiology, Appl Health, Rec  

HHP 5033 Advanced Techniques in Orthopedic Assessment  
Description: Knowledge in evaluating various upper and lower extremity orthopedic injuries.  
Credit hours: 3  
Contact hours: Lecture: 3  
Levels: Graduate  
Schedule types: Lecture  
Department/School: Kinesiology, Appl Health, Rec
HHP 5053 Research Design in Leisure, Health and Human Performance  
**Prerequisites:** PSYC 5303 or STAT 5013.  
**Description:** Research design with applicability toward leisure, health and human performance. Conceptual understanding of theory, tools and processes involved in designing research. Course previously offered as LEIS 5053.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 5073 Psychological Aspects of Sport  
**Description:** Psychological foundations of sport emphasizing performance enhancement by athletes through psychological training techniques. Course previously offered as HPEL 5073.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 5122 Therapeutic Modalities I  
**Prerequisites:** Admission into the Entry Level Masters degree Athletic Training Education Program.  
**Description:** Advanced knowledge in the application of common thermal and cryotherapeutic interventions for acute and chronic injuries as they related to evidence based practice.  
**Credit hours:** 2  
**Contact hours:** Lecture: 1 Lab: 2  
**Levels:** Graduate  
**Schedule types:** Lab, Lecture, Combined lecture and lab  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 5173 Therapeutic Interventions in Athletic Training  
**Description:** Advanced understanding of various methods of how to treat orthopedic injuries commonly seen in health care.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 5523 Current Readings in Health  
**Description:** Contemporary research, literature, projections and views as applied to total health and well-being. Course previously offered as HPEL 5523.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 5530 International Athletic Training  
**Description:** Explore and experience the techniques of prevention and care of athletic injuries in a culture outside of the United States. Course must be taken in two different countries to count as second time credit. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.  
**Credit hours:** 1-3  
**Contact hours:** Lecture: 1  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 5593 Human Electrocardiographic Interpretation  
**Prerequisites:** HHP 3114 or consent of instructor.  
**Description:** Knowledge concerning the collection and interpretation of the electrocardiogram (EKG) and its relationship to heart anatomy, physiology and electrophysiology. Course previously offered as HPEL 5593.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 5603 Principles of Performance Enhancement  
**Prerequisites:** HHP 2654, HHP 3114, ZOOL 3204.  
**Description:** Theoretical foundation of specific tenets of exercise and performance enhancement. Upon successful course completion students will be eligible to sit for the National Academy of Sports Medicine (NASM) examination for NASM Performance Enhancement Specialist certification.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 5613 Cardiac Rehabilitation  
**Prerequisites:** HHP 2653 and HHP 3114 or equivalent.  
**Description:** Factors involved in cardiovascular disease. History, implementation and administration of cardiac rehabilitation programs. Course previously offered as HPEL 5613.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 5703 Principles of Corrective Exercise  
**Description:** A scientific approach to corrective exercise program design and implementation.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 5733 Motor Learning  
**Description:** Research in psychology and physical education relevant to the understanding of the nature and basis of motor skill learning. Course previously offered as HPEL 5733.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec
HHP 5823 Applied Neuromuscular Anatomy and Physiology
Prerequisites: HHP 2654.
Description: Structure and behavior of the human body, especially as it pertains to movement. Particular emphasis will be placed on neuroanatomy, the muscular system, and the neurophysiological basis of human movement. An introduction to clinical motor-related disorders will also be provided. Course previously offered as HPEL 5823.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 5843 Quantitative Biomechanics and Kinesiology
Prerequisites: HHP 5823.
Description: Analytical approach to the study of the human nervous system and human motion as applied to kinematic and kinetic analysis. Additional flat fee of $10.00 applies. Course previously offered as HPEL 5843.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 5853 Clin Ex Test & Prescript
Prerequisites: HHP 3114.
Description: An in-depth study of the principles and application of clinical exercise testing including submaximal and maximal tests, oxygen consumption, and electrocardiography. Guidelines to prescribing individualized exercise plans will also be covered. Special attention will be paid to clinical variables and special populations. Course previously offered as HPEL 5853.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 5863 Stress Testing and Exercise Prescription II
Prerequisites: HDFS 5853.
Description: Theoretical aspects of evaluating functional capacity through stress testing with the development of exercise prescription for special populations with physiological limitations imposed by age, disease, heredity and environment. Course previously offered as HPEL 5863.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 5873 Human Bioenergetics
Prerequisites: HHP 3114.
Description: Human energy production, utilization and storage in response to exercise. Course previously offered as HPEL 5873.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 5894 Biochemistry of Exercise Lab Methods
Prerequisites: Consent of the instructor.
Description: Practice using basic laboratory skills which can be applied to sophisticated techniques in biochemical analysis. General biochemistry as it relates to exercise metabolism, laboratory procedures, calculations, common lab problems and solutions and laboratory safety procedures.
Credit hours: 4
Contact hours: Lecture: 3 Lab: 2
Levels: Graduate
Schedule types: Lab, Lecture, Combined lecture and lab
Department/School: Kinesiology, Appl Health, Rec

HHP 5923 Readings in Neurophysiology
Description: Establishes a foundation in neurophysiology, particularly relating to health and the neural control of human movement. Developed through examining original research, especially the seminal articles from this field with special emphasis on areas of contention and controversy. Same course as HHP 5823: Applied Neuromuscular Anatomy and Neurophysiology.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 6000 Doctoral Dissertation
Description: Exploration and presentation of selected topics and research in health and human performance. Course previously offered as HPEL 6000. Offered for variable credit, 1-25 credit hours, maximum of 25 credit hours.
Credit hours: 1-25
Contact hours: Other: 1
Levels: Graduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

HHP 6010 Independent Study in Health and Human Performance
Prerequisites: Consent of instructor.
Description: Supervised readings, research or independent study of trends and issues related to the areas of health and human performance. Course previously offered as HPEL 6010. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.
Credit hours: 1-3
Contact hours: Other: 1
Levels: Graduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

HHP 6013 Professional Issues in Health and Human Performance
Description: This course is designated to introduce doctoral students to the major areas of higher education relevant to professional preparation in health and human performance curricula. Included are issues of higher education, roles of the educator, curriculum development, implementation and management, instructional strategies, and accreditation.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
HHP 6020 Research Colloquium
Description: Exploration and presentation of selected topics and research in health and human performance. Course previously offered as HPEL 6020. Offered for variable credit, 1-3 credit hours, maximum of 3 credit hours.
Credit hours: 1-3
Contact hours: Other: 1
Levels: Graduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

HHP 6023 Special Topics in Health and Human Performance
Prerequisites: Admission to the Graduate College.
Description: Special topics related to health and human performance. Investigation, discussion and analysis of contemporary topics.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 6053 Advanced Research in Health and Human Performance
Prerequisites: Graduate elementary statistical methods course.
Description: In-depth study of selected surveys and experimental research in HHP including questionnaire development, survey methodology and analysis of data. Course previously offered as HPEL 6053.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 6063 Statistical Computing and Proposal Writing
Prerequisites: Consent of instructor.
Description: Instruction in the use of SPSS using a personal computer. Preparation of research proposals. Course Previously offered as HHP 6060.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 6083 Biomedical Signal Acquisition
Description: Writing custom software for use in a laboratory setting using LabVIEW. Intended for any lab-based science degree programs in which signals are acquired and analyzed, especially BIOMEDICAL SIGNALS. Acquiring data, interfacing with laboratory equipment, and analyzing and organizing data, with self-designed custom software program. No prior computer programming knowledge required.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 6723 Curriculum Development in Health, Leisure and Human Performance
Prerequisites: Admission to the Graduate College.
Description: Identification and analysis of curriculum theories with emphasis on traditional and innovative approaches to curriculum design for programs in health, leisure and human performance. Course previously offered as HHP 5723.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

LEIS 1232 Beginning Golf
Description: Theory and practice of basic skills, rules, terminology and etiquette.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
General Education and other Course Attributes: Leisure Performance Activity

LEIS 1242 Beginning Tennis and Racquetball
Description: Theory and practice of tennis and racquetball; basic skills, rules, terminology, and game strategy for singles and doubles play. No credit for students with credit in LEIS 1252.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
General Education and other Course Attributes: Leisure Performance Activity

LEIS 1252 Beginning Tennis
Description: Theory and practice of basic skills, rules, terminology and game strategy for singles and doubles play. No credit for students with credit in LEIS 1242.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
General Education and other Course Attributes: Leisure Performance Activity

LEIS 1322 Bowling
Description: Theory and practice of approaches, deliveries, releases and mechanical principles involved in aiming and follow through.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
General Education and other Course Attributes: Leisure Performance Activity
LEIS 1342 Physical Fitness
Description: Theory and practice of aerobic and weight training activities with learning experiences designed to promote physical fitness.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
General Education and other Course Attributes: Leisure Performance Activity

LEIS 1352 Weight Training
Description: Improvement of muscular strength and endurance in the major muscle groups of the body through progressive resistive exercise. Fundamental anatomy, physiology, mechanical principles, methods and techniques as applied to weight training programs.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
General Education and other Course Attributes: Leisure Performance Activity

LEIS 1362 Self Defense
Description: Theory and practice of self defense; scientific principles of gravity and body control over opposing forces, and principles of contest judo.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
General Education and other Course Attributes: Leisure Performance Activity

LEIS 2112 Rock Climbing
Description: Theory and practice in the basics of technical rock climbing, bouldering and spelunking. Additional flat fee of $30.00 applies.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
General Education and other Course Attributes: Leisure Performance Activity

LEIS 2122 Backpacking and Hiking
Description: Theory and practice of outdoor skills and leadership techniques for executing and evaluating a wilderness activity. Additional flat fee of $30.00 applies.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
General Education and other Course Attributes: Leisure Performance Activity

LEIS 2322 Recreational Dance
Description: Theory and practice of traditional social dances and a variety of "free style" dance forms.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
General Education and other Course Attributes: Leisure Performance Activity

LEIS 2323 Recreational Dance
Description: Theory and practice of traditional social dances and a variety of "free style" dance forms.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
General Education and other Course Attributes: Leisure Performance Activity

LEIS 5000 Master's Thesis
Prerequisites: Consent of major professor.
Description: Research in leisure studies for master's degree. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.
Credit hours: 1-6
Contact hours: Other: 1
Levels: Graduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

LEIS 5010 Directed Study in Leisure Services
Description: Directed study in Leisure and from the profession on topics not included in other courses. Offered for variable credit, 1-3 credit hours, maximum of 20 credit hours.
Credit hours: 1-3
Contact hours: Other: 1
Levels: Graduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

LEIS 5020 Workshop in Leisure Studies
Description: Advanced instruction on specialized topic areas in leisure studies. Offered for variable credit, 1-6 credit hours, maximum of 20 credit hours.
Credit hours: 1-6
Contact hours: Other: 1
Levels: Graduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

LEIS 5023 Legal Aspects of Health, Physical Education and Leisure Services
Description: The application and interpretation of the law as it applies to teachers, coaches and administrators of health, physical education and leisure services programs. Course previously offered as HHP 5023.
Credit hours: 1-3
Contact hours: Other: 1
Levels: Graduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

LEIS 5029 Field Problems in Leisure Studies
Description: Applied research within the practice of leisure studies. Offered for variable credit, 1-6 credit hours, maximum of 20 credit hours.
Credit hours: 1-6
Contact hours: Other: 1
Levels: Graduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec
LEIS 5073 Recreational Therapy and Geriatrics
Prerequisites: LEIS 2433 or consent of instructor.
Description: Role of Recreational Therapists (RT) working with geriatric population. Topics include terminology, etiology, prognosis, assessment, and program development in RT.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

LEIS 5403 Interpretation in Leisure Services
Description: Organization and administration of visitor centers and interpretive naturalist programs, philosophic approaches, and methods for interpreting the natural and cultural history of public parks and recreation areas. Course previously offered as HPEL 5403.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

LEIS 5413 Organization and Administration of Leisure Services
Description: Systematic approach to problem solving and decision-making for structure, personnel management, finance and program development for leisure service delivery systems. Course previously offered as HPEL 5413.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

LEIS 5423 Supervision and Leadership in Leisure Services
Prerequisites: Graduate standing.
Description: Administrative supervision and leadership in leisure services delivery systems. An examination of theories and practice as it relates to human, programmatic, and facility resources.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

LEIS 5433 Current Issues in Leisure Services
Prerequisites: Admission to the leisure studies program.
Description: Current issues related to the leisure services profession. Investigation, discussion and analysis of contemporary issues.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

LEIS 5443 Social Foundations of Leisure Services
Prerequisites: Graduate standing.
Description: Social, psychological, philosophical and historical foundations of leisure. The impact of social forces on leisure throughout history. Course previously offered as HPEL 5443.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

LEIS 5453 Social Psychology of Leisure
Description: Inquiry into the understanding of human behaviors, thoughts and attitudes related to leisure, and the understanding of complex issues related to the social psychology of leisure.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

LEIS 5463 Issues in Recreational Therapy
Prerequisites: LEIS 2433 or professional experience in recreational therapy.
Description: Current issues in recreational therapy with emphasis on accreditation, certification, licensure, quality assurance and ethics.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

LEIS 5473 Leisure and Aging
Prerequisites: LEIS 2433 or consent of instructor.
Description: Overview of the leisure needs and services for older adults, with emphasis upon the delivery system and leisure interventions. Course previously offered as HPEL 5473.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

LEIS 5483 Recreational Therapy for Persons with Physical Disabilities
Prerequisites: LEIS 2433 or professional experience in recreational therapy.
Description: The role of recreational therapy in the treatment and rehabilitation of individuals with physical disabilities. Emphasis on terminology, prognosis, etiology or specific disabilities, program development, assessment.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

LEIS 5493 Recreational Therapy in Mental Health and Intellectual Disabilities
Prerequisites: LEIS 2433 or professional experience in recreational therapy.
Description: The role of recreational therapists (RT) in mental health or intellectual disabilities with emphasis upon client prognosis and methodologies of treatment programs.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
LEIS 6000 Doctoral Dissertation
Description: Required of all candidates for the Doctor of Philosophy degree. Credit is given upon completion of the dissertation. Offered for variable credit, 1-25 credit hours, maximum of 25 credit hours.
Credit hours: 1-25
Contact hours: Other: 1
Levels: Graduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

LEIS 6010 Independent Study in Leisure Studies
Prerequisites: Consent of instructor.
Description: Supervised readings, research or study of trends and issues related to leisure studies. Offered for variable credit, 1-3 credit hours, maximum of 20 credit hours.
Credit hours: 1-3
Contact hours: Other: 1
Levels: Graduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

LEIS 6013 Professional Issues in Leisure Studies
Prerequisites: Admission to the Graduate College.
Description: Introduction to higher education issues relevant to professional preparation in leisure studies curricula, including roles of the educator, curriculum development, implementation and management, instructional strategies and accreditation.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

LEIS 6020 Leisure Research Colloquium
Prerequisites: Graduate student standing.
Description: Exploration and presentation of selected topics and research in leisure studies. Offered for variable credit, 1-3 credit hours, maximum of 20 credit hours.
Credit hours: 1-3
Contact hours: Other: 1
Levels: Graduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

LEIS 6023 Special Topics in Leisure Studies
Prerequisites: Admission to the Graduate College.
Description: Special topics related to recreation, parks and leisure studies. Investigation, discussion and analysis of contemporary topics.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

LEIS 6043 Ethical Issues in Health, Leisure, and Human Performance
Prerequisites: Admission to the Graduate College.
Description: A survey of ethical issues with specific emphasis on health, leisure, and human performance in higher education.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

LEIS 6453 Leisure Behavior
Description: The advanced study of leisure and human behavior. Research related to the understanding of how and why humans engage in leisure.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

LEIS 6763 Management in Health, Leisure, and Human Performance
Settings
Prerequisites: Admission to the Graduate College.
Description: Essential elements of organizational structures, management issues, functions and styles in public, non-profit and private settings in health, leisure and human performance. Course previously offered as HHP 5763.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 2403 Leisure and Society
Description: The leisure phenomenon, the leisure services industry, and societal views of leisure in the United States. Exploration of personal and social views of leisure and how those views impact individuals, families and social groups. Previously offered as RMTR 2403.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 2413 Introduction To Leisure Services
Description: The nature, scope and significance of leisure and recreation. Delivery systems for leisure services, major program areas and the interrelationship of special agencies and institutions serving the recreation needs of society. Previously offered as RMTR 2413.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 2433 Introduction to Recreational Therapy
Description: Theory and application of recreational therapy with emphasis on types of illnesses and disabilities, delivery systems, programming services. Previously offered as RMTR 2433.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 2433 Introduction to Recreational Therapy
Description: Theory and application of recreational therapy with emphasis on types of illnesses and disabilities, delivery systems, programming services. Previously offered as RMTR 2433.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
RMRT 2443 Contemporary Issues in Diversity (DS)
Description: Exploration of the primary and secondary dimensions of diversity and their impact on society. Individual and institutional responses to cultural diversity. Previously offered as RMTR 2443.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
General Education and other Course Attributes: Diversity, Social & Behavioral Sciences

RMRT 2463 Laboratory In Leisure Services
Description: Lecture, discussion and experiential learning of recreation and leisure activities. Adapted activities, small and large group games, sports, arts and crafts, music, drama and cultural events. Previously offered as RMTR 2463.
Credit hours: 3
Contact hours: Lecture: 2 Lab: 2
Levels: Undergraduate
Schedule types: Lab, Lecture, Combined lecture and lab
Department/School: Kinesiology, Appl Health, Rec

RMRT 2473 Foundation of Leisure Service Leadership
Description: Introduction to the principles and practical applications of group leadership techniques, problem solving, supervision and evaluation of personnel. Previously offered as RMTR 2473.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 3010 Leisure Services Workshop
Description: Intensive training program on a specialized topic in leisure services. Previously offered as RMTR 3010. Offered for variable credit, 1-3 credit hours, maximum of 9 credit hours.
Credit hours: 1-9
Contact hours: Other: 1
Levels: Undergraduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

RMRT 3212 Lifeguard Training
Description: Theory and practice of water safety and rescue skills essential for lifeguards. May obtain American Red Cross Lifeguard Training Certification. Previously offered as RMTR 3212.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 3313 Camp Operations and Programs
Description: Operations and programming for day and resident camps. Includes all camp settings and camper populations. Previously offered as RMTR 3313.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 3413 Recreational Therapy and Mental Illness/Intellectual Disabilities
Prerequisites: RMRT 2433.
Description: The role of Recreational Therapists (RT) working with individuals diagnosed with mental illness and/or intellectual disabilities. Topics include terminology, etiology, prognosis, assessment, and program development in RT. Previously offered as RMTR 3413.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 3423 Recreational Therapy In Geriatric Practices
Prerequisites: RMRT 2433.
Description: The role of Recreational Therapists (RT) working with the geriatric population. Topics include terminology, etiology, prognosis, assessment, and program development in RT. Previously offered as RMTR 3423.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 3431 Recreation Management Practicum I
Prerequisites: RMRT 2413.
Description: Supervised practical experience with leadership responsibilities for planning, conducting and evaluating activities and programs. Graded on a pass-fail basis. Previously offered as RMTR 3431.
Credit hours: 1
Contact hours: Lecture: 1
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 3432 Recreation Management Practicum II
Description: Supervised practical experience with leadership responsibilities for planning, conducting and evaluating activities and programs. Previously offered as RMTR 3432. Graded on a pass-fail basis.
Credit hours: 2
Contact hours: Lecture: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 3433 Recreational Therapy and Physical Disabilities
Prerequisites: RMRT 2433.
Description: The role of Recreational Therapists in the rehabilitation of individuals with physical disabilities. Topics include terminology, etiology, prognosis of specific problems, assessment, and program development in RT. Previously offered as RMTR 3433.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
RMRT 3441 Warm Water Therapy Lab
Description: This aquatic lab course is designed to give students valuable hands-on experience with participants with disorders ranging from preschool through senior citizen population. Previously offered as RMTR 3441.
Credit hours: 1
Contact hours: Lab: 2
Levels: Undergraduate
Schedule types: Lab
Department/School: Kinesiology, Appl Health, Rec

RMRT 3463 Program Design in Recreation Management Services
Prerequisites: MATH 1513, MATH 1483 or equivalent.
Description: Emphasis on organization, supervision, promotion and evaluation of programs. Previously offered as RMTR 3463.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 3473 Medical Procedures For Recreational Therapy
Description: The course covers the basic knowledge documentation including vocabulary, abbreviations, symbols, prefixes, and suffixes typically used in clinical settings in which Recreational Therapists practice. Taken concurrently with Junior Internship Courses. Previously offered as RMTR 3473.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 3480 Junior Internship
Prerequisites: RMTR 2413, RMTR 2473, RMTR 3441, co-requisite RMTR 3473 and one course in emphasis areas of study (Recreational Therapy or Leisure Service Management).
Description: Supervised practical experience (minimum 200 to 400 contact hours based upon credit hours enrolled) with leadership responsibilities for planning, conducting and evaluating activities and programs. Previously offered as RMTR 3480. Graded on a pass-fail basis. Offered for variable credit, 3-6 credit hours, maximum of 6 credit hours.
Credit hours: 3-6
Contact hours: Other: 3
Levels: Undergraduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

RMRT 3491 Pre-Internship In Leisure Services
Description: Preparation for internship in therapeutic recreation and leisure services management. Previously offered as RMTR 3491.
Credit hours: 1
Contact hours: Lecture: 1
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 4010 Directed Studies in Leisure
Prerequisites: Consent of instructor and program head.
Description: Supervised readings, research or study of trends and issues related to leisure studies. Previously offered as RMTR 4010. Offered for variable credit, 1-9 credit hours, maximum of 9 credit hours.
Credit hours: 1-9
Contact hours: Other: 1
Levels: Undergraduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

RMRT 4213 Water Safety Instructorship
Description: Methods of teaching swimming and aquatic safety with practical application of knowledge, principles and analysis of skills. May obtain American Red Cross Water Safety Instructor's Certification (WSI). Previously offered as RMTR 4213.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 4433 Evaluation of Leisure Services
Prerequisites: STAT 2013.
Description: Methods, techniques and application of the evaluation process related to a wide variety of leisure service functions: clientele, programs, personnel, facilities and organization. Previously offered as RMTR 4433.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 4453 Outdoor Education
Description: Development of a holistic approach to teaching and learning in the outdoors. Learning in, about, and for, the out-of-doors as a process for acquiring skills with which to enjoy outdoor pursuits. Previously offered as RMTR 4453.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate, Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 4463 Areas and Facilities In Leisure Services
Prerequisites: LEIS 3463 or consent of instructor.
Description: Planning, design and development of areas and facilities in leisure service delivery systems. Previously offered as RMTR 4463.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate, Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 4473 Recreation In the Natural Environment
Description: Theory and practical application of outdoor recreation concepts with emphasis on philosophies, principles, policies, economics, trends and problems. Previously offered as RMTR 4473.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
RMRT 4480 Internship in Recreational Therapy
Prerequisites: Last semester senior year with cumulative GPA of 2.5 and completion of RMTR 3480, RMRT 4481 and co-requisite of RMRT 4483.
Description: Supervised fieldwork experience in recreational therapy. Graded on a pass-fail basis. Must be taken concurrently with RMRT 4483. Previously offered as RMTR 4480. Offered for variable credit, 1-9 credit hours, maximum of 9 credit hours.
Credit hours: 1-9
Contact hours: Other: 1
Levels: Undergraduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

RMRT 4481 Senior Seminar In Leisure Services
Prerequisites: RMRT major; completion of a minimum of 15 hours of Leisure Studies core courses.
Description: Culmination of course work in leisure studies. Examination of current issues, professional practices and personal philosophy of leisure. Previously offered as RMTR 4481.
Credit hours: 1
Contact hours: Lecture: 1
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 4483 Administrative Documentation in Internship for Recreational Therapy
Prerequisites: Last semester senior year with cumulative GPA of 2.5 and RMTR 3480, RMRT 4481 and co-requisite of RMRT 4480.
Description: Assignment based course that complements RMRT 4480 Internship in recreational therapy. Must be taken concurrently with RMRT 4480. Previously offered as RMTR 4483.
Credit hours: 3
Contact hours: Other: 3
Levels: Undergraduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

RMRT 4493 Administration of Leisure Services
Description: Decision-making, problem solving, personnel policies, legal issues, fiscal policies and budget procedures related to the delivery of leisure services. Previously offered as RMTR 4493.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 4513 Leisure Education
Prerequisites: RMTR 3463.
Description: Models of leisure education discussed and practices in conjunction with enhancing student’s ability with basic skills of leisure counseling to facilitate optimal leisure pursuits. Previously offered as RMTR 4513.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate, Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 4553 Tourism in Recreation Settings
Description: Theory and foundations of the philosophy, principles and practices that associate tourism with recreation agencies and settings. Previously offered as RMTR 4553.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate, Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 4713 Campus Recreation, Intramurals, and Sport
Description: Program operations, industry standards, and current issues surrounding these areas of the recreation industry.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate, Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
RMRT 4933 Advanced Methods In Recreational Therapy
Prerequisites: RMTR 3483 and consent of instructor.
Description: Theoretical and practical examination of contemporary implementation procedures used in recreational therapy practice. Previously offered as RMTR 4933.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate, Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

RMRT 4943 Grant Writing and Nonprofit Management
Description: Methods and techniques used in grant writing as well as the establishment of a nonprofit agency. Previously offered as RMTR 4943.
Credit hours: 3
Contact hours: Lecture: 3
Levels: Graduate, Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

Undergraduate Programs
- Applied Exercise Science: Pre-Professional, BS (http://catalog.okstate.edu/education-health-aviation/kinesiology-applied-health-recreation/applied-exercise-science-pre-professional-bs)
- Physical Education: Teacher Education, BS (http://catalog.okstate.edu/education-health-aviation/kinesiology-applied-health-recreation/physical-education-teacher-education-bs)
- Recreation Management and Recreational Therapy, Recreation Management, BS (http://catalog.okstate.edu/education-health-aviation/kinesiology-applied-health-recreation/recreation-management-recreational-therapy/recreation-management-therapy-manage-bs)
- Recreation Management and Recreational Therapy, Recreational Therapy, BS (http://catalog.okstate.edu/education-health-aviation/kinesiology-applied-health-recreation/recreation-management-therapy/recreation-management-therapy-bs)
- Sports and Coaching Science, BS (http://catalog.okstate.edu/education-health-aviation/kinesiology-applied-health-recreation/sports-coaching-science-bs)
- Coaching Science (COAS), Minor (http://catalog.okstate.edu/education-health-aviation/kinesiology-applied-health-recreation/coaching-science-minor)
- Recreation Management and Recreational Therapy (RMRT), Minor (http://catalog.okstate.edu/education-health-aviation/kinesiology-applied-health-recreation/recreation-management-therapy-minor)

Graduate Programs
Graduate Program
Doug Smith, PhD—Professor and Graduate Coordinator

MS in Health and Human Performance
The health and human performance program provides preparation at the master’s level with the option of health promotion. The 36-hour degree offers a Thesis and Non-thesis (Creative Component) option.

The program focuses on advancing the students understanding of the proximal and distal determinants of mental and physical health.

PhD in Health, Leisure and Human Performance
The purpose and focus of this program is to prepare excellent entry-level research scholars for formal and informal learning organizations. They may serve in such roles as faculty members at colleges and universities and scholar practitioners in the workplace. Students meet their career needs and goals through (1) community-based, translational research and (2) classroom experiences focusing on social justice and diversity. The option in health and human performance is designed to permit flexibility within the Health discipline while assuring that all students in the program are provided the opportunity to develop research skills which facilitate functioning as future faculty members or scholar practitioners.

Graduate Program
Tim Passmore, EdD, CTRS/L—Associate Professor and Graduate Coordinator

Master of Science in Leisure Studies
Beyond the baccalaureate level, the program in leisure studies provides preparation at the master’s level across the discipline. Students develop a plan of study, under the advisement of a graduate committee and may focus on various emphasis areas in recreation, parks and leisure services or in recreational therapy. Graduates of the master’s degree are typically employed in management and administrative positions in a wide variety of recreation, parks and leisure service settings. Graduates with a master’s degree with the focus on Recreational Therapy are typically employed in healthcare settings to include hospitals, physical rehabilitation facilities, behavioral health, facilities, long-term care facilities and other facilities focused on healthcare. These include areas such as campus recreation, municipal parks and recreation, military recreation, YMCAs, state parks and others. The master’s degree is 36 credit hours beyond the bachelor’s degree and many graduate assistantships are available for qualified students.

PhD in Health, Leisure and Human Performance, with an option in Leisure Studies
Students seeking the terminal degree in Leisure Studies engage in the PhD in HLHP. Those completing this program are well prepared for entry-level positions as faculty members in a wide range of colleges and universities. To facilitate student readiness to work in academia, doctoral students work closely with faculty, engage in coursework and examinations, and participate in opportunities for experiences in teaching, scholarship and service. Core learning experiences include an understanding of curriculum, applied ethics and administration, as well as developing an understanding of the common tripartite mission of most universities - scholarship, teaching, and service. The PhD requires 60 hours of coursework beyond the master’s degree; many graduate assistantships are available for qualified students.

Faculty
Douglas Smith, PhD—Professor and Head
Regents Professor: Bert Jacobson, EdD
Associate Professors: Timothy Baghurst, PhD; Patricia Hughes, PhD; Donna Lindenmeier, PhD; Tim Passmore, EdD;
Melissa Zahl, PhD

**Assistant Professors:** Jason DeFreitas, PhD; Nathaniel Jenkins, PhD; Taryn Price, PhD

**Visiting Lecturer:** Melissa Jensen, MS