

MASTER OF SCIENCE - KINESIOLOGY

The mission of the Master of Science in Kinesiology program is to promote the study of health/fitness/wellness, sport administration, pedagogy, and exercise science through teaching, research, and service in health and kinesiology. This program includes several plans that vary with thesis or non-thesis options for support and elective classes, is designed to help students develop conceptual and theoretical thinking skills, and to obtain knowledge and abilities that will prepare them as scholars, future leaders, practitioners, educators, or administrators in their respective areas. The kinesiology program offers a graduate degree that prepares students for health- and/or kinesiology-related careers in the public or private sectors.

Students who are interested in pursuing a doctoral degree, teaching as a lecturer in junior and senior colleges, qualifying for positions and/or advancement in public schools or corporate and clinical settings should consider applying for the program.

Program Details

The degree may be pursued under a 30-credit hour thesis program (Plans I-A or I-B) or a 36-credit hour program requiring a research project (Plan III). Plans I-A and III also afford students the opportunity to take coursework in a resource area(s) or supporting field. Students may pursue a kinesiology generalist degree or may choose to tailor their major elective, resource area(s), supporting field coursework and/or research so that their degree plan emphasizes sport administration/kinesiology pedagogy or health/exercise science

Human Performance Laboratory (STEM 162):

Houses equipment for undergraduate and graduate class laboratories, and research data collection by faculty and students. Equipment includes but is not limited to a portable and stationary metabolic system (COSMED K5 and Parv-O Medics TrueOne® 2400, respectively), Velotron RacerMate and Monark cycle ergometers, Medical Quinton Q-Stress Test System 12-lead exercise ECG, , Quantum X and commercial BIA, wheelchair treadmill, heart rate monitors, blood pressure cuffs, lipid, glucose, lactate analyzers, and O₂ saturation monitors.

Health and Fitness Assessment Laboratory (STEM 164):

This lab is designed to teach and conduct health- and fitness-related assessments. It houses equipment that includes a Power Cycle (Austin, TX), BOD POD and InBody body composition analyzers, bone densitometer (DEXA), electromyography (EMG), Cybex Orthotron KT, Lafayette Manual Muscle Test System, lipid, lactate, and cholesterol analyzers, as well as blood collection supplies including catheter, clamps, and syringes.

Muscle Physiology Laboratory (STEM 126):

This lab is designed to conduct animal research related to the muscle hypertrophy, atrophy, strength, and power analysis. It houses equipment that includes a muscle level system (305C-LR & 310C, AURORA), anesthesia system (Vetflo, Kent), isolated pulse stimulator (2100, A-M system), six channel electro acupuncture (ES-160, ITO®), inverted fluorescence microscope (IX70, Olympus), and microscope (2SM series, United scope).

Exercise and Biochemistry Laboratory (STEM 128):

This lab is designed to support further biochemical analysis for both human and animal samples from the labs. It houses equipment that includes a microplate reader (Synergy HTX, Bio-Tek), micro centrifuge (CNR-00163, VWR), micro plate washer (Cole-Parmer), blood analyzer (LDX), shaker incubator (Boekel), -80 freezer (New Brunswick Innova U725), and several other freezers.

Biomechanics and Motor Control Laboratory (STEM 130):

This lab is designed to conduct research related to the human movement, performance, and motion analysis. It houses equipment that includes Isokinetic Extremity System (Cybex NORM, CSMi), Force Measurement System (BP600600, AMTI), EMG System (PS850, Biometrics), High Speed Camera system (OptiTrack Prime 13, Naturalpoint), and Human movement Monitoring System (Opal-09, APDM).

Kinesiology Teaching Laboratory (STEM 132):

This lab is designed to teach kinesiology and educational science related course. It houses typical biological and biochemical equipment for undergraduate and graduate class laboratories and research data collection. Students are exposed to laboratory experiences, research opportunities, and use of technology commonly employed in the kinesiology field and educational sciences.

Curricula

Core Courses (9 credit hours)

EDKN 5312	Physiology of Exercise	3 credit hours
EDKN 5317	Research Methods in Kinesiology	3 credit hours
EDKN 5338	Statistical Analysis of Research Data	3 credit hours

Elective Requirement (3 to 15 credit hours, depending on plan)

EDKN 5301	Sports Coaching and Officiating	3 credit hours
EDKN 5303	Teaching College Physical Education	3 credit hours
EDKN 5308	Administration of Athletics	3 credit hours
EDKN 5309	Organization & Administration of Kinesiology Programs	3 credit hours
EDKN 5315	Current Issues in Kinesiology Programs	3 credit hours
EDKN 5316	History & Philosophy of Sport & Human Performance	3 credit hours
EDKN 5333	Seminar in Selected Topics (May be repeated for credit as topics change)	3 credit hours
EDKN 5334	Fitness, Nutrition, & Weight Management	3 credit hours
EDKN 5335	Performance in Environmental Extremes	3 credit hours
EDKN 5336	Youth Fitness & Performance	3 credit hours
EDKN 5337	Aging & Physical Activity	3 credit hours
EDKN 5338	Statistical Analysis of Research Data	3 credit hours

Research (3 to 6 credit hours, depending on plan)

EDKN 5305	Graduate Research Project	3 credit hours
EDKN 5306	Thesis (2 semesters)	6 credit hours

Support Areas (0 to 12 credit hours, depending on plan)

These courses include, but are not limited to:

- Health
- Guidance and Counseling
- Educational Administration
- Management

The Master of Science in Kinesiology also offers an option to pursue Principal Certification. The total number of hours for the MS in Kinesiology with Administrator Certification is 48. 160 clock hours are required for the Internship in School Administration (EDAD 5345). After 12 hours of EDAD coursework have been completed in the program, students may take the Principal (268) practice TExES Exam. This provides students with an option to be an Athletic Director or Principal.

In order to sit for the state exam, a candidate must be admitted to the Educator Preparation Program, meet academic competency requirements and receive approval to test. Pursuant to the Texas Education Code (TEC), §22.083, candidates must undergo a criminal history background check prior to employment as an educator. A person who is enrolled or planning to enroll in a State Board for Educator Certification-approved educator preparation program or planning to take a certification examination may request a preliminary criminal history evaluation letter regarding the person’s potential ineligibility for certification due to a conviction or deferred adjudication for a felony or misdemeanor offense.

Required Coursework (36 semester credit hours)

EDKN 5312	Physiology of Exercise	3 credit hours
EDKN 5317	Research Methods in Kinesiology	3 credit hours
EDKN 5338	Statistical Analysis of Research Data	3 credit hours
EDKN 5305	Graduate Research Project	3 credit hours
EDAD 5341	School Administration	3 credit hours
EDAD 5301	Behavioral and Organizational Foundation of Education	3 credit hours
EDAD 5344	Supervision	3 credit hours
EDAD 5315	Administration of the Various Special Programs in Education	3 credit hours
EDAD 5342	Principalship-Elementary and Secondary Schools	3 credit hours
EDAD 5383	Public School Law	3 credit hours
EDAD 5313	School Administration: Public School Finance	3 credit hours
EDAD 5345	Internship in School Administration	3 credit hours

Students pursuing this option must also complete 4 major elective courses from the course offerings below:

Major Elective Courses (12 semester credit hours)

EDKN 5301

EDKN 5315

EDHL 5311

EDKN 5308

EDKN 5316

EDHL 5321

EDKN 5309

EDKN 5333

EDHL 5322