

# SCHOOL OF HEALTH PROMOTION AND KINESIOLOGY

**Web Site:** <https://twu.edu/health-promotion-kinesiology/>

**Chair:** Dr. George King, Professor

**Location:** Pioneer Hall 208

**Phone:** 940-898-2575

## Graduate Degrees Offered

- Master of Public Health (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/master-public-health-mp-h/>)
- M.S. in Health Studies (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/health-studies-ms/>)
- M.S. in Health Studies (Dental Hygiene) (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/health-studies-dental-hygiene-ms/>)
- Dual Degree: M.S. in Health Studies and M.L.S. (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/dual-degree-health-studies-ms-mls/>)
- Ph.D. in Health Studies (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/health-studies-phd/>)
- M.S. in Exercise and Sports Nutrition (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/exercise-sports-nutrition-ms/>)
- M.S. in Kinesiology (Adapted Physical Activity) (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/kinesiology-ms-adapted-physical-activity/>)
- M.S. in Kinesiology (Biomechanics and Motor Behavior) (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/kinesiology-ms-biomechanics/>)
- M.S. in Kinesiology (Coaching) (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/kinesiology-ms-coaching-general/>)
- M.S. in Kinesiology (Exercise Physiology) (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/kinesiology-ms-exercise-physiology/>)
- M.S. in Kinesiology (Sport Management) (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/kinesiology-ms-sports-management/>)
- Ph.D. in Kinesiology (Adapted Physical Activity) (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/kinesiology-adapted-physical-activity-phd/>)
- Ph.D. in Kinesiology (Biomechanics & Motor Behavior) (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/kinesiology-biomechanics-motor-behavior-phd/>)
- Ph.D. in Kinesiology (Exercise Physiology) (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/kinesiology-exercise-physiology-phd/>)
- Ph.D. in Kinesiology (Sport Management) (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/kinesiology-sport-management-phd/>)
- P.B. Certificate in Adapted Physical Education (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/post-baccalaureate-certificate-adapted-physical-education/>)

kinesiology/post-baccalaureate-certificate-adapted-physical-education/)

- P.B. Certificate in Leadership in Education and Sport (<http://catalog.twu.edu/graduate/health-sciences/health-promotion-kinesiology/post-baccalaureate-certificate-leadership-education-sport/>)

## Master of Science in Informatics

Informatics is the study and application of information, computer, cognitive, and organizational sciences to the arts, sciences, and professions. The Master of Science in Informatics (<http://catalog.twu.edu/graduate/arts-sciences/mathematics-computer-science/informatics-ms/>) program at TWU provides students with an adaptable, interprofessional, and interdisciplinary approach to the study of Informatics in a hybrid learning environment. The program will provide students with the skills needed for success in high-demand professions and careers in the areas of Clinical Informatics, Data Science/Data Analytics, Cybersecurity, Health Studies, Sports Informatics, and Community Informatics. The program is delivered collaboratively by academic components including Computer Science, Nursing, Health Studies, Kinesiology, and Library and Information Studies.

## Graduate Research and Teaching Facilities

The School of Health Promotion and Kinesiology is housed in Pioneer Hall. This state-of-the-art facility contains accessible classrooms, multimedia centers, dance studios, laboratories, a large gymnasium, an indoor track, a weight training room, an athletic training room, racquetball courts, dressing rooms, and administrative and faculty offices. A natatorium is located on the first floor. The pool includes eight lanes for lap swimming and a separate large shallow end used for water aerobics, exercise physiology, and adapted physical activity programming. Water treadmills provide added research opportunities for cross-disciplinary projects.

Biomechanics and motor behavior, exercise physiology, biochemistry, and pedagogy laboratories are dedicated to teaching and research. These well-equipped facilities permit research studies, including persons with and without disabilities, across various emphasis areas.

The Exercise Physiology Laboratory comprises a 950-square-foot Human Exercise Testing Laboratory and a 600-square-foot Biochemistry Laboratory. The Exercise Physiology and Biochemistry labs contain treadmills, cycle ergometers, a Velotron ergometer, metabolic carts, Cosmed portable metabolic analyzers, automated and ambulatory blood pressure cuffs, a hydrostatic weighing tank, spectrophotometer, microplate reader and washer, refrigerated centrifuge, ultra-low temp freezers, chromatography refrigerator, MAGPIX multi-plex analyzer, and glucose/lactate analyzer. This range of equipment facilitates research in stress testing, body composition assessment, bone density, cardiovascular respiratory analysis, and blood biochemistry analysis. Additionally, the exercise biochemistry laboratory utilizes skeletal muscle cell culture models, gene expression analysis, and immunohistochemistry techniques to investigate the physiological mechanisms affecting skeletal muscle growth and atrophy in exercise and pathology.

The Biomechanics Laboratory (6,300 square feet) is one of the best-equipped in the state and nation and contains motion analysis systems, four force plates, a 16-channel wireless EMG, and an isokinetic dynamometer system. The Motion Analysis Laboratory houses a full line of motion analysis equipment and accessories. Advanced computerized data collection and analysis systems are available for motor learning and

control studies. The available equipment supports research in isokinetic, isometric, and isotonic strength testing, anthropometry, telemetry, and high-speed motion analysis.

The Adapted Physical Education emphasis area provides programmatic opportunities in the Kitty Magee Arena and the indoor swimming pool designed for easy access and accommodations for individuals with special needs. The Teacher Analysis Lab is designed to enhance the student learning environment by capturing audio and video into a computer that merges with analytical software. The Sherrill Teaching and Research (STAR) lab is a multipurpose room used by Pedagogy-teacher preparation and Adapted Physical Education.

Outdoor facilities include playing fields, tennis courts, a softball diamond, and a soccer field.