

Master of Science in Kinesiology

Administrative Unit

The Office of Graduate Studies and Research administers this program through the Kinesiology faculty in the Department of Kinesiology, College of Arts and Sciences.

Degree Program

The Master of Science in Kinesiology program is designed to extend students' understanding of the concepts, research, and theories related to the science of human movement - kinesiology. Additionally, the program design recognizes students' desire to use such information to improve their professional competencies as physical educators, coaches, athletes, sport administrators, fitness program directors, and in other professions that are grounded in the discipline of kinesiology.

Graduate students have an opportunity to focus on one of three interest areas within the discipline of Kinesiology:

1. Exercise science
2. Psychology of exercise and sport
3. Teaching, coaching, and administration.

Working with their faculty advisors, students are encouraged to design programs that meet their professional needs, goals, and interests.

As a partner in a University of Texas System collaborative program, U.T. Permian Basin offers most graduate courses over the Internet. It is possible to complete the entire Master of Science in Kinesiology online - through Web-based courses. With a couple of exceptions, graduate Kinesiology courses are no longer offered on the UT Permian Basin campus.

Program Objectives

Regardless of students' area of interest and/or the course delivery mode, the following objectives should be met through the successful completion of the Master of Science in Kinesiology:

1. Demonstrate an understanding of the theoretical bases of Kinesiology through oral and written expression.
2. Discuss and describe the research literature related to the student's chosen interest area.
3. Apply theoretical concepts from the research literature to the student's chosen profession.
4. Design, implement, and complete a research or professional project.
5. Develop a manuscript describing the results of a research or professional project suitable for submission to a professional journal.

Admission Requirements

Students seeking admission to the Kinesiology graduate degree program must meet all admission requirements specified by the Office of Graduate Studies (see page 15). Typically, students desiring to pursue the Master of Science in Kinesiology would possess a bachelor's degree with a major or minor in Physical Education, Kinesiology, or a related area. Individuals who do not hold such a degree may be required to complete leveling courses prior to enrolling in certain Kinesiology graduate courses. Typically, such students are required to take an undergraduate anatomy and physiology course prior to taking the exercise science courses. Determination of these leveling requirements will be made on an individual basis by the Graduate Acceptance Committee comprised of the Kinesiology Graduate Faculty and will be specified in the student's acceptance letter.

Degree Requirements

The Master of Science in Kinesiology degree requires (a) the completion of twelve credit hours of core course requirements (four courses), (b) nine credit hours in an interest area (three courses), (c) elective hours, and (d) a final project or thesis. The total number of hours for the degree is thirty-six (36).

Core Course Requirements. All students pursuing the Master of Science in Kinesiology are required to complete the following core of 12 semester credit hours:

KINE 6310	Statistics	3
KINE 6312	Research Methods	3
KINE 6360	Advanced Exercise Physiology	3
KINE 6320	Advanced Sport Psychology	
or	or	
KINE 6323	Advanced Psychology of Exercise	3

Interest Areas. In addition, a student will select one of the following three areas of interest and take at least nine semester hours of course work from that area. Additional course work may be drawn from any area.

I. Exercise Science

KINE 6360	Advanced Exercise Physiology	3
KINE 6361	Exercise Physiology Laboratory Methods-Procedures	3
KINE 6362	Training and Conditioning Methods	3
KINE 6363	Methods and Procedures for Coronary Heart Disease Risk Detection and Reduction	3
KINE 6364	Heat Stress and Exercise	3
KINE 6370	Applied Biomechanics	3
KINE 6371	Biomechanics Lab Techniques	3

II. Psychology of Exercise and Sport

KINE 6320	Advanced Sport Psychology	3
KINE 6322	Applied Sport Psychology	3
KINE 6323	Advanced Psychology of Exercise	3
KINE 6340	Sport and Society	3

III. Teaching, Coaching, and Administration

KINE 6380	Analysis of Teaching and Coaching Behavior	3
KINE 6381	Curricular Innovations	3
KINE 6382	Administration of Physical Education and Athletics	3
KINE 6322	Applied Sport Psychology	3
KINO 6370	Applied Biomechanics	3

Elective Hours. Any of the graduate courses offered by the U.T. Permian Basin Kinesiology faculty may be used for elective hours. Students may take graduate courses offered through the U.T. TeleCampus as part of collaborative online Master's degree in Kinesiology for elective hours, also.

Although students may not include leveling course work in their graduate degree program, they may include a maximum of six semester credit hours of 4300-level courses with permission of their advisor.

Thesis and Non-Thesis Options. In addition to the various interest area choices, students may select either a thesis option or a non-thesis (project) option. Although there are differences between the two options, either option provides the student with an opportunity to work with a graduate faculty advisor to develop a proposal that describes what the student intends to do. The proposal is presented to and approved by the student's Graduate Committee, and, once completed, defended by the student in an oral presentation.

I. Thesis Option. Students who select the thesis option will complete a minimum of 30 semester credit hours of course work plus a six-semester credit hour thesis. The master's thesis consists of research in the application of principles and theories of human movement to some problem of interest. The research is usually a laboratory or field experiment requiring the testing of hypotheses and the collection and analysis of data.

II. Non-Thesis Option. Students who select the non-thesis option will complete a minimum of 33 semester credit hours of course work plus a three-semester credit hour research project. Projects can take many forms. While they may involve hypothesis testing and the collection and analysis of data, master's projects are more likely to take the form of exploratory, field studies, secondary data analysis, and survey research. Acceptable projects also include such activities as the construction of physical education curriculum, the development of online instructional materials, and the design of employee wellness programs.

Both thesis and non-thesis options require completion of the core course requirements and at least nine semester credit hours in one of the three emphasis areas.

Course Listings

The following courses are available to all Kinesiology graduate students. Some are taught on campus periodically. Those courses taught online are identified as "available online." The U.T. System Kinesiology collaborative offers additional graduate courses through the U.T. TeleCampus. These courses are available only online and are listed at the very end. All courses are available to all U.T. Permian Basin Kinesiology graduate students. For the complete schedule of courses offered during a given academic year, contact the Kinesiology Graduate Program Coordinator or visit the Kinesiology Program's HomePage at <http://www.utpb.edu/REACH/kines.htm>.

KINE 6310 Statistics (3)

Statistical concepts emphasizing simple and multiple regression, hypothesis testing and analysis of variance. Prerequisite: one year of college level mathematics. (Available online.)

KINE 6312 Research Methods (3)

Research techniques and inferential statistical procedures appropriate to the research process in physical education. Prerequisite: KINE 6310, MATH 6301 or equivalent. (Available online.)

KINE 6320 Advanced Sport Psychology (3)

Concepts and research methodology in social psychological study of sport and physical activity. Selected theories of sport involvement applied to sport and physical activity analysis. (Available online.)

KINE 6322 Applied Sport Psychology (3)

Mental training techniques that have been used successfully by athletes and coaches to improve sport performance are studied. The mental training techniques include imagery, arousal regulation, somatic and cognitive stress management, concentration and attention control, positive self-talk, and goal setting. Prerequisite: KINE 6320, its equivalent, or permission of the instructor. (Available online.)

KINE 6323 Advanced Psychology of Exercise (3)

Theoretical models and research related to the determinates of exercise initiation and adherence are studied. Research studies investigating the effects of exercise on mental health are also reviewed. Additional topics selected by students are covered. (Available online)

KINE 6340 Sport and Society (3)

Examines opposing points of view related to the role of sport in various American institutions (political, economic, educational, religious) and by diverse socio-cultural groups within these institutions. The impact of sport upon individuals and society will also be scrutinized (racism, sexism, elitism). (Available online.)

KINE 6356 Issues of Women and Sport (3)

Explores problems, patterns and processes associated with the sport involvement of women in American culture. Topics include the history of women's participation, social stereotypes of sportswomen, institutional influences and performance capabilities.

KINE 6360 Advanced Exercise Physiology (3)

Functioning of the human body and responses and adaptations of the different systems as a result of physical exercise. Topics include muscle physiology, the cardio respiratory system, neural control of human movement, nutrition, athletic performance, physiological applications of physical training and preventive health care. Laboratory experiences included. (Available online.)

KINE 6361 Exercise Physiology Laboratory Methods-Procedures (3)

Practical applications of the different principles that govern the responses and adaptations of the human body to physical exercise. Laboratory equipment used to collect data and analyze results. Prerequisite: KINE 6360, its equivalent, or permission of the instructor.

KINE 6362 Training and Conditioning Methods (3)

Examines the relevant systems of human physiology in the context of sport specific training and conditioning. Helps develop the students' understanding of the adaptations that the musculoskeletal and cardio respiratory systems undergo during training and conditioning for sports and exercise. Prerequisite: KINE 6360, its equivalent, or permission of the instructor. (Available online.)

KINE 6363 Methods and Procedures for Coronary Heart Disease Risk Detection and Reduction (3)

A study of the leading risk factors that contribute to the development of coronary artery heart disease. Laboratory methods and procedures used in assessing the different risk factors including 12-lead EKG and graded exercise stress testing. Implementation of programs aimed at risk reduction and prevention of heart disease.

KINE 6364 Heat Stress and Exercise (3)

Enhances the students' understanding of the physiological effects of heat stress and thermoregulatory controls/maintenance in the body. Topics include heat stress and heat illness, the history behind thermoregulatory medicine, the physiology of the renal and thermoregulation systems in the body, and treatment and prevention of heat stress during sports and work.

KINE 6370 Applied Biomechanics (3)

The course is concerned with the integration of advanced kinesiological foundations applied to exercise science. Specific topics include: physical growth and neuro-muscular control, laws of physics applied to human movement and the effects of exercise on the muscular and skeletal systems. In addition, this course will introduce students to advanced biomechanics laboratory techniques by conducting research. (Available online.)

KINE 6371 Biomechanics Lab Techniques (3)

The course is concerned with laboratory applications as they relate to exercise science. Emphasis will be placed upon laboratory experiences in biomechanics. Those experiences will involve equipment setup, data collection, data acquisition, and data analysis in the following areas: forceplate acquisition, 3-dimensional analysis, and electromyography.

KINE 6380 Analysis of Teaching and Coaching Behavior (3)

Observation, description, coding and analysis of teaching behavior in physical education and coaching. (Available online.)

KINE 6381 Curricular Innovations (3)

Examines current trends and issues in physical education curriculum development. The course content includes examples of program innovations, as well as current international, national (e.g., NASPE national standards), and local (e.g., TEKS in Texas) curriculum initiatives. Individually or as members of a small group, students will design physical education curricula to be implemented in their own schools. (Available online.)

KINE 6382 Administration of Physical Education and Athletics (3)

An examination of administrative theories and practices in physical education, intramural and athletic programs. (Available online.)

KINE 6389 Selected Topics (1-3)

Graduate courses that will be offered only once, will be offered infrequently, or are being developed before a regular listing in the catalog.

KINE 6391 Contract Study (3)

For students who are pursuing independent study or research (as described in the contract study format).

KINE 6392 Practicum (3)

A field work experience designed to provide practical, real life education for students. Under the supervision of a professional, students enhance their knowledge and skills in the practice of their selected interest area.

KINE 6398 Master's Project (3)

Meets the research requirements for the non-thesis option in master's degree program.

KINE 6399 Master's Thesis (3 or 6)

Meets the research requirements for the thesis option in master's degree program.

U.T. TeleCampus Courses Available for Elective Credit. This list may not be complete as courses are being added; check <http://www.utpb.edu/REACH/kines.htm> for an up-to-date list.

KINO 6326 Motor Learning and Control (UT El Paso) (3)

Current theories and concepts involved in the processes of motor skills acquisition and performance from a behavioral perspective. Major topics include the methodology of studying motor performance, information processing, sensory and central contributions to motor control, coordination, individual differences, conditions of practice, feedback, retention and transfer and the learning process. Practical application of principles is emphasized. (Available online, only.)

KINO 6340 History and Philosophy (UT Pan American) (3)

Students will examine the historical development of kinesiology, physical education and sport from primitive to modern day times. Emphasis is placed on the role sport and physical education plays as part of the total educational system and how educational philosophy influences modern sport and physical education. Major philosophies will be investigated and applied to assist the student in developing her or his individual philosophy. (Available online, only.)

KINO 6342 Ethics in Health and Kinesiology (UT Tyler) (3)

Students will examine ethical considerations encountered in professional areas related to health, exercise and sport. The students will learn to develop and evaluate ethical viewpoints based on theory and fundamental principles. (Available online, only.)

KINO 6346 Contemporary Issues in Physical Education and Sport (UT Tyler) (3)

This course engages students in an analysis of contemporary controversial problems related to physical education and sport. Students will learn general principles and procedures related to rational development and evaluation of viewpoints, and will learn to apply these principles and procedures to specific controversies relevant to the professional interests and goals of the students in the class. (Available online, only.)

KINO 6348 US Health System (UT Tyler) (3)

In this course students will better understand the extremely complex and rapidly changing U.S. health system. Though it is important for you as a student to appreciate the value of understanding our current healthcare system, healthcare systems are not holy and I believe they should be viewed with a degree of scholarly irreverence and skepticism. Students will be expected to cultivate a habit of demanding evidence as they peer into our diversified institutions and the minds of Americans who have created such perplexing systems for doing things. (Available online, only.)

KINO 6354 Early Childhood Physical Activity (UT El Paso) (3)

A study of physical activity in early childhood and its influence on child development to include types of physical activity and their relationship to emotions, health, social and physical growth and development. (Available online, only.)

KINO 6356 Issues in Adapted Physical Activity (UT Arlington/UT Pan American) (3)

This course is specifically designed to expand the roles and responsibilities of the teacher/coach in the current and the future inclusion settings. Students will analyze and evaluate issues, trends and research findings pertinent to adapted physical activity for students with disabilities. (Available online, only.)

KINO 6380 Nutrition, Health, and Disease (UT Tyler) (3)

Study of the basic nutrients, nutritional needs at various stages of life, and therapeutic diets for selected disease states. This course or an equivalent is a prerequisite for KINO 6382, sports Nutrition. (Available online, only.)

KINO 6382 Sports Nutrition (UT Tyler) (3)

Study of nutrition as it relates to optimal training and performance of sports activities. Prerequisite: KINO 6380 Nutrition, Health, and Disease or equivalent graduate or upper-division undergraduate general nutrition course. Prerequisite: KINE 6380, its equivalent, or permission of the instructor. (Available online, only.)