

TEXAS A&M UNIVERSITY
DEPARTMENT OF KINESIOLOGY & SPORT MANAGEMENT

Master of Science in Kinesiology
with Specialization in Exercise Physiology

The M.S. in Kinesiology with an emphasis in *Exercise Physiology* provides advanced training in the physiological responses to acute exercise and the adaptations that occur with training. Note that this is a different option from those in Clinical Exercise Physiology and Sport Physiology.

NON-THESIS OPTION

Course ID	Course Title	Credit Hours
KINE 601	Reading Research Publications in Kinesiology	3
KINE 627	Exercise Biomechanics	3
KINE 637	Exercise Physiology I	3
KINE 638	Exercise Physiology II	3
KINE 648	Instrumentation and Techniques in Exercise Physiology II	2
KINE 681	Seminar	2
KINE 689 ¹	Advanced Exercise Assessment and Programing	3
KINE 690 ²	Theory of Research in Kinesiology (Statistics)	3
Electives ³	Advisor Directed Electives	14
TOTAL		36

THESIS OPTION

Course ID	Course Title	Credit Hours
KINE 601	Reading Research Publications in Kinesiology	3
KINE 627	Exercise Biomechanics	3
KINE 637	Exercise Physiology I	3
KINE 638	Exercise Physiology II	3
KINE 648	Instrumentation and Techniques in Exercise Physiology II	2
KINE 681	Seminar	2
KINE 689 ¹	Advanced Exercise Assessment and Programing	3
KINE 690 ²	Theory of Research in Kinesiology (Statistics)	3
KINE 691	Research	5
Electives ³	Advisor Directed Electives	9
TOTAL		36

¹ Special Topics: 3rd semester must be in CARS workflow; change to Advanced Exercise Assessment and Programing.

² May be substituted with STAT 651 Statistics in Research I.

³ All course electives must be chosen with advisor approval *prior* to enrolling in the course(s) AND *before* filing a degree plan.

ADVISOR-DIRECTED ELECTIVE CONSIDERATIONS

Course electives must be chosen with prior advisor approval before the student enrolls in the course or includes it on their degree plan. Other courses not on this list may be chosen with prior advisor approval.

Course ID	Course Title	Credit Hours
BICH 601	Fundamentals of Biochemistry I	3
BICH 602	Fundamentals of Biochemistry II	3
FSTC 607	Physiology and Biochemistry of Muscle as Food	3
HLTH 609	Applied Epidemiology	3
HLTH 610	Health Assessment	3
HLTH 640	Health Intervention and Wellness	3
KINE 427	Therapeutic Principles	3
KINE 606	Motor Neuroscience I	3
KINE 628	Nutrition in Sport and Exercise	3
KINE 629	Physiology of Strength Conditioning	3
KINE 640	Motor Neuroscience II	3
KINE 641	Motor Neuroscience: Development Issues	3
KINE 646	Fundamentals of Space Life Science	3
KINE 649	Applied Exercise Physiology	3
KINE 684	Professional Internship in Clinical Exercise Physiology	3
KINE 685	Directed Studies: Research Problem	3
SPMT 644	Movement Analysis for Coaches	3
NFSC 301	Nutrition through Life	3
NFSC 405	Nutritional Treatment of Disease	3
NFSC 613	Protein Metabolism	3
NFSC 617	Experimental Techniques in Meat Science	3
NFSC 618	Lipids and Lipid Metabolism	3
NFSC 632	Nutrition in Disease	3
NFSC 641	Nutritional Biochemistry I (Fall only)	3
NFSC 642	Nutritional Biochemistry II	3
VTTP 605	Systemic Physiology I (Fall only)	5
VTTP 606	Systemic Physiology II (Spring only)	5

DEMONSTRATED UNDERGRADUATE COMPETENCIES

Courses completed at Texas A&M or equivalents taken in another accredited undergraduate institution as verified by transcript. Courses taken on-line or at distance will not be accepted for lab- enhanced courses.

Course ID	Course Title
BIOL 319 & 320	Human Anatomy and Physiology I & II
CHEM 119 & 120	Fundamentals of Chemistry I & II with laboratories
KINE 433	Physiology of Exercise
MATH 142	Business Calculus or equivalent
PHYS 201	College Physics
or	
KINE 426	Exercise Biomechanics

POSSIBLE SEQUENCE OF COURSES FOR MS DEGREE IN KINESIOLOGY WITH SPECIALIZATION IN EXERCISE PHYSIOLOGY

Non-Thesis Option – Four-Semester Study Plan

Fall		Spring		Summer		Fall	
KINE 627	3	KINE 637	3	KINE 690	3	Elective	8
KINE 638	3	Elective	3	Elective	3	8 SCH	
KINE 648	2	KINE 601	3	6 SCH			
KINE 681	1	KINE 681	1	10 SCH		Total = 36 SCH	
KINE 689	3						
12 SCH							

Thesis Option – Four-Semesters Study Plan

Fall		Spring		Summer		Fall	
KINE 627	3	KINE 637	3	KINE 690	3	KINE 691	5
KINE 638	3	Elective	3	Elective	3	Elective	3
KINE 648	2	KINE 601	3	6 SCH		8 SCH	
KINE 681	1	KINE 681	1	10 SCH			
KINE 689	3						
12 SCH							