TEXAS A&M UNIVERSITY
DEPARTMENT OF KINESIOLOGY & SPORT MANAGEMENT

Master of Science in Kinesiology
with Specialization in Clinical Exercise Physiology

The M.S. in Kinesiology with an emphasis in ***Clinical Exercise Physiology*** is for students desiring careers in the clinical, rehabilitative, or corporate health care arenas. The curriculum is designed to provide students with the scientific background and technical skills necessary to evaluate health and physical fitness as they pertain to disease risk, especially cardiopulmonary disease. They are then exposed to strategies of prescribing preventive and rehabilitative exercise to promote optimal physical fitness and health. The curriculum also prepares students to take the American College of Sports Medicine Certified Exercise Physiologist or Certified Clinical Exercise Physiologist Exams.

NON-THESIS OPTION

Course ID	Course Title	Credit Hours
KINE 601	Reading Research Publications in Kinesiology	3
KINE 626	Exercise for Clinical Populations	3
KINE 627	Exercise Biomechanics	3
KINE 637	Exercise Physiology I	3
KINE 638	Exercise Physiology II	3
KINE 639	Exercise Electrocardiography	3
KINE 648	Instrumentation and Techniques in Exercise Physiology II	2
KINE 681	Seminar	2
KINE 683	Practicum in Kinesiology (Exercise Evaluation & Fitness Testing)	3
KINE 684	Professional Internship in Clinical Exercise Physiology	4 or[3] 2
KINE 689[1]	Advanced Exercise Assessment and Programing	3
KINE 690[2]	Theory of Research in Kinesiology (Statistics)	3
KINE 685 or[3]	Directed Studies: Research Problem	1
KINE 629	Physiology of Strength Conditioning	3
	TOTAL	**36**

THESIS OPTION

Course ID	Course Title	Credit Hours
KINE 601	Reading Research Publications in Kinesiology	3
KINE 626	Exercise for Clinical Populations	3
KINE 627	Exercise Biomechanics	3
KINE 637	Exercise Physiology I	3
KINE 638	Exercise Physiology II	3
KINE 639	Exercise Electrocardiography	3
KINE 648	Instrumentation and Techniques in Exercise Physiology II	2
KINE 681	Seminar	2
KINE 683	Practicum I in Kinesiology (Sports Physiology Practicum I)	3
KINE 689[1]	Advanced Exercise Assessment and Programing	3
KINE 690[2]	Theory of Research in Kinesiology (Statistics)	3
KINE 691	Research	5
	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] A combination of 4-credit KINE 684 and 1-credit KINE 685 for a 4-semester non-thesis option. A combination of 2-credit KINE 684 and 3-credit KINE 629 for a 5-semester non-thesis option. The rest of courses will be identical for the two non-thesis options.

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 CLINICAL EXERCISE PHYSIOLOGY

NON-THESIS OPTION

Four-Semester Study Plan

Fall		**Spring**		**Summer**		**Fall**	
KINE 627	3	KINE 626	3	KINE 683	3	KINE 684	4
KINE 638	3	KINE 637	3	KINE 690	3	KINE 685	1
KINE 648	2	KINE 639	3	**6 SCH**		**5 SCH**	
KINE 681	1	KINE 601	3				
KINE 689	3	KINE 681	1				
12 SCH		**13 SCH**				**Total = 36 SCH**	

Five-Semester Study Plan

Fall		**Spring**		**Summer**	
KINE 629	3	KINE 626	3	KINE 683	3
KINE 638	3	KINE 637	3	KINE 690	3
KINE 681	1	KINE 639	3	**6 SCH**	
KINE 683	3	**9 SCH**			
10 SCH					
Fall		**Spring**			
KINE 601	3	KINE 684	2		
KINE 627	3	**2 SCH**			
KINE 648	2				
KINE 681	1				
9 SCH				**Total = 36 SCH**	

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

THESIS OPTION

Four-Semester Study Plan

Fall		**Spring**		**Summer**		**Fall**	
KINE 627	3	KINE 626	3	KINE 683	3	KINE 681	4
KINE 638	3	KINE 637	3	KINE 690	3	KINE 691	1
KINE 648	2	KINE 639	3	KINE 691	1		**5 SCH**
KINE 681	1	KINE 601	3		**7 SCH**		
KINE 689	3		**12 SCH**				**Total = 36 SCH**
	12 SCH						

Five-Semester Study Plan

Fall		**Spring**		**Summer**	
KINE 627	3	KINE 626	3	KINE 683	3
KINE 638	3	KINE 637	3	KINE 690	3
KINE 681	1	KINE 639	3		**6 SCH**
KINE 689	3		**9 SCH**		
	10 SCH				

Fall		**Spring**		
KINE 601	3	KINE 691	2	
KINE 648	2		**2 SCH**	
KINE 681	1			
KINE 691	3			
	9 SCH			**Total = 36 SCH**

ADVISOR-DIRECTED ELECTIVE CONSIDERATIONS

In case a required course is not available, the student can substitute it with an elective on this list.
Any substitution must be approved by the student's faculty advisor.
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
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
VTPP 605	Systemic Physiology I (Fall only)	5
VTPP 606	Systemic Physiology II (Spring only)	5