TEXAS A&M UNIVERSITY
DEPARTMENT OF KINESIOLOGY & SPORT MANAGEMENT

Master of Science in Kinesiology
with Emphasis in
Performance Physiology and Strength & Conditioning

The M.S. in Kinesiology with an emphasis in ***Performance Physiology and Strength & Conditioning (PPSC)*** is for students desiring careers in conditioning and training of athletes and individuals working within a tactical environment. The curriculum is designed to provide the scientific background and technical skills necessary to evaluate athletes' performance and design sport-specific conditioning programs. The only option available is non-thesis. The curriculum may prepare students for the National Strength and Conditioning Association certification.

NON-THESIS CURRICULUM

Course ID	Course Title	Credit Hours
KINE 601	Reading Research Publications in Kinesiology	3
KINE 627	Exercise Biomechanics	3
KINE 628	Nutrition in Sport and Exercise	3
KINE 629	Physiology of Strength and Conditioning	3
KINE 631	Specialized Strength & Conditioning Techniques Professional	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	1
KINE 682	Special Topics in Strength & Conditioning Seminar	2
KINE 683[1]	Practicum I in Kinesiology (PPSC Practicum I)	3
KINE 684[1]	Internship in PPSC (1-4 variable credit course)	4
KINE 690[2]	Theory of Research in Kinesiology (Statistics)	3
	TOTAL	**36**

[1] KINE 683: Practicum I in PPSC offered fall semester.

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

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

Five-Semester Study Plan

Fall		Spring		Summer	
KINE 629	3	KINE 627	3	KINE 682	2
KINE 638	3	KINE 631	3	KINE 684	4
KINE 683	3	KINE 637	3		**6 SCH**
	9 SCH		**9 SCH**		
Fall		**Spring**			
KINE 690	3	KINE 601	3		
KINE 628	3		**3 SCH**		
KINE 648	2				
KINE 681	1				
	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
KINE 606	Motor Neuroscience I	3
KINE 626	Exercise for Clinical Populations	3
KINE 630	Periodized Models	3
KINE 631	Specialized Strength & Conditioning Techniques	3
KINE 639	Exercise Electrocardiography	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