MASTERS OF SCIENCE IN KINESIOLOGY
EMPHASIS IN CLINICAL EXERCISE PHYSIOLOGY

05/24/19

The M.S. in Kinesiology with an emphasis in ***Clinical Exercise Physiology*** is a degree program 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 Exercise Specialist or Registered Clinical Exercise Physiologist Exams.

NON-THESIS OPTION

KINE	601	Reading Research Publications in Kinesiology	3
KINE	626	Exercise for Clinical Populations	3
KINE	637	Exercise Physiology I	3
KINE	638	Exercise Physiology II	3
KINE	639	Exercise Electrocardiography	3
KINE	647	Instrumentation and Techniques in Exercise Physiology I	2
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
KINE	690[1]	Theory of Kinesiology Research (Statistics)	3
Electives[2]		Advisor Directed	5
		TOTAL	**36 SCH**

THESIS OPTION [3]

KINE	601	Reading Research Publications in Kinesiology	3
KINE	637	Exercise Physiology I	3
KINE	638	Exercise Physiology II	3
KINE	639	Exercise Electrocardiography	3
KINE	647	Instrumentation and Techniques in Exercise Physiology I	2
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	685	Directed Studies: Research Problems in Clinical Exercise Physiology	2
KINE	690[1]	Theory of Kinesiology Research (Statistics)	3
KINE	691	Research	6
		TOTAL	**32 SCH**

[1] May substitute STAT 651- Statistics in Research I for KINE 690 - Theory of Kinesiology Research (Statistics)
[2] All course electives must be chosen with advisor approval prior to enrolling in the course(s) and before filing a degree plan.
[3] Thesis option requires admission by research advisor.

ADVISOR-DIRECTED ELECTIVE CONSIDERATIONS[1]

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[2]	Professional Internship in Clinical Exercise Physiology	4
KINE	685	Directed Studies: Research Problem	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	630	Nutrition in Disease	3
NFSC	641	Nutritional Biochemistry I (fall only)	3
NFSC	642	Nutritional Biochemistry II	3
VTPP	605	Systemic Veterinary Physiology I (fall only)	5
VTPP	606	Systemic Veterinary Physiology II (spring only)	5

DEMONSTRATED UNDERGRADUATE COMPETENCIES:

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

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

[1] 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.

[2] KINE 684 - Professional Internship may be chosen by Thesis students as an elective, but the course hours *cannot* count toward the degree plan minimal credit hour requirements. Up to four credit hours of KINE 684 - Professional Internship *can* be used by Non-Thesis students to count toward the minimal credit hours required for the degree.

Possible Sequence of Courses for *Non-Thesis* M.S. Degree in Clinical Exercise Physiology

Fall	Spring	Summer	Fall
KINE 601 3 KINE 638 3 KINE 648 2 KINE 681 1 Elective[2] 3 **12 SCH**	KINE 626 3 KINE 637 3 KINE 639 3 KINE 647 2 KINE 681 1 **12 SCH**	KINE 690[1] 3 KINE 683 3 Elective[2] 2 **8 SCH**	KINE 684 4 (Internship) **4 SCH** **TOTAL Degree = 36 SH**

Possible Sequence of Courses for Thesis M.S. Degree / Clinical Exercise Physiology

Fall	Spring	Summer	Fall
KINE 601 3 KINE 638 3 KINE 648 2 KINE 681 1 KINE 690[1] 3 **12 SCH**	KINE 637 3 KINE 639 3 KINE 647 2 KINE 681 1 KINE 685 2 **11 SCH**	KINE 683 3 KINE 691 3 **6 SCH**	KINE 691 3 **3 SCH** **TOTAL Degree = 32 SCH**

NOTE: Course sequence will vary with individual student requirements and course scheduling by the HLKN department. Total degree hours are approximate. It generally takes a student two years to complete this program.

[1] May substitute STAT 651 – Statistics in Research I for KINE 690 – Theory of Research (Statistics)

[2] Course electives must be chosen with prior advisor approval before the student enrolls in the course or includes it on their degree plan.