## TEXAS A&M UNIVERSITY DEPARTMENT OF KINESIOLOGY & SPORT MANAGEMENT

# Doctor of Philosophy in Kinesiology with Specialization in Exercise Physiology

(May 2024)

### Total credit hours required for degree: Minimum of 60 with a Master's degree

Required Common Core		Credit Hours: 45
<b>KINE 614</b>	External Research Fund Development	3
KINE 681	Seminar	6
KINE 682 <sup>1</sup>	Doctoral Seminar in Exercise Physiology	3
KINE 685	Directed Studies	12
KINE 690	Theory of Research in Discipline	3
KINE 691	Research	18

<sup>&</sup>lt;sup>1</sup> A minimum of 2 KINE 682 seminars of 1.5 credit hour each are needed

Required Exercise Physiology Core and Electives		Credit Hours: 15
STAT 652	Research in Statistics II	3
Advisor Directed Electives <sup>2</sup>		12
	STATS	0
	KINE	9
	Non-KINE	3

<sup>&</sup>lt;sup>2</sup> A minimum of 12 credit hour Advisor Directed Electives should be chosen in consultation with the student's academic advisor with **at least 3 credit hours of Non-KINE Electives**. The remainder of credit hours can be selected from STATS and KINE Electives.

The following STATS, KINE, and Non-KINE courses list serves as guidelines for many elective courses approved by the Exercise Physiology graduate faculty. Courses not listed below may also be taken with advisor approval.

Advisor Directed Electives - STATS		Credit Hours	
ANSC 622	Research methods in Animal Science	3	
<b>EPSY 651</b>	Theory of structural equation models	3	
EPSY 653	Advanced Theory of structural equation models	3	
MSCI 611	Experimental Design for Biomedical Science	3	
STAT 608	Regression analysis	3	
STAT 636	Applied Multivariate Analysis	3	
STAT 651	Statistics in Research I	3	
STAT 653	Statistics in Research III	3	
STAT 659	Applied Categorical Data Analysis	3	

Advisor Directed Electives - KINE		Credit Hours
KINE 601	Reading Research Publications in Kinesiology	3
KINE 606	Motor Neuroscience I	3
KINE 609	Professional & Career Development KINE	3
KINE 626	Exercise for Clinical Populations	3
<b>KINE 637</b>	Exercise Physiology I	3
KINE 638	Exercise Physiology II	3
<b>KINE 639</b>	Exercise Electrocardiography	3
<b>KINE 646</b>	Fundamentals of space life sciences	3
<b>KINE 647</b>	Instr & Tech in Ex Phys I	3
KINE 648	Instr & Tech in Ex Phys II	3
KINE 649	Applied Exercise Physiology	3
KINE 651	Intro to Human Clinical Research	3
KINE 652	Methods in Human Research	3
KINE 684	Professional Internship	3

Advisor Directed Electives - Non-KINE		Credit Hours
BICH 601	Fund Biochemistry I	3
BICH 602	Fund Biochemistry II	3
<b>BICH 624</b>	Enzymes, Proteins, & Nucleic Acids	3
BICH 631	Biochemical Genetics 3 BICH 650 Genomics	3
BIOL 613	Cell Biology	3
<b>BMEN 605</b>	Virtual Instrumentation Design Medical Systems 3	3
<b>CHEM 601</b>	Analytical Chemistry I	3
FSTC 607	Physiology & Biochemistry of Muscle as a Food	3
<b>GENE 626</b>	Analyses of Gene Expression	2
NUTR 613	Protein Metabolism	3
NUTR 617	Experimental Techniques in Meat Science	3
NUTR 618	Lipids and Lipid Metabolism	3
NUTR 641	Nutritional Biochemistry I	3
NUTR 642	Nutritional Biochemistry II	3
VIBS 602	Histology	4
VIBS 603	Neuroanatomy	4
VIBS 604	Biomed Neuroendocrine & Endocrine Disorders	3
VIBS 607	Applied Epidemiology	4
VIBS 640	Neurobiology	1-5
VTPP 605	Systemic Veterinary Physiology I	5
VTPP 606	Systemic Veterinary Physiology II	5
VTPP 625	Pharmacology	3
VTPP 653	Endocrinology	4
VTPP 655	Vascular Physiology	4
VTPP 656	Physiology of the Heart	4
VTPP 657	Cardiovascular Physiology	4

#### RESEARCH EXPERIENCE REQUIREMENT

- Before scheduling the dissertation proposal meeting each student will:
  - 1. have presented, as sole or first author, at least one presentation at a state, regional, or national conference; AND
  - 2. will be an author on at least one research paper submitted to a peer-reviewed national or international journal.
  - 3. Also, before graduation, it is expected that students will submit at least one first-authored manuscript derived from the dissertation to a national or international refereed journal(s).

#### MINIMAL HOUR REQUIREMENT

• The Ph.D. requires a minimum of 60 hours beyond the Master's or 90 hours beyond the Baccalaureate degree. Depending on preparation and experience, doctoral students may be required to complete undergraduate and graduate leveling work in addition to the minimum Ph.D. requirements (see below).

#### MINIMUM PREREQUISITES OR COMPETENCIES

• Refer to the Texas A&M University Graduate and Undergraduate Catalog for course descriptions. Competency in the content of the course is required rather than the specific course by number. The student applying to our graduate program is responsible for providing written evidence that these competencies have been met. Please note that courses taken online or at distance will not be accepted for laboratory-enhanced courses. The graduate office in the Department of Kinesiology and Sport Management in consultation with graduate committee chairs/advisors will review transcripts to verify the evidence. Deficiencies in these competencies may necessitate the student taking coursework in addition to the 60 semester hours required for the doctoral degree.