

September 2018

**Texas A&M University**  
**Department of Health and Kinesiology**  
**Ph.D. in Kinesiology with an emphasis on Motor Neuroscience**

<u>Course Title</u>	<b>Credit Hours</b>
	<b>Total Hours 54</b>
KINE 609R Theory of Research (Exp Design)	3*
KINE 681 Seminar	6*
KINE 684 Professional Internship	3*
KINE 685 Directed Studies	12*
KINE 691 Research	18*

**Minimum Hours 42**

<u>Course Title</u>	
STAT 652 Statistics in Research II	3*
STAT 608 Least Square and Regression Analysis	3
STAT 609 Order Statistics and Nonparametric	3
STAT 619 Analysis of Variance	3
STAT 636 Methods in Multivariate Analysis	3

**Minimum Hours 9**

<u>Course Title</u>	
KINE 682 Seminar in Issues in Motor Development	1
KINE 682 Seminar in Issues in Motor Learning	1
KINE 682 Seminar in Issues in Motor Control	1
KINE 682 Seminar in Neuromuscular Physiology	1

**Minimum Hours 3**

**Supporting Electives**

To be chosen with advisement from graduate advisor

<u>Course Title</u>	<b>Credit Hours</b>
VAPH 603 Nueroanatomy	4
VAPH 640 Neurobiology	3
	<b>3 Minimum Hours</b>

<u>Course Title</u>	
EPSY 646 Issues in Child and Adolescent Development	3
PSYC 603 Motivation and Cognitive Processes	3
PSYC 606 Learning	3
PSYC 609 Psychophysiology	3
PSYC 610 Organizational Psychology	3
PSYC 615 Perceptual Processes	3
PSYC 634 Principles of Human Development	3
	<b>Minimum Hours 72</b>

<u>Course Title</u>	<b>Credit Hours</b>
PSYC 636 Seminar in Developmental Psychology	3
PSYC 685 Problems	3
	<b>Minimum Hours 9</b> <b>(this is 6 hours with</b> <b>just two courses.)</b>

<u>Course Title</u>	<b>Credit Hours</b>
BIEN 601 Foundations of Bioengineering Analysis	3
BIEN 602 Instrumentation and Measurement in Bioengineering	3
BIEN 614 Modeling of Biological Systems	3
BIEN 638 Control Mechanisms in Living Systems	3
INEN 630 Human Operator in Complex Systems	3
INEN 635 Human Information Processing	3
KINE 650 Microcomputer Utilization in Sports Statistics	3
	<b>Minimum Hours 6</b>

**\*Required Courses**

The Ph.D. in Kinesiology with a specialization in Motor Behavior requires a minimum of 72 hours beyond the masters or 96 hours beyond the baccalaureate degree. Depending on preparation and experience doctoral students may be required to complete leveling work in addition to the minimum

Ph.D. requirements (see below).

### **Research Experience Requirement**

Prior to scheduling the dissertation proposal meeting, each student will: (a) have presented, as sole or first author, at least one presentation at a state, regional, or national conference; and (b) will be an author on at least one research paper submitted to a peer-reviewed national or international journal. In addition, dissertations will not be signed by the department head until the student has submitted as first author a manuscript (or manuscripts) of the study to a national or international refereed journal (or journals).

### **Minimum Hour Requirement**

The PhD requires a minimum of 67 hours beyond a master's or 96 hours beyond the baccalaureate degree. Depending on the preparation and experience, doctoral students may be required to complete undergraduate or graduate leveling work in addition to the minimum PhD requirements.

### **Suggested Prerequisites or Competency**

Please refer to the Texas A&M University Undergraduate Catalog for the content of the courses listed below. Competency in the content of the course is required rather than the specific course. The Office of Graduate Studies in the Department of Health and Kinesiology in consultation with the graduate committee chair or temporary advisor will be happy to review transcripts of potential graduate students.

### **Course Title Course Description**

MATH 131 Math Concepts Calculus

PHYS 201 College Physics

PHYS 202 College Physics

ZOOL 318 Chordate Anatomy

-or-

ZOOL 319 Human Anatomy & Physiology I

ZOOL 320 Human Anatomy & Physiology II

-or-

ZOOL 388 Principles of Animal Physiology

KINE 406 Motor Lrn & Skill Perf

KINE 425 Tests & Measurements

KINE 426 Analysis of Movement

KINE 433 Exercise Physiology

Computer Literacy

KINE 606 Physiological Aspects

KINE 630 Mechanical Analysis

KINE 640 Motor Skill Learning

KINE 641 Motor Development

STAT 651 Statistics in Research I

**Additional Competencies**

Graduate level physiology including at least three of the following: cellular physiology (VTPP 640), physiology of excitable membranes (VTPP 642), neurophysiology (VTPP 643), physiology of muscle (VTPP 644), physiology of Senses(VTPP 650), and Physiological Measurements (VTPP 651).