

# KINESIOLOGY - BS, EXERCISE SCIENCE TRACK, BASIC EXERCISE PHYSIOLOGY CONCENTRATION

The Bachelor of Science degree in Kinesiology offers several tracks designed to prepare students for a variety of careers. The track options available develop a strong science background making students excellent candidates for employment opportunities in human movement/exercise related areas (cardiac rehabilitation, corporate or private fitness), advanced graduate studies (motor neuroscience, kinesiology, exercise physiology), or professional school (physical or occupational therapy or medical and dental school). Course prerequisites are included in the various programs under all tracks to support students wishing to pursue professional school study or graduate school study. Additional program and track information is available on the Department of Kinesiology and Sport Management website or may be obtained by contacting the advising office in the department.

The Basic Exercise Physiology track provides a background in the physical and biological sciences required for additional graduate study in Exercise Physiology or entry into medical or dental professional school. Students pursuing medical or dental school use professional directed elective hours to meet professional school entrance requirements. Students planning to pursue a graduate degree in Exercise Physiology may enroll in independent study leading to an undergraduate research project.

## Program Requirements

This degree plan has been laid out showing students the number of hours they must take each semester in order to complete the degree in four years without attending summer school. This is a suggested plan and does not have to be followed as laid out below. Students should use this information in conjunction with advising documents available from their advisor or the department website when scheduling courses each semester to ensure they are meeting all prerequisites, taking courses for admission to professional phase in a timely manner and meeting all grade requirements.

### First Year

Fall		Semester Credit Hours
BIOL 111	Introductory Biology I <sup>1</sup>	4
ENGL 103 or ENGL 104	Introduction to Rhetoric and Composition <sup>1,2</sup> or Composition and Rhetoric	3
KINE 213	Foundations of Kinesiology <sup>1</sup>	3
PBSI 107	Introduction to Psychology	3
Select from the following: <sup>1,2</sup>		3-4
MATH 140	Mathematics for Business and Social Sciences	
MATH 148	Calculus II for Biological Sciences	
MATH 152	Engineering Mathematics II	
MATH 168	Finite Mathematics	

MATH 172	Calculus II	
Semester Credit Hours		16
<b>Spring</b>		
BIOL 112	Introductory Biology II <sup>1</sup>	4
CHEM 119	Fundamentals of Chemistry I <sup>1</sup>	4
KINE 121	Physical and Motor Fitness Assessment <sup>1,3</sup>	2
Select one of the following: <sup>1,2</sup>		3-4
MATH 142	Business Calculus	
MATH 147	Calculus I for Biological Sciences	
MATH 151	Engineering Mathematics I	
MATH 171	Calculus I	
Professional development elective <sup>1,4,5</sup>		3
Semester Credit Hours		16
<b>Second Year</b>		
<b>Fall</b>		
BIOL 319	Integrated Human Anatomy and Physiology I <sup>1,3</sup>	4
CHEM 120	Fundamentals of Chemistry II <sup>1</sup>	4
Select one of the following: <sup>1,2</sup>		3
COMM 203	Public Speaking	
COMM 205	Communication for Technical Professions	
COMM 243	Argumentation and Debate	
ENGL 210	Technical and Professional Writing	
American history ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history</a> ) <sup>2,4</sup>		3
Semester Credit Hours		14
<b>Spring</b>		
BIOL 320	Integrated Human Anatomy and Physiology II <sup>1,3</sup>	4
CHEM 227	Organic Chemistry I <sup>1</sup>	3
CHEM 237	Organic Chemistry Laboratory <sup>1</sup>	1
American history ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history</a> ) <sup>2,4</sup>		3
Professional development elective <sup>1,4,5</sup>		3
Semester Credit Hours		14
<b>Third Year</b>		
<b>Fall</b>		
BIOL 351	Fundamentals of Microbiology <sup>1</sup>	4
CHEM 228	Organic Chemistry II <sup>1</sup>	3
CHEM 238	Organic Chemistry Laboratory <sup>1</sup>	1
KINE 318	Athletic Injuries <sup>1</sup>	3
POLS 206	American National Government	3
Language, philosophy and culture ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture</a> ) <sup>2,4</sup>		3
Semester Credit Hours		17
<b>Spring</b>		
BICH 410	Comprehensive Biochemistry I <sup>1</sup>	3
KINE 199	Required Physical Activity <sup>1,3,6</sup>	1
KINE 307	Lifespan Motor Development <sup>1</sup>	3
PHYS 201	College Physics <sup>1</sup>	4

STAT 302 or STAT 303	Statistical Methods <sup>1</sup> or Statistical Methods	3
<b>Semester Credit Hours</b>		<b>14</b>
<b>Fourth Year</b>		
<b>Fall</b>		
GENE 301	Comprehensive Genetics <sup>1</sup>	3
GENE 312	Comprehensive Genetics Laboratory <sup>1</sup>	1
KINE 433	Physiology of Exercise <sup>1</sup>	3
KINE 435	Physiology of Exercise Lab <sup>1,7</sup>	1
PHYS 202	College Physics <sup>1</sup>	4
POLS 207	State and Local Government	3
<b>Semester Credit Hours</b>		<b>15</b>
<b>Spring</b>		
KINE 406	Motor Learning and Skill Performance <sup>1</sup>	3
KINE 407	Motor Control and Learning Lab <sup>1,7</sup>	1
KINE 426	Exercise Biomechanics <sup>1</sup>	3
KINE 427	Therapeutic Principles <sup>1</sup>	3
KINE 428	Exercise Biomechanics Laboratory <sup>1</sup>	1
Creative arts ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts</a> ) <sup>2,5</sup>		3
<b>Semester Credit Hours</b>		<b>14</b>
<b>Total Semester Credit Hours</b>		<b>120</b>

<sup>1</sup> Must make a grade of C or better.<sup>2</sup> Course must meet Core Curriculum requirements.<sup>3</sup> Must be taken at Texas A&M University.<sup>4</sup> Course selection should meet the International and Cultural Diversity (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/>) and/or Cultural Discourse (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/>) Graduation requirement, if needed.<sup>5</sup> To be chosen in consultation with your academic advisor. Select from: BICH 411, BICH 412; BIOL 206, BIOL 213, BIOL 405, BIOL 434/ NRSC 434, BIOL 454; COMM 370; GENE 310, GENE 320/BIMS 320; HLTH 231, HLTH 335, HLTH 353, HLTH 354; KINE 216/HLTH 216, KINE 285, KINE 305, KINE 340, KINE 485 KINE 491; NUTR 202, NUTR 300-499 (<http://catalog.tamu.edu/undergraduate/course-descriptions/nutr/>); PHIL 111, PHIL 251, PHIL 480; PBSI 300-499 (<http://catalog.tamu.edu/undergraduate/course-descriptions/pbsi/>); PBSI 225 or PBSI 307; SOCI 205; SPMT 304; VTPB 409, VTPP 425; HLTH 240/KINE 240 or ISTM 209 or ISTM 210.<sup>6</sup> Activities should be chosen in consultation with advisor. Participation in band or athletics cannot be used for KINE 199 credit. KINE 199 activities cannot be repeated for credit and must be taken for a grade.<sup>7</sup> Meets Core Curriculum writing requirement.