KINESIOLOGY - BS, EXERCISE SCIENCE TRACK, APPLIED 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 Applied Exercise Physiology track prepares students to become clinical exercise physiologists working in cardiopulmonary rehabilitation programs. This program contains a strong science background making students excellent candidates for professional schools such as Physical Therapy School. Students can also prepare for immediate employment in clinical fields to include areas like cardiac and pulmonary rehabilitation, pharmaceutical sales and medical equipment sales and service. In addition, students also train for jobs as personal trainers or corporate/private fitness specialists. This track also enables students to continue their education in fields such as Clinical Exercise Physiology, Sport Physiology and Nutrition.

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

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<th>Semester Credit Hours</th>
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<tr>
<td>Fall</td>
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</table>
| BIOL 111             | Introductory Biology 1 
| ENGL 104 or ENGL 103 | Composition and Rhetoric 1 or Introduction to Rhetoric and Composition
| KINE 121             | Physical and Motor Fitness Assessment 1,2
| Select one of the following: 1 | 3-4
| MATH 140             | Mathematics for Business and Social Sciences
| MATH 148             | Calculus II for Biological Sciences
| MATH 152             | Engineering Mathematics II

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| BIOL 112             | Introductory Biology II 1
| CHEM 119             | Fundamentals of Chemistry I 1
| KINE 213             | Foundations of Kinesiology 1
| American history elective (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history) | 3,4
| Professional development elective 1,3,5 | 3

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<td>Second Year</td>
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| CHEM 120             | Fundamentals of Chemistry II 1
| PBSI 107             | Introduction to Psychology 3
| Select one of the following: | 3-4
| MATH 142             | Business Calculus
| MATH 147             | Calculus I for Biological Sciences
| MATH 151             | Engineering Mathematics I
| MATH 171             | Calculus I
| American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history) | 3
| Creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts) | 3,4

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<tr>
<td>Spring</td>
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| BIOL 319             | Integrated Human Anatomy and Physiology I, 1,2
| KINE 199             | Required Physical Activity 1,2,6
| PHYS 201             | College Physics
| POLS 207             | State and Local Government 3
| Professional development elective 1,3,5 | 3

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<tr>
<td>Third Year</td>
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| BIOL 320             | Integrated Human Anatomy and Physiology II 1,2
| KINE 318             | Athletic Injuries 1
| PHYS 202             | College Physics
| POLS 206             | American National Government 3
| Select one of the following: 1 | 3
| COMM 203             | Public Speaking
| COMM 205             | Communication for Technical Professions
| COMM 243             | Argumentation and Debate
| ENGL 210             | Technical and Professional Writing

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</table>
| BIOL 111             | Introductory Biology II 1
| KINE 213             | Foundations of Kinesiology 1
| KINE 318             | Required Physical Activity
| MATH 142             | Business Calculus
| MATH 147             | Calculus I for Biological Sciences
| MATH 151             | Engineering Mathematics I
| MATH 171             | Calculus I
| American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history) | 3
| Creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts) | 3,4

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| BIOL 319             | Integrated Human Anatomy and Physiology I, 1,2
| KINE 199             | Required Physical Activity 1,2,6
| PHYS 201             | College Physics
| POLS 207             | State and Local Government 3
| Professional development elective 1,3,5 | 3
### Spring
- **KINE 199** Required Physical Activity 1,2,6 1
- **KINE 307** Lifespan Motor Development 1 3
- **KINE 433** Physiology of Exercise 1 3
- **KINE 435** Physiology of Exercise Lab 1,7 1
- **KINE 439** Exercise Evaluation and Prescription 1,7 4

Professional development elective 1,3,5 3

**Semester Credit Hours** 15

### Fourth Year

#### Fall
- **KINE 406** Motor Learning and Skill Performance 1 3
- **KINE 426** Exercise Biomechanics 1 4
- **KINE 427** Therapeutic Principles 1 3
- **KINE 483** Practicum in Kinesiology 1 3

Professional development elective 1,3,5 3

**Semester Credit Hours** 16

#### Spring
- **KINE 484** Internship in Kinesiology 1 9

**Semester Credit Hours** 9

### Total Semester Credit Hours 120

1. Must make a grade of C or better.
2. Must be taken at Texas A&M University.
3. Course selection should meet the International and Cultural Diversity (http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/) (ICD) and/or Cultural Discourse (http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/) (CD) graduation requirement, if needed.
4. Must meet Core Curriculum requirements.
5. To be chosen in consultation with your academic advisor from:
   - BICH 410, BICH 411, BICH 412; BIOL 206, BIOL 213, BIOL 351, BIOL 405, BIOL 434/NRSC 434, BIOL 454; CHEM 227, CHEM 228, CHEM 237, CHEM 238; COMM 370; GENE 301, GENE 312 or GENE 320/BIMS 320, GENE 310; HLTH 231, HLTH 335, HLTH 353, HLTH 354; KINE 285, KINE 305, KINE 340, KINE 485, KINE 491; NUTR 202 or NUTR 203, NUTR 300-499 (http://catalog.tamu.edu/undergraduate/course-descriptions/nutr/); PHIL 111, PHIL 251, PHIL 480; PSYC 300-499 (http://catalog.tamu.edu/undergraduate/course-descriptions/psyc/); PBSI 225 or PBSI 307; VTPB 409, VTPP 425; KINE 240/HLTH 240 or ISTM 209 or ISTM 210; PBSI 304 or SPMT 304; SOCI 205; STAT 302 or STAT 303.
6. Must take Majors Aerobic Movement and Majors Res/Flex. 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.
7. Meets Core Curriculum writing requirement.