Students must complete all General Education and Major requirements. Any approved General Education course also required for the major may apply to (double-count in) both required areas. Courses common to the areas of World Cultures, Arts and Humanities, and Social and Historical Studies may also double count. However, credit for such courses counts only once toward the total required credits for a degree.

### General Education (20 – 39 credits)

**English Composition (0 to 3 credits, C minimum required)**
- Complete one of the following options:
  - 3 CMLT-C 110 Writing the World
  - 3 ENG-W 131 Elementary Composition
  - 3 ENG-W 170 Projects in Reading and Writing
  - 0 ENG-W 131 EX Elementary Composition Exemption

**Mathematical Modeling (3 to 4 credits)**
- Complete one of the following options:
  - 4 MATH-D 116 AND MATH-D 117 Intro to Finite Mathematics I-II
  - 3 MATH-J 113 Introduction to Calculus with Applications
  - 3 MATH-M 106 The Mathematics of Decision & Beauty
  - 3 MATH-M or V or S 118 Finite Mathematics
  - 3 MATH-M or V 119 Brief Survey of Calculus I
  - 4 MATH-M 211 Calculus I
  - 4 MATH-M 213 Accelerated Calculus

**Natural and Mathematical Sciences (5 credits)**
- Complete 5 credits from the list of approved N&M courses in the IUB General Education Bulletin. At least one course must be a natural science (as indicated by an asterisk in the GENED bulletin).

**Arts and Humanities (6 credits)**
- Complete 6 credits from the list of approved A&H courses in the IUB General Education Bulletin.

**Social and Historical Studies (6 credits)**
- Complete 6 credits from the list of approved S&H courses in the IUB General Education Bulletin.

**World Languages and Cultures (0 to 14 credits)**

*Choose one of the following three options:*
- Complete 6 credits of world culture courses from the list of approved WC courses in the IUB General Education Bulletin.
- OR
- Achieve competency in a single foreign language equal to successful completion of the four semester sequence in a world language.
- OR
- Complete a 6-credit International experience in an approved study abroad. A list of approved course choices may be found in the IUB General Education Bulletin.

### Major (84 – 93 credits)

**Exercise Science (KYEXSBS)**

- B.S. in Kinesiology degree (120 minimum credit hours)
- Department of Kinesiology
- 2.5 GPA required for admission, 2.0 GPA req. for graduation
- No Pass/Fail except for free electives
- Effective for students matriculating summer 2016

**Complete the following Exercise Science courses (39-41 cr.):**
- 2 SPH-I 119 Personal Fitness
- 3 SPH-K 150 Introduction to Kinesiology & Public Health S&H
- 3-5 ANAT-A 215 Basic Human Anatomy N&M OR
  - SPH-K 205 Structural Kinesiology
  - SPH-K 391 Biomechanics
  - SPH-K 405 Introduction to Sport Psychology
  - SPH-K 409 Basic Physiology of Exercise (P: PHSL-P 215, &
  - ANAT-A 215 or SPH-K 205)
  - SPH-K 452 Motor Learning
  - SPH-N 231 Human Nutrition (P: CHEM-C 101 or C 117) N&M
  - 5 PHSL-P 215 Basic Human Physiology N&M
  - 5 PHYS-P 201 General Physics 1 N&M
  - 3 PSY-K 300 Stats Technq OR STAT-S 303 OR SPEAK-K 300
  - 3 PSY-P 101 Introductory Psychology 1 OR PSY-P 155 N&M

**Complete two of the following three MATH options (6-8 cr.):**
- 3-4 MATH-M or V or S 118 Finite OR MATH-D-116 & D117 (4 cr.) N&M
- 3-4 MATH-M or V 119 Srvy Calc 1 OR MATH-M 211 Calc 1 (4 cr.) N&M
- 3-4 MATH-M 120 Srvy Calc II OR MATH-M 212 Calc 2 (4 cr.) N&M

**Complete one of the following CHEM options (5-10 cr.):**
- 3 CHEM-C 117 Principles of Chemistry & Biochemistry I N&M
- 2 CHEM-C 127 Chemistry & Biochemistry Lab I N&M
- OR all of the following:
  - 3 CHEM-C 101 Elementary Chemistry 1 N&M
  - 2 CHEM-C 121 Elementary Chemistry Laboratory 1 N&M
  - 3 CHEM-C 102 Elementary Chemistry 2 ** N&M
  - 2 CHEM-C 122 Elementary Chemistry Laboratory 2 ** N&M

**Complete one of the following computer courses (3 cr.):**
- 3 BUS-K 201 The Computer in Business
- 3 CSCI-A 110 Intro to Computers & Computing N&M
- 3 SPH-K 200 Microcomputer Applications in Physical Ed

**Complete the following communications course (3 cr.):**
- 3 COLL-P 155 Public Oral Communication

**Complete 6 credits from the following writing courses (6 cr.):**
- 3 BUS-C 204 Business Communications
- 3 ENG-W 103 Introduction to Creative Writing A&H
- 1 ENG-W 202 English Grammar Review
- 3 ENG-W 203 Creative Writing (P: ENG-W 103)
- 3 ENG-W 231 Professional Writing Skills
- 3 ENG-W 240 Community Service Writing*
- 3 ENG-W 270 Argumentative Writing
- 3 ENG-W 280 Literary Editing & Publishing
- 3 ENG-W 350 Advanced Expository Writing
- 3 MSCH-C 221 (Formerly: TEL-T 211) Writing for Electronic Media

**Exercise Science electives** (22 cr.):
- Exercise Science elective choices listed on reverse.
Exercise Science electives (22 cr.):
Complete a minimum of 22 credits from the following
Electives should be chosen based on your professional goals or courses needed for entrance to a Professional Graduate school such as PT/OT/PA/Med.

- 3 SPH-B 354 Multidisciplinary Perspectives in Gerontology
- 3 SPH-F 150 S&H or EDUC-P 314 Life Span Development
- 3 SPH-H 160 First Aid & Emergency Care
- 2 SPH-K 280 Basic Prevention and Care of Athletic Injuries
- 1 SPH-K 301 Job Search Strategies for Kines Students
- 2 SPH-K 317 Theory and Practice of Resistance Training
- 3 SPH-K 335 Theories & Conditioning for Coaching *
- 1-2 SPH-K 385 Practicum in Adapted Phys. Ed.
- 3 SPH-K 398 Adapted Physical Education
- 3 SPH-K 412 Exercise in Health and Disease** (P: SPH-K 409)
- 3 SPH-K 417 Physical Activity and Disease (P: K 409) *
- 3 SPH-K 435 Philosophical Foundations of Coaching **
- 3 SPH-K 490 Motor Development and Learning *
- 3 SPH-K 492 Research in Kinesiology
- 1-3 SPH-K 496 Lab Assisting or Field Exp. in Kinesiology
- 1-3 SPH-K 497 Internship in Exercise Science
- 3 SPH-M 211 Introduction to Sport Management
- 3 SPH-M 333 Sport in America: Historical Perspective
- 3 SPH-M 382 Sport in American Society **
- 3 ANTH-A 105 Human Origins S&H
- 3 ANTH-A 303 Evolution and Prehistory
- 4 ANAT-A 464 Human Tissue Biology **
- 3 ANTH-B 200 Bioanthropology N&M
- 3 ANTH-B 301 Bioanthropology Laboratory
- 3-5 BIO-L 100 Humans & the Biological World * N&M
- 3 BIO-L 104 Introductory Biology Lectures N&M
- 3 BIO-L 112 Foundations of Biology: Biological Mech N&M
- 3 BIO-L 111 Found. of Biology: Evol, Diversity, Ecology N&M
- 3 BIO-L 113 Biology Laboratory (P: BIO-L 112)
- 3 BIO-L 211 Molecular Biology (P: L112 and CHEM-C 117)
- 3 BIO-L 311 Genetics (P: BIO-L 211)
- 3 BIO-L 312 Cell Biology
- 3 BIO-L 313 Cell Biology Laboratory
- 3 BIO-L 330 Biology of the Cell
- 3 BIO-M 200 Microorganisms in Nature and Disease**
- 1 BIO-M 215 Microorganism Laboratory**
- 4 BIO-L 451 Integrative Human Physiology

Additional Elective choices:
- 5 CHEM-C 103 Introduction to Chemical Principles N&M
- 5 CHEM-C 118 Principles of Chemistry & Biochem II or CHEM-N 330 Intermediate Inorganic Chem (P:C342, C343)
- 3 CHEM-C 341 Organic Chemistry I
- 3 CHEM-C 342 Organic Chemistry II (P: CHEM-C 341)
- 3 CHEM-C 343 Organic Chemistry Laboratory I
- 3 CHEM-C 483 Biological Chemistry (P: C 342)
- 3 CHEM-R 340 Survey of Organic Chemistry
- 2 CLAS-C 209 Medical Terms from Greek & Latin
- 4 CSCI-A 202 Introduction to Programming II N&M
- 4 CSCI-C 212 Introduction to Software Systems
- 3 CSCI-C 241 Discrete Structures for Comp Science
- 4 CSCI-C 311 Programming Languages
- 4 CSCI-C 335 Computer Structures
- 4 CSCI-C 343 Data Structures
- 3 HPSC-X 200 Introduction to Scientific Reasoning N&M
- 3 MATH-M 301 Applied Linear Algebra and Appl or MATH-M 303 Linear Algebra for Undergraduates
- 4 MATH-M 311 Calculus III
- 3 MATH-M 312 Calculus IV
- 3 MSCI-M 131 Disease and the Human Body
- 3 MSCI-M 216 Medical Science of Psychoactive Drugs N&M
- 5 PHIL-P 105 Critical Thinking A&H
- 3 PHIL-P 140 Introduction to Ethics A&H
- 3 PHIL-P 150 Elementary Logic A&H
- 3 PHIL-P 250 Introduction to Symbolic Logic N&M
- 3 PHIL-P 251 Intermediate Symbolic Logic N&M
- 5 PHYS-P 202 General Physics 2 N&M
- 3 PSY-P ___ Any Psy courses other than P 101 and K 300

With advisor approval, other science courses may be counted as Exercise Science Electives.

Students must present evidence of current CPR certification to the recorder’s office in SPH Room 123 at the time the student applies for graduation. The document submitted must display a date which indicates that the student is currently certified in CPR. Certification in CPR is only acceptable from the American Red Cross, the American Heart Association, or the National Safety Council. Note that an elective course choice, SPH-H 160 First Aid & Emergency Care includes CPR certification.

GENERAL EDUCATION 20-39
MAJOR 84-93

COMPLETE A MINIMUM OF 120 CREDITS FOR THIS DEGREE.

* Generally fall only   ** Generally spring only
The guide below shows how you can sequence courses to allow for completion of the degree in a four-year period. Students must complete minimum of 120 credit hours, this averages to 15 credit hours per semester. Students are admitted to the School of Public Health—Department of Kinesiology after completing 26 or more credit hours with a 2.5 cumulative IU GPA. Once admitted students are required meet with an Exercise Science advisor at least once a semester. Pre-professional students need to plan coursework carefully and should see their departmental advisors and Health Professions and Pre-Law advisors on a regular basis.

Course Sequencing Guide

<table>
<thead>
<tr>
<th>First year</th>
<th>30 credit hours (or complete a total of 30 credit hours by the beginning of the third semester)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester 1</strong></td>
<td><strong>Semester 2</strong></td>
</tr>
<tr>
<td>CHEM prep or A&amp;H and/or WLC</td>
<td>CHEM-C 117/127 or CHEM-C 101-121#</td>
</tr>
<tr>
<td>ENG-W 131 or W 170*</td>
<td>COL-P 155</td>
</tr>
<tr>
<td>MATH-M 118 or M 119</td>
<td>SPH-I 119</td>
</tr>
<tr>
<td>PSY-P 101</td>
<td>Exercise Sci. Elect.@</td>
</tr>
<tr>
<td>SPH-K 150</td>
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</tr>
</tbody>
</table>

The Exercise Science degree is designed to help prepare you for graduate/professional school. Take time to research graduate programs and prerequisite coursework, often you’ll need to plan to take additional science courses and the sequencing of these courses is important.

<table>
<thead>
<tr>
<th>Second year</th>
<th>30 credit hours (or complete a total of 60 credit hours by the beginning of the fifth semester)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester 3</strong></td>
<td><strong>Semester 4</strong></td>
</tr>
<tr>
<td>CHEM-C 118 or Exercise Sci. Elect.@</td>
<td>ANAT-A 215 or SPH-K 205♦</td>
</tr>
<tr>
<td>or Exercise Sci. Elect.@</td>
<td>SPH-N 231</td>
</tr>
<tr>
<td>SPH-K 200 or equivalent A&amp;H and/or WLC</td>
<td>Exercise Sci. Elect.@</td>
</tr>
<tr>
<td>Exercise Sci. Elect.@</td>
<td>SPH-N 231</td>
</tr>
<tr>
<td>Free Elective</td>
<td>Exercise Sci. Elect.@</td>
</tr>
<tr>
<td></td>
<td>SPH and/or WLC</td>
</tr>
</tbody>
</table>

Third year 30 credit hours (or complete a total of 90 credit hours by the beginning of the seventh semester)

<table>
<thead>
<tr>
<th>Fourth year</th>
<th>30 credit hours (or complete a minimum of 120 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester 5</strong></td>
<td><strong>Semester 6</strong></td>
</tr>
<tr>
<td>PHL-P 215</td>
<td>PHL-P 215</td>
</tr>
<tr>
<td>Statistics@</td>
<td>Writing Course@</td>
</tr>
<tr>
<td>or Exercise Sci. Elect.@</td>
<td>Writing Course@</td>
</tr>
</tbody>
</table>

| * Grade of C or higher is required |
| # CHEM-C 117/127 is recommended for pre-professional students. |
| @ See TAB sheet for options |
| ♦ Pre-professional students take ANAT-A 215 (5 cr.) rather than SPH-K 205 (3 cr.). |
| ^^^ STAT-S 303 is recommended for Pre-Med students. |

Many graduate/professional school application are due during the Fall semester, remember to keep track of these deadlines. All students must provide evidence of current CPR certification when applying for graduation.

Visit: [http://www.publichealth.indiana.edu/program-areas/exercise-science/index.shtml](http://www.publichealth.indiana.edu/program-areas/exercise-science/index.shtml)
Exercise Science

Description of Program

The major in exercise science has a science-based curriculum that provides a broad background for students planning to further their education at the graduate level. The program emphasizes these primary disciplines: anatomy, biomechanics, exercise physiology, sport psychology, and motor learning/control. Students complete a rigorous curriculum in major course work as well as in areas such as anatomy, chemistry, mathematics, physics, physiology, and psychology. The major provides an excellent preparation for graduate work in adapted physical education, ergonomics, biomechanics, exercise physiology, motor control, sport psychology, and sports medicine. In addition, students with this major prepare for admission to graduate programs in physical and occupational therapy, medicine, physician assistant, dentistry, podiatry, optometry, chiropractic, osteopathy, and other allied health fields.

Special Opportunities

Majors have the opportunity to work with faculty research specialists in areas specific to kinesiology. Students planning to pursue graduate kinesiology programs are encouraged to gain laboratory research experience offered by departmental faculty. Internship opportunities outside of the department in a wide variety of medical and allied health areas are coordinated by the Kinesiology Career office. Throughout the year, the very active Kinesiology Club invites speakers from a number of health profession areas to share their expertise and professional perspective with majors. Through these experiences, students learn firsthand about the graduate programs/professions of interest to them. Expert and in-depth advising services help students tailor their major program to meet their eventual goals.

Careers

Many students with this major are preparing to enter graduate programs in their career area of interest, most often a health profession, such as: physical therapist, occupational therapist, physician’s assistant, medical doctor, dentist, optometrist, or other allied health profession. Other students go on to pursue graduate degrees in exercise physiology, biomechanics, motor learning and control, and ergonomics. Others may seek positions in fitness instruction, personal training, coaching, cardiac rehabilitation, health screening and education, pharmaceutical sales, or sales and marketing of medical, fitness, or sports-related equipment. This major can be combined with a minor or professional certification to tailor the student’s background to a specific area, such as health care, coaching, fitness, or business.