KINESIOLOGY, B.S. (HEALTH AND HUMAN DEVELOPMENT)

Begin Campus: Any Penn State Campus
End Campus: University Park

Degree Requirements
For the Bachelor of Science degree in Kinesiology a minimum of 120 credits is required for the Applied Exercise Health option, a minimum of 120 credits is required for the Movement Science option, and a minimum of 122 credits is required for the Exercise Science option:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
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<tbody>
<tr>
<td>General Education</td>
<td>45</td>
</tr>
<tr>
<td>Electives</td>
<td>0-2</td>
</tr>
<tr>
<td>Requirements for the Major</td>
<td>100-108</td>
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</tbody>
</table>

18-27 of the 45 credits for General Education are included in the Requirements for the Major. This includes: Applied Exercise and Health Option - 9 credits GN, 6 credits GQ, 3 credits of GH, 6 credits of GS and 3 credits of GHW; Movement Science Option - 9 credits of GN courses, 6 credits of GQ courses, 3 credits of GS courses, 3 credits of GHW courses; Exercise Science Option - 9 credits of GN courses, 6 credits of GQ courses, 3 credits of GHW courses.

Per Senate Policy 83.80.5, the college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. KINES requires students to complete 24 credits for the major through courses taken at University Park. Courses taken at other Penn State campuses may not be counted toward this 24 credit minimum. For more information, check the Recommended Academic Plan for this major.

General Education
Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all baccalaureate students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (https://bulletins.psu.edu/undergraduate/general-education/baccalaureate-degree-general-education-program/). For more information, check the Recommended Academic Plan for your intended program.

The keystone symbol appears next to the title of any course that is designated as a General Education course. Program requirements may also satisfy General Education requirements and vary for each program.

Foundations (grade of C or better is required.)
- Quantification (GQ): 6 credits
- Writing and Speaking (GWS): 9 credits

Knowledge Domains
- Arts (GA): 6 credits
- Health and Wellness (GHW): 3 credits
- Humanities (GH): 6 credits

Integrative Studies (may also complete a Knowledge Domain requirement)
- Inter-Domain or Approved Linked Courses: 6 credits

University Degree Requirements
First Year Engagement
All students enrolled in a college or the Division of Undergraduate Studies at University Park, and the World Campus are required to take 1 to 3 credits of the First-Year Seminar, as specified by their college First-Year Engagement Plan.

Other Penn State colleges and campuses may require the First-Year Seminar; colleges and campuses that do not require a First-Year Seminar provide students with a first-year engagement experience.

Writing Across the Curriculum
3 credits required from the college of graduation and likely prescribed as part of major requirements.

Total Minimum Credits
A minimum of 120 degree credits must be earned for a baccalaureate degree. The requirements for some programs may exceed 120 credits. Students should consult with their college or department adviser for information on specific credit requirements.

Quality of Work
Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

Limitations on Source and Time for Credit Acquisition
The college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. Credit used toward degree programs may need to be earned from a particular source or within time constraints (see Senate Policy 83-80 (http://senate.psu.edu/policies-and-rules-for-undergraduate-users/82-00-and-83-00-degree-requirements/#83-80)). For more information, check the Suggested Academic Plan for your intended program.

Requirements for the Major
A grade of C or better is required for all courses in the major. To graduate, a student enrolled in the major must earn at least a C grade in each course designated by the major as a C-required course, as specified by Senate Policy 82-44 (http://senate.psu.edu/policies-and-rules-for-undergraduate-users/82-00-and-83-00-degree-requirements/#82-44).

Common Requirements for the Major (All Options)

<table>
<thead>
<tr>
<th>Prescribed Courses</th>
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<tbody>
<tr>
<td>Code</td>
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</table>

Prescribed Courses: Require a grade of C or better
BIOL 161 Human Anatomy and Physiology I - Lecture 3
BIOL 163 Human Anatomy and Physiology II - Lecture 3
KINES 100 The Cultural and Behavioral Foundations of Kinesiology 3
KINES 101 The Biophysical Foundations of Kinesiology 3
KINES 202 Functional Human Anatomy 3
KINES 295B Kines Careers & Observation 1
KINES 321 Psychology of Movement Behavior 3
KINES 341 The Historical, Cultural, and Social Dynamics of Sport 3
KINES 345 Meaning, Ethics, and Movement 3
KINES 350 Exercise Physiology 3
KINES 360 The Neurobiology of Motor Control and Development 3
KINES 384 Biomechanics 3
NUTR 251 Introductory Principles of Nutrition 3

Additional Courses

Additional Courses: Require a grade of C or better
Select 3-4 credits from the following: 3-4
SCM 200 Introduction to Statistics for Business
STAT 200 Elementary Statistics
STAT 250 Introduction to Biostatistics

Requirements for the Option

Requirements for the Option: Require a grade of C or better
Select an option 55-67

Requirements for the Option

Applied Exercise and Health Option (60-67 credits)
Available at the following campuses: University Park

Code Title Credits

Prescribed Courses: Require a grade of C or better
CI 280 Introduction to Teaching English Language Learners 3
EDPSY 10 Individual Differences and Education 3
KINES 200 Muscle Training: Physiology, Programs, Techniques 3
KINES 201 Cardiorespiratory Training for Health and Performance 3
KINES 267 Fundamental Movement Skills Instruction 1
KINES 367 Games and Sports Instruction Across the Lifespan 1
KINES 368 Individual Fitness and Wellness 2
KINES 401 Applied Group Fitness Exercise Prescription and Program Design 3
KINES 456 Physical Fitness Appraisal 4
PSYCH 100 Introductory Psychology 3

Additional Courses

Additional Courses: Require a grade of C or better
MATH 26 or Satisfactory performance on the MATH placement examination – i.e., placement beyond the level of MATH 26 3
Select 3-5 credits from: 3-5
CHEM 101 Introductory Chemistry
CHEM 106 Introductory and General Chemistry
CHEM 110 Chemical Principles I

CHEM 130 Introduction to General, Organic, and Biochemistry
Select 3-4 credits from: 3-4
PHYS 150 Technical Physics I
PHYS 250 Introductory Physics I

Supporting Courses and Related Areas

Supporting Courses and Related Areas: Require a grade of C or better
Take the following required courses with selected emphasis area: 25-29

HPE Certification Emphasis:
KINES 366 The Process of Teaching Physical Education
KINES 395A Ldrship Pract:Tchers
KINES 400 Adapted Physical Education
KINES 464 Physical Education Programming and Practicum
KINES 468W Health Instruction in the School–Content and Method
KINES 495A Practicum in Student Teaching
SPLED 400 Inclusive Special Ed Foundations: Legal, Characteristics, Collaboration, Assessment, and Management

ACSM/NSCA Certification Emphasis:
KINES 395B Leadership Practicum: KINES
KINES 421 Exercise Psychology
KINES 425W Physical Activity in Diverse Populations or KINES 48: Scientific Basis of Exercise for Older Adults or KINES 49: Programming for Business and Agencies or KINES 49: Principles and Ethics of Coaching
KINES 457 Exercise Prescription and Case Studies
KINES 485 Science and Practice of Training Athletes
KINES 495B Field and/or Research Practicum in Kinesiology
KINES 495E Advanced Professional Development in Kinesiology

Select 3 credits from approved 400-level KINES courses:
KINES 410 Physical Growth and Motor Development
KINES 411 Introduction to Musculoskeletal Injury and Rehabilitation
KINES 422 Physical Activity Interventions
KINES 424 Women and Sport
KINES 425W Physical Activity in Diverse Populations
KINES 455 Physiological Basis of Exercise as Medicine
KINES 458 Introduction to Electrocardiogram Interpretation
KINES 459 Community Engagement and Outreach in Kinesiology
KINES 460 Movement Disorders
KINES 465 Neurobiology of Sensorimotor Stroke Rehabilitation
KINES 467 The Science of Performance Enhancement
KINES 481W Scientific Basis of Exercise for Older Adults
KINES 483 Motor Patterns of Children
KINES 493 Principles and Ethics of Coaching

Movement Science Option (56-58 credits)
Available at the following campuses: Altoona, University Park

CHEM 101 Introductory Chemistry
CHEM 106 Introductory and General Chemistry
CHEM 110 Chemical Principles I

Select 3-4 credits from: 3-4
PHYS 150 Technical Physics I
PHYS 250 Introductory Physics I

Supporting Courses and Related Areas

Supporting Courses and Related Areas: Require a grade of C or better
Take the following required courses with selected emphasis area: 25-29
Kinesiology, B.S. (Health and Human Development)

**Prescribed Courses: Require a grade of C or better**

- BIOL 110 Biology: Basic Concepts and Biodiversity 4
- BIOL 162 Human Anatomy and Physiology I - Laboratory 1
- BIOL 164 Human Anatomy and Physiology II - Laboratory 1
- CHEM 111 Experimental Chemistry I 1
- CHEM 112 Chemical Principles II 3
- CHEM 113 Experimental Chemistry II 1
- KINES 395B Leadership Practicum: KINES 1
- KINES 495B Field and/or Research Practicum in Kinesiology 6
- PHYS 250 Introductory Physics I 4
- PHYS 251 Introductory Physics II 4
- PSYCH 100 Introductory Psychology 3

**Additional Courses: Require a grade of C or better**

- CHEM 106 Introductory and General Chemistry 3-5
- or CHEM 110 Chemical Principles I 3
- MATH 26 or Satisfactory performance on the MATH placement examination – i.e., placement beyond the level of MATH 26 3

Select an additional 12 credits from approved 400-level KINES courses:

- KINES 400 Adapted Physical Education 1
- KINES 410 Physical Growth and Motor Development 1
- KINES 411 Introduction to Musculoskeletal Injury and Rehabilitation 1
- KINES 419 Disability Sport and Recreation 1
- KINES 420 Psychosocial Dimensions of Physical Activity 1
- KINES 421 Exercise Psychology 1
- KINES 422 Physical Activity Interventions 1
- KINES 423 Psychology of Sports Injuries 1
- KINES 424 Women and Sport 1
- KINES 425W Physical Activity in Diverse Populations 1
- KINES 426 Physical Activity and Public Health 1
- KINES 427 Developmental Sport & Exercise Psychology 1
- KINES 428 Motivation and Emotion in Movement 1
- KINES 429 Psychology of Sport Performance 1
- KINES 430W Groups in Physical Activity 1
- KINES 439W Ethics in Sport and Sport Management 1
- KINES 440 Philosophy and Sport 1
- KINES 441 History of Sport in American Society 1
- KINES 442 Sport in Ancient Greece and Rome 1
- KINES 445 Alcohol and Drug Education 1
- KINES 446 History of Sport in the Modern World 1
- KINES 447W Representing Sport in Popular Film 1
- KINES 452 Applied Cardiovascular Physiology 1
- KINES 453 Environmental Physiology 1
- KINES 454 Women's Health and Exercise Across the Lifespan 1
- KINES 455 Physiological Basis of Exercise as Medicine 1
- KINES 456 Physical Fitness Appraisal 1
- KINES 457 Exercise Prescription and Case Studies 1
- KINES 458 Introduction to Electrocardiogram Interpretation 1
- KINES 459 Community Engagement and Outreach in Kinesiology 1
- KINES 460 Movement Disorders 1
- KINES 463 Acquisition of Motor Skills 1
- KINES 465 Neurobiology of Sensorimotor Stroke Rehabilitation 1
- KINES 467 The Science of Performance Enhancement 1
- KINES 471 MOTOR CONTROL 1
- KINES 481W Scientific Basis of Exercise for Older Adults 1
- KINES 483 Motor Patterns of Children 1
- KINES 484 Advanced Biomechanics 1
- KINES 485 Science and Practice of Training Athletes 1
- KINES 488 Mechanics of Locomotion 1
- KINES 492W Programming for Business and Agencies 1
- KINES 493 Principles and Ethics of Coaching 1
- KINES 493W Principles and Ethics of Coaching 1
- KINES 495E Advanced Professional Development in Kinesiology 1
- KINES 499 Foreign Studies 1

**Supporting Courses and Related Areas: Require a grade of C or better**

Select 9 credits in University-wide offerings from an approved list, in consultation with adviser

**Exercise Science Option (55-58 credits)**

- Available at the following campuses: Altoona, Berks, Harrisburg

**Prescribed Courses: Require a grade of C or better**

- KINES 200 Muscle Training: Physiology, Programs, Techniques 3
- KINES 201 Cardiorespiratory Training for Health and Performance 3
- KINES 260 Research Skills in Kinesiology 3
- KINES 356 Activity and Disease 3
- KINES 358 Ergogenic Aids 1
- KINES 420 Psychosocial Dimensions of Physical Activity 3
- KINES 456 Physical Fitness Appraisal 4
- KINES 457 Exercise Prescription and Case Studies 3
- KINES 495C Exercise Science Practicum 4

**Additional Courses: Require a grade of C or better**

Select 3 credits from KINES 1 to KINES 99

- MATH 22 or Satisfactory performance on the MATH placement examination – i.e., placement beyond the level of MATH 22 3
- PHYS 150 Technical Physics I 3
- or PHYS 250 Introductory Physics I 4

Select one of the following:

- CHEM 101 Introductory Chemistry 3-5
- CHEM 106 Introductory and General Chemistry 3
- CHEM 110 Chemical Principles I & CHEM 111 and Experimental Chemistry I 3
- CHEM 130 Introduction to General, Organic, and Biochemistry 3
**Supporting Courses and Related Areas: Require a grade of C or better**

Select 16 credits from one of the following emphasis area from an approved list, in consultation with adviser. At least 3 credits must be at the 400 level.

<table>
<thead>
<tr>
<th>Emphasis</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>Business Emphasis</td>
<td>16</td>
</tr>
<tr>
<td>Science Emphasis</td>
<td></td>
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</tbody>
</table>