



# Exercise Science, BS

**Program:** Physical Education and Sport, Exercise Science

**Department:** [Kinesiology, Health, & Sport Science](#)

**College:** [Health and Human Services](#)

**Website:** [www.iup.edu/kines/undergrad/physical-education-sport-exercise-science-bs](http://www.iup.edu/kines/undergrad/physical-education-sport-exercise-science-bs)

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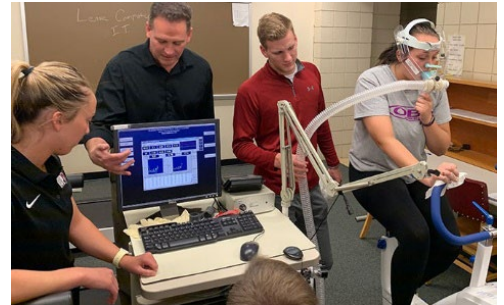
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**Accreditation:** [CAAHEP](#) - Founding Accredited Exercise Science Program



**Program Description:** IUP's Exercise Science program is accredited by the Committee on Accreditation for the Exercise Sciences as part of the [Commission on Accreditation of Allied Health Education Programs](#). This program provides students with the knowledge, skills, and abilities to seek employment in private and commercial fitness clubs, medical fitness facilities, sport-specific and conditioning facilities, and clinical settings such as cardiac pulmonary rehabilitation programs. This program has an academic core, specialty classes in exercise assessment, programming, and prescription, as well as opportunities for work-site experience.

**Career Opportunities:** Students in Exercise Science can expect, according to the US Bureau of Labor Statistics through 2022:

- Exercise Physiologists in Cardiac Rehabilitation -- 13 percent, faster than average
- Physical & Occupational Therapists -- 28 percent, much faster than average
- Physician's Assistants -- 37 percent, much faster than average
- Health coaches -- 16 percent much faster than average
- Strength & Conditioning coaches -- 13 percent, faster than average
- Personal/Aerobic trainers -- 10 percent, faster than average

**Student Organizations:** We encourage all Exercise Science students to become members of the IUP Exercise Science Club. Student members regularly participate in a variety of service projects for the IUP community as well as fundraisers including the Race to AnyPlace. Educational opportunities include career-oriented guest speakers and attendance at the annual Mid-Atlantic Regional meeting of the American College of Sports Medicine.

**Experiential Learning:** Students in Exercise Science enjoy significant opportunities with over 300 internship sites in 11 states across the US. Students can use their internships to secure placement in graduate programs in PT, PA, OT, nursing, or medicine as well as explore a vast array of employment possibilities within Exercise Science. Recent internships included the UPMC and AHN multiple network locations, George Washington University strength & conditioning, UPMC Mario Lemieux Sports Complex, Excelsa Healthcare system, Westinghouse, 1000 Hills Fitness, The Children's Institute, Drayer Physical Therapy, Durkin Sports Performance, Hoff Chiropractic, Penn State Fritz Center, Sparta Science, Robert Morris University, St. Luke's Hospital, Geisinger Health System, and Pittsburgh VA Medical Center.



# Exercise Science, BS

## Four-year Course Sequencing

**Department:** Kinesiology, Health, & Sport Science

**College:** Health and Human Services

**Degree:** Bachelor of Science

**Calendar Year:** 2020-2021

**Website:** [www.iup.edu/kines/undergrad/physical-education-sport-exercise-science-bs](http://www.iup.edu/kines/undergrad/physical-education-sport-exercise-science-bs)

**Four-year Sequencing:** The below four-year plan outlines the courses required in each semester of your baccalaureate degree. The goal is for you to visualize the years to come and understand what courses or other requirements are needed in order to graduate in four years. This also allows you to plan with your advisor for important engagement activities that support your higher education goals, such as planning for an internship, research, and/or study abroad. The summer and winter terms are also an opportunity to take courses or accomplish other goals.

Freshman Year: Fall			Freshman Year: Spring		
Course	Course Description	Credits	Course	Course Description	Credits
BIOL 104	Human Biology w/lab	4	BIOL 106/116	Human Genetics & Health w/lab	4
ENGL 101	College Writing	3	PSYC 101	General Psychology	3
WELLNESS 143	Dimensions of Wellness	3	KHSS 175	Prevention & Care	2
KHSS 146	Foundations of Exercise Science	1	KHSS 221	Human Structure and Function	3/4
KHSS 209	Motor Behavior	3	(or) BIOL 150	Human Anatomy w/lab	
			FINE ARTS	LS Req – Fine Arts	3
<b>Total Fall</b>		<b>14</b>	<b>Total Spring</b>		<b>15/16</b>

Sophomore Year: Fall			Sophomore Year: Spring		
Course	Course Description	Credits	Course	Course Description	Credits
ENGL 121	Humanities Literature	3	ENGL 202	Research Writing	3
FDNT 145	Foundations of Nutrition	3	KHSS 286	Personal Training Practicum	3
KHSS 285	Grp. /Ind. Exercise Leadership	3	KHSS 287	Aquatic Fitness Instruction	1
KHSS 343	Physiology of Exercise	3	KHSS 315	Biomechanics	3
KHSS 347	Physiology of Exercise Lab	1	MATH 217	Probability & Statistics	3
SOC SCIENCE	LS Req- Social Science	3	GLOBAL/MULTI	LS Req- Global/Multicultural	3
<b>Total Fall</b>		<b>16</b>	<b>Total Spring</b>		<b>16</b>

Junior Year: Fall			Junior Year: Spring		
Course	Course Description	Credits	Course	Course Description	Credits
KHSS 375	Phys. Basis of Strength Training	3	KHSS 344	Adaptive Physical Act. & Sport	3
KHSS 411	Physical Fitness Appraisal	3	KHSS 410	Exercise Prescription	3
KHSS 413	Physical Activity & Aging/Lifespan	3	Free Elective	Free Elective	3
Controlled Elect	Controlled Elective	2/3	Free Elective	Free Elective	3
HIST	LS Req- 196/197/198	3	PHIL/REL	LS Req - Phil or Rel Studies	3
<b>Total Fall</b>		<b>14/15</b>	<b>Total Spring</b>		<b>15</b>

Senior Year: Fall			Senior Year: Spring		
Course	Course Description	Credits	Course	Course Description	Credits
BIOL 240	Human Physiology	4	KHSS 492	Senior Capstone Ex Science	3
KHSS 414	Exercise Electrocardiography	3	KHSS 493	Exercise Science Internship	6
(or) KHSS 416	Funct. Training in Strength and Cond.		Free Elective	Free Elective	4
KHSS 415	Lifestyle Behavioral Modification	3			
Free Elective	Free Elective	3			
Free Elective	Free Elective	3			
<b>Total Fall</b>		<b>16</b>	<b>Total Spring</b>		<b>13</b>



# Exercise Science, BS

## Summary of Requirements

**Department:** Kinesiology, Health, & Sport Science

**College:** Health and Human Services

**Degree:** Bachelor of Science

**Calendar Year:** 2020-2021

**Website:** <https://www.iup.edu/kines/undergrad/physical-education-sport-exercise-science-bs/>

**Summary of Requirements:** Exercise Science is an interdisciplinary profession for students interested in fitness, sport, exercise, rehabilitation, and prevention. Students may select from a variety of careers, working with individuals from the very young to older individuals. Students attain knowledge, skills, and abilities to assess, develop, apply, and modify exercise and rehabilitation programs for those who are apparently healthy or have a variety of chronic diseases and disabilities. Employment in this field is generally seen as above average compared to other disciplines and includes opportunities in group & personal training, health coaching, corporate wellness, strength & conditioning, cardiopulmonary rehabilitation and a variety of allied health professions such as PT, OT, PA, nursing, chiropractic and medicine.

### Liberal Studies (44 credits)

Course	Credits	Grade
<b>Learning Skills: English Composition (6 credits)</b>		
ENGL 101 Composition	3	
ENGL 202 Composition II	3	

<b>Learning Skills: Mathematics (3 credits)</b>		
MATH 217 Probability and Statistics	3	

<b>Humanities (9 credits)</b>		
HIST 196 or 197 or 198	3	
ENGL 121 Humanities Literature	3	
PHIL/RLST Select one from the course list	3	

<b>Fine Arts (3 credits)</b>		
Select one from the list	3	

<b>Natural Sciences (8 credits)</b>		
BIOL 104 Human Biology w/lab	4	
BIOL 106/116 Human Genetics & Health w/lab	4	

<b>Social Sciences (9 credits)</b>		
PSYC 101 General Psychology	3	
Select one from the list	3	
Select one from the List (Global/Multicultural)	3	

<b>Dimensions of Wellness (3 credits)</b>		
Select from the list of 143 courses	3	

<b>Liberal Studies Elective (3 credits)</b>		
FDNT 145 Introduction to Nutrition	3	

- [Global/Multicultural](#), 3 credits required but if you complete a Global Multicultural in the Social Sciences category, this is completed.
- Writing Intensive, 6 credits required, but programs have these courses built into the coursework, so talk with your advisor.
- [Review Degree Works](#) for your progress toward the degree.

### Exercise Science Core Requirements (57-58 credits)

Course	Credits	Grade
BIOL 240 Human Physiology	4	
KHSS 146 Foundations of Ex. Sci.	1	
KHSS 175 Prevention and Care of Injuries	2	
KHSS 209 Motor Behavior	3	
KHSS 221 Human Struct. And Function	3/4	
(or) BIOL 150 Human Anatomy		
KHSS 285 Group/Ind. Ex. Leadership	3	
KHSS 286 Personal Training Practicum	3	
KHSS 287 Aquatic Fitness Instruction	1	
KHSS 315 Biomechanics	3	
KHSS 343 Physiology of Exercise	3	
KHSS 347 Physiology of Exercise Lab	1	
KHSS 344 Adapted Physical Activity and Sport	3	
KHSS 375 Physiological Basis of Strength Train/Condit	3	
KHSS 410 Exercise Prescription	3	
KHSS 411 Physical Fitness Appraisal	3	
KHSS 413 Physical Activity and Aging	3	
KHSS 415 Lifestyle Behavior Management	3	
KHSS 414 Exercise Electrocardiography	3	
(or) KHSS 416 Funct. Training in Strength and Cond.		
KHSS 492 Senior Capstone in Exercise Science	3	
KHSS 493 Internship in Exercise Science	6	

<b>Controlled Electives (choose one, 2-3 credits)</b>		
BIOL 200 Medical Terminology	2	
KHSS 292 Introduction to Sports Management	3	
KHSS 373 Bus. Admin. In the Fitness Industry	3	
KHSS 436 Corrective Ex. For the Health & Fitness Prac.	3	
KHSS 493 Internship (additional)	3	

<b>Total Credits (120 credits)</b>	
Exercise Science	57-58
Controlled Electives	2-3
Liberal Studies	44
Electives	16

**Additional Information:** Through advisement students may complete courses required for graduate programs such as physical & occupational therapy, physician's assistant, nursing, medicine as well as graduate programs in exercise physiology. Other course may be substituted for additional internship credits in the Spring of senior year in consultation with advisor.