

BACHELOR OF SCIENCE IN APPLIED SCIENCE IN EXERCISE SCIENCE

The Department of Human Performance and Exercise Science offers a Bachelor of Science in Applied Science degree with a major in exercise science. This program prepares students for certification through the American College of Sports Medicine (ACSM) and the National Strength & Conditioning Association (NSCA) as health/fitness specialists.

As such, graduates will be able to design safe and effective exercise prescriptions and conduct individual exercise programs, fitness testing, and health education for low- to moderate-risk individuals, individuals with controlled diseases, and individuals in special populations (e.g. pregnancy, hypertension, diabetes mellitus).

Graduates are employed in a wide variety of settings that include:

- medically based wellness programs
- corporate wellness programs
- strength and conditioning
- clinical rehabilitation programs such as cardiac rehabilitation
- public and private fitness clubs

In addition, the program serves as a strong foundation for students wishing to pursue advanced degrees in the field of exercise science or enter professional schools such as:

- Athletic Training
- Physical Therapy
- Occupational Therapy
- Physician Assistant
- Medical school
- Graduate degree in Exercise Science/Physiology

Learning Outcomes

The student learning outcomes for the BSAS in exercise science are as follows:

- Students will accurately perform fitness evaluations for both healthy and clinical populations.
- Students will demonstrate the ability to teach fitness skills and lead group exercise.
- Students will demonstrate the ability to develop an exercise prescription tailored to healthy and clinical populations.
- Students will display professional knowledge, skills, and abilities during their internship.

Admission

Application forms and other information for formal admittance to the Department of Human Performance and Exercise Science may be obtained in the department office, Room 307, Beeghly Center. This program can be completed in eight semesters if students average 16 hours per semester.

For individual semester advisement, including general education, minor, and additional requirements, see assigned departmental advisor.

For more information, visit [Exercise Science - B.S. in Applied Science](#).

The following are HPES courses required in the major for this degree:

COURSE	TITLE	S.H.
General Education Requirements		
Core Competencies		9
ENGL 1550	Writing 1	
ENGL 1551	Writing 2	
CMST 1545	Communication Foundations	
Mathematics Requirement		5-7
MATH 1513	Algebra and Transcendental Function	
OR		
MATH 1510 & MATH 1511	College Algebra and Trigonometry	
Arts and Humanities		6
Natural Sciences		8
BIOL 1551 & 1551L	Anatomy and Physiology 1 and Anatomy 1 Laboratory for Health Professions	
BIOL 1552 & 1552L	Anatomy and Physiology 2 and Anatomy and Physiology 2 Laboratory	
Social Science		6
PSYC 1560	General Psychology	
Social and Personal Awareness		6
FNUT 1551	Normal Nutrition	
General Education Elective		
CHEM 1515	General Chemistry 1	4
CHEM 1515L	General Chemistry 1 Laboratory	0
Major Requirements		
HPES 1559	Aerobic Conditioning Activities	2
HPES 1560	Resistance Training	1
HPES 1500 Activity Elective		1
HPES 1595	Introduction to Human Performance and Exercise Science (FYE course)	2
HPES 2605	Sports First Aid and Injury Prevention	3
HPES 2625	Pedagogical Aspects of Exercise Science	3
HPES 3700	Exercise Testing and Prescription 1	4
HPES 3705	Statistics and Research Design in Exercise Science	3
HPES 3710 & 3710L	Physiology of Exercise and Physiology of Exercise Laboratory	5
HPES 3720 & 3720L	Kinesiology and Applied Anatomy and Kinesiology and Applied Anatomy Laboratory	4
HPES 3730	Exercise Testing and Prescription 2	4
HPES 3760	Strength Training and Conditioning	3
HPES 4880	Internship	8
HPES 4805	Administration of Exercise Programs	4
HPES 4810	Exercise Testing and Prescription 3	5
HPES 4875	Exercise Counseling and Behavioral Strategies	4
Required support course; credit hours do not count as part of the major:		
PHYS 1501	Fundamentals of Physics 1	4
PHYS 1501L	Fundamentals of Physics Laboratory 1	1

Total Semester Hours 105-107

Course	Title	S.H.
Year 1		
Fall		
HPES 1559	Aerobic Conditioning Activities	2
MATH 1513	Algebra and Transcendental Function	5
ENGL 1550	Writing 1	3

BIOL 1551 & 1551L	Anatomy and Physiology 1 and Anatomy 1 Laboratory for Health Professions	4	Elective	3
			Elective	1
Semester Hours			Semester Hours	16
			Total Semester Hours	121
Spring				
HPES 1560	Resistance Training	1		
HPES 1595	Introduction to Human Performance and Exercise Science	2		
ENGL 1551	Writing 2	3		
Arts & Humanities Elective		3		
BIOL 1552 & 1552L	Anatomy and Physiology 2 and Anatomy and Physiology 2 Laboratory	4		
CMST 1545	Communication Foundations	3		
Semester Hours				16
Year 2				
Fall				
HPES 2625	Pedagogical Aspects of Exercise Science	3		
HPES 2605	Sports First Aid and Injury Prevention	3		
CHEM 1515 & 1515L	General Chemistry 1 and General Chemistry 1 Laboratory	4		
PSYC 1560	General Psychology	3		
Semester Hours				13
Spring				
HPES Activity Elective		1		
HPES 3700	Exercise Testing and Prescription 1	4		
HPES 3705	Statistics and Research Design in Exercise Science	3		
FNUT 1551	Normal Nutrition	3		
PHYS 1501 & 1501L	Fundamentals of Physics 1 and Fundamentals of Physics Laboratory 1	5		
Semester Hours				16
Year 3				
Fall				
HPES 3710 & 3710L	Physiology of Exercise and Physiology of Exercise Laboratory	5		
HPES 3720 & 3720L	Kinesiology and Applied Anatomy and Kinesiology and Applied Anatomy Laboratory	4		
HPES 4805	Administration of Exercise Programs	4		
Elective		3		
Semester Hours				16
Spring				
HPES 3730	Exercise Testing and Prescription 2	4		
HPES 3760	Strength Training and Conditioning	3		
Arts & Humanities Elective		3		
Social Science Elective		3		
Social & Personal Awareness Elective		3		
Semester Hours				16
Year 4				
Fall				
HPES 4810	Exercise Testing and Prescription 3	5		
Elective		3		
Elective		3		
Elective		3		
Semester Hours				14
Spring				
HPES 4880	Internship	8		
HPES 4875	Exercise Counseling and Behavioral Strategies	4		