Hours

# **Bachelor of Science in Exercise Science**

The Exercise Science program at the University of Kansas prepares students for a variety of career paths after graduation, including admission to most physical therapy schools. Graduates may also work in agencies that dispense health- and fitness-related programs, such as commercial or private health and fitness centers, hospital exercise and cardiac rehabilitation programs, and corporate fitness centers or apply for graduate study in exercise physiology. It also serves as a foundation for graduate-level work in health sciences, such as nursing, chiropractic, medicine (physician assistant, medical doctor, etc.), physical/occupational therapy or dietetics. The program combines rigorous coursework in the sciences with exercise science classes such as biomechanics, exercise biochemistry and neuromuscular exercise physiology.

Incoming Freshman Students: Students can be admitted into the Sport Management or Exercise Science program as freshmen if they meet KU's assured admission standards and declare Sport Management or Exercise Science as their major.

Incoming Transfer Students: Students can be admitted into Sport Management or Exercise Science as transfer students if they are admitted to KU, declare Sport Management or Exercise Science as their major, and meet the following criteria:

• A KU + Transfer Cumulative GPA of at least 2.75

<u>Current KU Students</u>: Students can be admitted into Sport Management or Exercise Science as current KU students if they meet the following criteria:

• A KU + Transfer Cumulative GPA of at least 2.75

Students that do not meet the requirements above can petition through the online <u>SOEHS</u> Admission Petition form.

For information about initial admission to KU, visit the Office of Admissions (https://admissions.ku.edu/). Visit the Office of International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Primary responsibility for meeting graduation requirements rests with the student.

- Complete an approved program with a minimum of 120 credit hours of course work. At least 30 hours must be taken in residence.
- A 2.75 minimum KU + Transfer Cumulative grade-point average for all academic coursework, including transfer hours.
- Other general regulations of the School and University, including KU Core Goal requirements.
- Successful completion of internship or approved electives.

Requirements to begin internship:

- A minimum KU + Transfer Cumulative grade-point average of 2.75.
- All program requirements must be completed before internship.

## **B.S. in Exercise Science**

Code

Title

Code	Title	Hours
General Education	on Requirements	
BIOL 100	Principles of Biology	
& BIOL 102	and Principles of Biology Laboratory ((Core 34:	
D	Natural and Physical Sciences (SGE)) 1	
Program Course		•
HSES 269	Introduction to Exercise Science	3
HSES 305	Methods of Strength Training and Conditioning	3
HSES 310	Research and Data Analysis in Health, Sport, an Exercise Sciences	d 3
HSES 330	Principles of Nutrition and Health	3
HSES 350	Care and Prevention of Athletic Injuries	3
HSES 369	Kinesiology	3
HSES 372	Exercise Physiology	3
HSES 375	Neuromuscular Exercise Physiology and Motor Control	3
HSES 470	Biomechanics	3
HSES 474	Exercise Biochemistry	3
HSES 373	Clinical Exercise Physiology	3
BIOL 200	Basic Microbiology	3
BIOL 240	Fundamentals of Human Anatomy	3
BIOL 203	Introductory Microbiology Laboratory	2
BIOL 241	Human Anatomy Observation Laboratory	2
BIOL 246	Principles of Human Physiology	3
BIOL 247	Principles of Human Physiology Laboratory	2
CHEM 130	General Chemistry I	5
CHEM 135	General Chemistry II	5
MATH 103	Trigonometry	2-5
or MATH 104	Precalculus Mathematics	
or MATH 115	Calculus I	
or MATH 125	Calculus I	
PHSX 114	College Physics I	1-4
PHSX 115	College Physics II	1-4
<b>Capstone Cours</b>	ee .	
HSES 473	Clinical Fitness Evaluation Techniques	3
Select 15 credit	hours from the following list of electives, mino	rs, 18
HSES 300	Study Abroad Topics in: (1-3)	
HSES 306	Principles of Personal Training (3) 4	
HSES 307	Tactical Strength and Conditioning (3) 4	
HSES 331	Sport and Exercise Nutrition (3) 4	
HSES 335	Clinical Field Experience (1-6)	
HSES 370	Health and Pathophysiology (3) <sup>4</sup>	
HSES 371	Medical Terminology for Health Professionals (3)	) 4
HSES 418	Health Aspects of Aging (3) <sup>3</sup>	<b>,</b>
HSES 440	Applied Sport and Performance Psychology (3)	3
HSES 475	Undergraduate Research in Health, Sport, and Exercise Sciences (1-6)	
HSES 489	Health and Human Sexuality (3) <sup>3</sup>	
HSES 497	Independent Study (1-3)	
HSES 580	Internship in: (Exercise Science) (15) <sup>2</sup>	
HSES 598	Special Course: (1-5)	
	, ,	

AAAS 203	Culture and Health
AAAS 204	Culture and Health, Honors
ABSC 160	Introduction to Child Behavior and Development (3)
GEOG 201	Culture and Health
GEOG 202	Culture and Health, Honors
GIST 210	Culture and Health
GIST 211	Culture and Health, Honors
BIOL 150	Principles of Molecular and Cellular Biology
BIOL 350	Principles of Genetics (4)
BIOL 503	Immunology (3)
BIOL 400	Fundamentals of Microbiology
BIOL 504	Immunology Laboratory (2)
BIOL 600	Introductory Biochemistry, Lectures (3)
BIOL 601	Principles of Biochemistry Laboratory (2)
BIOL 636	Biochemistry I (4)
CHEM 330	Organic Chemistry I (3)
CHEM 331	Organic Chemistry I Laboratory (2)
CHEM 335	Organic Chemistry II (3)
CHEM 336	Organic Chemistry II Laboratory (2)
CLSX 332	Medical Terminology: Greek and Latin Roots
HEIM 230	Medical Terminology
MATH 365	Elementary Statistics (3)
PHIL 676	Medical Ethics: Life and Death Issues
PSYC 333	Child Development (3) )
PSYC 350	Psychological Disorders (3))
SOC 104	Elements of Sociology (3) <sup>3</sup>
SOC 304	Principles of Sociology (3) <sup>4</sup>
SOC 424	Sociology of Health and Medicine (3)
SPAN 326	Spanish for Health Care Workers (3)
A maximum of 6 credit hours of foreign language courses can be counted as required electives credit <sup>7</sup>	
HEIM 415	Healthcare Delivery Systems (3)
HEIM 420	Legal Aspects of Healthcare (3)
HEIM 540	Health Information Systems (3)
HEIM 567	Quality and Performance Improvement in Healthcare (3)
HEIM 570	Introduction to Healthcare Management (3)
HEIM 585	Healthcare Reimbursement (3) <sup>5</sup>

Sport Management Minor (https://catalog.ku.edu/education/health-sport-exercise-sciences/minor-sport-management/) <sup>5</sup>, Business Minor (https://catalog.ku.edu/business/minor/#requirementstext) <sup>5</sup>, Entrepreneurship Certificate (https://catalog.ku.edu/business/ucrt-entrepreneurship/), Psychology Minor (https://catalog.ku.edu/liberal-arts-sciences/psychology/minor-psychology/#requirementstext) <sup>5</sup>, Public and Population Health Minor (https://catalog.ku.edu/professional-studies/public-population-health-minor/#minorrequirementstext) <sup>4,5</sup>, Public and Population Health Certificate (https://catalog.ku.edu/professional-studies/public-population-health-ucert/#certificaterequirementstext) <sup>4,5</sup>, Nutrition Minor (https://catalog.ku.edu/professional-studies/nutrition-minor/#minorrequirementstext) <sup>4,5</sup>, Nutrition Certificate (https://catalog.ku.edu/professional-studies/nutrition-ucert/#certificaterequirementstext) <sup>4,5</sup>.

- required before one can apply for an internship. Internship students are required to be present at the internship site a minimum of 40 hours per week for 16 weeks NO EXCEPTIONS.
- <sup>3</sup> Currently, only offered on the Lawrence Campus
- <sup>4</sup> Currently, only offered on the Edwards Campus
- Any listed minor may be declared and completed as 18 elective credit hours OR taken as individual courses toward the required 18 required elective hours.
- Trigonometry must be completed as a sequence to MATH 101 (College Algebra) to meet degree requirements, unless a higher-level math is completed in its place (MATH 104-Precalculus Mathematics, MATH 115-Calculus I, or MATH 125-Calculus I).
- <sup>7</sup> HSES advisor approval needed.

This is a sample plan of study. Students should consult with their academic advisor to create an individualized plan for degree completion.

Year	1

Fall	Hours Spring	Hours
ENGL 101 (Core 34: English (SGE)) <sup>010**</sup>	3 ENGL 102 (Core 34: English (SGE)) <sup>010**</sup>	3
MATH 101 (Core 34: Math and Statistics (SGE)) 030*	3 COMS 130 (Core 34: Communications (SGE)) <sup>020**</sup>	3
BIOL 100 (Core 34: Natural and Physical Sciences (SGE)) <sup>040***</sup>	3 BIOL 240	3
BIOL 102 (Core 34: Natural and Physical Sciences (SGE)) <sup>040</sup>	1 MATH 103	2
PSYC 104 (Core 34: Social and Behavior Science (SGE)) <sup>050**</sup>	3 Core 34: Arts and Humanities (SGE) <sup>060</sup>	3
HSES 269	3	
	16	14
Year 2		
Year 2 Fall	Hours Spring	Hours
	Hours Spring 3 BIOL 247	Hours 2
Fall		
Fall BIOL 246	3 BIOL 247	2
Fall BIOL 246 BIOL 241	3 BIOL 247 2 CHEM 135	2 5
Fall BIOL 246 BIOL 241 CHEM 130 PHIL 160 (Core 34: Arts and	3 BIOL 247 2 CHEM 135 5 HSES 350	2 5 3
Fall BIOL 246 BIOL 241 CHEM 130 PHIL 160 (Core 34: Arts and Humanities (SGE)) <sup>060**</sup>	3 BIOL 247 2 CHEM 135 5 HSES 350 3 HSES 375 3 Core 34: Social and	2 5 3 3
Fall BIOL 246 BIOL 241 CHEM 130 PHIL 160 (Core 34: Arts and Humanities (SGE)) <sup>060**</sup>	3 BIOL 247 2 CHEM 135 5 HSES 350 3 HSES 375  3 Core 34: Social and Behavior Science (SGE) <sup>050</sup>	2 5 3 3
Fall BIOL 246 BIOL 241 CHEM 130 PHIL 160 (Core 34: Arts and Humanities (SGE)) 060** HSES 330	3 BIOL 247 2 CHEM 135 5 HSES 350 3 HSES 375  3 Core 34: Social and Behavior Science (SGE) <sup>050</sup>	2 5 3 3
Fall BIOL 246 BIOL 241 CHEM 130 PHIL 160 (Core 34: Arts and Humanities (SGE)) <sup>060**</sup> HSES 330  Year 3	3 BIOL 247 2 CHEM 135 5 HSES 350 3 HSES 375 3 Core 34: Social and Behavior Science (SGE) <sup>050</sup> 16	2 5 3 3 3 3
Fall BIOL 246 BIOL 241 CHEM 130 PHIL 160 (Core 34: Arts and Humanities (SGE)) <sup>060**</sup> HSES 330  Year 3 Fall	3 BIOL 247 2 CHEM 135 5 HSES 350 3 HSES 375 3 Core 34: Social and Behavior Science (SGE) <sup>050</sup> 16 Hours Spring	2 5 3 3 3 Hours
Fall BIOL 246 BIOL 241 CHEM 130 PHIL 160 (Core 34: Arts and Humanities (SGE)) 060** HSES 330  Year 3 Fall HSES 310	3 BIOL 247 2 CHEM 135 5 HSES 350 3 HSES 375  3 Core 34: Social and Behavior Science (SGE) <sup>050</sup> 16  Hours Spring 3 HSES 470	2 5 3 3 3 <b>16</b> <b>Hours</b> 3

### Year 4

Required Elective<sup>1</sup>

Fall	Hours Spring	Hours
HSES 473 (Capstone)	3 HSES 305	3

15

3 Required Elective<sup>1</sup>

3

15

<sup>&</sup>lt;sup>1</sup> Must have a minimum grade of "C-" or better.

Students may apply for an internship at an approved site once all coursework is completed. A 2.75 KU + Transfer Cumulative GPA is

	16	12
Required Elective <sup>1</sup>	3	
Core 34: Global Culture (SGE) <sup>070</sup>	3 Required Elective <sup>1</sup>	3
PHSX 115	4 Required Elective <sup>1</sup>	3
HSES 373	3 HSES 474	3

#### **Total Hours 120**

#### Notes:

- \* This course is a Required major course and is also part of Core 34: Systemwide General Education. If this course is not taken to fulfill the Core 34:SGE requirement, it must be taken in place of elective hours.
- \*\* This course is a <u>Recommended</u> Core 34: Systemwide General Education course. This specific course is not required but is recommended by the program's faculty.
- \*\*\* This course is a <u>Required Core 34</u>: Systemwide General Education course. This program is approved by the Kansas Board of Regents to require this specific Core 34:Systemwide General Education course. If a student did not take this course it must be taken in addition to other degree requirements.

<sup>&</sup>lt;sup>1</sup> Courses that fulfill the Required Elective (p. 1) requirement.