# 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

Current KU Students: 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 SOEHS 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 Hour | Hours |
| :---: | :---: | :---: |
| General Education Requirements |  |  |
| $\begin{aligned} & \text { BIOL } 100 \\ & \text { \& BIOL } 102 \end{aligned}$ | Principles of Biology and Principles of Biology Laboratory ((Core 34: Natural and Physical Sciences (SGE)) ${ }^{1}$ |  |
| Program Course Requirements |  |  |
| 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, and 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 |
| Capstone Course |  |  |
| HSES 473 | Clinical Fitness Evaluation Techniques | 3 |

Select 15 credit hours from the following list of electives, minors, 18 or certificate programs

HSES 300 Study Abroad Topics in: $\qquad$ (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) ${ }^{4}$
HSES 371 Medical Terminology for Health Professionals (3) ${ }^{4}$
HSES 418 Health Aspects of Aging (3) ${ }^{3}$
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) ${ }^{3}$
HSES 497 Independent Study (1-3)
HSES 580 Internship in:___ (Exercise Science) (15) ${ }^{2}$
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) ${ }^{3}$ |
| SOC 304 | Principles of Sociology (3) ${ }^{4}$ |
| 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 |  |
| 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) ${ }^{5}$ |

Sport Management Minor (https://catalog.ku.edu/education/health-sport-exercise-sciences/minor-sport-management/) ${ }^{5}$, Business Minor (https:// catalog.ku.edu/business/minor/\#requirementstext) ${ }^{5}$, Entrepreneurship Certificate (https://catalog.ku.edu/business/ucrt-entrepreneurship/), Psychology Minor (https://catalog.ku.edu/liberal-arts-sciences/psychology/ minor-psychology/\#requirementstext) ${ }^{5}$, Public and Population Health Minor (https://catalog.ku.edu/professional-studies/public-population-health-minor/\#minorrequirementstext) ${ }^{4,5}$, Public and Population Health Certificate (https://catalog.ku.edu/professional-studies/public-population-health-ucert/\#certificaterequirementstext) ${ }^{4,5}$, Nutrition Minor (https://catalog.ku.edu/professional-studies/nutrition-minor/ \#minorrequirementstext) ${ }^{4,5}$, Nutrition Certificate (https://catalog.ku.edu/ professional-studies/nutrition-ucert/\#certificaterequirementstext) ${ }^{4,5}$.
${ }^{1}$ Must have a minimum grade of "C-" or better.
${ }^{2}$ Students may apply for an internship at an approved site once all coursework is completed. A $2.75 \mathrm{KU}+$ Transfer Cumulative GPA is
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.
${ }^{3}$ Currently, only offered on the Lawrence Campus
${ }^{4}$ Currently, only offered on the Edwards Campus
5 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.
6 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).
7 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)) ${ }^{010^{* *}}$ | 3 ENGL 102 (Core 34: English (SGE)) ${ }^{010^{* *}}$ | 3 |
| :---: | :---: | :---: |
| MATH 101 (Core 34: Math and Statistics (SGE)) ${ }^{030^{*}}$ | 3 COMS 130 (Core 34: <br> Communications (SGE)) ${ }^{020^{* *}}$ | 3 |
| BIOL 100 (Core 34: Natural and Physical Sciences (SGE) $)^{040^{* * *}}$ | 3 BIOL 240 | 3 |
| BIOL 102 (Core 34: Natural and Physical Sciences (SGE)) ${ }^{040}$ | 1 MATH 103 | 2 |
| PSYC 104 (Core 34: Social and Behavior Science (SGE)) ${ }^{050^{* *}}$ | 3 Core 34: Arts and Humanities (SGE) ${ }^{060}$ | 3 |
| HSES 269 | 3 |  |
|  | 16 | 14 |

## Year 2

| Fall | Hours Spring | Hours |
| :--- | :---: | ---: |
| BIOL 246 | 3 BIOL 247 | 2 |
| BIOL 241 | 2 CHEM 135 | 5 |
| CHEM 130 | 5 HSES 350 | 3 |
| PHIL 160 (Core 34: Arts and | 3 HSES 375 | 3 |
| Humanities (SGE)) $)^{660^{* *}}$ | 3 Core 34: Social and |  |
| HSES 330 | Behavior Science (SGE) |  |
|  | $\mathbf{1 6}$ | 3 |

## Year 3

Fall

| Hours Spring | Hours |
| :---: | ---: |
| 3 HSES 470 | 3 |
| 3 BIOL 200 | 3 |
| 3 BIOL 203 | 2 |
| 3 PHSX 114 | 4 |
| 3 Required Elective |  |

Year 4
Fall
Hours Spring
Hours
HSES 473 (Capstone)

3 HSES 305

| HSES 373 | 3 HSES 474 | 3 |
| :---: | :---: | :---: |
| PHSX 115 | 4 Required Elective ${ }^{1}$ | 3 |
| Core 34: Global Culture $(S G E)^{070}$ | 3 Required Elective ${ }^{1}$ | 3 |
| Required Elective ${ }^{1}$ | 3 |  |
|  | 16 | 12 |

Total Hours 120
${ }^{1}$ Courses that fulfill the Required Elective (p. 1) requirement.

## 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 Recommended Core 34: Systemwide General Education course. This specific course is not required but is recommended by the program's faculty.
*** - This course is a Required Core 34: 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.

