

EXERCISE PHYSIOLOGY (BS)

This program was approved for students entering the university in the Summer 2024–Spring 2025 catalog year. For more information about catalog year, go to Catalog Year Information (<https://catalog.louisville.edu/undergraduate/university-wide-unit-specific-policies/catalog-year/>).

Bachelor of Science in Exercise Physiology

Unit: College of Education and Human Development (<http://www.louisville.edu/edu/>)

Department: Health & Sport Sciences (HSS) (<http://louisville.edu/education/departments/hss/>)

Academic Plan Code(s): See Track Requirements tab.

Program Requirements

All students completing the Bachelor of Science degree in Exercise Physiology must complete the core classes, program requirements, and at least one track, along with appropriate related and supporting or elective courses. The core provides students with a background in the social, physiological, and historical knowledge needed for their chosen profession.

The Allied Health Therapies track prepares students for careers in allied health therapies such as Physical Therapy, Occupational Therapy, and Clinical Exercise Physiology. Curriculum is designed to prepare students for graduate and professional school in these areas and follows guidelines set forth by the American College of Sports Medicine.

The Human Performance track prepares students for careers in strength & conditioning, sport science, fitness, personal training, and corporate wellness. Curriculum is designed to maximize certification exam success and follows guidelines set forth by the National Strength and Conditioning Association.

The Physical Education and Health track assists students in acquiring the skills, knowledge, and dispositions to become effective and committed health and physical education teachers. Extensive school-based fieldwork experiences are integrated into the curriculum.

Degree Summary

Code	Title	Hours
	General Education Requirements (https://catalog.louisville.edu/undergraduate/general-education-requirements/) ¹	31
	College/School Requirements	3
	Program/Major Requirements	30
	Track Requirements	62
	Minimum Total Hours	120

¹ Some courses required in this degree program may satisfy multiple requirements. To complete the degree in the **minimum number of hours** listed, some hours from the General Education Requirements must be satisfied by courses defined by the unit and/or program. Using other courses to satisfy General Education requirements will require additional hours to complete the degree requirements or reduce the number of available electives within a track. See the Degree Requirements and Track tabs for specific coursework.

Specific coursework information can be found on the Degree Requirements tab.

Departmental Admission Requirements

See admissions requirements for the College of Education and Human Development at <https://louisville.edu/admissions> (<https://louisville.edu/admissions/>).

Admission to the professional phase of the Physical and Health Education track also requires:

- Minimum 2.75 or higher overall GPA, or 3.0 in last 30 hours
- Minimum test scores as required by the Education Professional Standards Board
- C or better in ENGL 102 (or equivalent) and in Oral Communication course
- Completion of Pre-Professional Courses with a B-minus or better
- Any other requirements as outlined in Application.

General Education Requirements

Code	Title	Hours
	General Education Requirements (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	31

The following course can be taken to fulfill the respective General Education Requirement and a major requirement in all tracks:

HSS 202	Foundations of Anatomy & Physiology - S (https://catalog.louisville.edu/undergraduate/general-education-requirements/)
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For tracks in Allied Health Therapies and Human Performance:

HSS 377	Foundations of Quantitative Statistics - QR (https://catalog.louisville.edu/undergraduate/general-education-requirements/)
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For track in Physical and Health Education:

HSS 293	Social and Psychological Dimensions of Physical Activity - SB (https://catalog.louisville.edu/undergraduate/general-education-requirements/)
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All degrees require the completion of the University-wide General Education Program (link provided above). Some General Education requirements may be met in the requirements for the major or supporting coursework, in which case additional electives may be required to complete the minimum hours for the degree.

College/School Requirements

Code	Title	Hours
HSS 181	First-Year Experience ¹	1
	Select two (2) Physical Activity Courses (see list below)	2

Minimum Total Hours 3

¹ Not required for transfer students with 24 credit hours or more. Students who successfully complete a first year experience course through another college may waive this requirement.

Program/Major Requirements

Code	Title	Hours
Core Courses		
HSS 180	First Aid and Safety Education	3

HSS 184	Healthy Lifestyles I	3
HSS 202	Foundations of Anatomy & Physiology - S (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 263	Introduction to Exercise Physiology	3
HSS 318	Diverse Populations in Physical Activity and Health	3
HSS 320	Growth and Motor Development Across the Lifespan	3
HSS 386	Advanced Anatomy and Physiology I ¹	3
HSS 387	Biomechanics	3
HSS 394	Foundations of Exercise Physiology	3
HSS 395	Fitness Assessment and Prescription	3
Minimum Total Hours		30

¹ Please see notes on Track page regarding Anatomy and Physiology requirements.

Code	Title	Hours
Track Requirements (see Track Requirements tab)		62

Degree Requirements

A minimum of 120 hours with an overall GPA of 2.25; minimum grade of C- in Exercise Physiology core and track-specific courses; successful completion of an Exercise Physiology Internship or Research Project; minimum of 50 hours at the 300-level or above.

Code	Title	Hours
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Culminating Undergraduate Experience (Graduation requirement)

Requirement fulfilled by completing one of the following:

Tracks in Allied Health Therapies and Human Performance

HSS 486	Advanced Exercise Physiology - CUE (https://catalog.louisville.edu/undergraduate/general-education-requirements/)
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Track in Physical and Health Education

HSS 477	Capstone Seminar: Initial Teacher Certification - CUE (https://catalog.louisville.edu/undergraduate/general-education-requirements/)
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Code	Title	Hours
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Physical Activity Courses

HSS 101	Beginning Swimming	1
HSS 102	Advanced Swimming	1
HSS 103	Life Saving	1
HSS 104	Scuba	1
HSS 108	Water Fitness	1
HSS 109	Weight Training	1
HSS 110	Physical Fitness and Conditioning	1
HSS 111	Aerobic Fitness	1
HSS 112	Mini-Marathon Training	1
HSS 114	Fitness Walking	1
HSS 115	Step Aerobics	1
HSS 116	Introduction to Yoga	1
HSS 117	Intermediate Yoga	1
HSS 118	Beginning Martial Arts	1
HSS 119	Intermediate Martial Arts	1

HSS 120	Beginning Racquetball	1
HSS 121	Billiards and Table Games	1
HSS 122	Badminton	1
HSS 123	Tennis	1
HSS 124	Advanced Tennis	1
HSS 125	Golf	1
HSS 126	Tumbling and Apparatus	1
HSS 127	Beginning Fencing	1
HSS 128	Pickleball	1
HSS 132	Canoeing	1
HSS 133	Backpacking and Hiking	1
HSS 134	Rappelling	1
HSS 136	Soccer	1
HSS 137	Volleyball	1
HSS 138	Basketball	1
HSS 140	Softball	1
HSS 144	Physical Activity for the Older Adult	1
HSS 145	Activity for the Physically Challenged	1
HSS 150	Special Topics: Physical Education Activities	1
HSS 160	Beginning Aerobic Dance	1
HSS 161	Intermediate Aerobic Dance	1
HSS 162	Beginning Modern Dance	1
HSS 163	Intermediate Modern Dance	1
HSS 164	Beginning Country Western Dance	1
HSS 165	Ballroom Dance	1
HSS 166	African Dance	1
HSS 167	Country Line Dance	1

Track Requirements

Track in Allied Health Therapies

Academic Plan Code(s): EXP_BS_AHT

Code	Title	Hours
HSS 377	Foundations of Quantitative Statistics - QR (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3

Select one of the following options: 2-3

HSS 381 & HSS 391	Advanced Anatomy and Physiology Lab I & Advanced Anatomy and Physiology Lab II ^{1,2}	
or HSS 507	Senior Seminar in Exercise Physiology	
HSS 389	Prevention and Care of Athletic Injuries I	3
HSS 390	Advanced Anatomy and Physiology II ^{1,2}	3
HSS 396	Lab Methods in Fitness Evaluation	3
HSS 460	Human Body in Health and Disease	3
HSS 462	Advanced Biomechanics	3
HSS 486	Advanced Exercise Physiology - CUE (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 492	Exercise Science Internship	3
HSS 504	Physical Activity and Public Health	3
General Electives		32-33

Minimum Total Hours 62

¹ HSS 381 should be taken concurrently with or after previous completion of HSS 386. HSS 391 should be taken with or after previous completion of HSS 390.

² Students should take either the entire HSS Advanced Anatomy and Physiology sequence (HSS 381, HSS 386, HSS 390, and HSS 391) (recommended), or the entire BIOL Anatomy and Physiology sequence (BIOL 260, BIOL 264, BIOL 261, and BIOL 265). There are no direct equivalents between each A&P course, therefore students are not permitted to mix courses between departments.

Track in Human Performance

Academic Plan Code(s): EXP_BS_HP

Code	Title	Hours
HSS 300	Nutrition Coaching	3
HSS 377	Foundations of Quantitative Statistics - QR (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 388	Foundations of Strength and Conditioning	3
HSS 389	Prevention and Care of Athletic Injuries I	3
HSS 390	Advanced Anatomy and Physiology II ¹	3
HSS 392	Principles of Sport and Exercise Psychology	3
HSS 396	Lab Methods in Fitness Evaluation	3
HSS 486	Advanced Exercise Physiology - CUE (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 492	Exercise Science Internship	3
HSS 500	Neuromuscular Exercise Physiology	3
HSS 530	Nutrition and Athletic Performance	3
General Electives		29
Minimum Total Hours		62

¹ Students should take either the entire HSS Advanced Anatomy and Physiology sequence (HSS 386 and HSS 390) (recommended), or the entire BIOL Anatomy and Physiology sequence (BIOL 260 and BIOL 261). There are no direct equivalents between each A&P course, therefore students are not permitted to mix courses between departments.

Track in Physical and Health Education

Academic Plan Code(s): EXP_BS_PHE

Code	Title	Hours
Pre-Professional Courses ¹		
EDTP 107	Human Development and Learning	3
HSS 200	Introduction to Health Education	3
HSS 270	Introduction to Physical Education	3
HSS 271	Teaching Physical Education	3
HSS 293	Social and Psychological Dimensions of Physical Activity - SB (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 302 or HSS 303	Nutrition in Healthy Living Human Nutrition	3
HSS 326	Movement Skills and Concepts in Physical Education	3

HSS 327	Invasion and Net Games	3
HSS 328	Target and Fielding Games	3
HSS 384	Teaching Health Education	3
HSS 455	Current Trends and Issues in Health Education - CUE (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3

General Electives 2

Professional Program Courses ²

EDTP 420	Reading and Writing Across the Curriculum	3
HSS 404	Methods in Elementary Physical Education	4
HSS 405	Methods in Secondary Physical Education	4
HSS 485	Methods in Health Education	4

Student Teaching Courses ²

HSS 414	Student Teaching in Elementary Physical Education	3
HSS 415	Student Teaching in Health Education	3
HSS 416	Student Teaching in Secondary Physical Education	3
HSS 477	Capstone Seminar: Initial Teacher Certification - CUE (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3

Minimum Total Hours 62

NOTE: Students should take HSS 386 (recommended) or both BIOL 260 and BIOL 261. There are no direct equivalents between each A&P course, therefore students are not permitted to mix courses between departments.

¹ Minimum grade of B- or better required in pre-professional HSS track courses.

² Courses restricted to students admitted to professional teacher education program.

Midpoint Assessment Prior to Student Teaching: All content methods classes passed with a cumulative 3.0 GPA; Electronic documentation of approved field experiences including assessment of dispositions; satisfactory performance on all Hallmark Assessment Tasks; Target performance or better on all rubrics.

Certification Assessment: Satisfactory dispositions assessment; passing scores on PRAXIS content and PLT exams; completion of degree requirements.

Flight Plans

Track in Allied Health Therapies

Year 1		Hours
Fall		
ENGL 101	Introduction to College Writing - WC (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 181	First-Year Experience	1
HSS 184	Healthy Lifestyles I	3
Physical Activity Course (HSS 101-HSS 167)		1
General Education: Cardinal Core Natural Sciences - S		3
General Education: Cardinal Core Natural Sciences Lab - SL		1
General Elective		3
Hours		15

Spring		
ENGL 102	Intermediate College Writing - WC (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 180	First Aid and Safety Education	3
HSS 263	Introduction to Exercise Physiology	3
General Education: Cardinal Core Arts & Humanities US Diversity - AHD1		3
General Education: Cardinal Core Oral Communication - OC		3
Hours		15
Year 2		
Fall		
HSS 320	Growth and Motor Development Across the Lifespan	3
HSS 377	Foundations of Quantitative Statistics - QR (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
General Education: Cardinal Core Arts & Humanities Global Diversity - AHD2		3
General Education: Cardinal Core Social & Behavioral Sciences Historical Perspective - SBH		3
General Elective		3
Hours		15
Spring		
HSS 202	Foundations of Anatomy & Physiology - S (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 318	Diverse Populations in Physical Activity and Health	3
General Education: Cardinal Core Social & Behavioral Sciences - SB		3
General Elective		3
General Elective		3
Hours		15
Year 3		
Fall		
HSS 381	Advanced Anatomy and Physiology Lab I	1
HSS 386	Advanced Anatomy and Physiology I	3
HSS 387	Biomechanics	3
HSS 394	Foundations of Exercise Physiology	3
General Elective		3
General Elective		3
Hours		16
Spring		
HSS 389	Prevention and Care of Athletic Injuries I	3
HSS 390	Advanced Anatomy and Physiology II	3
HSS 391	Advanced Anatomy and Physiology Lab II	1
HSS 396	Lab Methods in Fitness Evaluation	3
Physical Activity Course (HSS 101-HSS 167)		1
General Elective		3
Hours		14
Year 4		
Fall		
HSS 395	Fitness Assessment and Prescription	3
HSS 460	Human Body in Health and Disease	3
HSS 462	Advanced Biomechanics	3
General Elective		3
General Elective		3
Hours		15
Spring		
HSS 486	Advanced Exercise Physiology - CUE (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 492	Exercise Science Internship	3
HSS 504	Physical Activity and Public Health	3
General Elective		3

General Elective	3
Hours	15
Minimum Total Hours	120

Track in Human Performance

Year 1		
Fall		Hours
ENGL 101	Introduction to College Writing - WC (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 181	First-Year Experience	1
HSS 184	Healthy Lifestyles I	3
Physical Activity Course (HSS 101-HSS 167)		1
General Education: Cardinal Core Natural Sciences - S		3
General Education: Cardinal Core Natural Sciences Lab - SL		1
General Education: Cardinal Core Social & Behavioral Sciences - SB		3
Hours		15
Spring		
ENGL 102	Intermediate College Writing - WC (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 180	First Aid and Safety Education	3
HSS 263	Introduction to Exercise Physiology	3
General Education: Cardinal Core Arts & Humanities US Diversity - AHD1		3
General Education: Cardinal Core Oral Communication - OC		3
Hours		15
Year 2		
Fall		
HSS 320	Growth and Motor Development Across the Lifespan	3
HSS 377	Foundations of Quantitative Statistics - QR (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
General Education: Cardinal Core Arts & Humanities Global Diversity - AHD2		3
General Education: Cardinal Core Social & Behavioral Sciences Historical Perspective - SBH		3
General Elective		3
Hours		15
Spring		
HSS 202	Foundations of Anatomy & Physiology - S (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 300	Nutrition Coaching	3
HSS 318	Diverse Populations in Physical Activity and Health	3
General Elective		3
General Elective		3
Hours		15
Year 3		
Fall		
HSS 386	Advanced Anatomy and Physiology I	3
HSS 387	Biomechanics	3
HSS 392	Principles of Sport and Exercise Psychology	3
HSS 394	Foundations of Exercise Physiology	3
General Elective		3
Hours		15
Spring		
HSS 389	Prevention and Care of Athletic Injuries I	3
General Elective		3
HSS 390	Advanced Anatomy and Physiology II	3
HSS 396	Lab Methods in Fitness Evaluation	3
General Elective		3
Hours		15

Year 4		
Fall		
HSS 395	Fitness Assessment and Prescription	3
HSS 500	Neuromuscular Exercise Physiology	3
HSS 530	Nutrition and Athletic Performance	3
Physical Activity Course (HSS 101-HSS 167)		1
General Elective		3
General Elective		2
Hours		15
Spring		
HSS 388	Foundations of Strength and Conditioning	3
HSS 486	Advanced Exercise Physiology - CUE (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 492	Exercise Science Internship	3
General Elective		3
General Elective		3
Hours		15
Minimum Total Hours		120

Track in Physical and Health Education

Year 1		
Fall		
ENGL 101	Introduction to College Writing - WC (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 180	First Aid and Safety Education	3
HSS 181	First-Year Experience	1
General Education: Cardinal Core Quantitative Reasoning - QR		3
General Education: Cardinal Core Natural Sciences - S		3
General Education: Cardinal Core Natural Sciences Lab - SL		1
Physical Activity Course (HSS 101-HSS 167)		1
Hours		15
Spring		
ENGL 102	Intermediate College Writing - WC (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 184	Healthy Lifestyles I	3
HSS 263	Introduction to Exercise Physiology	3
General Education: Cardinal Core Arts & Humanities US Diversity - AHD1		3
General Education: Cardinal Core Oral Communication - OC		3
Hours		15
Year 2		
Fall		
HSS 200	Introduction to Health Education	3
HSS 270	Introduction to Physical Education	3
HSS 293	Social and Psychological Dimensions of Physical Activity - SB (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
General Education: Cardinal Core Arts & Humanities Global Diversity - AHD2		3
General Education: Cardinal Core Social & Behavioral Sciences Historical Perspective - SBH		3
Hours		15
Spring		
EDTP 107	Human Development and Learning	3
HSS 202	Foundations of Anatomy & Physiology - S (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
HSS 302 or HSS 303	Nutrition in Healthy Living or Human Nutrition	3
HSS 318	Diverse Populations in Physical Activity and Health	3
HSS 320	Growth and Motor Development Across the Lifespan	3

Physical Activity Course (HSS 101-HSS 167)		1
Hours		16
Year 3		
Fall		
HSS 271	Teaching Physical Education	3
HSS 384	Teaching Health Education	3
HSS 386	Advanced Anatomy and Physiology I	3
HSS 387	Biomechanics	3
HSS 394	Foundations of Exercise Physiology	3
General Elective		2
Hours		17
Spring		
HSS 326	Movement Skills and Concepts in Physical Education	3
HSS 327	Invasion and Net Games	3
HSS 328	Target and Fielding Games	3
HSS 395	Fitness Assessment and Prescription	3
HSS 455	Current Trends and Issues in Health Education - CUE (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
Hours		15
Year 4		
Fall		
EDTP 420	Reading and Writing Across the Curriculum	3
HSS 404	Methods in Elementary Physical Education	4
HSS 405	Methods in Secondary Physical Education	4
HSS 485	Methods in Health Education	4
Hours		15
Spring		
HSS 414	Student Teaching in Elementary Physical Education	3
HSS 415	Student Teaching in Health Education	3
HSS 416	Student Teaching in Secondary Physical Education	3
HSS 477	Capstone Seminar: Initial Teacher Certification - CUE (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
Hours		12
Minimum Total Hours		120

The Flight Plan outlined above is intended to demonstrate one possible path to completing the degree within four years. Course selection and placement within the program may vary depending on course offerings and schedule, elective preferences, and other factors (study abroad, internship availability, etc.). Please consult your advisor for additional information about building a flight plan that works for you.

Degree Audit Report

Degree Audit reports illustrate how your completed courses fulfill the requirements of your academic plan, and which requirements are still outstanding. Degree audits also take transfer credits and test credits into account. "What-if" reports allow you to compare the courses you have completed in your current academic plan to the courses required in another academic plan. Should you have questions about either report, please consult with your academic advisor.

Flight Planner

The Flight Planner tool is available for you to create a personalized Flight Plan to graduation. Advisors have access to review your Flight Planner and can help you adjust it to ensure you remain on track to graduate in a timely manner.

To create these reports:

1. Log into your ULink account.
2. Click on the Academic Progress tile.

3. Select the appropriate report.
 - a. To run a Degree Audit report, click on "View my Degree Audit."
 - b. To create a What-if report, click on "Create a What-if Advisement Report."
 - c. To run a Flight Planner report, click on "Use My Flight Planner."

Click here to run a Degree Audit report, create a What-if report, or run a Flight Planner report. (<https://ulink.louisville.edu>)

Professional Licensure Information

The Bachelor of Science in Exercise Physiology, track in Physical and Health Education program prepares students to meet the requirements for certification and/or licensure. If you plan to pursue professional licensure or certification, you should first determine your state's criteria for examination and licensure to see how/if our program meets those requirements prior to enrollment. We recommend that you also contact your state's licensing board directly to verify that the requirements have not changed recently and to answer any questions especially those regarding additional requirements beyond the degree.

More information about certification or licensure is available at the following website: <https://louisville.edu/oapa/licensure-information> (<https://louisville.edu/oapa/licensure-information/>) (you may search by school or by the name of the program then click on 'View Details' to display the information).

For programs with an online option, more information about certification or licensure is available here: <https://louisville.edu/online/About-Us?tab=disclosure> (<https://louisville.edu/online/About-Us/?tab=disclosure>).

Note: other tracks in the BS in Exercise Physiology program may prepare students to sit for examinations to qualify for certifications offered by private organizations including the American College of Sports Medicine, the National Strength & Conditioning Association, and the Collegiate Strength and Conditioning Coaches Association. These certifications are sometimes preferred or required for employment in specific settings (e.g., hospitals, college campuses) within the field. However, other tracks in the program (Allied Health Therapies, Human Performance) are not designed to prepare students for any professional licensure issued by any US state or other jurisdiction.