

HEALTH AND SPORT SCIENCES (HSS)

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>).

500-level courses generally are included in both the undergraduate- and graduate-level course listings; however, specific course/section offerings may vary between semesters. Students are responsible for ensuring that they enroll in courses that are applicable to their particular academic programs.

Course Fees

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (<https://louisville.edu/bursar/tuitionfee/university-fees/>).

HSS 500. Neuromuscular Aspects of Human Performance 3 Units

Term Typically Offered: Fall, Spring

Prerequisite(s): HSS 387; HSS 390; and HSS 394.

Description: This course provides an in-depth exploration of neuromuscular structure and function in respect to control of exercise and human movement, specifically as it relates to human performance and athletic adaptation. Emphasis will be placed on bioenergetics, muscle plasticity, neural control of exercise, acute responses and chronic adaptations to various exercise training, and adaptation to various stimuli.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

HSS 501. Advanced Applied Kinesiology 3 Units

Term Typically Offered: Fall, Spring, Summer

Prerequisite(s): Graduate Standing or Consent of Instructor Exploration of advanced principles of applied kinesiology, focusing on structure and function of skeletal muscle to optimize movement patterns and enhance athletic performance.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

HSS 503. Field Testing for Athletes 3 Units

Prerequisite(s): Graduate Standing or Consent of Instructor This course provides an in-depth examination of field testing methodologies used to assess athletic performance and monitor training progress in various sports and athletic populations.

Description: Students will learn the principles of test selection, administration, data interpretation, and application to optimize performance assessment and inform training program design.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

HSS 504. Physical Activity and Public Health 3 Units

Term Typically Offered: Fall, Spring

Description: Students will examine individual, social, organizational, community, environmental, and policy factors that serve as facilitators and barriers to the promotion of physical activity and public health. This course is designed to provide students with the knowledge, skills, and abilities to conduct physical activity and public health needs assessments; to plan, implement, evaluate, lead, and manage physical activity and public health interventions, initiatives, and programs; to conduct physical activity and public health research; and to communicate and advocate for physical activity and public health promotion.

Course Attribute(s): CBL - This course includes Community-Based Learning (CBL). Students will engage in a community experience or project with an external partner in order to enhance understanding and application of academic content.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

HSS 505. Bioenergetics 3 Units

Term Typically Offered: Fall, Spring, Summer

Prerequisite(s): Graduate Standing or Consent of Instructor This course provides a detailed exploration of the principles of bioenergetics and metabolic pathways involved in energy production in the human body, with a focus on their implications for athletic performance, exercise prescription, and training program design.

Description: Students will explore the biochemistry of energy metabolism, energy systems interplay, substrate utilization, and metabolic adaptations to exercise.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

HSS 506. Athlete Monitoring and Data Management 3 Units

Term Typically Offered: Spring Only

Prerequisite(s): Graduate Standing or Consent of Instructor.

Description: Basic Data Management will be taught including data collection, entry, and management in both XCEL and R Programs. Students will learn data collection techniques for Global Positioning Systems (GPS), Force Plate, and Velocity-Based Training forms of athlete monitoring. By the end of the course, students will have strong skills in analyzing monitoring data, visualization of data into meaningful charts, and be proficient in the ability to interpret results into comprehensive reports for coaches and the sports performance team.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

HSS 507. Senior Seminar in Exercise Physiology 3 Units

Term Typically Offered: Occasionally Offered

Prerequisite(s): HSS 387 and HSS 394; 90+ hours; and permission of instructor.

Description: Critical and comprehensive examination of well-defined topics related to exercise physiology that are not studied in regular courses. Topics will be announced in schedule of courses.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

- HSS 530. Nutrition and Athletic Performance** **3 Units**
Term Typically Offered: Fall Only
Prerequisite(s): HSS 300, HSS 302, or HSS 303 Principles of nutrition with special emphasis on nutrient and energy needs of athletes of optimal performance.
 For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 564. Women's Health Issues** **3 Units**
Description: This course will identify a broad range of health issues that can be unique to women or of special importance to women throughout the world. The course will examine the roles women play as both providers and consumers of health care nationally and internationally.
 For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 565. Nutrition for Children and Adolescents** **3 Units**
Description: Nutritional needs during childhood are covered with emphasis on diet evaluation, menu planning and disease prevention. Nutrition units will be developed using the curriculum planning map.
 For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 567. Healthy Sexuality and AIDS Education** **3 Units**
Description: A study of the basic competencies required for AIDS/STD education and prevention within the framework of healthy sexual functioning.
 For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 575. Administration of Physical Education Program and Athletics** **3 Units**
Description: Administration of the total physical education program on the secondary school level, including units on budget, staff, facilities, programs, equipment, public relations, and evaluation.
 For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 589. Injury Prehab and Rehab** **3 Units**
Term Typically Offered: Fall, Spring, Summer
Prerequisite(s): Graduate Standing or Consent of Instructor This course focuses on the principles and practices of injury rehabilitation and prevention (pre-rehabilitation).
Description: Students will explore evidence-based strategies for assessing, treating, and preventing musculoskeletal injuries commonly encountered in athletic populations, with an emphasis on promoting optimal recovery, restoring function, and reducing the risk of future injuries.
 For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 597. Special Topics in Health and Sport Science** **3 Units**
Term Typically Offered: Occasionally Offered
Prerequisite(s): Consent of instructor.
Description: Examination of well-defined topics not studied in regular courses. Topics will be announced in Schedule of Courses.
 For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 598. Independent Study in Health and Sport Science** **1-3 Units**
Description: Opportunity for the student, under the supervision of a sponsoring faculty member, to pursue individualized study related to research or practice that is not included in regular courses in the curriculum.
 For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 601. Philosophy of Sport and Physical Education** **3 Units**
Description: Study of sport from various philosophical positions. Relation of theories and thoughts about what constitutes sport to particular time periods. Offered as needed.
 For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 602. Instructional Technology in Health and Sport Sciences** **3 Units**
Description: The course is designed to develop students' technology skills in order to support their activities in K-12 classrooms and other health and wellness settings.
 For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 604. Research Methods in HSS** **3 Units**
Prerequisite(s): HSS 377.
Description: Techniques used in developing the research project. Development of outline for action research project.
 For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 605. Teaching and Learning for Elementary Physical Education** **4 Units**
Term Typically Offered: Fall Only
Description: Philosophy, objectives, curriculum and methods of teaching physical education to elementary students. Must be taken prior to student teaching.
 For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 606. Teaching and Learning for Secondary Physical Education** **4 Units**
Term Typically Offered: Fall Only
Description: Philosophy, objectives, curriculum and methods of teaching physical education to secondary students. Content-area literacy strategies for physical education will be covered. Must be taken prior to student teaching.
 For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 607. Methods of Supervision in Physical Education** **3 Units**
Description: Covers various models of supervision. Several systematic observational data collection systems will be used to develop skills for supervision in physical education.
 For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

<p>HSS 608. Curriculum: An Achievement Based Approach 3 Units Prerequisite(s): Admission to MAT in Physical Education Program. Description: Presents a variety of curricular approaches to physical education along with activities to help the teacher deliver the content. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)</p>	<p>HSS 614. Action Research Project 3 Units Prerequisite(s): Admission to MAT in Physical Education Program. Corequisite(s): HSS 611 and HSS 612. Description: Each graduate student must complete an action research project during the student teaching experience. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)</p>
<p>HSS 609. Teaching and Learning for Health Education 4 Units Term Typically Offered: Fall Only Prerequisite(s): Admission to the MAT. Description: This course is designed to cover planning, implementation and evaluation of health education for middle and high school students. This course must be taken prior to student teaching. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)</p>	<p>HSS 615. Student Teaching: Health Education 4 Units Term Typically Offered: Spring Only Description: Five weeks of supervised observation, participation, and teaching health education in middle and high schools. Must be taken concurrently with HSS 612 and HSS 613. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)</p>
<p>HSS 610. Experiential Outdoor Education Leadership 3 Units Prerequisite(s): Admission to MAT in Physical Education Program. Description: Teaches necessary skills to lead outdoor experiential education programs. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)</p>	<p>HSS 618. Diverse Populations in Physical Activity and Health 3 Units Description: The study of social and cultural system of diverse groups, related to physical activity and health. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)</p>
<p>HSS 611. Seminar in Student Teaching in Health and Physical Education 3 Units Term Typically Offered: Spring Only Prerequisite(s): Admission to MAT in Health Physical Education P-12 Program. Corequisite(s): HSS 612, HSS 613 and HSS 615. Description: Designed as analysis of student teaching activities for the purpose of improving instructional competence, developing professionalism and reflective teaching skills, and understanding the learner within the instructional context. Each graduate student must complete an action research project during student teaching experience. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)</p>	<p>HSS 619. Practicum: Psychomotor Assessment of Dysfunctions in Adapted Physical Activity 3 Units Description: Administration of tests of psychomotor functioning; interpretation of findings; writing the educational diagnosis; participation in multidisciplinary settings. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)</p>
<p>HSS 612. Student Teaching: Elementary Physical Education 4 Units Term Typically Offered: Spring Only Prerequisite(s): Admission to MAT in Physical Education Program. Corequisite(s): HSS 611. Description: Provides supervised observation, participation and teaching in physical education at the elementary and secondary school levels. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)</p>	<p>HSS 620. Instructional Design in Adapted Physical Activity 3 Units Prerequisite(s): Background in physical education and/or special education, or consent of instructor. Description: Designed to provide knowledge and understanding which will enable students to plan and conduct diversified programs of developmental activities, games, sports, and rhythms suited to the interests, capabilities, and limitations of typical students. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)</p>
<p>HSS 613. Student Teaching: Middle/Secondary Physical Education 4 Units Term Typically Offered: Spring Only Prerequisite(s): Admission to MAT in Physical Education Program. Corequisite(s): HSS 611. Description: Provides supervised observation, participation and teaching in physical education at the elementary and secondary school level. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)</p>	<p>HSS 621. Diagnostic/Assessment in Adapted Physical Activity 3 Units Description: Instructional intervention applied to the physical education setting; emphasis on design, implementation and evaluation of assessment tools and procedures in programs for the disabled. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)</p>
<p>HSS 614. Action Research Project 3 Units Prerequisite(s): Admission to MAT in Physical Education Program. Corequisite(s): HSS 611 and HSS 612. Description: Each graduate student must complete an action research project during the student teaching experience. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)</p>	<p>HSS 625. Instructional Leadership in Physical Education 3 Units Description: A critical examination of the current knowledge base and best practices in K-12 physical education instruction, programming, assessment and professional development. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)</p>

- HSS 629. Introduction to Health Consultation** 3 Units
Prerequisite(s): HSS 501 and HSS 503.
Description: Study of the basic skills required for health behavior change using a health counseling approach with emphasis on the development of skills needed to design and facilitate health counseling programs. For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 630. Nutrition and Athletic Performance** 3 Units
Prerequisite(s): College nutrition course or consent of instructor.
Description: Principles of nutrition with special emphasis on nutrient and energy needs of athletes for optimal performance. For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 631. Leadership in Health Promotion - CUE** 3 Units
Term Typically Offered: Occasionally Offered
Description: Analysis of administrative and organizational factors of health education and promotion from within the program, within the organization, and between organizations. Emphasis will be placed on policy making, administration, and functional issues such as collaboration and consultation at the organizational level.
Note: Cross-listed with HSS 431.
Course Attribute(s): CUE - This course fulfills the Culminating Undergraduate Experience (CUE) requirement for certain degree programs. CUE courses are advanced-level courses intended for majors with at least 90 earned credits/senior-level status.
 For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 649. Psychological Aspects of Physical Education and Sport** 3 Units
Description: Analysis of the interaction among personality, motor ability, group dynamics, and environment in physical education and sports performance. For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 650. Personality and Social Development in Sport** 3 Units
Description: Systematic study of man's behavior in sport in relation to his social environment. Emphasis on the relationship between physical activity and interpersonal competence, attitudes, personality and aggression. For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 655. Current Trends and Studies in Health and Sport Sciences.** 3 Units
Description: Examination of current literature, research and trends in HSS. For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 659. Motor Control and Learning: Lab** 3 Units
Description: Experiments in motor learning that promote the use of basic apparatus and practical applications of research. For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 660. Motor Control & Learning** 3 Units
Description: Analysis and critical review of literature on selected topics relating to motor control and learning. Emphasis on research in the area of motor learning. For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 663. Sexuality Education** 3 Units
Description: Survey of the dynamics of family life and parenting skills. Scope of family life education, methods, source materials and current issues. For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 669. Administering Health Promotion and Disease Prevention Programs** 3 Units
Prerequisite(s): A year of sport management or consent of instructor.
Description: Special problems in administration of health promotion and disease prevention programs in a variety of community organizations. Program planning and organization; financing and budgeting; measuring program effectiveness; integration of health promotion and disease prevention programs and strategies with existing healthcare delivery systems. For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 675. Health Promotion and Disease Prevention at the Individual Level** 3 Units
Description: Techniques for identifying patterns of health-negative behaviors and life-style patterns on the part of an individual and health-negative circumstances in an individual's immediate environment. Development, implementation, and evaluation of person-focused changed strategies designed to eliminate, offset, and/or minimize the effects of health-negative behaviors and microenvironmental factors. For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 676. Community Health Promotion and Disease Prevention** 3 Units
Description: Analytic techniques for identifying health-negative factors in the organizational and community setting; developing, implementing, and evaluating strategic plans and programs for health promotion and disease prevention at the organizational and community level. For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)
- HSS 684. Program Planning in Health Education and Promotion** 3 Units
Description: Effective design, implementation, and evaluation of health instruction within the school and community setting. Emphasis on the development of sequential learning opportunities designed to meet individual and societal health needs and interests. For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

HSS 690. Seminar in Comparative Analysis 3 Units

Prerequisite(s): At least one graduate methods course.

Description: Qualitative Comparative Analysis is a method of doing cross-case analysis with a specific focus on the influence of context as it relates to health and prevention.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

HSS 692. Cooperative Internship/Practicum 1-3 Units

Prerequisite(s): Completed 21 hours toward degree; completed 6 hours of HSS courses.

Description: Supervised practical work experience in an organization or business related to the student's academic field, area of specialization, or career interest.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

HSS 697. Special Topics in Health and Sport Sciences 1-3 Units

Description: Examination of one or more selected topics in the study of Health and Sport Sciences.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

HSS 699. Directed Readings in Health and Sport Sciences 1-3 Units

Description: Supervised readings and written project relating to a specific research topic in health.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)

HSS 789. Advanced Research Design 3 Units

Term Typically Offered: Summer Only

Prerequisite(s): LEAD 701, and either LEAD 600 or EDAP 639, or permission of instructor.

Description: Discussion of quantitative research methods and their application to the design of a study. Emphasis on designs for causal inferences about the effects of an intervention on outcomes variables, especially quasi-experimental designs.

Note: Cross-listed with ECPY 789, EDAP 789, and LEAD 789.

For class offerings for a specific term, refer to the Schedule of Classes (<http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm>)