Human Performance Studies (HPS)

Courses numbered 100 to 299 = lower-division; 300 to 499 = upper-division; 500 to 799 = undergraduate/graduate.

HPS 111. Introduction to Physical Education 3 credit hours
Introduction to the history, principles, philosophy and foundations of physical education with concomitant outgrowths for modern society.

HPS 113. Introduction to Exercise Science 3 credit hours
An overview of the basic physiological, neurological and biomechanical processes associated with physical activity and human movement.

HPS 114. Introduction to Athletic Training 3 credit hours
2 Classroom hours; 2 Lab hours. Covers introductory techniques, applications and theories for the beginning athletic training student. Includes basic skills of fitness program design, emergency procedures, immediate injury care, pharmacology interactions, modality application and environmental conditions.

HPS 117. Community First Aid and Community CPR 2 credit hours
Community first aid and community cardiopulmonary resuscitation with certification by the American Red Cross.

HPS 121. Professional Practicum 2 credit hours
Covers clinical skills and proficiencies relating to emergency/immediate care, health history, modality application and environmental conditions as well as various methods of athletic taping, bandaging, protective padding and bracing of anatomical regions. Prerequisites: admission to the ATP and instructor's consent.

HPS 130. Taping and Bandaging in Athletic Training 1 credit hour
Covers techniques used for the care and prevention of athletic injuries. Includes various methods of athletic taping, bandaging, protective padding and bracing of anatomical regions.

HPS 180. Fitness Instructor Training 2 credit hours
Designed to produce group exercise instructors who can teach floor aerobics, step aerobics, cycling, muscle pump, water aerobics and more. Does not include Yoga or Pilates. A nationally-recognized certification test is administered at the conclusion of the course. Prerequisites: must have previous experience participating in group exercise classes. Adult CPR certification is required before taking the certification tests.

HPS 202. Individual Sports 2 credit hours
Introduces basic skills and strategies of individual sports/activities. Prerequisite: K-12 physical education major.

HPS 203. Adventure Sports 2 credit hours
Introduces activities focusing on life adventures. Prerequisite: K-12 physical education major.

HPS 204. Movement Concepts 2 credit hours
Introduces fundamental motor patterns and movement education. Prerequisite: K-12 physical education major.

HPS 205. Team Sports 2 credit hours
Introduces basic skills and strategies of team sports. Prerequisite: K-12 physical education major.

HPS 220. Athletic Training Practicum 2 credit hours
Covers clinical skills and proficiencies relating to emergency care, basic treatment of injury, risk management, preventative procedures, equipment intensive and specific medical conditions. Prerequisites: admission to the athletic training education program and instructor's consent.

HPS 221. Athletic Training Practicum II 2 credit hours
Covers clinical skills and proficiencies relating to assessment and evaluation of the upper extremity, cervical spine, head and face. Prerequisites: HPS 220 and instructor's consent.

HPS 229. Applied Human Anatomy 3 credit hours
A study of the structure and function of the cardiovascular, skeletal and muscular systems of the human body with application to physical activity.

HPS 300. Rhythmic Activities in PreK-12 Physical Education 2 credit hours
Teaches the value, methodology and curricular content of rhythmic activities appropriate for PreK-12 physical education students. Prerequisite: admission to teacher education program.

HPS 302. Administration in Exercise Science 3 credit hours
Examines the various issues, policies and procedures involved with administration in exercise science. Emphasis is on facility organization and design, legal liability, personnel management, budgeting, equipment purchasing, and record keeping and promotions. Special topics are related to fitness and wellness center administration.

HPS 306. Water Safety Instructor 2 credit hours
1 Classroom hour; 2 Lab hours. Meets American Red Cross standards for certification in Emergency Water Safety and Water Safety Instructor Training. Students must show proficiency at the American Red Cross Swimmer skill level within three weeks after enrolling. Prerequisite: HPS 107A or departmental consent.

HPS 310. Organization and Administration of Physical Education Program 3 credit hours
Addresses the leadership and management skills and duties required of the physical educator in the public school system. Designed to provide students with the knowledge, skills and tools they will need to organize and administer physical education, intramural and athletic programs, and to oversee the management of the physical plant and facilities. Ethics, human resources, budgeting, legal and safety issues, and community collaboration and resources are also studied. Prerequisites: HPS 201A, B, C, D, 460; admission to teacher education, completion of preprofessional block.

HPS 311. ISAM: Physical Education in Secondary Grades 6-12 1-3 credit hours
Provides the skills and knowledge for teacher candidates to successfully teach secondary physical education grades 6-12. Instruction for teaching techniques, teaching progression, skill analysis and development are provided. Students learn effective, authentic assessment of student learning in physical education. There is a study of the adolescent and management techniques for both middle school and high school students. Learning styles are studied and a variety of learning strategies are studied and implemented. A grade of B- or higher must be attained to be recommended for student teaching. Prerequisite: admission to teacher education program. Corequisite: HPS 312.

HPS 312. ISAM: Preteaching Internship: Physical Education-Secondary 1-3 credit hours
Through systematic observation in a secondary school (middle or high school), students observe and examine the nature of teaching and the role of teachers in secondary school physical education classes. A grade of B- or higher must be attained to be recommended for teaching internship. Prerequisite: admission to teacher education program. Corequisite: HPS 311.
HPS 313. Exercise & Sport Nutrition 3 credit hours
Study of the role of nutrition as a means to enhance performance in exercise and sport. Topics include principles of healthful nutrition, energy metabolism and nutrients, regulation of metabolism by macro and micro nutrients, weight control and analysis of the validity and safety of proposed nutritional ergogenic aids. In addition, regulatory (FDA and FTC) aspects of sports nutrition are reviewed.

HPS 317. CPR/AED/First Aid for the Professional Rescuer 2 credit hours
Students learn American Red Cross first aid and CPR/AED skills as used by first responders—those who have a professional duty to act in an emergency and to provide care.

HPS 320. Athletic Training Practicum III 2 credit hours
Covers clinical skills and proficiencies relating to assessment and evaluation of the lower extremity, abdomen/thorax, thoracic, lumbar and sacral spine. Prerequisites: HPS 221 and instructor's consent.

HPS 321. Athletic Training Practicum IV 2 credit hours
Covers clinical skills and proficiencies relating to therapeutic modalities and various treatment protocols involving electrotherapy, ultrasound, traction, joint mobilizations and massage to enhance the healing process. Prerequisite: HPS 320 and instructor's consent.

HPS 324. ISAM: Physical Education in Elementary Grades PreK–5 3 credit hours
Provides the skills and knowledge for teacher candidates to successfully teach elementary physical education grades PreK-5. Instruction for teaching techniques, teaching progression, skills analysis and development are provided. Students learn effective, authentic assessment of student learning in physical education. There is a study of primary and intermediate grades. Management techniques and age-appropriate activities are practiced. Learning styles are studied and a variety of learning strategies are studied and implemented. A grade of B- or higher must be attained to be recommended for student teaching. Prerequisite: admission to teacher education program. Corequisite: HPS 325.

HPS 325. ISAM: Preteaching Internship: Physical Education-Elementary 1 credit hour
Through systematic observation in an elementary school, students observe and examine the nature of teaching and the role of teachers in elementary physical education classes. A grade of B- or higher must be attained to be recommended for teaching internship. Prerequisite: admission to teacher education program. Corequisite: HPS 324.

HPS 328. Kinesiology - Biomechanics 3 credit hours
The understanding of the kinesthetics and mechanics of human motion with respect to performance of sport activities. Prerequisite: HPS 229 or BIOL 223 or HS 290.

HPS 329. Health and Wellness Concepts for PreK-12 Teacher Education 2 credit hours
Designed for the physical education PreK-12 teacher candidate to gain the skills and knowledge to integrate health and wellness with physical activity. The health and wellness concepts are designed to promote living a positive, healthy lifestyle for a lifetime. Provides a foundation of information for students to learn to teach health and wellness in HPS 400. Prerequisite: admission to teacher education program.

HPS 331. Care and Prevention of Athletic Injuries 3 credit hours
2 Classroom hours; 2 Lab hours. The study of acute injury care, prevention and recognition methods for the coach, athletic trainer and physical educator to aid in the management of athletic related injuries. Prerequisite: HPS 229 or BIOL 223 or HS 290.

HPS 334. Assessment and Technology for PreK-12 Physical Education 3 credit hours
Provides teacher candidates the skills and knowledge needed to learn effective, authentic assessment of student learning in physical education in addition to providing the skills and knowledge to effectively implement technology into PreK-12 health and physical education classes. A framework is provided that offers a process for designing curriculum, instruction and assessment so they are conceived, developed and implemented in a clear, thoughtful manner. Assessment is aligned with district, state and national content standards to demonstrate the value of individual student learning and to support a congruent process of both assessment of student learning and of program effectiveness. Technology skills associated with HPER disciplines are developed. Prerequisites: admission to teacher education program and completion of Block 1 of teacher education program.

HPS 350. Upper Extremity Assessment 4 credit hours
3 Classroom hours; 2 Lab hours. Covers clinical assessment related to injury/illness sustained by the competitive athlete specifically involving the upper extremity. Includes skills of health history, visual inspection, physical palpation and functional stress testing. Prerequisites: HPS 229 or equivalent, HPS 331.

HPS 351. Lower Extremity Assessment 4 credit hours
3 Classroom hours; 2 Lab hours. Covers clinical assessment related to injury/illness sustained by the competitive athlete specifically involving the lower extremity. Includes skills of health history, visual inspection, physical palpation and functional stress testing. Prerequisites: HPS 229 or equivalent, HPS 331.

HPS 352. General Medical Conditions in Athletics 3 credit hours
The study of diseases, disorders, illnesses and other general medical conditions affecting the health of the athlete. The student learns to recognize the signs, symptoms and predisposing conditions associated with the skin; eyes, ears, nose and throat; respiratory and cardiovascular system; endocrine system; gastrointestinal and genitourinary tract; gynecological disorders; viral syndromes; and neurological disorders. Prerequisite: HPS 229.

HPS 360. Adapted Physical Education 3 credit hours
Assists students in developing the necessary skills for the implementation of enjoyable physical activity into the lives of persons impaired, disabled or handicapped. In addition to classroom work, students participate in observations and physical activity with persons impaired, disabled or handicapped. Prerequisites: HPS 229 or equivalent, admission to teacher education and completion of preprofessional block.

HPS 400. ISAM: Health Education PreK-12 2 credit hours
Provides practical applications of theoretical models of change for the health field. Discusses health problems, strategies for effecting change and outcome assessment. Develops selected instructional materials. A grade of B- or higher must be attained to be recommended for student teaching. Prerequisite: admission to teacher education program. Corequisite: HPS 401.

HPS 401. ISAM: Preteaching Internship: Health Education PreK-12 1 credit hour
Through systematic observation in PreK-12 schools, students observe and examine the nature of teaching health education. A grade of B- or higher must be attained to be recommended for teaching internship. Prerequisite: admission to teacher education program. Corequisite: HPS 400.

HPS 402. Health Education for the Physical Educator 2 credit hours
Provides practical applications of theoretical models of health education for the physical education classroom. Discusses health problems,
strategies for effecting change and outcome assessment. Develops selected instructional materials. The use of multiple intelligences, integration techniques, classroom management, health education standards, curriculum and technology support the goal of this course. Course includes diversity content. Prerequisite: HPS 329.

HPS 420. Athletic Training Practicum V  2 credit hours
Covers clinical skills and proficiencies relating to therapeutic exercise and various rehabilitation protocols involving flexibility, muscular strength, physical conditioning and functional progressions. Prerequisites: HPS 321 and instructor's consent.

HPS 421. Athletic Training Practicum VI  2 credit hours
Covers clinical skills and proficiencies relating to organizational, administrative and management skills that formulate the administrative aspects of athletic training. Prerequisites: HPS 420 and instructor's consent.

HPS 425. Methods in Physical Education and Health  2 credit hours
Methods of teaching physical education, health and wellness. Acquaints elementary classroom majors with organizational skills and instructional materials. Not open to students in physical education. Prerequisite: admission to teacher education.

HPS 440. Concepts in the Prescription of Exercise  3 credit hours
An introduction of techniques appropriate for screening, health appraisal and fitness assessment as required for prescribing exercise programs for persons without disease or with controlled disease, and provision for practical experience in a supervised setting outside the class. Prerequisite: HPS 229 or BIOL 223 or HS 290.

HPS 442. Administration of Athletic Training  3 credit hours
The principles of administration components within the athletic training profession. The student plans, coordinates and supervises areas of health care services, financial expenditures, personnel management, public relations and athletic training facility development. Prerequisites: HPS 331, instructor's consent.

HPS 450. Therapeutic Modalities  3 credit hours
2 Classroom hours; 2 Lab hours. The study of theories, applications and methods of various modalities consisting of cryotherapy, electrotherapy, hydrotherapy and thermotherapy in addition to principles of manual therapy, intermittent compression and massage. Prerequisites: HPS 229 or equivalent, HPS 331.

HPS 451. Therapeutic Exercise  3 credit hours
2 Classroom hours; 2 Lab hours. The study of a comprehensive rehabilitation/reconditioning program involving techniques of flexibility, muscular strength, muscular endurance and cardiorespiratory training including anaerobic and aerobic principles. Prerequisites: HPS 229 or equivalent, HPS 331.

HPS 460. Motor Learning  3 credit hours
Designed to examine the principles of motor learning by examining the physiological, psychological and neuromotor factors that affect the acquisition of motor skills. Prerequisite: HPS 229, or BIOL 223, or HS 290.

HPS 470. Fitness Practicum  2-3 credit hours
Application of theory to practice by assisting in various activities associated with the field of exercise science (e.g., fitness instruction, weight management, weight training, athletic training, etc.) a minimum of 15 hours per week. Prerequisites: HPS 117, 440; 2.500 GPA or departmental consent.

HPS 471. Teaching Internship - Physical Education - Secondary  6 credit hours
Application for teaching internship must be made to the coordinator of laboratory experiences prior to the semester in which the student intends to enroll. The assignment for teaching internship begins with the opening of the public schools and the student is expected to follow the public school calendar for a semester. A grade of B- or higher must be attained to be recommended for licensure. Prerequisites: completion of all courses in the major field and Core II of the teacher education program. Corequisites: HPS 472, 473.

HPS 472. Teaching Internship - Physical Education - Elementary  6 credit hours
Application for teaching internship must be made to the coordinator of laboratory experiences prior to the semester in which the student intends to enroll. The assignment for teaching internship begins with the opening of the public schools, and the student is expected to follow the public school calendar for a semester. A grade of B- or higher must be attained to be recommended for licensure. Prerequisites: completion of all classes in the major field and Core II of the teacher education program. Corequisites: HPS 471, 472.

HPS 473. Teaching Internship Seminar - Physical Education  1 credit hour
Weekly seminar evaluates strategies for managing classrooms and assesses instructional strategies. Students also discuss the employment process and the requirements for teacher certification. A grade of B- or higher must be attained to be recommended for licensure. Corequisites: HPS 471, 472.

HPS 481. Cooperative Education  1-8 credit hours
Allows students to participate in the cooperative education program. Graded Cr/NCr. Prerequisites: 2.500 GPA and admission to College of Education.

HPS 490. Physiology of Exercise  3 credit hours
2 Classroom hours; 2 Lab hours. Provides a working knowledge of human physiology as it relates to exercise. Prerequisite: HPS 229 or BIOL 223 or HS 290.

HPS 495. Internship in Exercise Science  8 credit hours
Culminating activity for students completing the BA in exercise science. Students spend the equivalent of full-time employment in an appropriate agency for one full semester. Prerequisites: senior standing, departmental consent, HPS 470, 2.500 minimum GPA overall and for major, admission to College of Education.

HPS 510. Coaching Principles  3 credit hours
Provides the skills and knowledge necessary for individuals to successfully coach and officiate both elementary and secondary school interscholastic and intramural athletics. Instruction for coaching and officiating techniques, coaching progression, skill analysis and skill development is provided. Management techniques for interscholastic and intramural athletics are included. A variety of coaching strategies as well as discipline and motivation techniques are discussed. Prerequisite: completion of Core I of teacher education program if undergraduate standing, graduate standing at WSU, or instructor's consent.

HPS 541. Strength Training and Conditioning  3 credit hours
 Helps prepare students for the National Strength and Conditioning Association (NSCA) Certification Commission's Certified Strength and Conditioning Specialist (CSCS) examination and/or the NSCA-Certified Personal Trainer certification examination. Anatomy, biochemistry, biomechanics, endocrinology, nutrition, exercise physiology, psychology and the other sciences that relate to the principles of designing safe and effective training programs are covered. Prerequisite: junior classification or graduate student status.

HPS 590. Independent Study  1-3 credit hours
Prerequisite: departmental consent.
HPS 715. Body Composition and Weight Management  3 credit hours
A comprehensive coverage of the theoretical and scientific aspects of body composition assessment and current strategies for effective weight management. The limitations and usefulness of reference and field methods for assessing body composition in research, clinical and health/fitness settings are addressed. The overall intent of this course is not only to provide classroom-based theory regarding body composition assessment, but also hands-on experience and training in applying the different assessment techniques.

HPS 732. Pathophysiology of Cardiovascular Disease  3 credit hours
Introduces the pathophysiology of multiple cardiovascular conditions and the developing industry of cardiac rehabilitation. Introduces assessment techniques in electrocardiography (ECG) to assist in the diagnosis of cardiovascular disease. Includes an introduction to ECG leads, rate and rhythm, ECG complexes and intervals, conduction disturbances, arrhythmia, ECG identification of myocardial infarction location and drug effects on an ECG. Prerequisite: HPS 490.

HPS 740. Endocrinology and Metabolism of Exercise  3 credit hours
Provides students an in-depth examination of the energy metabolism during exercise and the role of the endocrine system in regulating acute and chronic metabolic responses to exercise. Special endocrine issues related to exercise physiology are discussed.

HPS 750P. ACE Group Fitness Instructor Course  1 credit hour
Designed to give students the knowledge and understanding necessary to prepare for the ACE group fitness instructor exam. In addition, students become more effective education fitness instructors. Students can take the exam for an additional $249.

HPS 750Q. ACE Personal Training Course  1 credit hour
Gives students the knowledge and understanding necessary to prepare for the ACE personal training certification exam. Students learn a comprehensive system for designing individualized programs based on the unique health and fitness goals of clients. Students can take the exam for an additional $249.

HPS 762. Statistical Concepts in Human Performance Studies  3 credit hours
 Covers descriptive statistics, elementary probability, distributional properties, one- and two-population mean and variance comparisons, ANOVA, linear regression and correlations. In addition, more advanced principles in parametric and nonparametric statistics are emphasized. Prerequisite: junior classification or graduate student status.

HPS 780. Physical Dimensions of Aging  3 credit hours
Cross-listed as AGE 780. Covers the complex physiological changes that accompany advancing age and how exercise affects the aging process. Includes an appreciation for how functional consequences affect mental and social dimensions of life. Emphasizes factors associated with the preparation, implementation and evaluation of research projects involving elderly populations.

HPS 781. Cooperative Education Field Study  1-3 credit hours
Provides the graduate student with a field placement which integrates theory with a planned and supervised professional experience designed to complement and enhance the student's academic program. Individualized programs must be formulated in consultation with appropriate graduate faculty. The plan of study for a graduate degree-bound student must be filed before approval of enrollment for cooperative education graduate credit. May be repeated for credit. A maximum of 3 hours (for nonthesis option) or 6 hours (for thesis option) may count toward the graduate degree. Graded Cr/NCr.

HPS 790. Applied Exercise Physiology  3 credit hours
Focuses on the applied aspect of exercise physiology. Includes the areas of environmental influences on performance; optimizing performance through training, nutrition and ergogenic aids; training and performance of the adolescent athlete and the differences in performance and training between genders. Prerequisite: HPS 490 or 830.

HPS 795. Physiology of Athletic Performance  3 credit hours
Explores the physiological responses involved with various athletic performances, including sports requiring endurance, speed and power. Includes such areas of physiological study as metabolic energy systems, cardiovascular and skeletal muscle adaptation, muscle fiber type differentiation and responses to extreme environmental conditions. Discovers parameters for performance and establishes guidelines for training at high levels of performance.

HPS 797. Exercise in Health and Disease  3 credit hours
Introduction to the physiology of disease and the effects of short- and long-term exercise on specific conditions. Understanding the guidelines for exercise testing and prescription in high risk populations. Prerequisite: HPS 490.