

# HUMAN PERFORMANCE & MOVEMENT SCIENCE (HP/HPEX/HPPE)

## HP-100 Issues in PE and Sport (4 Credits)

This course is designed to examine the historical perspectives and contemporary issues that have shaped the physical education, recreation, and sport professions. The course also introduces professional best practices in physical education, recreation and sport such as the Danielson Framework for Teaching.

**Offered:** Fall, Every Year

## HP-154 Lifeguard Training (2 Credits)

Candidates must pass a swimming competency test given on the first day of class. If certification is desired, there will be an additional fee. This course provides an opportunity for students to acquire basic knowledge, skills, and techniques in Lifeguard Training. Designed for non-HPMS majors. Graded Pass/Fail.

## HP-177 Golf (1 Credit)

Students acquire basic knowledge, skills, and techniques in Golf. There will be an additional greens fee. Designed for non-HPMS majors. Graded Pass/Fail.

## HP-191 First Aid & Cpr for the Profssnl Rescuer (1 Credit)

First Aid and CPR for the Professional Rescuer procedures for certification. If certification is desired, there will be an additional fee. Graded Pass/Fail.

## HP-192 Medical Terminology (2 Credits)

Medical terminology is language that is used to describe anatomical structures, processes, conditions, medical procedures, and treatments. This course is designed to introduce the student to the synthesis & analysis of medical terms built from basic word elements, with the use of prefixes, roots and suffixes, applied to body systems.

**Offered:** All, Every Year

## HP-210 Principles of Coaching (4 Credits)

Course highlights coach's role and application of interdisciplinary knowledge from psychology, sociology, and physiology toward development of the individual or team for athletic performance. An understanding of sport psychology, legal liability, teaching skills, daily and seasonal planning, physical training methods, and integration of the whole individual and team is emphasized.

**Offered:** Spring, Every Year

## HP-290 Special Topics (1-6 Credits)

Study of a selected topic in physical education. May be repeated as topics change.

**Prerequisite(s):** HPMS major or permission of instructor

**Offered:** All, Every Year

## HP-298 Independent Study (1-8 Credits)

The student completes a written research project under supervision of a HPMS faculty member who, in consultation with the Dean's Office determines the credit value. May be repeated for a total of 8 credits.

**Prerequisite(s):** Exercise Science, Physical Education or Sport & Recreation Management major and permission of instructor

**Offered:** All, Every Year

## HP-300 Applied Kinesiology (4 Credits)

A lecture-lab experience focused on mechanical principles in the study of human movement. Expanding on the neuromuscular and musculoskeletal systems to gain an understanding of basic motor patterns, using qualitative & quantitative analysis exercise and sport movements.

**Prerequisite(s):** BIO-230 or permission of instructor

**Offered:** Spring, Every Year

## HP-301 Physiology of Exercise (4 Credits)

The study of physiological principles and adaptations to exercise and physical activity. Focuses on the scientific evaluation and understanding of immediate and long-term effects of exercise on the human body. Emphasis placed on the muscular, cardiovascular, endocrine, and respiratory systems. Lecture and labs. May take concurrent with BIO-332.

**Offered:** Fall, Every Year

## HP-307 Sport Management (4 Credits)

This course is designed to give the student a thorough understanding of the complexities of Sport Management. The scope of this class includes definitions, basic theories, organizational structure, leadership skills, sport marketing, facility and event management, sport law, sport ethics, sport finance. Cross-listed as: MGT-307.

**Prerequisite(s):** MGT-101

**Offered:** Fall, Every Year

## HP-340 Epidemiology of PA (4 Credits)

An introduction to the principles and methods of epidemiology and their applicability in the field of Athletic Training and Exercise Science. Students will examine factors governing health and disease. Students will be expected to critically interpret the epidemiologic literature relevant to health professionals and active populations.

**Prerequisite(s):** BIO-332 or permission of instructor

**Offered:** Fall, Odd Years

## HP-341 Patholgy Pharmacology & Excercise Illnes (4 Credits)

An in-depth discussion of primary mechanisms, physiological mechanisms, inflammatory process & pathophysiology associated with sport injuries & medical conditions. Students gain an understanding of the relevant pharmacodynamics, pharmacokinetics & recommended physical activity used in the treatment of conditions associated with health promotion and disease prevention relevant to an active population.

**Prerequisite(s):** BIO-332 or permission of instructor

**Offered:** Spring, Odd Years

## HP-344 Sports Nutrition (4 Credits)

An introduction to Sports Nutrition, including digestion, absorption, and assimilation of food nutrients; Bioenergetics in training; optimal nutrition for sports and exercise; thermoregulation and fluid balance; body composition, weight control, and disordered eating.

**Prerequisite(s):** Exercise Science, or Physical Education, Public Health major, or permission of instructor

**Offered:** Fall, Every Year

## HP-362 Law & Ethics in Sport and Rec (4 Credits)

This course provides an overview of legal principles and ethical issues in sport and recreation. The course is designed to help future managers develop a legal and ethical decision-making process for a career in sport and recreation. Topics discussed include morality, professional code of ethics, tort law, contract law, etc.

**Prerequisite(s):** HP-100

**Offered:** Fall, Every Year

**HP-374 Practicum One (4 Credits)**

A supervised experience that provides an opportunity for students to gain experience and practical knowledge within the sport or recreational environment. All PE Major-CYPAS Option students must have current certification in Adult and Child CPR & AED.

**Prerequisite(s):** HPPE-360 or MGT-307/HP-307, or Permission of Instructor

**Offered:** Fall, Every Year

**HP-444 Sports & Rec. Administration (4 Credits)**

Introduction to the principles of organizational structure within sport organizations, examines the principles, guidelines, and recommendations for the planning and management appropriate to sports programs, ranging from colleges to ultramodern fitness centers.

**Prerequisite(s):** MGT-307 or HP-210, or permission of instructor

**HP-460 Research Methods in Human Movt (4 Credits)**

This course moves beyond use of literature for evidence-based practice to development of an original research study. Quantitative and qualitative study designs are critically examined. Students apply univariate and bivariate analyses to answer research questions. Students experience the research process from question development through results interpretation first-hand via class activities.

**Prerequisite(s):** HP-340 or permission of instructor

**Offered:** Spring, Even Years

**HP-472 Externship (4 Credits)**

A supervised experience designed for the advanced student to gain additional experience and practical knowledge within an exercise-related facility or within the sport or recreational environment. PE Major and EXS Major must have current certification in Adult and Child CPR & AED.

**Prerequisite(s):** HPEX-372 or HP-374 or HP-474

**Offered:** Occasionally, Every Year

**HP-474 Practicum Two (4 Credits)**

A supervised experience that provides an opportunity for the advanced student to apply their knowledge and skills within their selected environment: youth fitness or sport and recreation environment. All PE Major-CYPAS Option students must have current certification in Adult and Child CPR & AED.

**Prerequisite(s):** HP-374 or HP-444, or Permission of Instructor

**Offered:** Spring, Every Year

**HP-490 Advanced Special Topics (1-8 Credits)**

Study of a selected topic in Human Performance & Movement Science at an advanced level. May be repeated as topics change.

**Prerequisite(s):** EXS, PE or SRM major or permission of instructor

**Offered:** All, Every Year

**HP-498 Independent Study (1-8 Credits)**

Advanced independent study. The student completes a written research project under supervision of an HPMS faculty member who, in consultation with the dean of Professional and Graduate Studies, determines the credit value. Repeatable to a maximum of 8 credits.

**Prerequisite(s):** HPMS major, and permission of instructor

**Offered:** All, Every Year

**HPEX-250 Introduction to Exercise Science (4 Credits)**

Introduction to Exercise Science, and to fundamental exercise training techniques. Topics covered include introduction to the field and careers of Exercise Science, appropriate cardiovascular exercise guidelines, the effect of physical activity on health, introduction to resistance training exercises and guidelines, resistance and plyometric training technique, and overall benefits of exercise.

**Offered:** Fall, Every Year

**HPEX-332 Exercise Testing & Programming (4 Credits)**

The principles of exercise testing in all five components of Health Related Fitness, using nationally accepted assessment tools and standards.

Designing and implementing exercise programs based on testing results for apparently healthy adults and those with chronic conditions. (Offered fall, occasionally spring)

**Prerequisite(s):** HP-200 or HP-300, or permission of instructor

**Offered:** Fall, Every Year

**HPEX-335 Advanced Strength and Conditioning (4 Credits)**

Examination and application of strength training and conditioning principles to enhance individual fitness and sport performance. Students develop skills in strength training, conditioning, and exercise leadership to improve individual and group fitness levels. National certification preparation is emphasized.

**Prerequisite(s):** Exercise Science major, HP-200, HPEX-250, or permission of instructor

**Offered:** Spring, Every Year

**HPEX-371 Str & Conditioning Practicum (4 Credits)**

Provides a field experience in strength and conditioning in a sport program designed to give the student an opportunity to plan, implement, and evaluate selected group fitness activities, practice sessions & conditioning programs.

**Prerequisite(s):** HP-210 and HPEX-335

**HPEX-372 Practicum: Exercise Leadership (4 Credits)**

Designed to provide students with a practical setting to apply the knowledge and skill learned throughout the Exercise Science program. Students will practice testing, planning, and facilitating exercise programs for individuals as well as groups.

**Prerequisite(s):** Exercise Science major and HPEX-332 with a minimum grade of C

**Offered:** All, Every Year

**HPEX-492 Exercise Science Seminar (4 Credits)**

A research based capstone course intended to allow students to research, present, and discuss current topics within the health, performance, fitness, and nutrition fields.

**Prerequisite(s):** Exercise Science major and HPEX-332

**Offered:** Fall, Every Year

**HPPE-235 Teaching Team Games & Sport (4 Credits)**

Basic concepts and instructional techniques for teaching Team Games & Sport to include (but not limited to): softball, floor hockey, soccer, basketball, volleyball and flag football. Analysis of motor skill performance and feedback. Teaching emphasis on planning, progression, lesson organization, and application of tactics and strategy to team play.

**Offered:** Fall, Every Year

**HPPE-245 Teaching Outdoor & Lifetime Activities (4 Credits)**

Basic concepts & instructional techniques for teaching outdoor & lifetime activities to include (but not limited to): tennis, pickleball, badminton, golf, bowling, outdoor adventure & seasonal activities. Analysis of motor skill performance & feedback. Emphasis on planning, progression, lesson organization, & application of how to manage risks & safety outdoors.

**Offered:** Spring, Every Year

**HPPE-255 Teaching Fund Mov & Rhythmic Activities (4 Credits)**

Basic concepts and instructional techniques for teaching fundamental movement & rhythmic activities to include (but not limited to): locomotor, manipulative, and stability skills. Analysis of fundamental movement patterns and feedback. Teaching emphasis planning, progression, and application of developmentally appropriate movement & rhythmic activities. Lecture-Laboratory Course.

**Prerequisite(s):** HPPE-235, HPPE-245 or permission of instructor

**Offered:** Fall, Odd Years

**HPPE-260 Total Fitness (2 Credits)**

Develops skills and knowledge related to concepts and assessment of health-related fitness in a physical education setting. Teaching emphasis on leading warmup.

**Offered:** Spring, Every Year

**HPPE-261 Fitness Curriculum for K-12 Learners (2 Credits)**

Develops skill and knowledge to teach health-related fitness concepts and activities in a physical education setting. Teaching emphasis will be on demonstrative/explanation of a fitness concept and transition to activity with individual feedback, with use of technology.

**Prerequisite(s):** Physical Education major or permission of instructor

**Offered:** Spring, Every Year

**HPPE-265 Teaching Fitness Child & Youth (4 Credits)**

Basic concepts, instructional techniques for teaching, assessing health-related concepts, developmentally appropriate activities to children & youth to include (but not limited to): components of fitness, basic training principles, & physiological basis for how physical activity influences body's systems. Emphasis on planning, progression, lesson organization, & use of appropriate technology.

**Prerequisite(s):** HPPE-235, HPPE-245 or permission of instructor

**Offered:** Fall, Even Years

**HPPE-268 Outdoor and Leisure Activities (2 Credits)**

Develops basic knowledge and skills to provide safe outdoor and leisure activities appropriate in a physical education and physical activity settings.

**Prerequisite(s):** PE major or permission of instructor

**Offered:** Spring, Even Years

**HPPE-277 Invasion Games (2 Credits)**

Develops skill and knowledge needed to play and teach invasion games. Teaching emphasis on demonstration/explanation of basic skill.

**Prerequisite(s):** Physical Education major or permission of instructor

**Offered:** Fall, Every Year

**HPPE-281 Fielding/Striking/Target Games (2 Credits)**

Develops skill and knowledge to perform and teach fielding/striking and target games. Teaching emphasis on demonstration/explanation of basic skill and transition to skill practice with individual feedback.

**Prerequisite(s):** Physical Education major or permission of instructor

**Offered:** Fall, Every Year

**HPPE-360 Teaching Physical Education (4 Credits)**

Developmental characteristics and needs in relation to physical education and curriculum planning. Emphasis on the development of effective teaching skills including planning and preparation the classroom environment (classroom management and interpersonal relationships), instruction, and professional responsibilities.

**Prerequisite(s):** HP-100, PSYC-211, or EDSP-202, PE Major or permission of instructor

**Offered:** Fall, Every Year

**HPPE-361 Adapted P.E. & Sport (4 Credits)**

Treats legal issues and the concept of inclusion as they apply to the physical educator, and physical activity leader. Motor and perceptual motor development, screening/assessment, and programming. Adaptation of physical education and sport activities to meet special needs of students. Individual child work included.

**Prerequisite(s):** HPPE-255

**Offered:** Spring, Even Years

**HPPE-363 Assessment of K-12 PE Learners (2 Credits)**

Overviews the purpose of evaluation in K-12 physical education programs. Program standards and various methods of evaluation are examined. Emphasis is placed on designing effective assessment tools that are aligned with program objectives as well as methods for using and reporting results.

**Prerequisite(s):** HPPE-360

**Offered:** Spring, Every Year

**HPPE-375 Practicum: Teaching Elementary (4 Credits)**

Students plan, teach, and evaluate Physical Education lessons/units at the elementary school level, apply knowledge of elementary school children, and understand the role of Physical Education within the school curriculum. Current certification in Standard First Aid, Adult and Child CPR and AED required. Cannot be taken concurrently with HPPE-376.

**Prerequisite(s):** HPPE-255, HPPE-360 (grade C or higher), PE major, Teacher Certification Option, Admission to Educator Preparation, and permission of instructor

**Offered:** Spring, Every Year

**HPPE-376 Practicum: Teaching Secondary (4 Credits)**

Students plan, teach, and evaluate Physical Education lessons/units at the secondary school level, apply knowledge of secondary school students, and understand the role of Physical Education within the school curriculum. Proof of current certification in Standard First Aid, Adult and Child CPR and AED. Cannot be taken concurrently with HPPE-375.

**Prerequisite(s):** HPPE-360 (grade C or higher), PE major, Teacher Certification option, Admission to Educator Preparation, and permission of instructor

**Offered:** Fall, Every Year

**HPPE-475 Student Teaching: Elementary (6 Credits)**

Full-time placement in a elementary physical education setting. Supervision provided by college supervisor and field-based professional toward mastery of principles, attitudes, and techniques for successful teaching. Proof of current certification in Standard First Aid, Adult and Child CPR and AED. Graded Pass/Fail.

**Prerequisite(s):** Permission of Educator Preparation Office

**Offered:** Spring, Every Year

**HPPE-476 Student Teaching: Secondary (6 Credits)**

Full-time placement in a secondary physical education setting. Supervision provided by college supervisor and field-based professional toward mastery of principles, attitudes, and techniques for successful teaching. Proof of current certification in Standard First Aid, Adult and Child CPR and AED. Graded Pass/Fail.

**Prerequisite(s):** Permission of Educator Preparation Office

**Offered:** Spring, Every Year

**HPPE-477 Student Teaching Seminar (2 Credits)**

Issues faced by physical education professionals in schools including but not limited to school policies and procedures, behavior management, record keeping, assessing student performance, student equity, collaboration, technology, advocacy, professional development, licensure, job search, interview skills.

**Corequisite(s):** HPPE-475 and HPPE-476

**Offered:** Spring, Every Year

**IIHP-310 Psycho-Social Aspects of Sport (4 Credits)**

The purpose of this course is to present an interdisciplinary approach to sport which will challenge students to critically reflect and discuss sport from psychological and sociological perspectives. The central focus of the course is to understand how these perspectives and experiences interconnect our personal and societal viewpoints of sport today.

**Prerequisite(s):** 24 credits in ISP including ITW-101 and QL

**IIHP-311 Outdoor Recreational Leadership (4 Credits)**

This interdisciplinary course will explore outdoor recreational leadership qualities, styles, and group dynamics from multiple perspectives (physical education/communication). Additional focus on experiential learning and examinations of selected program activities; develop, lead, and evaluate activities based on varying participant requirements; and earn a Leave No Trace certification.

**Prerequisite(s):** 24 credits in ISP including ITW-101 and QL

**Offered:** Spring, Every Year

**IIHP-352 Exercise Psychology (4 Credits)**

An interdisciplinary approach to understanding why only some people participate in physical activity. Students reflect on past and current experiences, examine psychological theories of motivation, and investigate the exercise high. Neurogenesis as the mechanism for cognitive and emotional benefits is explored. Students develop strategies for increasing exercise motivation in others.

**Prerequisite(s):** 24 credits of ISP including ITW-101 and QL

**Offered:** Spring, Even Years

**INHP-160 Cardiorespiratory Fitness (2 Credits)**

Students acquire knowledge and skills for heart rate-based training, and practice multiple methods of improving cardiorespiratory fitness. Students learn to monitor exercise intensity and adapt exercise to different interests and abilities. This course is useful for improving personal fitness and for developing skills for exercise programming.

**INHP-161 Resistance Training (2 Credits)**

Students acquire knowledge and skills for increasing muscular strength, endurance and size. Students learn proper form and safe use of resistance equipment. Evidence-based methods are taught and practiced. This course is useful for improving personal fitness and for developing skills for exercise programming.

**INHP-162 Muscular Relaxation Training (2 Credits)**

Students will acquire knowledge and mental skills for reducing the effects of stress and anxiety on the muscles in the body. Students will be guided through mind to body and body to mind relaxation training techniques for ideal activation levels. This course is useful for improving personal health.

**INHP-164 Flexibility & Mobility (2 Credits)**

Students acquire knowledge and skills for improving joint range of motion and flexibility. Evidence-based methods of improving musculoskeletal mobility are presented. Students practice techniques for stretching, self-massage, myofascial release, and postural alignment. This course is useful for improving personal fitness and for developing skills for exercise programming.

**INHP-220 Physical Activity and Disease (4 Credits)**

Introduction to human physiology and research regarding physical activity's relationship to Cardiovascular Disease, Type II Diabetes, Obesity, Hyperlipidemia, Hypertension, Cancer and Mental Health. The course will integrate content, epidemiological research, and critical thinking to interpret physiological information concerning the human body adaptations due to physical activity on health.

**Offered:** Summer, Every Year