DEPARTMENT OF HUMAN PERFORMANCE AND EXERCISE SCIENCE

(330) 941-3654

The goals of the Department of Human Performance and Exercise Science are to improve motor performance, develop health related lifetime fitness for the university community, and prepare students for related professions. These goals are achieved by promoting and integrating scientific research related to human performance and exercise science as presented through focused programs of study and outreach services.

Students interested in majoring in exercise science should consult with an advisor in the Department of Human Performance and Exercise Science or call (330) 941-3654.

Important Notice

Finger printing, a criminal background check, and drug testing may be required as a condition for working with a variety of sites used by programs offered in this department. Some sites used by programs offered in the department require that a person have no felony convictions and have passed a drug test within the past year. Any student unable to meet these site requirements may not be able to complete their degree from the department. If you have questions concerning these requirements, please see an advisor in the department.

General Education Courses

The department offers one course that satisfies general education requirements. HPES 1500 Physical Activity Core Concepts may be applied in the Social and Personal Awareness domain. Please note that in order for HPES 1500 Physical Activity Core Concepts to count in the SPA domain, students must take any two HPES Activity Classes (http://catalog.ysu.edu/archives/2016-2017/undergraduate/colleges-programs/college-health-human-services/department-human-performance-exercise-science/bsas-exercise-science) in addition to HPES 1500 Physical Activity Core Concepts. These courses do not have to be taken concurrently.

Elective Courses

Activity classes may count for General Education credit and may count as elective credit. Please refer to the paragraph above for general education information. For a complete listing of activity courses, see the activity course listings in the Undergraduate Catalog.

It is suggested that students with preexisting medical conditions confer with their physician prior to enrolling in activity classes. Students with physical disabilities are urged to see their physician, or the nurse in the Student Health Services office, to review activities which might be appropriate. Most activity classes can be adapted to one's personal abilities and students are encouraged to discuss this with the instructor. Students with disabilities are encouraged to focus on their physical abilities and consider the social and physical benefits that accrue from physical activity. If a disabled student finds only one appropriate activity class, permission may be requested from the department chair (Beeghly Center 307) to take the same class twice for credit.

Veterans who have served at least one full year can receive activity class credit for service.

Members of the men's or women's varsity teams may receive activity class credit through enrollment in HPES 1549 Varsity Competition. This class may be repeated one time per year for each sport in which an athlete is participating. However, only one HPES 1549 Varsity Competition course can count toward the General Education requirement.

Students must provide their own clothing for activity classes, and this attire must be appropriate to the activity. In addition, students who wish to use the locker facilities, must bring their own lock and towel for use during activity classes. Most of the other equipment for activity classes is supplied by the department (a lab fee will be charged in some courses).

For more information, visit the Department of Human Performance and Exercise Science.

Chair
Jennifer Pintar, Ph.D., Chair

Professors
Frank J. Bosso, Ph.D., Professor
Yongung Kwon, Ph.D., Assistant Professor
Sara Michaliszyn, Ph.D., Assistant Professor
Nicole Mullins, Ph.D., Professor
Jennifer Pintar, Ph.D., Professor
Jessica Wallace, Ph.D., Assistant Professor

Majors


Minor


Master's Degree

• Master of Athletic Training (http://catalog.ysu.edu/archives/2016-2017/graduate/graduate-programs/master-athletic-training)

HPES 1500 Physical Activity Core Concepts 1 s.h.

Essential concepts that document the relationship between physical activity and maintaining optimal health. Personal and social implications of physical inactivity are also explored. Two HPES activity courses must be taken in addition to this course to satisfy the requirements for GER credit.


HPES 1502 Volleyball 1 1 s.h.

Basic rules and fundamental skills of volleyball including serves, bump, overhead pass, and block.

HPES 1507 Volleyball 2 1 s.h.

Intermediate-to-advanced volleyball skills including diving, rolling, and various team offensive and defensive strategies.

Prereq.: HPES 1502.
HPES 1508 Group Cycling 1 s.h.
Introduction to improving fitness levels through group cycling. The emphasis in this class will be on improving cardiovascular fitness through indoor stationary cycling bicycles. All fitness levels are welcomed and will acquire fitness benefits.

HPES 1509 Meditation 1 s.h.
Overview of practical meditation theory, with diverse practices culled from the world's wisdom inheritance presented as guided meditation experiences. Historical perspective, along with relevant findings of current neuroscience research which support the efficacy of meditation are considered. The practices develop heightened awareness skills, whether practiced sitting, standing, walking, or supine.

HPES 1510 Archery 1 s.h.
Techniques of target archery. Selection, care, and repair of equipment.

HPES 1511 Badminton 1 s.h.
Skills, mechanics, and rules of badminton.

HPES 1512 Bowling 1 s.h.
Fundamentals of bowling the straight ball. Equipment selection, correction of errors, and scoring. For beginning bowlers. The bowling lanes are located off campus. Transportation to the lanes is not provided.

HPES 1513 Bowling 2 s.h.
Intermediate bowling. Refinement of bowling skills and use of the hook delivery. Tournament planning, team strategy, and competition.
Prereq.: HPES 1512.

HPES 1514 Fencing 1 s.h.
Fundamentals of foil fencing. Methods of attack and parry, and elementary bouts and judging.

HPES 1515 Fencing 2 s.h.
Intermediate strategies and techniques of foil fencing and bouting.
Prereq.: HPES 1514.

HPES 1516 Boxing for Beginners 2 s.h.
This course consists of learning how to properly work out like a boxer. Students will be trained to use the proper equipment, and how to stand, move, punch, and train like a boxer preparing to competitively box. Students will NOT be actually boxing another competitor.

HPES 1519 Racquetball 1 s.h.
Racquetball rules and techniques for singles and doubles play. Basic strategy and skill development.

HPES 1520 Golf 1 s.h.
Fundamental skills of golf. Includes grip, stance, swing patterns, and putting as well as rules of course play.

HPES 1521 Golf 2 s.h.
Intermediate golf. Refinement of swing patterns, methods of instruction, correction of errors. Emphasis on the use of various clubs and types of shots.
Prereq.: HPES 1520.

HPES 1522 Tennis 1 s.h.
Fundamental skills of tennis including forehand and backhand drives and service. Basic rules, strategy, and method.

HPES 1523 Tennis 2 s.h.
Theory and practice of intermediate-to-advanced tennis skills and play.
Prereq.: HPES 1522.

HPES 1524 Physical Fitness and Exercise Programs 1 s.h.
Discussion and participation in activities designed to develop and improve the health-related aspects of physical fitness including weight and stress control.

HPES 1526 Marksmanship 1 s.h.
The safety and practice of handling firearms. Target shooting in prone, kneeling and standing positions.

HPES 1528 Advanced Physical Fitness and Exercise Programs 1 s.h.
Discussion of and participation in strenuous activities designed to develop and improve the health- and performance-related aspects of physical fitness.

HPES 1529 Recreational Games 1 s.h.
Fundamentals, skills, techniques, strategy, and rules of racquetball, paddle tennis, table tennis, shuffleboard, and other recreational games.

HPES 1530 Learn to Swim 1 s.h.
Introduction to swimming and survival skills, floating, drown-proofing, basic swim strokes (side, elementary back, and front crawl), beginning diving, and simple aquatic games. This course is designed for the student who cannot swim; it is not open to swimmers.

HPES 1531 Aquatics 2 s.h.
Intermediate swimming. Introduction to back crawl, breaststroke and butterfly. Techniques in underwater swimming; use of mask, snorkel and fins. Elementary lifesaving skills and refinement of basic springboard diving.
Prereq.: HPES 1530.

HPES 1533 Fitness Swimming 1 s.h.
Utilization of freestyle swimming stroke to improve/maintain fitness across the lifespan. Content includes stroke mechanics, turning technique, and swim training program design to meet individual fitness and health goals.
Prereq.: Ability to swim for 250 yards.

HPES 1537 Aquatic Exercise 1 s.h.
Fitness through aquatic conditioning exercises tailored to the individual needs of the student. Open to swimmers and non-swimmers.

HPES 1544 Step Aerobics 1 s.h.
Rhythmic exercise and conditioning activities performed to music, utilizing a step platform as the foundation of the workout. Designed to improve cardio-respiratory endurance and flexibility. Emphasis on understanding the five basic components of fitness and basic principles and techniques involved in step training.

HPES 1545 Folk and Square Dance 1 s.h.
European and Mediterranean folk dances, American Square dances, and mixers. Beginning materials and practice.

HPES 1547 Flexibility and Core Training 1 s.h.
When performed properly, flexibility can reduce injuries, help recover from injuries, correct muscle imbalances, and recover from exercise. Stretching has also been shown to promote relaxation and stress reduction. This course will cover flexibility utilizing flexbands. In addition, core work and light resistance training will be explored.

HPES 1548 Aerobic Dance 1 s.h.
Rhythmic exercises and conditioning activities performed to music. Designed to improve cardiovascular fitness, flexibility, and general muscle tone.

HPES 1549 Varsity Competition 1 s.h.
Credit may be obtained through competition in varsity athletic programs.
Prereq.: Consent of coach.

HPES 1550 Pilates 1 s.h.
Instruction in principles of body alignment and posture and participation as it pertains to fundamental Pilates techniques.

HPES 1551 Student Athlete Experience 1 s.h.
This course will provide an orientation to student athletes on understanding the demands related to life as a student athlete. This course will focus on various topics related to life-skills such as time management and study skills, campus and community leadership, sports nutrition, professionalism and etiquette, Title IX and sexual harassment, personal financial management and budgeting, and career building and interview skills.

HPES 1552 Yoga 1 s.h.
Instruction in principles of meditation, body alignment and posture, and participation as it pertains to fundamental yoga techniques.

HPES 1553 Yoga 2 s.h.
Builds on the groundwork of fundamental postures, breathing, present moment awareness practices, and various methods for removal of mental and physical tensions introduced in HPES 1552. Practices are drawn from the inheritance of Yoga (Hatha and Raja), for further skill development for managing health and vitality of mind and body.
Prereq.: HPES 1552 or consent of instructor.
HPE 1554 Fitness Walking 1 s.h.
Information on the benefits of walking for fitness. Health advantages, appropriate conditioning, pace, warm-up and cool-down. Practical experience in the skills needed to achieve success in developing and adhering to a walking program.

HPE 1555 Jogging 1 s.h.
Holistic approach to the theory and practice of jogging with emphasis on the physiological benefits.

HPE 1556 Racquetball 2 1 s.h.
Advanced racquetball techniques, strategy, conditioning, and mental preparation for singles, doubles, and tournament play. Emphasis on the use of various advanced shots, positioning, and officiating.
Prereq.: HPE 1519.

HPE 1557 Weight Training 1 s.h.
Introduction to progressive resistive exercise for men and women. Topics include strength training, types of equipment, exercise techniques, circuit training, competitive weightlifting, body building, and injury prevention.

HPE 1558 Physical Fitness for Life 2 s.h.
Participation in exercise and physical activities, and identification of resources and assessment instruments utilized in developing an individualized, well-rounded, effective, lifelong physical fitness program. One hour lecture, two hours lab.

HPE 1559 Aerobic Conditioning Activities 2 s.h.
Analyses and practices in activities designed to develop and improve cardiovascular endurance. Such activities include, but are not limited to, aquatics, fitness walking and jogging. One hour lecture, two hours lab.
Prereq.: Exercise science major, or Physical education major.

HPE 1560 Resistance Training 1 s.h.
Concepts and applications of progressive resistance exercise. Emphasis on advanced principles and techniques for developing muscular strength and endurance for fitness and athletic performance. Two hours lab.
Prereq.: Exercise science major or Physical education major.

HPE 1563 Rock Climbing 1 s.h.
Instruction and participation in fundamental rock climbing techniques that include safely constructing anchor systems, employing belay methods, equipment selection, and beginning climbing skills. A weekend, off-campus field-experience is required.

HPE 1564 Bicycling 1 s.h.
Instruction and practice in bicycling skills, techniques, and procedures necessary for intermediate or long trips. Students must provide their own three-, five-, or ten-speed bicycle.

HPE 1565 Self-Defense 1 s.h.
The defensive techniques of Judo and Aikido designed to counter attacks with a knife, club, gun or bare fist. Balance, control, safety, falling.

HPE 1566 Judo 1 s.h.
Introduction to the history, philosophy and techniques of Judo. Fundamental techniques include falls, hand and leg throws, grappling, various holds and joint locks.

HPE 1568 Taekwondo/Karate 1 s.h.
An introduction to the history, philosophy and techniques of taekwondo/karate. Fundamental techniques include: stances, kicks, punches, and forms.

HPE 1569 Taekwondo Karate 2 1 s.h.
This course consists of an advanced refinement of taekwondo/karate forms and techniques as well as the enhancement and application of their techniques. Students will be presented with advanced skills to further their knowledge of the history and traditions of this martial art. This course builds upon the basic knowledge learned from HPE 1568 (taekwondo/karate I).
Prereq.: HPE 1568.

HPE 1568 Selected Activities in Human Performance and Exercise Science 1-2 s.h.
Knowledge of and practice in a particular area of dance, fitness, or sport. Activity is announced each time the course is offered. May be repeated up to 4 s.h. with change in topic.

HPE 1588 Scientific Basis of Fitness 2 s.h.
Introduction to components of physical fitness and their physiological basis. Role of exercise in prevention of cardiovascular and other hypokinetic diseases. Participation and application of training principles in a variety of fitness activities. Selection and proper use of exercise equipment. One hour lecture, two hours lab.
Prereq.: Physical education major.

HPE 1590 Foundations of Fitness 3 s.h.
Students will learn the fundamentals of fitness as it relates to lifestyle choices and health. Discussion and participation in activities designed to develop and improve the health-related aspects of physical fitness including weight and stress control will be used to develop a personal fitness program through personal goals.

HPE 1595 Introduction to Human Performance and Exercise Science 2 s.h.
Introduction to exercise science and related professions. Includes exploration of the general concepts, goals, aims, objectives, professional organizations, scholarly literature, sub-disciplines within the field, and career employment opportunities.

HPE 1596 Sports First Aid and Injury Prevention 3 s.h.
Basic injury prevention, evaluation, and emergency care. Certification in ARC Standard First Aid and Adult CPR. Basic wrapping and strapping techniques used with common sports injuries. Two hours lecture, two hours lab.
Prereq.: Exercise science major, Wellness minor, or consent of instructor.

HPE 1615 Methods of Teaching Rhythmic Aerobic Activity 2 s.h.
Rhythm and movement fundamentals related to aerobic dance and step aerobics. Methods and materials of teaching rhythmic aerobic activity culminating in practical teaching experience in the classroom. One hour lecture, two hours lab.
Prereq.: HPE 1589.

HPE 1618 Physical Education Practicum 2 s.h.
A supervised experience in a minimum of 14 physical activity sub-disciplines (e.g., sports management, sporting goods industry, not-for-profit organizations, physical activity administration, physical activity skill instruction, etc.) under the direction of a qualified individual.
Prereq.: Physical education major and HPE 1595.

HPE 1620 Exercise Equipment Management 1 s.h.
Factors to consider when purchasing new or used exercise equipment, equipment repair and preventive maintenance procedures, and equipment-related risk management.
Prereq.: Permission of instructor.

HPE 1625 Pedagogical Aspects of Exercise Science 3 s.h.
Effective instructional practices and development of organizational skills and characteristics required for teaching in exercise programs. Two hours lecture, two hours lab.
Prereq.: HPE 1559 and HPE 1595.

HPE 2530 Lifeguard Training 1 s.h.
Water rescue, preventive lifeguarding techniques, emergency procedures. Red Cross certificate granted upon satisfactory completion of all requirements.
Prereq.: Ability to swim 300 yards continuously, tread water for 2 minutes.

HPE 2631 Water Safety Methods for Instructors 2 s.h.
Techniques for teaching and supervising swimming, emergency water safety, and basic water safety. Introduction to infant and preschool aquatic programs. A water safety instructor's certificate granted upon satisfactory completion of all requirements.
Prereq.: Current lifeguard training certificate or emergency water safety certificate.
HPES 2632 Skin and Scuba Diving 2 s.h.
Basic skin-diving with the use of mask, fins, and snorkel. Scuba diving skills with the use of tank and regulator. Emphasis on diving physics, physiology, lifesaving, first aid, and safety skills related to skin and scuba diving. Two hours lecture, two hours lab. Student must furnish mask, fins, and snorkel.

HPES 2635 Openwater Scuba Diving 1 s.h.
Practical experiences in physiological and psychological stress, underwater navigation, effects of hyperthermia, decompression, repetitive diving, and rescue techniques. Students completing this course receive basic openwater certification. Students must furnish mask, fins, and snorkel. Two days openwater field experience. Two hours lecture, two hours lab.

HPES 2672 Biomechanics 3 s.h.
Knowledge and methods of mechanics as they apply to the structure and function of the living human system. Muscular structure and function in relation to physical movement, analysis of fundamental movements. Includes the physical characteristics of the human body and principles of mechanical physics. Two hours lecture. Two hours lab.

HPES 2697 Camping 2 s.h.
The specific skills and problems encountered in camping: shelter, clothing, food, transportation, and site selection. Two hours lab.

HPES 2699 Sport in American Culture 3 s.h.
Sport in American culture from the colonial period to the present as it relates to such areas as education, literature, film and drama, minorities, politics, professional sport, religion and urbanization.

HPES 3700 Exercise Testing and Prescription 1 s.h.
Introductory exercise leadership skills including exercise testing and prescription, and design of safe and effective programs. Includes a minimum of 30 hours of field experience in exercise testing, leadership, observation, and career exploration. Content based on American College of Sports Medicine objectives.

HPES 3705 Statistics and Research Design in Exercise Science 3 s.h.
Scientific methods in exercise science including research design and statistical analyses. Experience with statistical software and understanding published research. Two hours lecture, two hours lab.

HPES 3710 Physiology of Exercise 4 s.h.
Acute responses and chronic adaptations of the body to physiological demands of physical activity. Topics related to the optimization of performance in sport and exercise include neuromuscular and cardiorespiratory function, energy production and utilization, and environmental influences.

HPES 3710L Physiology of Exercise Laboratory 1 s.h.
Experiments and basic laboratory procedures in the field of exercise physiology.

HPES 3720 Kinesiology and Applied Anatomy 3 s.h.
Muscular structure and function in relation to physical movement; analysis of fundamental movements.

HPES 3720L Kinesiology and Applied Anatomy Laboratory 1 s.h.
Analysis and basic laboratory procedures in relation to physical movement and biomechanics. Two hours lab.

HPES 3725 Mindfulness 2 s.h.
Mindfulness is a state of active, open attention on the present and the practice of being aware moment-to-moment. Students will learn techniques of mindfulness. Topics include breath awareness, sitting meditation, body scanning, walking meditation, eating meditation, yoga, loving kindness and yoga nidra.

HPES 3730 Exercise Testing and Prescription 2 4 s.h.
Intermediate exercise testing, exercise prescription based on metabolic calculations and program development for special populations. Supervised field experience in exercise leadership involving 5-8 hours per week. Content based on American College of Sports Medicine objectives.

HPES 3750 Principles of Coaching 2 s.h.
The scientific, psychological, and management aspects of coaching. Includes ethics and management responsibilities, personnel management, community relations, conditioning, and other related topics.

HPES 3755 Athletic Training 1 2 s.h.
Practical and theoretical aspects of the prevention of athletic injuries. Includes supplies, wrapping and strapping, protective equipment. Emphasizes prevention, evaluation, and emergency care. One hour lecture, two hours lab.

HPES 3760 Strength Training and Conditioning 3 s.h.
Scientific principles, concepts, and adaptations to resistance exercise. Practical application of lifting and spotting technique, testing procedures, program design, and organization and administration of the strength and conditioning facility. Two hours lecture, two hours lab.

HPES 3765 Athletic Training 1 2 s.h.
Practical and theoretical aspects of the prevention of athletic injuries. Includes supplies, wrapping and strapping, protective equipment. Emphasizes prevention, evaluation, and emergency care. One hour lecture, two hours lab.

HPES 3770 Administration of Exercise Programs 4 s.h.
Provides an overview of legal, management, and marketing skills necessary to implement exercise related wellness programs. Requires development of business plan including facility design and equipment selection.

HPES 4810 Exercise Testing and Prescription 3 5 s.h.
Clinical exercise tests (electrocardiography, pulmonary function, submaximal/ maximal cardiorespiratory tests) and exercise prescription (cardiovascular, pulmonary, diabetes, stress, cancer, PVD and hypertension). Supervised experience in clinical exercise facilities nine hours during the semester. Content based on American College of Sports Medicine objectives. and HPES 3710. 5 s.h.

HPES 4850 Administration of Exercise Programs 4 s.h.
Provides an overview of legal, management, and marketing skills necessary to implement exercise related wellness programs. Requires development of business plan including facility design and equipment selection.

HPES 4850 Exercise Testing and Prescription for the Health Professions 3 s.h.
Introduction to exercise testing and prescription for healthy adults as well as clinical (cardiovascular, pulmonary, diabetes, obesity, osteoporosis, arthritis) and other special (pregnancy, children, elderly) populations. For Health Professions majors. Not applicable to the major in Exercise Science. Two hours lecture, two hours lab.

HPES 4850 Exercise Testing and Prescription for the Health Professions 3 s.h.
Introduction to exercise testing and prescription for healthy adults as well as clinical (cardiovascular, pulmonary, diabetes, obesity, osteoporosis, arthritis) and other special (pregnancy, children, elderly) populations. For Health Professions majors. Not applicable to the major in Exercise Science. Two hours lecture, two hours lab.

HPES 4850 Administration of Exercise Programs 4 s.h.
Provides an overview of legal, management, and marketing skills necessary to implement exercise related wellness programs. Requires development of business plan including facility design and equipment selection.

HPES 4810 Exercise Testing and Prescription 3 5 s.h.
Clinical exercise tests (electrocardiography, pulmonary function, submaximal/ maximal cardiorespiratory tests) and exercise prescription (cardiovascular, pulmonary, diabetes, stress, cancer, PVD and hypertension). Supervised experience in clinical exercise facilities nine hours during the semester. Content based on American College of Sports Medicine objectives. and HPES 3710. 5 s.h.

HPES 4850 Administration of Exercise Programs 4 s.h.
Provides an overview of legal, management, and marketing skills necessary to implement exercise related wellness programs. Requires development of business plan including facility design and equipment selection.

HPES 4850 Exercise Testing and Prescription for the Health Professions 3 s.h.
Introduction to exercise testing and prescription for healthy adults as well as clinical (cardiovascular, pulmonary, diabetes, obesity, osteoporosis, arthritis) and other special (pregnancy, children, elderly) populations. For Health Professions majors. Not applicable to the major in Exercise Science. Two hours lecture, two hours lab.

HPES 4850 Administration of Exercise Programs 4 s.h.
Provides an overview of legal, management, and marketing skills necessary to implement exercise related wellness programs. Requires development of business plan including facility design and equipment selection.

HPES 4850 Exercise Testing and Prescription for the Health Professions 3 s.h.
Introduction to exercise testing and prescription for healthy adults as well as clinical (cardiovascular, pulmonary, diabetes, obesity, osteoporosis, arthritis) and other special (pregnancy, children, elderly) populations. For Health Professions majors. Not applicable to the major in Exercise Science. Two hours lecture, two hours lab.

HPES 4850 Administration of Exercise Programs 4 s.h.
Provides an overview of legal, management, and marketing skills necessary to implement exercise related wellness programs. Requires development of business plan including facility design and equipment selection.
HPES 4855 Organization and Administration of Human Performance and Exercise Programs 3 s.h.
Organizational patterns and administrative methods in activities, including instructional programs, intramurals and recreation.
Prereq.: 20 s.h. in major.

HPES 4865 Athletic Training 2 2 s.h.
Advanced techniques of athletic training with emphasis on evaluation, treatment and rehabilitation of athletic injuries. Topics include application of therapeutic modalities, reconditioning programs, and the role of the athletic trainer in sports medicine. One hour lecture, two hours lab.
Prereq.: HPES 3765.

HPES 4870 Exercise and Aging for Health Professions 3 s.h.
For majors in Gerontology/Health Professions who work with older adults in exercise/physical activity programs. Emphasis on physical aspects/limitations of aging, exercise testing, prescription, and programs for the elderly. Not applicable to the major in Exercise Science.
Prereq.: Senior standing or permission of instructor.

HPES 4875 Exercise Counseling and Behavioral Strategies 4 s.h.
Exercise Counseling and Behavioral Strategies Evidence-based theories and domains geared toward fostering change, growth, and self-actualization in exercise. The scientific foundations of basic exercise counseling and behavioral strategies that enable effective wellness coaching are explored.
Prereq.: Junior standing.

HPES 4880 Internship 8 s.h.
A culminating experience in an approved fitness or sports-related setting under the direct supervision of a qualified individual and coordinated by a supervising faculty member. Requires 400 hours to obtain 8 s.h. May be taken concurrently with HPES 4875.
Prereq.: Completion of Exercise Science core requirements through HPES 4810.

HPES 4884 Physical Education Internship 12 s.h.
A culminating experience in an approved sport or fitness-related facility or place of business under the direct supervision of a site and university supervisor. Capstone course. Requires 600 contact hours to obtain 12 s.h.
Prereq.: Completion of all HPES major core courses.

HPES 4888 Selected Topics in Human Performance and Exercise Science 1-3 s.h.
In-depth study of special subject matter within the field of physical education. Topic announced each time course is offered. May be repeated for a maximum of 6 s.h. with change in topic.
Prereq.: 72 s.h. or consent of instructor.

HPES 4890 Undergraduate Research 1-3 s.h.
Research participation under the direction and guidance of a full-time faculty member. Provides the advanced student with research experience in HPES. May be repeated to a maximum of six s.h. Junior standing or permission of instructor.

HPES 4898 Seminar: Human Performance and Exercise Science 1 s.h.
Special and current problems in HPES.
Prereq.: 72 semester hours.

HPES 4899 Physiology of Exercise for Physical Education 2 s.h.
Acute responses and chronic adaptations of the body to the physiological demands of physical activity. Prime focus is application to the teaching of physical education.
Prereq.: HEPE 3766.

HPES 4899L Physiology of Exercise for Physical Education Laboratory 1 s.h.
Experiments and basic laboratory procedures in the field of exercise physiology.
Concurrent with: HPES 4899.