

HPE - HEALTH, PHYSICAL ED (HPE)

HPE 000. Senior Portfolio. (0 Credits)

At the completion of their program of study each student with a major in the Department of Health, Physical Education, and Recreation will be required to produce a senior portfolio. The intent of this senior level project is to document the student's professional development and mastery of required course content over the course of his/her academic studies. Specific components of the senior portfolio will include the student's professional philosophy, evidence of a professional development plan, evidence of professional collaboration and networking, examples of created technology, examples of research involvement, and artifacts from the major core, concentration, and emphasis area. Specific instructions for development of the senior portfolio will be provided in introductory major courses and on line at the departmental web site. Prerequisites: Senior; completed or is in the final semester of completing all major requirements.

HPE 1XX. HPE Elective. (1-3 Credits)

HPE 102. Weight Training and Conditioning. (1 Credit)

Scientific application of anatomy, kinesiology, physiology, and psychology principles in designing a program in keeping with the individual's age, body type, physical condition, and personal needs and goals. Two class periods per week. (Fall, Spring, Summer)

HPE 105. Walking/Jogging/Running. (1 Credit)

Encompasses all aspects of walking, jogging and running from pre-stretching warm-up routines to actual walking, jogging and running. Students may select any one of the three activities. Designed to improve cardiovascular system. Two class periods per week. (Fall, Spring, Summer)

HPE 106. Tennis. (1 Credit)

Basic strokes, movement, rules, and play techniques for the beginner. Two class periods per week. (Fall, Spring, Summer)

HPE 108. Golf. (1 Credit)

Basic skills of golf with practical application on the golf course. Two class periods per week. Special fee: \$30.00. (Fall, Spring)
Course Fees: \$45

HPE 109. Bowling. (1 Credit)

Basic skills of bowling with practical skills in a class league. Two class periods per week. Special fee: \$30.00. (Fall, Spring, Summer)
Course Fees: \$30

HPE 110. Badminton. (1 Credit)

Basic skills and strategy of badminton with practical application in a class tournament. Two class periods per week. (Fall)

HPE 118. Advanced Golf. (1 Credit)

Improvement and refinement of the golf swing, with primary emphasis on individual instruction and playing. Two class periods per week. Prerequisite: HPE 108 or acceptable skill. Special fee: \$30.00.
Course Fees: \$45

HPE 119. Beginning Self-Defense and Karate. (1 Credit)

Basic history, culture and theories of the fighting arts. Various skills and techniques used to defend oneself with practical application in class. Students are required to purchase their own uniform. Two class periods per week. (Fall, Spring)

HPE 120. Advanced Self-Defense and Karate. (1 Credit)

Improvement and refinement of basic skills of self-defense, with primary emphasis on self-defense strategies and advanced skill development. Students are required to purchase their own uniform. Two class periods per week. Prerequisite: HPE 119 or permission of instructor. (Offered on sufficient demand)

HPE 123. Volleyball. (1 Credit)

Basic skills, rules and strategies of volleyball. Two class periods per week. (Spring)

HPE 125. Basketball. (1 Credit)

Basic skills, rules and strategy of basketball. Two class periods per week. (Fall)

HPE 130. Beginning Swimming. (1 Credit)

Basic skills for non-swimmers as suggested by the American Red Cross. Two class periods per week. (Fall, Spring)

HPE 131. Intermediate Swimming. (1 Credit)

Emphasis on the five basic swimming styles as suggested by the American Red Cross. Additional emphasis will be placed on personal safety and self-rescue. Two class periods per week. Prerequisite: HPE 130 or equivalent skill. (Fall, Spring)

HPE 140. Aerobic Dance. (1 Credit)

Designed to provide a physical fitness program that offers complete and effective conditioning. Emphasis on moving for fitness and fun. Two class periods per week. (Fall, Spring, Summer)

HPE 142. Square Dance. (1 Credit)

Introduction to a variety of Eastern and Western style square dances. Two class periods per week. (Spring)

HPE 145. Beginning Sailing. (1 Credit)

The purpose of this course is to provide students with the knowledge and skills needed to participate in and enjoy sailing as a lifetime recreational activity. Special emphasis will be given to the development of sound fundamental knowledge and skills, such as selection, care and use of equipment, sailing terminology, types of sailboats, wind and points of sail, sail trim and balance, nautical rules of the road and basic seamanship. Due to the nature of this course, all students will be required to make class field trips to the Muscle Shoals Sailing Club.
Course Fees: \$40

HPE 146. Canoeing. (1 Credit)

The purpose of this course is to provide students with the knowledge and skills needed to participate in and enjoy canoeing as a lifetime activity. Special emphasis will be given to the development of sound fundamental knowledge and skills, such as selection, care and use of equipment, both solo and tandem paddling techniques, transporting a canoe, personal safety skills, and reading moving water. Due to the nature of this course, all students will be required to make class field trips to different lakes and rivers in the surrounding area.
Course Fees: \$35

HPE 147. River Rafting. (1 Credit)

HPE 148. Scuba Diving. (1 Credit)

The purpose of this course is to provide students with the knowledge and skills needed to participate in and enjoy scuba diving as a lifetime recreational activity. Special emphasis will be given to development of fundamental knowledge and skills, such as selection, care and use of scuba equipment; entries and exits from the water with scuba gear; establishing proper buoyancy; safety skills such as proper breathing, mask and regulator recovery, buddy breathing, and emergency accents; and use of dive tables to calculate bottom time, decompression time and surface intervals. Students successfully completing this course will be eligible for open water certification following completion of checkout dive in open water. Certification is optional. Course cost will vary based on instruction provider and equipment rental.

HPE 149. Advanced Scuba Diving. (1 Credit)

The purpose of this course is to provide students with the knowledge and skills needed to participate in and enjoy advanced scuba diving as a lifetime recreational activity. Special emphasis will be given to conducting deep scuba dives, underwater navigation, search and recovery procedures including lift bag/surface marker buoy deployment, peak performance buoyancy, wreck and night diving, use of dive tables for repetitive dives and deep dive combination, and decompression theory. Students successfully completing this course will be eligible for advanced open water certification following completion of checkout dive in open water. Certification is optional. Course cost will vary based on instruction provider and equipment rental.

HPE 150. Snow Skiing. (1 Credit)

The purpose of this course is to provide students with the knowledge and skills needed to participate in and enjoy snow skiing as a lifetime recreational activity. Special emphasis will be given to development of knowledge and skills such as selection, care and use of snow skiing equipment, proper clothing for comfort and safety, basic snow skiing techniques, and boarding and disembarking from a ski lift. Course cost will vary based on destinations selected for snow skiing experiences.

HPE 151. Snowboarding. (1 Credit)

The purpose of this course is to provide students with the knowledge and skills needed to participate in and enjoy snowboarding as a lifetime recreational activity. Special emphasis will be given to development of knowledge and skills such as selection, care and use of snowboarding equipment, proper clothing for comfort and safety, basic snowboarding techniques, and boarding and disembarking from a ski lift. Course cost will vary based on destinations selected for snowboarding experiences.

HPE 152. Orienting and Geocaching. (1 Credit)

The purpose of this course is to provide students with the knowledge and skills needed to participate in and enjoy orienteering and geocaching as lifetime recreational activities. Orienteering is an outdoor activity in which the participant utilizes the skills of topographic map reading and following directions by compass or other means to navigate over unfamiliar terrain. Geocaching involves the use of GPS coordinance to locate specific objects. This course will introduce students to map and compass skills essential for orienteering and use of a GPS unit geocaching.

HPE 153. Rock Climbing. (1 Credit)

The purpose of this course is to provide students with the knowledge and skills needed to participate in and enjoy basic rock climbing and rappelling as a lifetime recreational activity. Special emphasis will be given to the development of sound fundamental knowledge and skills such as knots and their uses, understanding the belay system, selection, care and use of rock climbing equipment, and basic rock climbing and rappelling techniques. Due to the nature of this course, all students will be required to participate in field trips to different climbing locations in the surrounding area.

Course Fees: \$30

HPE 154. Caving. (1 Credit)

This course is designed to provide students with the knowledge and skills needed to participate in and enjoy caving as a lifetime recreational activity. Special emphasis will be given to the development of sound fundamental knowledge and skills such as equipment selection, use and management; selection of personal equipment; safety; basic cave mapping techniques; and understanding and appreciating the cave environment. Additional emphasis will be given to development of a socially responsible attitude toward use of natural resources. Due to the nature of this course, all students will be required to make class field trips to caving sites in the surrounding area.

Course Fees: \$30

HPE 155. Mountain Biking. (1 Credit)

The purpose of this course is to provide students with the knowledge and skills needed to participate in and enjoy mountain biking as a lifetime recreational activity. Special emphasis will be given to the development of fundamental knowledge and skills, such as selection, care and use of equipment, riding techniques, basic bike repairs, personal safety skills, and riding with environmental awareness. Due to the nature of this course, all students will be required to participate in class field trips to different trail and mountain biking locations in the surrounding area.

Course Fees: \$30

HPE 156. Backpacking. (1 Credit)

The purpose of this course is to provide students with the knowledge and skills needed to participate in and enjoy backpacking as a lifetime recreational activity. Special emphasis will be given to the development of fundamental knowledge and skills, such as selection, care and use of backpacking equipment, tents and their uses, fire building and cooking, menu and trip planning, personal safety skills, and backpacking with environmental awareness. Due to the nature of this course all students will be required to participate in class field trips.

Course Fees: \$35

HPE 157. Outdoor Cooking. (1 Credit)

This course is designed to introduce students to a variety of outdoor cooking techniques; from the campfire to the grill. Specifically the student will learn the elements of fire building and cooking with fire including direct cooking over an open fire, foil cooking, can cooking, cardboard cooking, cooking with a reflector oven, Dutch oven cooking, cooking using various camp stoves, and cooking using a grill/smoker. Due to the nature of this course, students will be required to purchase various foods for preparation during the course. A list of foods and cost will be provided during the first course meeting.

Course Fees: \$20

HPE 158. Fly Fishing. (1 Credit)

The purpose of this course is to provide students with the knowledge and skills needed to participate in and enjoy fly fishing as a lifetime recreational activity. Special emphasis will be given to the development of sound fundamental knowledge and skills such as selection use and care of fly fishing tackle, fly selection, fly tying, casting techniques, fish identification, entomology, and conservation. Due to the nature of this course, all students will be required to make class field trips to local fishing areas.

Course Fees: \$30

HPE 159. Disc Sports. (1 Credit)

The purpose of this course is to provide students with the knowledge and skills needed to participate in and enjoy disc sports as a lifetime recreational activity. In this course, students will learn the skills, rules, and strategies needed for successful participation in a variety of disc sports including ultimate frisbee, disc golf, and other disc related activities.

HPE 160. Archery. (1 Credit)

This course is designed to provide students with fundamental skills in use of a bow and arrow, including selection, care and proper use of archery equipment, shooting techniques, range safety and tournament shooting, hunting safety, and state game laws associated with the use of archery equipment.

Course Fees: \$15

HPE 161. Introduction to Freshwater Fishing. (1 Credit)

An introductory course for individuals interested in learn the basic principles of fishing including: how to tie basic fishing knots, equipment terminology, casting mechanics, identification and handling of caught fish, and lure selection. The settings will include a traditional classroom environment and field experiences at local streams, ponds, and lakes.

Course Fees: \$15

HPE 162. Bicycling. (1 Credit)

The purpose of this course is to provide students with the knowledge and skills needed to participate in and enjoy bicycling as a lifetime recreational activity. Special emphasis will be given to the development of fundamental knowledge and skills, such as selection and fitting of a bicycle, bicycle terminology, basic riding skills, proper clothing, physical fitness and bicycling, basic bicycle repairs, road rules and riding safety, riding in different environmental conditions, and riding with environmental awareness. Due to the nature of this course, all students will be required to participate in class field trips to different in the surrounding area.

Course Fees: \$30

HPE 175. Essentials of Healthy Living. (3 Credits)

This course provides the student with instruction and experiences relative to the basic concepts of optimal health and wellness. Emphasis will be given to the emotional, psychological, sociological, and physiological factors within the environment that influence an individual's health and well-being. Part of the course will include laboratory experiences dealing with personalized individual assessments regarding wellness-related issues and application of these results in a behavioral change plan. (Fall, Spring, Summer)

Course Fees: \$30

HPE 199. Service Learning. (3 Credits)

This course is designed to introduce students to Service Learning through the integration of academic learning about local, national, and global issues with service work addressing those concerns. Approval of supervising department required. (Offered upon sufficient demand.)

HPE 202. Lifeguard Training. (3 Credits)

Emphasis on water rescue skills required for American Red Cross lifeguarding certification. Two class periods per week. Prerequisite: HPE 131 or permission of instructor and successful completion of pre-test. (Offered on sufficient demand)

Course Fees: \$10

HPE 203. Methods of Teaching Aquatics. (3 Credits)

Emphasis on refinement of five basic styles of swimming as suggested by the American Red Cross and development of instructional techniques for teaching swimming. Students who qualify my receive certification as an ARC Water Safety Instructor. Two class periods per week. Prerequisite: HPE 131 or permission of instructor and completion of pre-test. (Offered on sufficient demand)

Course Fees: \$10

HPE 213. Foundations of Health. (3 Credits)

This course explores personal and community health problems, including nutrition, mental health, safety, stress management, prevention of disease, mood modifiers, medical and dental services, and degenerative diseases. (Fall, Spring)

HPE 216. Introduction to Individual and Dual Sports. (3 Credits)

This course is designed to teach individual/dual sport activities (i.e., tennis, pickleball, badminton, etc.) basic to physical education programs. Emphasis will be placed on skill development and methods and techniques for teaching these sport skills. Evaluation techniques for measuring knowledge and skill in these activities will also be stressed. (Spring)

HPE 221. Introduction to Health and Physical Education. (3 Credits)

An introduction to the health and physical education profession including professional organizations, career opportunities, historical development, basic principles underlying contemporary theory and practice, and the development of a sound professional philosophy. (Fall, Spring)

HPE 225. Nutrition and Human Performance. (3 Credits)

An introduction to the influence and relationship of basic nutrients to optimal healthy living as well as fitness and athletic performance. Prerequisites: HPE 175 or HPE 213. (Fall, Spring, Summer)

HPE 226. Introduction to Team Sports. (3 Credits)

This course is designed to teach team sport activities (i.e., basketball, volleyball, softball, soccer, etc.) basic to physical education programs. Emphasis will be placed on skill development and methods and techniques for teaching these sport skills. Evaluation techniques for measuring knowledge and skill in these activities will also be stressed. (Fall)

HPE 233. First Aid. (3 Credits)

The study of first aid and safety as recommended by the current national guidelines combined with methods of prevention and care of injuries associated with physical education and athletics. CPR will also be covered during this course. Two class periods and one 1-hour laboratory period per week. Course fee: \$15.00 (Fall, Spring, Summer)

Course Fees: \$15

HPE 235. Medical Terminology. (1 Credit)

This course is designed to familiarize the student with medical terminology relevant to the profession of exercise science. Emphasis is on the spelling, definition, and usage of medical terms for effective communication. (Fall)

HPE 270. Practical Experiences in Health, Physical Education, Recreation, and Sport Management. (1 Credit)

Introductory field experience for students with concentrations in health, physical education, recreation, or sport management. Students will be required to complete a minimum of 30-hours as directed by the course instructor. Prerequisites: HPE 221 or SRM 222. (Fall, Spring)

HPE 275. Officiating Sports. (3 Credits)

Theory and practice of officiating team, individual and duel sports. Two class sessions per week and a minimum of 30 field experience hours involving sport officiating. (Fall, Spring)

HPE 300. Methods of Teaching Physical Education , Grades 6-12. (3 Credits)

Methods of teaching physical education in grades 6-12. Emphasis on factors of purpose, growth and development, motor learning, program planning, and evaluation. Students will be required to complete a minimum of 24 field experience hours observing and assisting in a school based physical education program. Prerequisites: HPE 221 or SRM 222 and HPE 233. (Spring)

HPE 304. Methods of Teaching Physical Education, Grades P-6. (3 Credits)

Methods of teaching physical education in grades P-5. Emphasis on student growth and development, selecting age appropriate activities including games, stunts, relays and rhythms, and sequential skill introduction. Additional emphasis will be given to motor learning, program planning, and evaluation for these grade levels. Students will be required to complete a minimum of 24 field experience hours observing and assisting in a school based physical education program. Recommended preparation: ED 299. (Fall)

HPE 342. School Health Education for the Elementary Grades. (3 Credits)

Information and skills related to the total school health program with an emphasis on health instruction. Additional components of the Comprehensive School Health Program will be addressed including school health services, healthful school environment, nutrition services, counseling and social support services, parent/community involvement, and health promotion for staff. Prerequisite: Admission to Teacher Education. (Fall, Spring, Summer)

HPE 343. Health Education and the Physical Educator. (3 Credits)

Health information and skill building needed by the physical educator to effectively teach comprehensive school health. The overall health and well-being of the student will be addressed including physical mental and social aspects. Prerequisites: HPE 175, HPE 213, HPE 300 or HPE 304, and admission to the Teacher Education Program. (Spring)

HPE 350. Applied Nutrition for the Lifespan. (3 Credits)

Building on basic nutritional concepts, this course will address nutritional needs across the lifespan including infancy, childhood, adolescence, childbearing/pregnancy, middle age, and seniors. Knowledge, skills and behavior impacting nutrition at the personal level will be addressed as well as skill application to initiate permanent behavior change. Prerequisite: HPE 175 or HPE 213. (Fall)

HPE 351. Chronic Disease and Health Promotion. (3 Credits)

A detailed examination of common chronic diseases and their impact on today's society. An in-depth epidemiological study of arthritis, cancer, CVD, diabetes, and osteoporosis; treatment options, and preventive strategies; and health promotion in reducing morbidity and mortality rates. Prerequisites: HPE 175 or HPE 213. (Spring)

HPE 352. Kinesiology. (3 Credits)

Emphasis on human movement, muscular growth and development, physiology of muscular contraction, motor learning, and scientific application of kinesiological principles. Prerequisite: BI 241 or BI 242. (Fall, Spring, Summer)

HPE 353W. Physiology of Exercise. (3 Credits)

Emphasis on the effects of exercise on the anatomical structures and physiological functions in humans during acute and chronic physical activity. In addition to exercise responses, the impact of environmental conditions, dietary and nutritional ergogenics, basic energy system and its regulation, and training responses, considerations for specific populations including children, females, and the active aging adult will be covered. Prerequisite BI 241 or BI 242. Special fee: \$30.00. (Fall, Spring) Course Fees: \$30

HPE 359. Special Course. (1-6 Credits)

Course number reserved for special courses offered from time to time in response to special circumstances. The courses are discipline specific with variable credit and when offered, they are identified by department content and credit.

HPE 360. Introduction to Fitness Testing. (3 Credits)

A professional preparation course dealing with the theory, competencies and practical skills used for conducting various health fitness and athletic performance assessments. Results and normative values of tests performed will be discussed with consideration of age, gender, and sport specific abilities. Special emphasis will be placed on the ability to administer and evaluate test protocols for health-related components of fitness as well as skill-related components of physical fitness necessary for sports participation. Students required to complete a minimum of 12 hours assisting in the Human Performance Laboratory. Prerequisite: HPE 175. (Fall)

HPE 369. Special Course. (1-6 Credits)

Course number reserved for special courses offered from time to time in response to special circumstances. The courses are discipline specific with variable credit and when offered, they are identified by department content and credit.

HPE 370. Theory and Practice in Coaching Sports. (3 Credits)

Emphasis on identifying, analyzing and evaluating recent developments and issues in the coaching profession. Prerequisite: HPE 221 or SRM 222. (Fall)

HPE 371. Coaching Practicum. (3 Credits)

Students will be assigned to field experiences as student coaches in schools qualified to provide coaching experiences. Students will be required to complete a minimum of 100 field experience hours observing and assisting as student coaches. Special fee: \$15.00. Prerequisites: HPE 221 or SRM 222; HPE 233, HPE 370. Course Fees: \$15

HPE 378. Athletic Training and Conditioning. (3 Credits)

Application of athletic training principles and techniques necessary for the care and prevention of athletic injuries. Two class periods and one 1-hour laboratory period per week. Prerequisites: HPE 233, HPE 352. (Fall, Spring)

HPE 389. On-Campus Internship. (3 Credits)**HPE 399. Departmental Service Learning. (1-6 Credits)**

This course is designed to provide students the opportunity to integrate academic learning about vital service issues within a specific discipline with service work addressing those issues. This course may be repeated for a maximum of six credits. Approval of supervising department required. (Offered upon sufficient demand.)

HPE 401. Adapted Physical Education. (3 Credits)

Study of the atypical individual as related to understanding both physical and mental disabilities and the development of sound physical education programs for various disabling condition. Topics addressed will include fitness assessment, developing sound physical education and activity programs, physiological responses to exercise, adaptations, and accessibility issues. Students will be required to complete a minimum of 30 field experience hours in an assigned adaptive physical education setting. Recommended preparation: EEX 340. (Fall, Spring)

HPE 402. Exercise Prescription and Fitness Appraisal in the Healthy Individual. (3 Credits)

Emphasis on development of professional competencies and skills used to evaluate health related components of physical fitness. General methodologies and procedures used in exercise testing, exercise prescription, risk factor identification, and education for healthy individuals will be studied. Prerequisites: HPE 233, HPE 352, HPE 353W, HPE 360.

HPE 403. Essentials of Prescribing Resistance Training. (3 Credits)

A professional preparation course addressing the theory and practical skills necessary to design and implement a variety of resistance training programs across the age spectrum. The use of different resistance modalities typically used to improve muscular endurance or muscular strength will be considered as well as the physiological, biomechanical, and safety aspects of resistance training. Prerequisites: HPE 352, HPE 353W. (Spring)

HPE 405. Exercise Leadership. (3 Credits)

Professional competencies, skills, methods, and procedures for use in exercise and fitness program design. Emphasis will be placed on exercise leadership skills, instructional techniques and oral communication suitable for a variety of exercise settings. Prerequisite: HPE 402. (Fall, odd-numbered years)

HPE 406. Human Sexuality. (3 Credits)

Emphasis on development of an understanding of the physical, mental, social, emotional, and psychological phases of human relationships as they are affected by male and female roles. Additional emphasis will be placed on understanding human sexuality as a healthy entity and as a source of creative energy in total life development. (Fall)

HPE 408. Consumer Health. (3 Credits)

Designed to provide the student with experience in critical analysis and evaluation of advertising claims related to a broad range of health-related products and services in the market place, health care delivery systems, and health practitioners. (Spring)

HPE 410. Health Promotion. (3 Credits)

An examination of the development of health promotion programs in community, corporate and school settings, including assessment of program development, selection of personnel, administration procedures, evaluation procedures, marketing techniques, and legal issues. Prerequisites: HPE 175 or HPE 213. (Spring, even-numbered years)

HPE 420. Health and Aging. (3 Credits)

An interdisciplinary course with a clinical component that focuses on the physiological, mental and emotional changes experienced by individuals as they age. Students will be required to complete a minimum of 12 clinical hours as part of this course. This course may be applied toward the gerontology certification. Also listed as NU 420 but creditable only in field for which registered. (Summer)

HPE 421. Psychology of Coaching. (3 Credits)

Application of psychological principles and theories to coaching and sports. Emphasis will be placed on the relationship of emotional states to performance, the role of coaching in the formation of values, the emotional reaction of crowds in sports situations, and the athlete and his/her personality and social environment. Prerequisite: HPE 370. (Spring)

HPE 422. Public Health. (3 Credits)

A critical examination of public health at all levels of government, from local agencies to international efforts. The course includes an examination of epidemiology, the role of voluntary and governmental agencies, and the accessibility of public health services to the population. Grant writing and fund raising in the public health sector will also be addressed. Prerequisite: HPE 213.

HPE 424. Drugs in Society. (3 Credits)

Analysis of the medical, psychological, social, and legal dimensions of drug use and abuse across cultures, the prevalence of drug abuse and roles played by the family and society in relation to drug abuse and addiction.

HPE 430. Behavioral Modification Interventions. (3 Credits)

Detailed analysis of an array of behavioral change techniques and their application to relevant health problems in prevention/intervention programs. Special emphasis will be placed on exercise adherence, dietary changes, weight control management, smoking cessation, and stress management. Prerequisite: HPE 175. (Summer, even-numbered years)

HPE 443. Management of Health, Physical Education, and Athletics. (3 Credits)

Emphasis on organization and administration of health, physical education and athletic programs in schools; curriculum planning; budgeting; selection, care and maintenance of equipment and facilities; personnel issues. Prerequisite: HPE 221. (Fall, Spring)

HPE 450. Motor Learning. (3 Credits)

This course is designed to prepare teachers, coaches and fitness instructors to teach motor skills in an effective and efficient manner. Prerequisite: HPE 221 or SRM 222. (Fall, Spring, Summer)

HPE 451. Applied Statistics in Health and Exercise Science. (3 Credits)

This course will consider the validity, reliability, and objectivity of evaluative techniques which are unique to the field of health and exercise science. Emphasis will be placed on use and interpretation of t-tests, ANOVA, regression, Z-scores, standard error, and preparation of tables and figures for formal presentations. Prerequisites: MA 110 or MA 112; HPE 175 or permission of instructor.

HPE 466W. Legal Issues and Risk Management in Sport and Leisure Activities. (3 Credits)

This course is intended to aid health, physical education, recreation, and sport management professionals in understanding major legal concepts affecting the practices and procedures followed in their professions. Additional emphasis will be given to procedures for initiating an active program of risk and liability management that will help ensure the safety of participants in these programs. Prerequisite: HPE 221 or SRM 222. (Fall, Spring, Summer)

HPE 479. Continued Enrollment. (1-3 Credits)**HPE 490. Research Methods: Introduction to Concepts and Analyses. (3 Credits)**

Exploration and discussion of concepts associated with scientific inquiry and the research process including proposal development and in-depth analysis of contemporary topics and recently published manuscripts.

HPE 494. Exercise Prescription for Moderate Risk and Known Disease Individuals. (3 Credits)

Professional competencies and skills for evaluating and prescribing safe and effective therapeutic exercise for individuals with multiple cardiovascular risk factors and/or diagnosed diseases such as heart and lung disease, diabetes and obesity. Prerequisite: HPE 402. (Spring, odd-numbered years)

HPE 496. Cardiopulmonary Rehabilitation and ECG Interpretation. (3 Credits)

Application of physiological principles for clinical exercise evaluation and therapeutic modalities for individuals with controlled cardiovascular, respiratory or metabolic disease including basic principles and interpretation of the electrocardiogram (ECG) as it relates to fitness programs for clients qualifying for cardiac or pulmonary rehabilitation. Emphasis will be placed on application of American College of Sports Medicine (ACSM) Guidelines for risk stratification, appropriate exercise prescriptions and exercise progressions. Three class periods; one 2-hour laboratory period per week. Prerequisite: HPE 494. (Spring)

HPE 496L. Cardiopulmonary Rehabilitation and ECG Interpretation Laboratory. (1 Credit)

Required laboratory for HPE 496 Cardiopulmonary Rehabilitation and ECG Interpretation. Practical application of basic principles, data collection, and interpretation of the electrocardiogram (ECG) as it relates to exercise testing and cardiac/pulmonary assessment. One 2-hour laboratory period per week. (Spring)

Course Fees: \$30

HPE 497. Special Topics. (1-3 Credits)

Detailed examination of a specific topic in the field of health and physical education. Topic will be announced prior to the scheduling of the class. May include field trips. A special fee may be required according to the topic and course content. (Fall, Spring, Summer)

HPE 498. Internship. (6 Credits)

Students will be assigned to an appropriate health, exercise science, recreation, or sport management agency for the purpose of experiencing a minimum of 200 hours of extended field experience. These 200 hours of field experience may be equally split between two separate agencies at the discretion of the program coordinator. Students will be consulted as to the agency with which they would desire to intern. At the completion of the internship, each student will provide a portfolio describing and providing examples of work completed and make an oral presentation to peers and departmental faculty. For students in the recreation and sport management concentration, this course will be taken in concurrently with SRM 497, Internship. Prerequisites: Completion of all other program of study requirements and approval of the department chair. (Fall, Spring, Summer)

Course Fees: \$30

HPE 499. Independent Study. (1-3 Credits)

Open to senior departmental majors upon submission of request and approval by the department chair. Provides opportunity for study, research or special field experiences in health and physical education based on appropriateness as determined by the department chair and faculty supervision. Prerequisite: Senior status in departmental major. (Fall, Spring, Summer)