The Department of Kinesiology and Health Sciences offers programs that prepare students to pursue careers that utilize exercise interventions for both healthy and diseased populations and/or careers designed for students who wish to enter a health care-related field (that does not require licensure, certification or registry status). The department offers one undergraduate degree program; the Bachelor of Science with either the exercise science concentration or the health science concentration.

Along with the undergraduate program, the department also offers a Master of Science in Health and Movement Sciences and Doctor of Philosophy in Rehabilitation and Movement Science.

The M.S. in Health and Movement Sciences program provides advanced coursework for students interested in the application of health and movement science principles to exercise science, teaching and sports medicine. This program has a central focus on the sciences and is flexible enough so that students, with the assistance of an adviser, can design a program that truly meets their professional goals.

The Doctor of Philosophy in Rehabilitation and Movement Science program is interdisciplinary in nature and includes faculty from the departments of Kinesiology and Health Sciences, Physical Therapy, and Physical Medicine and Rehabilitation. Students choose a concentration in either exercise physiology or neuromusculoskeletal dynamics.

The department also offers a post-baccalaureate undergraduate Certificate in Health Sciences that is designed for students who hold a baccalaureate degree in a non-science area and wish to pursue their undergraduate pre-health sciences requirements at VCU.

For more information, consult the department’s website (http://khs.vcu.edu/).

- Health, Physical Education and Exercise Science, Bachelor of Science (B.S.) with a concentration in exercise science (http://bulletin.vcu.edu/undergraduate/college-humanities-sciences/kinesiology-health-sciences/health_physical-education-exercise-science-bs-concentration-exercise-science/)
- Health, Physical Education and Exercise Science, Bachelor of Science (B.S.) with a concentration in health science (http://bulletin.vcu.edu/undergraduate/college-humanities-sciences/kinesiology-health-sciences/health_physical-education-exercise-science-bs-concentration-health-science/)
- Health Sciences, Certificate in (Post-baccalaureate undergraduate certificate) (http://bulletin.vcu.edu/undergraduate/college-humanities-sciences/kinesiology-health-sciences/health-sciences-certificate/)
- Health, physical education and exercise science (HPEX) (p. 1)
- Health, physical education and exercise science labs (HPEZ) (p. 6)
HPEX 232. Introduction to Driver Education. 3 Hours.
Semester course; 3 lecture hours. 3 credits. A current automobile operator's permit is required. An introduction to the vehicle operator's task within the highway transportation system: driver task analysis.

HPEX 250. Medical Terminology. 1 Hour.
Semester course; 1 lecture hour. 1 credit. Self-directed learning experience for students entering a medical or allied health profession. Presents medical terms by their root word, suffix and prefix. Develops skills to build and decode medical terms by their word parts. Develops ability to recognize and use common medical abbreviations.

HPEX 271. Safety, First Aid and CPR. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course includes American Red Cross and/or American Heart Association certification in Multimedia Standard First Aid and Basic Life Support (cardiopulmonary resuscitation). In addition, basic principles of accident causation and prevention are presented.

HPEX 291. Special Topic in Health, Physical Education and Exercise Science. 1-3 Hours.
Semester course; 1-3 credits. May be repeated for a maximum of 3 credits. Restricted to health, physical education and exercise science majors only. Offers students the opportunity to participate in an approved professional experience related to the students' knowledge base of general education and professional introduction courses; may include participatory and experimental formats dictated by the faculty supervisor; credits determined by the number of contact hours of the experience.

HPEX 292. Independent Study in Health, Physical Education and Exercise Science. 1-3 Hours.
Semester course; 1-3 credits. Health, physical education and exercise science majors only. May be repeated up to a maximum of 3 credits. Enables a student to create an individualized research project or professional experience based on specific professional needs and goals; must have adviser's approval; experiences based on the student's knowledge base of general education and professional core introduction courses; credits determined by the number of contact hours and extensiveness of the project.

HPEX 293. Field Practicum I. 3-6 Hours.
Semester course; variable practicum hours. 3-6 credits. Health, physical education and exercise science majors only. Provides observational and small group experiences for the pre-professional student; includes planned observations, tutorials and small group involvement under the supervision of the faculty and field supervisor; summary papers, observational logs, resumes and updated five-year plans are completed in this writing intensive course; a minimum of 50 contact hours per credit hour required; consult with adviser to obtain specific course requirements.

HPEX 294. Field Practicum II. 3-6 Hours.
Semester course; variable practicum hours. 3-6 credits. Health, physical education and exercise science majors only. Provides observational and small group experiences for the pre-professional student; includes planned observations, tutorials and small group involvement under the supervision of the faculty and field supervisor; minimum of 50 contact hours per credit hour required; consult with adviser to obtain specific course requirements.

HPEX 295. Clinical Practicum I. 3-6 Hours.
Semester course; variable practicum hours. 3-6 credits. Health, physical education and exercise science majors only. Provides observational and small group experiences for the pre-professional student; includes planned observations, tutorials and small group involvement under the supervision of the faculty and clinical supervisor; summary papers, observational logs, resumes and updated five-year plans are completed in this writing intensive course; a minimum of 50 contact hours per credit hour required; consult with adviser to obtain specific course requirements.

HPEX 296. Clinical Practicum II. 3-6 Hours.
Semester course; variable practicum hours. 3-6 credits. Health, physical education and exercise science majors only. Provides observational and small group experiences for the pre-professional student; includes planned observations, tutorials and small group involvement under the supervision of the faculty and clinical supervisor; a minimum of 50 contact hours per credit hour required; consult with adviser to obtain specific course requirements.

HPEX 300. Health Care Delivery in the U.S.. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Introduces students to the American health care system and provides an opportunity to analyze the diverse components comprising the system. Major components of the system are examined, including inpatient and outpatient services, financing, insurance and technology. Provides the student a perspective of the variety of career choices in health care.

HPEX 301. Fitness and Health. 3 Hours.
Semester course; 3 lecture hours (delivered online, face-to-face or hybrid). 3 credits. Presents the knowledge and pedagogical principles of strength, flexibility, aerobic and anaerobic training programs, as well as the role that exercise and lifestyle play on overall health. Emphasis is on understanding, experiencing and applying conditioning principles for individuals and how they impact health.

HPEX 325. Pathology and Pharmacology in Athletic Training. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: HPEX 220, HPEX 220L, PHIS 206 and PHIZ/BIOZ 206L. Acquaints the student with the pathology of athletic injuries and the proper use of pharmacology in the treatment of athletic injuries. Includes the pathomechanics of sports injuries and the use of medication in the treatment of sports injuries.

HPEX 330. Elementary Health and Physical Education. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: HPEX 230, and either HPEX 201 or HPEX 202. Open only to general health and physical education majors in the health, physical education and exercise science program. Emphasis is given to the role of movement and theory in the education program and its implications for curriculum development and learning. Major consideration is given to the development of movement competency through thematic instruction.

HPEX 331. Methods in Driver Education. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: HPEX 232. This course is designed to provide driver education instructional principles and methodology.

HPEX 332. Motor Learning and Performance. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course is designed to introduce the student to the major concepts of motor control and motor learning and the influencing conditions. It will provide a framework for understanding the structure and function of the nervous system in relation to perception and motor control. Other topics include the general nature of skill acquisition and how learners interact with the environment while performing motor tasks. The theoretical framework underlying learning and memory are related to the acquisition of motor skills.
HPEX 333. Psychosocial Aspects of Sport and Physical Activity. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. The focus of this course is  
the scientific study of the behavior of individuals and groups within sport  
and physical activity in terms of the psychological effects and factors  
of sport participation, and in terms of the social relationships and social  
settings within which sport participation occurs.

3 Hours.  
Semester course; 3 lecture hours. 3 credits. Corequisite: HPEZ 334.  
Topics include selecting, administering, scoring and evaluating tests in  
the areas of general motor performance, health screening, fitness, sport  
skills and knowledge. Includes scientific test construction and basic  
statistical analysis.

HPEX 335. Elementary Physical Education for Physical Education Majors.  
3 Hours.  
Semester course; 2 lecture and 2 laboratory hours. 3 credits. Designed  
to enhance knowledge of elementary physical education through an  
analysis of the aims, goals, objectives, programs and teaching methods.  
Construction of year-round curriculum and daily lesson plans. Emphasis  
also placed upon the acquisition of administrative and organizational  
knowledge dealing with facilities, equipment, teaching aids, testing,  
measurement and safety.

HPEX 337. Technology in Teaching Health and Physical Education. 3  
Hours.  
Semester course; 3 lecture hours. 3 credits. Emphasis is placed on the  
application of the latest software and hardware technology used in  
the field of health and physical education. Students use public school  
settings and authentic data whenever possible.

HPEX 345. Nutrition for Health and Disease. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Enrollment restricted to  
HPEX majors. Overview of basic nutritional knowledge for both healthy  
individuals and those with increased risk of cardiovascular disease. The  
course relies on evidence-based research when discussing food and  
nutrition. Topics include science and politics of dietary guidelines; the  
science and controversies of carbohydrates, proteins, fats, vitamins  
and minerals; supplements; obesity and weight loss; digestion and  
absorption; allergies and intolerances; functional foods, phytochemicals  
and organic food.

HPEX 346. Employee Health Fitness Management. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. This course presents the  
knowledge, skills and abilities needed to design and implement health  
promotion, wellness and fitness programs that improve the physical  
health of employees of various working environments, as well as assess  
the cost-effectiveness of these programs.

HPEX 347. Foundation Principles for Health, Fitness and Sport  
Professions. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. This course provides  
foundational principles for health, fitness and sport professions.  
Subdisciplines such as exercise physiology, sport and exercise  
psychology, biomechanics, motor behavior and sociocultural aspects of  
fitness and sport will be included. Students will also discuss career  
and leadership pathways within fitness/sport management.

HPEX 350. Nutrition. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Provides learning  
opportunities that enable the student to acquire a practical and useful  
knowledge based on the sound principles of applied human nutrition.  
Emphasis will be on nutritional needs through the cycles of life providing  
information that will enhance the student’s own lifestyle and provide  
experience in interpreting nutritional information for the public.

HPEX 351. Issues in Sexuality. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. An overview of content,  
principles and strategies relating to issues in human sexuality both in  
the community and school settings. Basic concepts of human sexuality  
as they develop in today's world are presented. Issues include sexual  
maturity, reproductive systems, conception, birth, abortion and varieties  
of sexual behavior and sexual dysfunctions and disorders.

HPEX 352. Substance Abuse. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. A survey of drugs that are  
used and abused in contemporary society. Multidisciplinary lectures  
and discussions include the historical and sociological perspectives of  
drugs in the school and community; the psychological and physiological  
effects of drug use; and the role of local and regional resources. Designed  
for students, teachers, counselors, administrators and other interested  
persons. Rehabilitation methods and prevention programs also will be  
discussed.

HPEX 353. Disease Trends, Prevention and Control. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Pre- or corequisite: HPEX  
250. Provides students an opportunity to examine the major  
categories of diseases, infectious and noninfectious, including significant  
examples in each category. Students will also research major diseases  
affecting the U.S. population as well as global populations. Current  
modalities for the prevention, treatment and control of these diseases will  
be studied.

HPEX 354. Coping and Adaptation. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Focuses on common stress  
factors in life such as death, personal loss, life changes, divorce and  
emotional problems, such as anger, loneliness and frustration. Strategies  
for dealing with such stressors are discussed and applied to both  
personal and professional settings.

HPEX 355. School and Community Health Resources. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Acquaints the student with  
current available school and community resources and educational  
materials for health information. Available services in a community  
health program will be surveyed.

HPEX 356. Community Health Education and Promotion: Theory and  
Practice. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Prerequisites: HPEX 300  
and 353. Pre- or corequisite: HPEX 355. Introduces theories, roles  
and skills that are the foundation for the professional practice of  
community health education. Emphasizes the growing significance of  
health education in preventing and/or treating health problems, health  
promotion and improving quality of life. Presents the historical evolution  
and development of the profession and the various settings in which  
health educators practice. Assists in the preparation of students for  
certification as health education specialists.

HPEX 357. Personal Health and Behavior Change. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Designed to provide students  
with a basic understanding of various contemporary personal and  
community health issues. Special emphasis placed on increasing  
awareness of multiple factors that affect individual health-behavior  
change and, subsequently, influence current and future health status.
HPEX 358. Introduction to Epidemiology. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: STAT 210.
Enrollment restricted to HPEX majors. Introduction of students to the
field of public health epidemiology, emphasizing methods for assessing
factors associated with the distribution and etiology of health and
disease. Skills include methods for identifying and evaluating sources
of health information, calculation of key epidemiologic measures,
epidemiological investigation techniques, and evaluation of the strengths
and weaknesses of different study designs.

HPEX 370. Coaching Seminar. 1 Hour.
Semester course; 1 lecture hour. 1 credit. A lecture/discussion
course that identifies the practical administrative and organizational
responsibilities coaches encounter. Realistic problem-solving is stressed.

HPEX 371. Psychology of Physical Activity. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Examines psychological
issues related to physical activity, exercise and sport participation. Topics
include individual and group motivation theory and techniques, leadership
effectiveness, mental health, mental skills training, injury rehabilitation,
eating disorders, exercise adherence, addiction, overtraining and use
of ergogenic aids. Emphasizes examination of current research and
application of psychological principles in a physical activity setting.

HPEX 372. Survey of Kinesiology and Physiology of Exercise. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Examines the basic concepts
of human biomechanics and exercise physiology. Includes basic and
applied kinesiology and metabolic, endocrinological, cardiovascular
and respiratory responses and adaptations to exercise. Emphasizes the
integration of kinesiological and physiological principles.

HPEX 373. Structural Kinesiology. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: BIOL 205.
Corequisite: HPEZ 373. Presents the anatomical aspects of human
motion with particular attention given to application of anatomical
structure and terminology in analysis of physical activities; emphasizes
structure and function of the human musculoskeletal system and
qualitative analysis of motor skills.

HPEX 374. Musculoskeletal Structure and Movement. 4 Hours.
Semester course; 3 lecture and 2 laboratory hours. 4 credits. Prerequisite:
BIOL 205. Pre- or corequisite: PHYS 201. Enrollment restricted to
HPEX majors. Provides an understanding of the mechanical aspects
of human motion with particular attention given to application of
anatomical structure, terminology and biomechanics in the analysis
of physical activity. Laboratory learning allows students to acquire
practical knowledge and skills in palpation, biomechanical analysis and
instrumentation.

HPEX 375. Physiology of Exercise. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: PHIS 206.
Corequisite: HPEX 375. Physiological changes in the human organism
resulting from exercise, investigation of recent research in diet, drugs,
fatigue, cardiovascular/respiratory fitness, conditioning programs for
various age groups and the effects of exercise upon various components
of physical fitness and health. Application of specific problems to
physical education programs. Laboratory experience in the use of
research instruments.

HPEX 380. Resistance Training for Health and Performance. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: HPEX 310 and
HPEX 375. Enrollment restricted to HPEX majors. Provides students with
the knowledge, skills and abilities to design and implement resistance
training programs for a variety of populations. Covers the scientific
and practical basis for resistance training to reduce injuries, improve
health and optimize performance. Students actively participate in and
demonstrate knowledge of a range of resistance exercise techniques, as
well as preparticipation screening. Helps prepare those students wishing
to attempt the National Strength and Conditioning Association's Certified
Strength and Conditioning exam.

HPEX 381. Introduction to Sport and Fitness Management. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course presents the
knowledge, skills and abilities of planning and implementing fitness
programs in commercial and corporate settings. Topics will include, but
are not limited to, fitness management leadership, operations/facility
management, staff management, consumer recruitment/retention and
strategic planning, as well as legal considerations.

HPEX 391. Special Topic in Health, Physical Education and Exercise
Science. 1-3 Hours.
Semester course; 1-3 credits. Health, physical education and exercise
science majors only. May be repeated up to a maximum of three credits.
Offers students the opportunity to participate in an approved professional
experience related to the students' knowledge base of general education,
professional introduction and some core professional courses; may
include participatory experiences in which the student plays an active
role in the experience; credits determined by the number of contact hours
of the experience.

HPEX 392. Independent Study in Health, Physical Education and Exercise
Science. 1-3 Hours.
Semester course; variable hours. 3-6 credits. Health, physical education and exercise
science majors only. May be repeated up to a maximum of 3 credits.
Enables a student to create an individualized research project or
professional experience based on specific professional needs and
goals; must have adviser's approval; experiences based on the student's
knowledge base of general education and professional introduction and
some professional core courses; credits determined by the number of
contact hours and extensiveness of the project.

HPEX 393. Field Experience I. 3-6 Hours.
Semester course; variable hours. 3-6 credits. Prerequisites: permission
of instructor; acceptance into teacher preparation program; and CPR
certification. Health, physical education and exercise science majors
only. Precedes the in-depth student teaching experience or the in-
depth exercise science field experience; includes planned observations,
tutorials, small group involvement under the supervision of the faculty
and field supervisor; practices routine, basic and advanced procedures;
minimum of 50 contact hours per credit hour required; consult with
adviser to obtain specific course requirements.

HPEX 394. Field Experience II. 3-6 Hours.
Semester course; variable hours. 3-6 credits. Health, physical education and
exercise science majors only. Designed to provide supervised
practical experience in the teaching process or delivery of health
education/health promotion programs; opportunities to further abilities
in physical education and exercise science through practical application
of skills in school or agency settings; a minimum of 50 contact hours
per credit hour required; consult with adviser to obtain specific course
requirements.
HPEX 395. Clinical Experience I. 3 Hours.
Semester course; 3 clinical hours. 3 credits. Prerequisites for students in the exercise science concentration: HPEX 375, junior standing and permission of instructor. Prerequisites for students in the health science concentration: HPEX 250, HPEX 300, HPEX 353 and BIOL 205, junior standing, and permission of instructor. Enrollment restricted to HPEX majors. Students are also expected to maintain current CPR/AED/FA certification throughout the semester. Students should consult with an adviser or course instructor to obtain concentration-specific course prerequisites and course requirements. Addresses competencies in exercise science, health promotion and/or health science. Provides experiences at an approved affiliate site under the supervision of faculty and approved site supervisors. Students gain practical experience in routine and basic procedures associated with exercise science, health promotion and/or health science. A minimum of 40 contact hours per credit hour required.

HPEX 396. Clinical Experience II. 3-6 Hours.
Semester course; variable clinical hours. 3-6 credits. Health, physical education and exercise science majors only. Addresses required competencies in the athletic training, kinesiotherapy or community wellness education programs; provides experiences in an approved affiliate site under the supervision of faculty and approved clinical instructors; gains practical experience in routine, basic and advanced procedures associated with athletic training, kinesiotherapy or community wellness; a minimum of 50 contact hours per credit hour required; consult with adviser to obtain specific course requirements and clinical competencies addressed.

HPEX 420. Athletic Training Administration. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: HPEX 395 and HPEX 396. Acquaints the student with the proper organization and management techniques used in health care administration of athletic training programs. Includes organization, management and administration of health care of the physically active in the athletic setting.

HPEX 430. The Organization, Administration and Supervision of the Intramural Sports Program. 3 Hours.
Semester course; 2 lecture and 2 laboratory hours. 3 credits. Experiences in the organization and administration of an intramural sports program. Lecture will be devoted to the theory, philosophy, history and plans for the conduct of an intramural sports program. Laboratory experience will be obtained by working in intramural programs.

HPEX 431. Adapted Physical Activity. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prepares future teachers and professionals to meet the needs of persons with disabilities in organized health, physical education and rehabilitation programs in the school, community or hospital setting. Provides an overview of those disabilities found most frequently in public school and rehabilitation settings.

HPEX 432. Methods and Curriculum in Physical Education. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prepares students to become independent problem-solvers and decision-makers by applying previously acquired knowledge to curriculum design and instruction in multiple settings; students acquire pedagogical skills and gain insight into the development of a physical education curriculum for elementary, middle and high school levels.

HPEX 433. Methods and Curriculum in Health Education. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prepares students to become independent problem-solvers and decision-makers by applying previously acquired knowledge to curriculum design and instruction in a classroom setting; students acquire pedagogical skills and gain insight into the development of a health education curriculum for elementary, middle and high school levels.

HPEX 435. Health Disparities in the U.S.. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: HPEX 353 and HPEX 358. Enrollment restricted to HPEX majors. Provides an exploration into the magnitude of health disparities in the U.S. and the association with socioeconomic status, race, ethnicity, country of origin, cultural history and access to health services. Students are encouraged to broaden their perspectives and understand how various sociocultural factors impact health and health care delivery as it relates to the patient/consumer as well as the health care practitioner. Targets the values, beliefs, attitudes and customs of multiple segments of the population in relationship to age, gender, disability status, sexual orientation, area of residence, etc. Emphasizes and provides learning experiences to assist in the development of cultural competence.

HPEX 440. Chronic Disease and Exercise Management. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: HPEX 375 and HPEX 375L. Presents in-depth information of various concepts specifically related to exercise management of persons with chronic disease and/or disability. Provides scientific knowledge of various chronic diseases and disabilities that are commonplace and can be managed with physical activity. General topics include cardiovascular and pulmonary diseases, metabolic diseases, immunological and hematological diseases, orthopaedic diseases and disabilities, neuromuscular disorders, and cognitive, emotional and sensory disorders. Focuses on the understanding of specific physical and physiological characteristics associated with the various diseases and disabilities.

HPEX 441. Assessment and Exercise Intervention in Health and Disease. 3 Hours.
Semester course; 2 lecture and 1 laboratory hours. 3 credits. Prerequisite: HPEX and HPEX 375. Provides in-depth information of various concepts specifically related to exercise assessment and prescription for healthy persons and those with chronic disease and/or disability. Examines the various concepts specifically related to measurement of cardiorespiratory fitness, pulmonary function, body composition, flexibility and muscular strength and endurance. Focuses on the development of exercise and physical activity prescriptions for healthy and diseased populations.

HPEX 445. Principles of Health Care Management. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: HPEX 240 or 300. Exposes the student to basic aspects of administration and management in various health care settings. The traditional areas of administration and management, such as planning, organizing, staffing, directing and controlling will be addressed. Contemporary issues such as cultural competence, quality of care, ethics, and fraud and abuse will be examined. The course will provide a theoretical base that will enhance and facilitate the student’s application of sound management principles in various practice settings.

HPEX 450. Program Planning and Evaluation. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: HPEX 356. Corequisite: HPEX 450. Presents the foundations of planning, implementation and evaluation of community health education programs. Exposes students to programming and evaluation in a variety of community health settings, including schools, work sites, hospitals, state and local health departments and nonprofit agencies.
HPEX 451. Professional Conference in Community Health Education. 1 Hour.
Semester course; 1 lecture hour. 1 credit. Offers the student an opportunity to participate in a professional conference focusing on community health education. This experience includes observing, summarizing and critically evaluating presentations, as well as preparing and delivering presentations and networking.

HPEX 470. Exercise Programming and Leadership. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: HPEX 310, HPEX 380 and HPEX 441. Provides knowledge and skills necessary for assessing, interpreting and designing health and activity programs for apparently healthy populations. Students develop leadership skills through presentation of ACSM exercise testing procedures and implementation of exercise prescriptions.

HPEX 475. Cardiovascular Pathophysiology and Pharmacology. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisites: HPEX 375 and HPEX 440 or equivalents. Enrollment restricted to HPEX majors. Presents theoretical principles of electrocardiography and the effects of pharmacological intervention in the treatment of cardiovascular disease. Specific emphasis placed on myocardial ischemia, myocardial infarction and their treatment through exercise rehabilitation protocols. The impact of pharmacological agents on the ECG and on exercise is explored.

HPEX 480. Professional Certification Seminar. 1 Hour.
Semester course; 1 lecture hour. 1 credit. Prerequisites: HPEX 380, HPEX 441 and HPEX 470. Enrollment restricted to seniors in HPEX major. Provides structured experiences in the classroom, laboratory and exercise arenas to improve knowledge, skills and abilities in health-related physical fitness assessment and exercise programming. Supplements existing course work by correcting any deficiencies in learning competencies toward being a successful exercise professional. A review of certification materials is also an important component of the course.

HPEX 491. Special Topic in Health, Physical Education and Exercise Science. 1-3 Hours.
Semester course; 1-3 credits. Health, physical education and exercise science majors only. May be repeated up to a maximum of 3 credits. Offers students the opportunity to participate in an approved professional experience related to the students’ knowledge base of general education, professional introduction and extensive core professional courses; may include research-based projects or more academically rigorous experiences; credits determined by the number of contact hours of the experience.

HPEX 492. Independent Study in Health, Physical Education and Exercise Science. 1-3 Hours.
Semester course; 1-3 credits. Health, physical education and exercise science majors only. May be repeated up to a maximum of 3 credits. Enables a student to create an individualized research project or professional experience based on specific professional needs and goals; must have adviser’s approval; experiences based on the student’s knowledge base of general education, professional introduction and extensive core courses; credits determined by the number of contact hours and extensiveness of the project.

HPEX 493. Field Experience III. 3-12 Hours.
Semester course; variable hours. 3-12 credits. Prerequisites: pass Praxis II; HPEX 393 with a minimum grade of C. Health, physical education and exercise science majors only. An in-depth field experience in a public school, health education/health promotion agency or other approved setting; designed to provide the pre-professional student with greater practical application of skills culminating in full responsibility for planning, implementing and evaluating the classroom, agency or facility activities; a minimum of 50 contact hours per credit hour required; consult with adviser to obtain a course syllabus regarding prerequisites and specific course requirements.

HPEX 494. Field Experience IV. 3-6 Hours.
Semester course; variable hours. 3-6 credits. Prerequisites: pass Praxis II; HPEX 393 with a minimum grade of C. Health, physical education and exercise science majors only. An in-depth field experience in a public school, health education/health promotion agency or other approved setting; designed to provide the pre-professional student with greater practical application of skills culminating in full responsibility for planning, implementing and evaluating the classroom, agency or facility activities; a minimum of 50 contact hours per credit hour required; consult with adviser to obtain a course syllabus regarding prerequisites and specific course requirements.

HPEX 495. Clinical Experience II. 6 Hours.
Semester course; 6 clinical hours. 6 credits. Prerequisites: HPEX 358, HPEX 395 and HPEX 435, each with minimum grade of C; or HPEX 395 and HPEX 441, each with minimum grade of C. Enrollment is restricted to students with senior standing in the health, physical education and exercise science major with permission of the instructor. Students are also expected to maintain current CPR/AED/FA certification throughout the semester. Students should consult with the course instructor to obtain course requirements. Fulfills capstone requirement. Addresses competencies in exercise science, health promotion and/or health science. Provides experiences at an approved affiliate site under the supervision of faculty and approved site supervisors. Students gain practical experience in routine, intermediate and advanced procedures associated with exercise science, health promotion and/or health science. A minimum of 40 contact hours per credit hour required.

HPEX 496. Clinical Experience III. 3-6 Hours.
Semester course; 6 clinical hours. 6 credits. Prerequisites: HPEX 395, senior standing, permission of instructor and minimum grade of C in all HPEX prerequisite courses. Enrollment restricted to HPEX majors. Students are also expected to maintain current CPR/AED/FA certification throughout the semester. Students should consult with an adviser or course instructor to obtain concentration-specific course prerequisites and course requirements. Addresses competencies in exercise science, health promotion and/or health science. Provides experiences at an approved affiliate site under the supervision of faculty and approved site supervisors. Students gain practical experience in routine, basic and advanced procedures associated with exercise science, health promotion and/or health science. A minimum of 40 contact hours per credit hour required.

Health, physical education and exercise science labs

HPEX 220. Introduction to Athletic Training Laboratory. 1 Hour.
Semester course; 2 laboratory hours. 1 credit. Corequisite: HPEX 220. Laboratory fee required. A laboratory to introduce the basic skills used by an athletic trainer in the prevention and care of athletic injuries in the physically active.
HPEZ 320. Upper Extremity Assessment of Athletic Injuries Laboratory. 1 Hour.
Semester course; 2 laboratory hours. 1 credit. Corequisite: HPEX 320.
Laboratory fee required. This laboratory course includes practice in
the skills of assessment and management of upper extremity athletic
injuries in the physically active. Includes head, neck, thoracic, abdominal,
shoulder, elbow, forearm, wrist, hand and finger injuries.

HPEZ 321. Lower Extremity Assessment of Athletic Injuries Laboratory. 1 Hour.
Semester course; 2 laboratory hours. 1 credit. Corequisite: HPEX 321.
Laboratory fee required. This laboratory course is designed to acquaint
the student with the proper assessment and treatment procedures for
lower extremity athletic injuries in the physically active. The lab will
include prevention, care and treatment of lower back, hip, thigh, knee,
lower leg, ankle and foot athletic injuries.

HPEZ 322. Therapeutic Exercise in Athletic Training Laboratory. 1 Hour.
Semester course; 2 laboratory hours. 1 credit. Corequisite: HPEX 322.
This laboratory course is designed to acquaint the student with the
proper use of therapeutic exercise in the treatment and rehabilitation of
athletic injuries in the physically active. The lab course will include the
skills of the therapeutic exercise used in the treatment of groin, thigh, hip,
knee, lower leg, ankle, foot, shoulder, elbow, wrist, hand, finger and back
athletic injuries.

HPEZ 324. Therapeutic Modalities in Athletic Training Laboratory. 1 Hour.
Semester course; 2 laboratory hours. 1 credit. Corequisite: HPEX 324.
Laboratory fee required. This laboratory course will allow the student
develop the practical skills required to properly apply therapeutic
modalities used to treat athletic injuries in the physically active.

HPEZ 334. Measurement and Analysis in Teaching and Exercise Science
Laboratory. 1 Hour.
Semester course; 2 laboratory hours. 1 credit. Corequisite: HPEX 334.
Laboratory experience applying knowledge and skills presented in
HPEX 334.

HPEZ 373. Structural Kinesiology Laboratory. 1 Hour.
Semester course; 2 laboratory hours. 1 credit. Prerequisite: BIOL 205.
Corequisite: HPEX 373. Laboratory experience applying knowledge and
theory from HPEX 373.

HPEZ 375. Physiology of Exercise Laboratory. 1 Hour.
Semester course; 2 laboratory hours. 1 credit. Prerequisite: PHIS 206.
Corequisite: HPEX 375. Provides practical application of the physiological
principles presented in HPEX 375; assists students in the development of
practical application competencies associated with assessment of acute
and chronic effects of exercise on the human body.

HPEZ 450. Service-learning in Community Health Education Planning and
Evaluation. 1 Hour.
Semester course; 1 service-learning/laboratory hour. 1 credit. Corequisite:
HPEX 450. Provides experience working with community partners to gain
firsthand exposure to specific target populations, observing the needs
of those populations and current efforts, if any, to address those needs.
Community partners include nonprofit agencies, schools, worksites,
hospitals and state and local health departments.