HES 099/Emergency Care **0 course unit**
(every semester)
Basic safety and emergency first-aid knowledge and skills with opportunity to attain American Red Cross CPR and first-aid certification.

HES 160/Current Health and Wellness Issues **1 course unit**
(every semester)
This course is designed so that students learn to explore wellness as an active choice based on understanding of the science of health/wellness and the statistical study of risk factors for mortality and morbidity. Students will develop this understanding through an investigation of lifestyle issues facing college students. They will learn how to assess their lifestyles, interpret indicators and trends, and evaluate choices using comprehensive health assessments.

HES 172/Foundations of Health and Exercise Science **1 course unit**
(every semester)
This course is designed to introduce students to the critical issues in physical education, fitness, sports, and health promotion. Changing philosophies and basic concepts will be discussed. Professions related to physical education, sports, fitness, and health wellness will be included.

HES 180/Motor Development and Elementary Movement **1 course unit**
(fall)
Prerequisite: reserved for Health and Exercise Science teacher candidates
Study of the concept and underlying principles of movement; application of these principles to early childhood movement, sports and dance.

HES 182/Lifespan Wellness Activities **1 course unit**
(spring)
Prerequisites: Reserved for Health and Exercise Science teacher candidates
The course will present introductory skills, knowledge, teaching methodology, evaluative techniques, and resources related to conducting at least three individual and dual sports activities. Primary emphasis is on knowledge of the skills and methodology. (Suggested sports: golf, tennis, badminton, and racquetball.)

HES 183/Recreational Lifetime Activities **1 course unit**
(spring)
Students will participate in a variety of individual and dual sports activities. Primary emphasis is on knowledge and performance of the skills. (Suggested sports: golf, tennis, badminton, and racquetball.)

HES 203/ Anatomy and Physiology I **1 course unit**
(with laboratory)
(every semester)
Prerequisite: BIO 171, reserved for Health and Exercise Science majors
This course is designed to prepare students on the basic scientific principles of Anatomy and Physiology. A systematic study of homeostasis involving all structure and function of the human body. Course topics will include biological terminology, from the cellular level through the fundamental Systems of the Body. Growth and development of the body's framework, movements, homeostatic balance for health and wellness will be emphasized. Laboratory experiences and dissections are included.

HES 204/Anatomy and Kinesiology **1 course unit**
(every semester)
Prerequisite: HES 203, reserved for Health and Exercise Science majors
A second year course for both physical education and exercise science students prepares the student to understand the science of motion. This course provides students with a foundation in neuromuscular physiology, anatomy, and biomechanics that is essential for the understanding of bodily movements and athletic performance.

HES 205/Applied Anatomy and Physiology II **1 course unit**
(with laboratory)
(spring)
Prerequisites: BIO 171, HES 203, reserved for Health and Exercise Science majors
This course is designed to prepare students on the basic scientific principles of Human Anatomy and Physiology. A comprehensive systematic study of "balance" involving all structures and function in the human body will be performed. Course topics will begin with basic anatomical terminology, from the human skeleton system, to the nervous system, muscle tissue, and the muscle system including the "Sliding Filament Theory" of muscular contraction. Growth and development, aging and rehabilitation will be emphasized. Laboratory experiences and dissections are included.

HES 210/Applied Strength Training and Conditioning Techniques **1 course unit**
(spring)
This course is designed to expose students to different strength training and conditioning modalities and equipment currently used in the field. General course topics include weight training, body weight and implement training, balance and instability training, corrective exercise, ballistic training, speed and agility training, plyometric training, aerobic training, and flexibility training all of which are important for any future exercise professional regardless of whether the student becomes a physical therapist, fitness instructor, strength and conditioning coach, or personal trainer. This course has a large practical component and involves physical exercise.

HES 250/Nutrition and Metabolism **1 course unit**
(every semester)
Prerequisites: HES 203, reserved for Health and Exercise Science majors
This course provides students with basic concepts and principles pertaining to nutrition and energy metabolism as well as various quantitative methods used in nutritional analysis. It focuses on most current and research-based information pertaining to the positive influence of proper nutrition on health, fitness, and sports performance and hands-on experiences for evaluating dietary status and energy balance.

HES 260/Issues in School Health
(spring)
Corequisite: HES 292
Prerequisites: reserved for Health and Exercise Science teacher candidates
An in-depth look at the health education content spectrum covered in K-12 curriculum and the direct connection to state and national standards. The primary emphasis is the foundation of knowledge necessary for teaching health at the elementary, middle, and secondary levels.

HES 282/Sport Concepts and Skills **1 course unit**
(fall)
Prerequisite: reserved for Health and Exercise Science teacher candidates
The course will present introductory skills, knowledge, teaching methodology, evaluative techniques, and resources related to conducting at least three team sports activities. Primary emphasis is on knowledge of the skills and methodology.

HES 283/Recreational Team Activities **1 course unit**
(fall)
Students will participate in a variety of team sport activities. Primary emphasis is on knowledge and performance of the skills. (Suggested sports: team handball, ultimate frisbee, volleyball, and basketball)

HES 292/Methods of Elementary Health and Physical Education **1 course unit**
(with laboratory)
(spring)
Prerequisite: HES 180, reserved for Health and Exercise Science teacher candidates
Introduction of methodologies specific to elementary health and physical education. A K-5 field experience consisting of observation, co-teaching, and teaching health and physical education are required. Primary emphasis on successful lesson planning, lesson implementation, management techniques, student learning and personal reflection

HES 301: Sports Biomechanics **1 course unit**
(fall)
Prerequisites: HES 203 and 205, reserved for Health and Exercise Science majors
A junior-level course for Exercise Science students. This course prepares students for a career in a fitness-related field. This course provides students with a foundation in kinesiology, exercise technique, kinetics, and kinematics that is essential for understanding the basic principles of human movement. This course is exempt for students that take HES 204, but a requirement if the student takes HES 205.

HES 302/Assessment and Evaluation of Human Performance **1 course unit**
(with laboratory)
(every semester)
*Prerequisites: r*eserved for Health and Exercise Science (non-teaching) majors
An upper level course for students studying exercise science. This course is designed to provide the student with a knowledge base in descriptive and inferential statistics and a thorough understanding of both laboratory and field evaluation of various components of fitness. Students also learn to work as writing teams in development of lab reports. This course serves as one of the intensive writing courses for the department.

HES 303/Assessment and Evaluation in Health & Physical Education **1 course unit**
(with laboratory)
(spring)
Prerequisites: reserved for Health and Exercise Science teacher candidates
An upper-level course for students studying teaching in health and physical education. This course will provide basic theoretical and practical experience in understanding evaluation procedures and assessment protocols common to health and physical education. Specific course topics will include traditional testing vs. authentic assessment, normative vs. criterion tests, domain specific assessment, test administration, assessment software. In addition, assessment tools will be located/created and utilized to evaluate student performance.

HES 304/Adapted Kinetics **1 course unit**
(fall)
Prerequisites: reserved for Health and Exercise Science teacher candidates
During the semester, the student will survey and investigate physical education as related to exceptional children. Emphasis will be focused on (a) defining and identifying specific categories of exceptional children; (b) developing instruction through the child-centered approach; (c) examining current trends and practices in adapted physical education; and (d) understanding theories, motor activity regimes, and physical activities geared toward an understanding of the exceptional child's needs and interest.

HES 307/Principles and Problems of Coaching **1 course unit**
(spring)
Focuses on the principles and problems of coaching that are applicable across all sports. Prepares students to critically evaluate and assess the issues and problems that confront coaches who work with athletes of all ages and abilities.

HES 311/Applied Physiology **1 course unit**
(every semester)
Prerequisites: HES 203, reserved for Health and Exercise Science majors
This course provides students with scientific information pertinent to the physiological and biochemical responses and adaptations of human body to physical stress and how regular physical activity may help augment human function and prevent hypokinetic-related diseases. Students will also be exposed to the research process pertaining to this subject matter and be prompted to use what they learn for problem solving.

HES 320/Research Methods in HES **1 course unit**
(spring semester)
*Prerequisite*s: HES 203, STA 115, reserved for Health and Exercise Science majors
This course examines and prepares students to understand research study design, research methodologies and techniques employed, statistical analysis, and appropriate reporting techniques in health and exercise science while examining current research in the field of health and exercise science. Students will read and interpret current research in health and exercise science, the scientific process, understanding research questions and theories, conducting thorough literature reviews, understanding research methods and measurement techniques, statistical analysis, and reporting mechanisms.

HES 335/Driver's Education **1 course unit**
(fall)
This courses provides students with basic and advanced concepts, principles, and pedagogies for teaching traffic safety. Successful completion of the course will allow health and physical education majors to apply for NJ State Driver's Education Certification.

HES 351/Stress Management **1 course unit**
(every semester)
Designed to help individuals relax, energize, and cope through learning strategies for desensitization to stressful situations, enhancement of self-image, and development of scientific relaxation techniques. A small additional fee may be required.

HES 353/Analysis of Drug Dependencies **1 course unit**
(spring)
Analysis of drug dependencies and their effect on the individual and society. The use, misuse, and abuse of mood-modifying substances including tobacco, alcohol, and other drugs, both therapeutic and illicit. Implications for instruction in the public schools.

HES 356/Foundations of Sex Education **1 course unit**
(fall)
Analysis of human sexuality, including human sexual response, value clarification, contraception, abortion, reproduction, social mores, homosexuality, sex research, and sex education. Curriculum design and implementation.

HES 370/300-Level Selected Topics in Health **1 course unit**
(occasionally)
In-depth study and/or field experience in current or specialized topics proposed by the faculty and approved by the department. The course may be repeated each time the content changes.

HES 371/Outdoor Education **1 course unit**
(fall)
Prerequisite: reserved for Health and Exercise Science teacher candidates
Introduction to the development of outdoor recreation and school camping. Theories, practices, educational significance, organization, administration, and basic program concepts. Field trips may be required at student expense.

HES 372/Care and Prevention of Athletic Injuries **1 course unit**
(with laboratory)
(spring, every other year)
Prerequisite: HES 203
Principles, organization, and administration of training room facilities. Preventive and remedial athletic bandaging, analysis of common injuries, first-aid and rehabilitation procedures, athletic training techniques.

HES 390/ Methods of Secondary Health and Physical Education **1 course unit**
(with laboratory)
(fall)
Prerequisite: reserved for Health and Exercise Science teacher candidates. HES 292, minimum GPA of 2.5
Advanced methodologies specific to secondary health and physical education. A secondary (grades 6-12) field experience consisting of observation, co-teaching, and teaching health and physical education are required. Primary emphasis on successful lesson planning with regard to the NASPE and NJCCC standards, lesson implementation, management techniques, student learning and personal reflection.

HES 391/Independent Study in Health and Exercise Science **variable course units**
(every semester)
Prerequisite: Approval of topic by department
For advanced student; in-depth study of a carefully defined area of health, exercise science, or physical education.

HES 400/Pediatric Exercise Science **1 course unit**
(with laboratory)
(fall)
Prerequisite: HES 311, reserved for Health and Exercise Science majors
This course examines the physiological responses to acute and chronic exercise in children and adolescents. An emphasis is placed on exploring differences between youth and adults to exercise training and discussing the influence of growth and maturation on fitness performance. A review of current pediatric research will be used to design exercise programs for healthy children as well as youth with chronic disease.

HES 405/Clinical Exercise Physiology **1 course unit**
(every semester)
Prerequisite: HES 311, reserved for Health and Exercise Science majors
This course is designed to provide students with an advanced understanding of functional changes in the human body throughout the lifespan as well as pathological process underlying various chronic diseases. Students will be given the opportunity to develop safe and appropriate exercise programs for special populations including children, elderly, and pregnant women as well as those with cardiorespiratory, metabolic, musculoskeletal, and neuromuscular conditions.

HES 410/Exercise Physiology and Exercise Prescription **1 course unit**
(every semester)
Prerequisite: HES 311, reserved for Health and Exercise Science majors
This course is designed to provide an in-depth discussion on adaptations of various physiological systems to exercise training. Additional emphasis will be placed on the effects of environmental factors on physiological systems and performance, nutritional concerns, and ergogenic aids. Practical applications are provided to enable students to develop exercise prescriptions for a host of competitive and recreational athletic populations.

HES 460/Comprehensive School Health **1 course unit**
(spring)
Prerequisite: HES 260, reserved for Health and Exercise Science teacher candidates
The programs of school and community health including their scopes, functions, organization, and administration, and their relationships to the needs of the total community are reviewed. Methodologies specific to K-12 health education content are a primary focus. Emphasis placed on successful planning, connection to AAHE/NJCCC standards, lesson implementation, and student learning.

HES 470/400-Level Selected Topics in Health **1 course unit**
(occasionally)
In-depth study and/or field experience in current or specialized topics proposed by the faculty and approved by the department. The course may be repeated each time the content changes.

HES 490/Student Teaching **2 course units**
(every semester)
Prerequisite: Meeting of all criteria for admission to student teaching
Corequisite: HES 498
Full semester of student teaching during the senior year with approved teachers in selected schools of the state. Direct supervision by teachers and college supervisors. Observation, participation, and responsible teaching. 2.75 grade point average is required.

HES 493/Internship **2 course units**
(every semester)
Prerequisite: Meeting of criteria for internship placement. Emphasis upon practical experience, research, observation, participation, organization, administration, and supervision in programs of fitness, wellness, cardiopulmonary rehabilitation, physical therapy, occupational therapy, sports conditioning, or other health-related programs. Students are required to complete 450 hours at an approved center or clinic. This course is for seniors in good standing who have completed coursework as outlined in the HES course of study.

HES 497/Research Seminar in Health and Exercise Science **1 course unit**
(spring)
This course is designed to provide an in-depth discussion on a broad range of topic areas including sports nutrition and supplementation, pharmacological interventions in sport, environmental physiology, hydration issues, endocrine factors, and overtraining. In addition, the course will have the flexibility to focus on other relevant topic areas that may arise in the field.

HES 498/Seminar in Health and Physical Education **1 course unit**
(every semester)
(capstone)
Prerequisites: 2.75 GPA; concurrent enrollment in HES 490
Primary focus on the connection between teaching and student learning. Additional content addresses program organization and administration in health and physical education. Legal foundations, personnel functions, budget and finance, facilities and equipment, public relations, and professional organizations discussed. Job seeking strategies, resume building, and interviewing.