**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 the assessment-intervention-reinforcement protocol of health sciences.

**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  
(every semester)  
*Krerequisite:* Reserved for Health and Exercise science pre-majors and teaching majors  
Study of the concept and underlying principles of movement; application of these principles to sports and dance.

**HES 182/Lifespan Wellness Activities**  
1 course unit  
(every semester)  
*Krerequisite:* Reserved for Health and Exercise Science pre-majors and teaching majors  
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 203/Anatomy and Physiology I**  
1 course unit  
(with laboratory)  
(every semester)  
*Krerequisite:* BIO 171  
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)  
*Krerequisite:* HES 203  
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
(with laboratory)
(spring)
Prerequisites: BIO 171, HES 203
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 282/Sport Concepts and Skills
(every semester)
Prerequisites: Reserved for health & exercise science pre-majors and teaching majors
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 292/Methods of Elementary Health and Physical Education
(with laboratory)
(every semester)
Prerequisite: HES 180
Observation of methods, techniques, organizational procedures, philosophies, and teaching styles currently used in elementary, middle/intermediate, and high school health and/or physical education classes. Field trips may be required at student expense. Development of competence and ability to teach complex motor skills related to dance, gymnastics, and elementary games. These experiences develop conceptual understanding.

HES 301: Sports Biomechanics
Prerequisites: HES 203 and 205
(fall)
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
(with laboratory)
(every semester)
An upper level course for students studying exercise science and physical education. 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 304/Adapted Kinetics
(spring)
Prerequisites: Reserved for Health and Exercise Science teaching majors.
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HES 307</td>
<td>Principles and Problems of Coaching</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td>HES 311</td>
<td>Applied Physiology</td>
<td>1</td>
<td>Techniques, principles, and physiological requirements of exercise. Participation in individual fitness teams, development of exercise specificity in individual and group exercise programs, and the use of laboratory sessions and equipment in designing exercise protocol and assessing improved physiological function.</td>
</tr>
<tr>
<td>HES 350</td>
<td>Nutrition and Metabolism</td>
<td>1</td>
<td>Focuses on research processes and communication skills applied to the role of exercise and proper nutrition in regard to their positive influence on weight control. Techniques for evaluating energy balance and planning for weight-loss programs are discussed in light of established scientific principles and procedures.</td>
</tr>
<tr>
<td>HES 351</td>
<td>Stress Management</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td>HES 353</td>
<td>Analysis of Drug Dependencies</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td>HES 356</td>
<td>Foundations of Sex Education</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td>HES 358</td>
<td>Perspectives on Aging, Death, and Dying</td>
<td>1</td>
<td>Analysis of personal meanings of aging, death, and dying viewed from biological, psychosocial, medical, and bioethical aspects. Roles of professionals in these areas and appraisal of current trends and research.</td>
</tr>
<tr>
<td>HES 370</td>
<td>300-Level Selected Topics in Health</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td>HES 371</td>
<td>Outdoor Education</td>
<td>1</td>
<td>Prerequisite: Reserved for Health and Exercise Science teaching majors.</td>
</tr>
</tbody>
</table>
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)
(every semester)
*Prerequisites:* HES 203, 204
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)
(every semester)
*Prerequisite:* Reserved for Health and Exercise Science pre-majors and teaching majors
Prepares prospective student teachers in physical education by providing visits to public and private schools of middle and secondary levels. Physical education programs will be observed and discussed, and some teaching experience may be provided. Field trips may be required at the student's expense.

**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 392/Theory and Practice of HPE**
1 course unit
(every semester)
Prepares prospective student teachers in physical education by providing visits to public and private schools of elementary, middle, and secondary levels. Physical education programs will be observed and discussed, and some teaching experience may be provided. Field trips may be required at the student's expense. *A GPA of 2.75 is required to enroll in this course.*

**HES 405/Exercise Guidelines for Allied Health Professionals**
1 course unit
(every semester)
*Prerequisite:* HES 311
This course is designed to provide students with a basic understanding of functional changes of human body throughout lifespan as well as pathological process underlying various lifestyle related chronic conditions. Students will also be given the opportunity to learn to develop safe and appropriate exercise programs with an emphasis on special populations including children, elderly, pregnant women as well as those with chronic conditions including heart disease, obesity, and diabetes, etc.

**HES 410/Exercise Physiology and Exercise Prescription**
1 course unit
(every semester)
*Prerequisite:* HES 311
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 450/Physiology of Resistance Training**
1 course unit
(every semester)
*Prerequisites:* HES 203, HES 204, HES 311
This senior-level course prepares students for a career in a strength and conditioning-related field by providing students with a foundation in neuromuscular physiology, exercise biomechanics, acute responses and chronic adaptations to resistance training, and advanced program design and training periodization.

### HES 456/Seminar: HIV Prevention Education
1 course unit
(occasionally)

### HES 459/Counseling for Health Issues
1 course unit
(every semester)
Basic counseling techniques are applied to health-related areas. The health educator's role is examined as a counselor involved with students, schools, and the community.

### HES 460/Comprehensive School Health
1 course unit
(every semester)
**Prerequisite:** Reserved for Health and Exercise Science teaching majors.
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.

### 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)
Emphasis upon practical experience, research, observation, participation, organization, administration, and supervision in programs of fitness, wellness, cardiac rehabilitation, physical therapy, or other health/wellness and sport promotion programs. Students may not take more than one additional course unit while doing an internship.

### HES 497/Research Seminar in Health and Exercise Science
1 course unit
(spring)
**Prerequisites:** HES 410
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)
**Prerequisites:** 2.75 GPA; concurrent enrollment in HES 490
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.