# HEALTH AND HUMAN PERFORMANCE (HHP)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit hours</th>
<th>Contact hours</th>
<th>Schedule types</th>
<th>Levels</th>
<th>Department/School</th>
</tr>
</thead>
<tbody>
<tr>
<td>HHP 1703</td>
<td>Introduction to Exercise Science</td>
<td>An introductory course of the general history, theories, principles, nature and scope of Exercise Science. This includes foundations and sub-disciplines, an understanding of essential skills, and career opportunities.</td>
<td></td>
<td>3</td>
<td>Lecture: 3 Contact: 3</td>
<td>Lecture</td>
<td>Undergraduate</td>
<td>Kinesiology, Appl Health, Rec</td>
</tr>
<tr>
<td>HHP 1753</td>
<td>Introduction to Physical Education</td>
<td>The nature, scope and significance of physical education. Historical and philosophical foundations, major sub-disciplines and their interrelationships, and career opportunities.</td>
<td></td>
<td>3</td>
<td>Lecture: 3 Contact: 3</td>
<td>Lecture</td>
<td>Undergraduate</td>
<td>Kinesiology, Appl Health, Rec</td>
</tr>
<tr>
<td>HHP 1823</td>
<td>Pedagogy of Non-Traditional Activities, Rhythm, and Movement</td>
<td>Introduction of activities typically taught as individual sports and activities. Teaching strategies, skill components, terms, safety issues, and selection of developmentally appropriate individual activities, scope and sequencing of skill components, assessment, lesson structure, and writing performance objectives.</td>
<td>HHP and RMRT majors and minors only.</td>
<td>3</td>
<td>Lecture: 3 Contact: 3</td>
<td>Lecture</td>
<td>Undergraduate</td>
<td>Kinesiology, Appl Health, Rec</td>
</tr>
<tr>
<td>HHP 1832</td>
<td>Pedagogy of Team Activities</td>
<td>Introductory course of the general history, theories, principles, nature and scope of Exercise Science. This includes foundations and sub-disciplines, an understanding of essential skills, and career opportunities.</td>
<td>HHP majors and Coaching Science minors only or permission of instructor.</td>
<td>3</td>
<td>Lecture: 3 Contact: 3</td>
<td>Lecture</td>
<td>Undergraduate</td>
<td>Kinesiology, Appl Health, Rec</td>
</tr>
<tr>
<td>HHP 2222</td>
<td>Introduction to Health Aspects of Gerontology</td>
<td>An introductory course of the physical and physiological aspects of aging combined with common pathology and intervention.</td>
<td></td>
<td>2</td>
<td>Lecture: 2 Contact: 2</td>
<td>Lecture</td>
<td>Undergraduate</td>
<td>Kinesiology, Appl Health, Rec</td>
</tr>
<tr>
<td>HHP 2553</td>
<td>Basic Athletic Injury Management</td>
<td>Identification of emergency medical situations and application of basic care for injury occurring in school and athletic setting.</td>
<td></td>
<td>3</td>
<td>Lecture: 3 Contact: 3</td>
<td>Lecture</td>
<td>Undergraduate</td>
<td>Kinesiology, Appl Health, Rec</td>
</tr>
<tr>
<td>HHP 2602</td>
<td>First Aid</td>
<td>A competency- and performance-based first aid course. Course previously offered as HLTH 2602.</td>
<td></td>
<td>2</td>
<td>Lecture: 2 Contact: 2</td>
<td>Lecture</td>
<td>Undergraduate</td>
<td>Kinesiology, Appl Health, Rec</td>
</tr>
<tr>
<td>HHP 2654</td>
<td>Applied Anatomy</td>
<td>Action and location of individual muscles and muscle groups. Anatomy as applied to a living person. Common anatomical injuries and diseases will be presented with each joint structure. Lab sections will be structured around specific content area for students' discipline.</td>
<td>BIOL 1114 or (BIOL 1113 and BIOL 1111).</td>
<td>4</td>
<td>Lecture: 3 Lab: 2 Contact: 5</td>
<td>Lab, Lecture, Combined lecture and lab</td>
<td>Undergraduate</td>
<td>Kinesiology, Appl Health, Rec</td>
</tr>
<tr>
<td>HHP 2712</td>
<td>Psychomotor Development</td>
<td>Fundamental aspects of motor development for infants, children, youth and adults. Course previously offered as PE 2712.</td>
<td></td>
<td>2</td>
<td>Lecture: 2 Contact: 2</td>
<td>Lecture</td>
<td>Undergraduate</td>
<td>Kinesiology, Appl Health, Rec</td>
</tr>
</tbody>
</table>
HHP 2802 Medical Terminology for the Health Professions
Description: Basic knowledge and understanding of medical language and terminology used in allied health and health professions.
Credit hours: 2
Contact hours: Lecture: 2 Contact: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 3010 Health and Human Performance Workshop
Description: Concentrated study of selected areas of health and human performance, including problems in instruction and administration not usually addressed in the undergraduate curriculum. Course previously offered as HPEL 3010. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.
Credit hours: 1-3
Contact hours: Contact: 1-3 Other: 1-3
Levels: Undergraduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

HHP 3114 Physiology of Exercise
Prerequisites: MATH 1513.
Description: A study of the various bodily systems, including major organs and tissues, and how they respond to acute and chronic exercise of varying intensity, duration and frequency. Course previously offered as PE 3114.
Credit hours: 4
Contact hours: Lecture: 3 Lab: 2 Contact: 5
Levels: Undergraduate
Schedule types: Lab, Lecture, Combined lecture and lab
Department/School: Kinesiology, Appl Health, Rec

HHP 3123 Principles of Personal Training
Description: To develop an understanding of the basic skills and competencies in personal training and evaluation and prepare for the National Strength and Conditioning Association (NSCA) personal trainer certification exam. A detailed study of personal training inclusive of musculoskeletal and cardiorespiratory anatomy, resistance training, aerobic exercises, nutrition, health appraisal, fitness testing, flexibility, and plyometric training. The role of the personal trainer will also be addressed.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 3133 Sport Supplements For Human Performance
Description: To develop an understanding of the proper selection and administration of sport supplements, risk factors involved in consuming supplements, and discussion of how specific supplements may or may not affect performance.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 3223 Motor Learning
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 3233 General Medical Concepts
Prerequisites: HHP 2654, HHP 2664, and ZOOL 3204, CHEM 1314, HHP 3673.
Description: Specific pathologies, medical conditions, and possible avenues for treatment of non-orthopedic conditions. Based in current medical research, theory and practical outcomes.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 3333 Ethics in Sports Administration and Coaching
Description: Exploration of the ethical, legal, and professional dilemmas that occur in athletic administration and coaching.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 3431 Early Laboratory Clinical Experiences in Physical Education
Prerequisites: HHP 1753 or consent of the instructor.
Description: The initial pre-professional clinical experience for schools, kindergarten through grade twelve, with primary duties including assisting in physical education classes. Required for full admission to Professional Education. Graded on a pass-fail basis. Previously offered as HHP 3431.
Credit hours: 3
Contact hours: Lecture: 1 Lab: 4 Contact: 5
Levels: Undergraduate
Schedule types: Lab, Lecture, Combined lecture and lab
Department/School: Kinesiology, Appl Health, Rec

HHP 3443 Psychosocial Aspects of Sport and Coaching
Description: Examination of the psychological aspects of sport that impact the performances of coaches and athletes.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 3553 Theory and Practice of Coaching
Description: The purpose of the course is to introduce and analyze the essential concepts and knowledge concerned with coaching in sports and related areas. This course provides a platform from which deeper knowledge in specific sub disciplines can be acquired through class specialization.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
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<tr>
<td>HHP 3663</td>
<td>Biomechanics</td>
<td>HHP 2654.</td>
<td>The study of anatomical mechanical phenomena underlying human motion. Application of biomechanical concepts to a wide variety of exercise, fundamental movement, sport and physical activity. Course previously offered as PE 3663.</td>
<td>3</td>
<td>3 Contact</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>Kinesiology, Appl Health, Rec</td>
</tr>
<tr>
<td>HHP 3753</td>
<td>Methods in Teaching Elementary Physical Education</td>
<td>HHP 1753, HHP 1833, HHP 1843, and HHP 3433</td>
<td>Instructional styles, implementation of behavioral goals and objectives through unit and lesson preparation, teaching methods and classroom management. Course previously offered as PE 3753.</td>
<td>3 Contact</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>Kinesiology, Appl Health, Rec</td>
<td></td>
</tr>
<tr>
<td>HHP 3883</td>
<td>Coaching Internship</td>
<td></td>
<td>Experience working with individual athletes, teams, coaches, and others in a practical setting.</td>
<td>3 Contact</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>Kinesiology, Appl Health, Rec</td>
<td></td>
</tr>
<tr>
<td>HHP 3924</td>
<td>Therapeutic Exercise</td>
<td>HHP 3802.</td>
<td>Scientific methods used in therapeutic exercise and rehabilitation of injuries. Investigation of mechanisms of injury, anatomical structures involved and methodological approach in designing rehabilitative programs. Course previously offered as HHP 3923, HHP 4923, and HLTH 4922.</td>
<td>4</td>
<td>3 Lab: 2 Contact: 5</td>
<td>Undergraduate</td>
<td>Lab, Lecture, Combined lecture and lab</td>
<td>Kinesiology, Appl Health, Rec</td>
</tr>
<tr>
<td>HHP 3993</td>
<td>Building and Sustaining a Successful Sports Program</td>
<td></td>
<td>Students learn skills and knowledge necessary to build a successful and sustainable sports program.</td>
<td>3</td>
<td>3 Contact</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>Kinesiology, Appl Health, Rec</td>
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<tr>
<td>HHP 4010</td>
<td>Directed Study</td>
<td>Written approval by department head.</td>
<td>Supervised readings, research or independent study of trends and issues related to the area of health, physical education or leisure services. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.</td>
<td>1-3</td>
<td>1-3 Contact: 1 Other: 1-3</td>
<td>Undergraduate</td>
<td>Independent Study</td>
<td>Kinesiology, Appl Health, Rec</td>
</tr>
<tr>
<td>HHP 3773</td>
<td>Methods in Teaching Secondary Physical Education</td>
<td>HHP 1753, HHP 1833, HHP 1843, and HHP 3433</td>
<td>Instructional styles, implementation of behavioral goals and objectives through unit and lesson preparation, teaching methods and classroom management. Course previously offered as PE 3773.</td>
<td>3 Contact</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>Kinesiology, Appl Health, Rec</td>
<td></td>
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<tr>
<td>HHP 4013</td>
<td>Motor Control</td>
<td>BIOL 3204 or HHP 3114</td>
<td>Advanced understanding of the neural control of movement. Particular emphasis will be placed on the neural and physiological basis of human movement and force production. An introduction to how systems change due to aging, training, and clinical motor disorders will also be provided.</td>
<td>3</td>
<td>3 Contact</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>Kinesiology, Appl Health, Rec</td>
</tr>
<tr>
<td>HHP 4124</td>
<td>Principles of Strength and Conditioning</td>
<td></td>
<td>Designing and implementing safe and effective strength training and conditioning programs and apply exercise prescription principles for training, injury prevention, and reconditioning. This course is also designed to prepare students for the National Strength and Conditioning Association (NSCA) Certified Strength and Conditioning Specialist (CSCS) exam. Previously offered as HHP 4123.</td>
<td>4</td>
<td>3 Lab: 2 Contact: 5</td>
<td>Undergraduate</td>
<td>Lab, Lecture, Combined lecture and lab</td>
<td>Kinesiology, Appl Health, Rec</td>
</tr>
<tr>
<td>HHP 4063</td>
<td>Neuroanatomy</td>
<td></td>
<td>Comprehensive overview of the normal structure and function of the nervous system and its divisions under conditions of normal health as well as disease. Designed for neuroscientists, pre-medical, and health professions students. An introduction to clinically-oriented neurological assessment will be provided.</td>
<td>3</td>
<td>Undergraduate</td>
<td>Lecture</td>
<td>Independent Study</td>
<td>Kinesiology, Appl Health, Rec</td>
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<tr>
<td>HHP 4243</td>
<td>Research Methods in Athletic Training</td>
<td></td>
<td>Interactive study of importance and process of conducting ethical research in athletic training and the healthcare professions. Emphasis placed on research design, ethics, collection of data, and the dissemination of results.</td>
<td>3</td>
<td>3 Contact</td>
<td>Undergraduate</td>
<td>Lecture</td>
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</tr>
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</table>
### HHP 4443 International Perspectives of Coaching
**Prerequisites:** Permission of the Instructor.  
**Description:** Students will acquire experiential coaching opportunities in an international environment, and will design and deliver coaching across a variety of sports and across multiple age groups.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

### HHP 4451 Athletic Training Practicum V  
**Prerequisites:** Successful completion of HHP 3461.  
**Description:** Directed observation in supervised advanced laboratory and clinical experiences in athletic training.  
**Credit hours:** 1  
**Contact hours:** Lab: 2  
**Levels:** Undergraduate  
**Schedule types:** Lab  
**Department/School:** Kinesiology, Appl Health, Rec

### HHP 4461 Athletic Training Practicum VI  
**Prerequisites:** Successful completion of HHP 3233, HHP 4451.  
**Description:** Directed observation in supervised advanced laboratory and clinical experiences in athletic training.  
**Credit hours:** 1  
**Contact hours:** Lab: 2  
**Levels:** Undergraduate  
**Schedule types:** Lab  
**Department/School:** Kinesiology, Appl Health, Rec

### HHP 4480 Internship in Health and Human Performance  
**Prerequisites:** Last semester senior standing with cumulative GPA of 2.50.  
**Description:** Supervised experience in school (physical education and health), community worksite or athletic training settings in order to qualify or prepare for appropriate teaching and professional certification.  
Course previously offered as PE 4480. Offered for variable credit, 1-12 credit hours, maximum of 12 credit hours.  
**Credit hours:** 1-12  
**Contact hours:** Contact: 1-12  
**Other:** 1-12  
**Levels:** Undergraduate  
**Schedule types:** Independent Study  
**Department/School:** Kinesiology, Appl Health, Rec

### HHP 4463 School Health and Safety for Physical Educators  
**Description:** Health and safety content for which physical educators are held responsible.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

### HHP 4723 Assessment in Physical Education  
**Prerequisites:** Full admission to professional education.  
**Description:** Evaluation techniques commonly used by physical educators and health professionals to measure knowledge, attitudes, sport skill proficiency and physical fitness. Course previously offered as PE 4723.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

### HHP 4733 Organization, Administration and Curriculum in Physical Education and Athletics  
**Prerequisites:** HHP 3753, HHP 3773 or concurrent enrollment; full admission to professional education.  
**Description:** Curricular design and management of physical education (P-12) and athletic programs. Course previously offered as PE 4733.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

### HHP 4773 Principles of Exercise Testing and Prescription  
**Prerequisites:** HHP 3114.  
**Description:** Study of principles of exercise testing including submaximal and maximal tests, exercise and basic electrocardiography, and guidelines for recommending exercise as related to health promotion and exercise science. Course previously offered as HLTH 4773.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

### HHP 4793 Adapted Physical Education  
**Description:** Cognitive and psychomotor characteristics of disabling conditions, needs and challenges of educating the exceptional learner in the regular physical education program. Course previously offered as PE 4793.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

### HHP 4933 Administration and Organization of Athletic Training Programs  
**Prerequisites:** HHP 4451.  
**Description:** The administration and organization of athletic training programs including planning and implementation, certification procedures, code of professional practice, safety standards and resource management. Course previously offered as HLTH 4933.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

### HHP 4933 Administration and Organization of Athletic Training Programs  
**Prerequisites:** HHP 4451.  
**Description:** The administration and organization of athletic training programs including planning and implementation, certification procedures, code of professional practice, safety standards and resource management. Course previously offered as HLTH 4933.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

### HHP 4993 Administration and Organization of Athletic Training Programs  
**Prerequisites:** HHP 4451.  
**Description:** The administration and organization of athletic training programs including planning and implementation, certification procedures, code of professional practice, safety standards and resource management. Course previously offered as HLTH 4933.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

### HHP 5000 Master's Thesis  
**Description:** Independent research required of candidates for master's degree. Credit awarded upon completion of thesis. Course previously offered as HPEL 5000. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.  
**Credit hours:** 1-6  
**Contact hours:** Contact: 1-6  
**Other:** 1-6  
**Levels:** Graduate  
**Schedule types:** Independent Study  
**Department/School:** Kinesiology, Appl Health, Rec
HHP 5010 Seminar
Description: Selected topics from the profession not covered in other courses. Presentation and critique of research proposals and results. Course previously offered as HPEL 5010. Offered for variable credit, 1-2 credit hours, maximum of 4 credit hours.
Credit hours: 1-2
Contact hours: Contact: 1-2 Other: 1-2
Levels: Graduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

HHP 5020 Health and Human Performance Workshop
Description: Workshop in selected areas of health and human performance. Course previously offered as HPEL 5020. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.
Credit hours: 1-3
Contact hours: Contact: 1-3 Other: 1-3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 5030 Field Problems in Health and Human Performance
Description: Individual investigations of issues in the areas of health and human performance. Course previously offered as HPEL 5030. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.
Credit hours: 1-3
Contact hours: Contact: 1-3 Other: 1-3
Levels: Graduate
Schedule types: Independent Study
Department/School: Kinesiology, Appl Health, Rec

HHP 5033 Advanced Techniques in Orthopedic Assessment
Description: Knowledge in evaluating various upper and lower extremity orthopedic injuries.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 5053 Research Design in Leisure, Health and Human Performance
Prerequisites: PSYC 5303 or STAT 5013.
Description: Research design with applicability toward leisure, health and human performance. Conceptual understanding of theory, tools and processes involved in designing research. Course previously offered as LEIS 5053.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 5063 Neuroanatomy
Description: Comprehensive overview of the normal structure and function of the nervous system and its divisions under conditions of normal health as well as disease. Designed for neuroscientists, pre-medical, and health professions students. An introduction to clinically-oriented neurological assessment will be provided.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 5073 Psychological Aspects of Sport
Description: Psychological foundations of sport emphasizing performance enhancement by athletes through psychological training techniques. Course previously offered as HPEL 5073.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 5523 Current Readings in Health
Description: Contemporary research, literature, projections and views as applied to total health and well-being. Course previously offered as HPEL 5523.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 5603 Principles of Performance Enhancement
Prerequisites: HHP 2654, HHP 3114, ZOOL 3204.
Description: Theoretical foundation of specific tenets of exercise and performance enhancement. Upon successful course completion students will be eligible to sit for the National Academy of Sports Medicine (NASM) examination for NASM Performance Enhancement Specialist certification.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 5703 Principles of Corrective Exercise
Description: A scientific approach to corrective exercise program design and implementation.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 5733 Motor Learning
Description: Research in psychology and physical education relevant to the understanding of the nature and basis of motor skill learning. Course previously offered as HPEL 5733.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 5823 Applied Neuromuscular Physiology
Prerequisites: HHP 2654.
Description: Structure and behavior of the human body, especially as it pertains to movement. Particular emphasis will be placed on neuroanatomy, the muscular system, and the neurophysiological basis of human movement. An introduction to clinical motor-related disorders will also be provided. Course previously offered as HPEL 5823.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec
HHP 5843 Applied Biomechanics  
**Prerequisites:** HHP 5823  
**Description:** Instruction and hands-on experience in the applied techniques to measure human movement and performance.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3 Contact: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec  
**Additional Fees:** HPE/CPSY Consummable Mat fee of $10 applies.

HHP 5853 Clin Ex Test & Prescript  
**Prerequisites:** HHP 3114.  
**Description:** An in-depth study of the principles and application of clinical exercise testing including submaximal and maximal tests, oxygen consumption, and electrocardiography. Guidelines to prescribing individualized exercise plans will also be covered. Special attention will be paid to clinical variables and special populations. Course previously offered as HPEL 5853.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3 Contact: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec  
**Additional Fees:** HPE/CPSY Consummable Mat fee of $15 applies.

HHP 5873 Human Bioenergetics  
**Prerequisites:** HHP 3114.  
**Description:** Human energy production, utilization and storage in response to exercise. Course previously offered as HPEL 5873.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3 Contact: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 5923 Readings in Neurophysiology  
**Prerequisites:** HHP 5823: Applied Neuromuscular Anatomy and Neurophysiology.  
**Description:** Establishes a foundation in neurophysiology, particularly relating to the neural control of human movement. Developed through examining original research, especially the seminal articles from this field with special emphasis on areas of contention and controversy.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3 Contact: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec  
**Prerequisites:** Consent of instructor.

HHP 6000 Doctoral Dissertation  
**Description:** Exploration and presentation of selected topics and research in health and human performance. Course previously offered as HPEL 6000. Offered for variable credit, 1-25 credit hours, maximum of 25 credit hours.  
**Credit hours:** 1-25  
**Contact hours:** Contact: 1-25 Other: 1-25  
**Levels:** Graduate  
**Schedule types:** Independent Study  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 6010 Independent Study in Health and Human Performance  
**Prerequisites:** Consent of instructor.  
**Description:** Supervised readings, research or independent study of trends and issues related to the areas of health and human performance. Course previously offered as HPEL 6010. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.  
**Credit hours:** 1-3  
**Contact hours:** Contact: 1-3 Other: 1-3  
**Levels:** Graduate  
**Schedule types:** Independent Study  
**Department/School:** Kinesiology, Appl Health, Rec  
**Prerequisites:** Consent of instructor.

HHP 6020 Research Colloquium  
**Description:** Exploration and presentation of selected topics and research in health and human performance. Course previously offered as HPEL 6020. Offered for variable credit, 1-3 credit hours, maximum of 3 credit hours.  
**Credit hours:** 1-3  
**Contact hours:** Contact: 1-3 Other: 1-3  
**Levels:** Graduate  
**Schedule types:** Independent Study  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 6063 Grant Writing in Kinesiology, Applied Health, and Recreation  
**Prerequisites:** Consent of instructor.  
**Description:** Develop competitive grant writing skills, budget preparation, identification and selection of funding opportunities, and understanding the review and awards process. Course Previously offered as HHP 6060.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3 Contact: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 6083 Biomedical Signal Acquisition  
**Description:** Writing custom software for use in a laboratory setting using LabVIEW. Intended for any lab-based science degree programs in which signals are acquired and analyzed, especially BIOMEDICAL SIGNALS. Acquiring data, interfacing with laboratory equipment, and analyzing and organizing data, with self-designed custom software program. No prior computer programming knowledge required.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3 Contact: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec