HEALTH AND HUMAN PERFORMANCE (HHP)

HHP 1703 Introduction to Exercise Science
Description: 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.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 1713 Introduction to Athletic Training
Prerequisites: Admission to the athletic training program.
Description: An introduction to the profession of athletic training. The principles of injury prevention and care relative to athletic injuries and development of essential skills and competencies needed to perform selected athletic training procedures. Theory-based course with required laboratory experiences.
Credit hours: 3
Contact hours: Lecture: 2 Lab: 2 Contact: 4
Levels: Undergraduate
Schedule types: Lab, Lecture, Combined lecture and lab
Department/School: Kinesiology, Appl Health, Rec

HHP 1753 Introduction to Physical Education
Description: The nature, scope and significance of physical education. Historical and philosophical foundations, major sub-disciplines and their interrelationships, and career opportunities. Previously offered as PE 1753.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 1823 Pedagogy of Non-Traditional Activities, Rhythm, and Movement
Prerequisites: HHP and RMRT majors and minors only.
Description: Introduction of activities typically taught to supplement individual or team sports in addition to basic fundamentals and methods of movement skills for rhythms including social, creative, developmental, and multicultural dance and activities. Content includes teaching strategies, assessments, skills analysis, skill components, concepts, terms, safety issues, selection of developmentally appropriate activities, and scope and sequencing of skill components by grade level.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 1833 Pedagogy of Team Activities
Prerequisites: HHP majors and Coaching Science minors only or permission of instructor.
Description: Introduction of activities typically taught as team or group activities. Instructional strategies (methodologies) of team sports, scope and sequencing of skill components, assessment, terms, safety issues, lesson structure, and writing performance objectives. Previously offered as HHP 1832.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 2222 Introduction to Health Aspects of Gerontology
Description: An introductory course of the physical and physiological aspects of aging combined with common pathology and intervention.
Credit hours: 2
Contact hours: Lecture: 2 Contact: 2
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 2451 Athletic Training Practicum
Prerequisites: Full admission into athletic training program.
Description: Directed observation in supervised introductory laboratory and clinical experiences in athletic training. Course previously offered as HHP 2450.
Credit hours: 1
Contact hours: Lab: 2 Contact: 2
Levels: Undergraduate
Schedule types: Lab
Department/School: Kinesiology, Appl Health, Rec

HHP 2461 Athletic Training Practicum II
Prerequisites: Successful completion of HHP 2451, HHP 2844.
Description: Directed observation in supervised introductory laboratory and clinical experiences in athletic training.
Credit hours: 1
Contact hours: Lab: 2 Contact: 2
Levels: Undergraduate
Schedule types: Lab
Department/School: Kinesiology, Appl Health, Rec
HHP 3112 Radiography Evaluation and Assessment
Prerequisites: Full admission into ATEP clinical or pre-professional option.
Description: Introduction to the fundamental principles, equipment, and common methods and procedures of radiography.
Credit hours: 2
Contact hours: Lecture: 2 Contact: 2
Levels: Undergraduate
Schedule types: Lecture
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: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Undergraduate
Schedule types: Lecture
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: 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 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 3433 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 3451 Athletic Training Practicum III
Prerequisites: Successful completion of HHP 2461, HHP 3802, HHP 3902.
Description: Directed observation in supervised intermediate laboratory and clinical experiences in athletic training.
Credit hours: 1
Contact hours: Lab: 2 Contact: 2
Levels: Undergraduate
Schedule types: Lab
Department/School: Kinesiology, Appl Health, Rec

HHP 3461 Athletic Training Practicum IV
Prerequisites: Successful completion of HHP 3451, HHP 3924.
Description: Directed observation in supervised intermediate laboratory and clinical experiences in athletic training.
Credit hours: 1
Contact hours: Lab: 2 Contact: 2
Levels: Undergraduate
Schedule types: Lab
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  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3663 Biomechanics  
**Prerequisites:** HHP 2654.  
**Description:** 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.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3673 Pathology and Pharmacology in Sports Medicine  
**Prerequisites:** HHP 2664, CHEM 1314, ZOOL 3204.  
**Description:** Principles of cellular inflammation, immunopathology, tissue growth and circulation. Examination of physiological drug activity in the body, drug disposition and pharmokinetics in sports medicine.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3753 Methods in Teaching Elementary Physical Education  
**Prerequisites:** HHP 1753, HHP 1823, HHP 1833, HHP 3433.  
**Description:** Instructional styles, implementation of behavioral goals and objectives through unit and lesson preparation, teaching methods and classroom management. Course previously offered as PE 3753.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3763 Health and Physical Education for Elementary Age Children  
**Description:** Methods of teaching health and physical education to elementary age children. Theory and practical experience of health behaviors, movement skills and physical fitness. Course previously offered as HPEL 3763.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3773 Methods in Teaching Secondary Physical Education  
**Prerequisites:** HHP 1753, HHP 1823, HHP 1833, HHP 3433.  
**Description:** Instructional styles, implementation of behavioral goals and objectives through unit and lesson preparation, teaching methods and classroom management. Course previously offered as PE 3773.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3802 Therapeutic Modalities for Injury I  
**Prerequisites:** HHP 2654, HHP 2664, CHEM 1314 and concurrent enrollment ZOOL 3204.  
**Description:** Discussion and application of common thermal and mechanical interventions used in the treatment of acute and chronic injuries to the musculoskeletal systems. Course previously offered as HHP 2902.  
**Credit hours:** 2  
**Contact hours:** Lecture: 1  
**Levels:** Undergraduate  
**Schedule types:** Lab, Lecture, Combined lecture and lab  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3802 Therapeutic Modalities for Injury II  
**Prerequisites:** HHP 2654, HHP 2664, CHEM 1314 and concurrent enrollment ZOOL 3204.  
**Description:** Discussion and application of common thermal and mechanical interventions used in the treatment of acute and chronic injuries to the musculoskeletal systems. Course previously offered as HHP 2902.  
**Credit hours:** 2  
**Contact hours:** Lecture: 1  
**Levels:** Undergraduate  
**Schedule types:** Lab, Lecture, Combined lecture and lab  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3883 Coaching Internship  
**Description:** Experience working with individual athletes, teams, coaches, and others in a practical setting.  
**Credit hours:** 3  
**Contact hours:** Contact: 3  
**Levels:** Undergraduate  
**Schedule types:** Independent Study  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3902 Therapeutic Modalities for Injury I  
**Prerequisites:** HHP 2654, HHP 2664, CHEM 1314 and concurrent enrollment ZOOL 3204.  
**Description:** Discussion and application of common thermal and mechanical interventions used in the treatment of acute and chronic injuries to the musculoskeletal systems. Course previously offered as HHP 2902.  
**Credit hours:** 2  
**Contact hours:** Lecture: 1  
**Levels:** Undergraduate  
**Schedule types:** Lab, Lecture, Combined lecture and lab  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3902 Therapeutic Modalities for Injury II  
**Prerequisites:** HHP 2654, HHP 2664, CHEM 1314 and concurrent enrollment ZOOL 3204.  
**Description:** Discussion and application of common thermal and mechanical interventions used in the treatment of acute and chronic injuries to the musculoskeletal systems. Course previously offered as HHP 2902.  
**Credit hours:** 2  
**Contact hours:** Lecture: 1  
**Levels:** Undergraduate  
**Schedule types:** Lab, Lecture, Combined lecture and lab  
**Department/School:** Kinesiology, Appl Health, Rec

HHP 3924 Therapeutic Exercise  
**Prerequisites:** HHP 3802.  
**Description:** 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.  
**Credit hours:** 4  
**Contact hours:** Lecture: 3  
**Levels:** Undergraduate  
**Schedule types:** Lab, Lecture, Combined lecture and lab  
**Department/School:** Kinesiology, Appl Health, Rec
HHP 3993 Building and Sustaining a Successful Sports Program  
Description: Students learn skills and knowledge necessary to build a successful and sustainable sports program.  
Credit hours: 3  
Contact hours: Lecture: 3 Contact: 3  
Levels: Undergraduate  
Schedule types: Lecture  
Department/School: Kinesiology, Appl Health, Rec

HHP 4010 Directed Study  
Prerequisites: Written approval by department head.  
Description: 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.  
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 4013 Motor Control  
Prerequisites: BIOL 3204 or HHP 3114.  
Description: 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.  
Credit hours: 3  
Contact hours: Lecture: 3 Contact: 3  
Levels: Undergraduate  
Schedule types: Lecture  
Department/School: Kinesiology, Appl Health, Rec

HHP 4063 Nervoanatomy  
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: Undergraduate  
Schedule types: Lecture  
Department/School: Kinesiology, Appl Health, Rec

HHP 4124 Principles of Strength and Conditioning  
Description: 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.  
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 4243 Research Methods in Athletic Training  
Prerequisites: STAT 2013.  
Description: 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.  
Credit hours: 3  
Contact hours: Lecture: 3 Contact: 3  
Levels: Undergraduate  
Schedule types: Lecture  
Department/School: Kinesiology, Appl Health, Rec

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 Contact: 3  
Levels: Undergraduate  
Schedule types: Lecture  
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 4530 International Athletic Training
Description: Explore and experience the techniques of prevention and care of athletic injuries in a culture outside of the United States. Course must be taken in two different countries to count as second time credit. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.
Credit hours: 1-3
Contact hours: Lecture: 1-3 Contact: 1-3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 4643 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 Contact: 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 Contact: 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 Contact: 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 Contact: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 4793 Adapted Physical Education
Prerequisites: HHP 3753, HHP 3773, full admission to Professional 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 Contact: 3
Levels: Graduate, Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 4901 Rehabilitation Seminar
Prerequisites: HHP 2844, HHP 2854, HHP 3673, HHP 3904, HHP 3924 and HHP 4451.
Description: Capstone course using patient problems to develop clinical decision-making incorporating preceding course work in pathology assessment, therapeutic modalities, exercise and pharmacology.
Credit hours: 1
Contact hours: Lecture: 1 Contact: 1
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 Contact: 3
Levels: Undergraduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 4983 Current Issues in Athletic Training
Prerequisites: HHP 3663, HHP 4451 and admission to athletic training program.
Description: Development of competencies set by the National Athletic Trainers Association Board of Certification. Current issues facing athletic trainers and the role in today's health care systems.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Graduate, 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 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 5056 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 5122 Therapeutic Modalities I
Prerequisites: Admission into the Entry Level Masters degree Athletic Training Education Program.
Description: Advanced knowledge in the application of common thermal and cryotherapeutic interventions for acute and chronic injuries as they related to evidence based practice.
Credit hours: 2
Contact hours: Lecture: 1 Lab: 2 Contact: 3
Levels: Graduate
Schedule types: Lab, Lecture, Combined lecture and lab
Department/School: Kinesiology, Appl Health, Rec

HHP 5173 Therapeutic Interventions in Athletic Training
Description: Advanced understanding of various methods of how to treat orthopedic injuries commonly seen in health care.
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 5593 Human Electrocardiographic Interpretation
Prerequisites: HHP 3114 or consent of instructor.
Description: Knowledge concerning the collection and interpretation of the electrocardiogram (EKG) and its relationship to heart anatomy, physiology and electrophysiology. Course previously offered as HPEL 5593.
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 5613 Cardiac Rehabilitation  
**Prerequisites:** HHP 2653 and HHP 3114 or equivalent.  
**Description:** Factors involved in cardiovascular disease. History, implementation and administration of cardiac rehabilitation programs. Course previously offered as HPEL 5613.  
**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 Anatomy and 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 Quantitative Biomechanics and Kinesiology  
**Prerequisites:** HHP 5823.  
**Description:** Analytical approach to the study of the human nervous system and human motion as applied to kinematic and kinetic analysis. Additional flat fee of $10.00 applies. Course previously offered as HPEL 5843.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3 Contact: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec  

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  

HHP 5863 Stress Testing and Exercise Prescription II  
**Prerequisites:** HDFS 5853.  
**Description:** Theoretical aspects of evaluating functional capacity through stress testing with the development of exercise prescription for special populations with physiological limitations imposed by age, disease, heredity and environment. Course previously offered as HPEL 5863.  
**Credit hours:** 3  
**Contact hours:** Lecture: 3 Contact: 3  
**Levels:** Graduate  
**Schedule types:** Lecture  
**Department/School:** Kinesiology, Appl Health, Rec  

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 5894 Biochemistry of Exercise Lab Methods  
**Prerequisites:** Consent of the instructor.  
**Description:** Practice using basic laboratory skills which can be applied to sophisticated techniques in biochemical analysis. General biochemistry as it relates to exercise metabolism, laboratory procedures, calculations, common lab problems and solutions and laboratory safety procedures.  
**Credit hours:** 4  
**Contact hours:** Lecture: 3 Lab: 2 Contact: 5  
**Levels:** Graduate  
**Schedule types:** Lab, Lecture, Combined lecture and lab  
**Department/School:** Kinesiology, Appl Health, Rec
HHP 5923 Readings in Neurophysiology
Description: Establishes a foundation in neurophysiology, particularly relating to health and 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. Same course as HHP 5823: Applied Neuromuscular Anatomy and Neurophysiology.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

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

HHP 6013 Professional Issues in Health and Human Performance
Prerequisites: Consent of instructor.
Description: This course is designated to introduce doctoral students to the major areas of higher education relevant to professional preparation in health and human performance curricula. Included are issues of higher education, roles of the educator, curriculum development, implementation and management, instructional strategies, and accreditation.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

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 6023 Special Topics in Health and Human Performance
Prerequisites: Admission to the Graduate College.
Description: Special topics related to health and human performance. Investigation, discussion and analysis of contemporary topics.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec

HHP 6053 Advanced Research in Health and Human Performance
Prerequisites: Graduate elementary statistical methods course.
Description: In-depth study of selected surveys and experimental research in HHP, including questionnaire development, survey methodology and analysis of data. Course previously offered as HPEL 6053.
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

HHP 6723 Curriculum Development in Health, Leisure and Human Performance
Prerequisites: Admission to the Graduate College.
Description: Identification and analysis of curriculum theories with emphasis on traditional and innovative approaches to curriculum design for programs in health, leisure and human performance. Course previously offered as HHP 5723.
Credit hours: 3
Contact hours: Lecture: 3 Contact: 3
Levels: Graduate
Schedule types: Lecture
Department/School: Kinesiology, Appl Health, Rec