

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 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 1843 Pedagogy of Individual Activities

Prerequisites: HHP and RMRT majors and minors only.

Description: 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. Previously offered as HHP 1842.

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 2553 Basic Athletic Injury Management

Prerequisites: HHP 2654.

Description: Identification of emergency medical situations and application of basic care for injury occurring in school and athletic setting.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Undergraduate

Schedule types: Lecture

Department/School: Kinesiology, Appl Health, Rec

HHP 2602 First Aid

Description: A competency- and performance-based first aid course. Course previously offered as HLTH 2602.

Credit hours: 2

Contact hours: Lecture: 2 Contact: 2

Levels: Undergraduate

Schedule types: Lecture

Department/School: Kinesiology, Appl Health, Rec

HHP 2654 Applied Anatomy

Prerequisites: BIOL 1114 or (BIOL 1113 and BIOL 1111).

Description: 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. Course previously offered as HHP 2653 and HLTH 2653.

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 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 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 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

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 Contact: 3

Levels: Undergraduate

Schedule types: Lecture

Department/School: Kinesiology, Appl Health, Rec

HHP 3753 Methods in Teaching Elementary Physical Education

Prerequisites: HHP 1753, and HHP 1833, and HHP 1843, and 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 Contact: 3

Levels: Undergraduate

Schedule types: Lecture

Department/School: Kinesiology, Appl Health, Rec

HHP 3773 Methods in Teaching Secondary Physical Education

Prerequisites: HHP 1753, and HHP 1833, and HHP 1843, and 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 Contact: 3

Levels: Undergraduate

Schedule types: Lecture

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 Other: 3

Levels: Undergraduate

Schedule types: Independent Study

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 Lab: 2 Contact: 5**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Kinesiology, Appl Health, Rec**HHP 3933 Tactical Strength and Conditioning****Prerequisites:** Exercise Science major, or consent of instructor**Description:** Theoretical and practical knowledge necessary to design safe and effective strength and conditioning programs for improving human performance for the Tactical Athlete (i.e., law enforcement, firefighters, and military personnel). Emphasis will be placed on the fundamental principles underlying the prescription of aerobic and anaerobic fitness and performance regimes to enhance occupational performance.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**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 and Learning****Prerequisites:** BIOL 3204 or HHP 3114.**Description:** An in-depth study of the neural control of movement, motor learning and performance. Particular emphasis will be placed on the neural and physiological basis of human movement, motor learning theory, and the development of motor abilities.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Kinesiology, Appl Health, Rec**HHP 4063 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:** Undergraduate**Schedule types:** Lecture**Department/School:** Kinesiology, Appl Health, Rec**HHP 4083 Physiology of Aging****Description:** This course will focus on how key physiological systems, such as musculoskeletal, neuromuscular, and sensory organs, develop and function throughout different phases of the human lifespan.

Additionally, pathophysologies associated with physical performance and age-related declines of these systems will be discussed at length.

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 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 Contact: 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 Contact: 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 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:** 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 4970 Internship AES: Pre-Professional****Prerequisites:** HHP 3114 & HHP 4773**Description:** The internship program for Applied Exercise Science (AES) at Oklahoma State University is intended for students to observe and gain practical experience in a professional environment in which they plan to work as a career. The internship experience consists of securing a placement such as a hospital setting, rehabilitation clinic, commercial fitness site, athletic trainer, athletic strength and conditioning department, or similar areas. Evaluation of the internship experience rests on the supervising faculty and internship supervisor. Graded pass/fail.**Credit hours:** 1-5**Contact hours:** Contact: 1-5 Other: 1-5**Levels:** Undergraduate**Schedule types:** Independent Study**Department/School:** Kinesiology, Appl Health, Rec

HHP 4980 Internship in AES: Strength and Conditioning**Prerequisites:** HHP 3114 & HHP 4124**Description:** The internship program for Applied Exercise Science (AES) at Oklahoma State University is intended for students to observe and gain practical experience in a professional environment in which they plan to work as a career. The internship experience consists of securing a placement such as a, hospital setting, rehabilitation clinic, commercial fitness site, athletic trainer, athletic strength and conditioning department, or similar areas. Evaluation of the intern experience rests on the supervising faculty and the internship supervisor. Graded pass/fail.**Credit hours:** 1-5**Contact hours:** Contact: 1-5 Other: 1-5**Levels:** Undergraduate**Schedule types:** Independent Study**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:** Lecture: 1-3 Contact: 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 5083 Physiology of Aging****Description:** This course will focus on how key physiological systems, such as musculoskeletal, neuromuscular, and sensory organs, develop and function throughout different phases of the human lifespan. Additionally, pathophysiologies associated with physical performance and age-related declines of these systems will be discussed at length.**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 Consumable 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 Consumable 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**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 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