

## **KNHS - Kinesiology and Health Science Courses**

### **KNHS 2100** *Diet and Nutrition (2-0-2)*

A study of the relationship that exists between diet and nutrition with specific application to maximizing overall health.

### **KNHS 2200** *CPR, First Aid and Sport Safety Training (1-0-1)*

This course introduces students to Adult, Infant and Child CPR; First Aid and automated external defibrillation training; and, sports related injury prevention.

### **KNHS 2350** *Health and Physical Education at the Early Childhood Level (2-0-2)*

This course presents the Early Childhood teacher education candidate with a guide for teaching health and physical education. In addition, this course may be used as a supplement for implementing a sound program.

### **KNHS 3100** *Introduction to Kinesiology and Health Science (2-2-3)*

An overview of the foundations of the various dimensions of Kinesiology and Health Science such as motor behavior, biomechanics, exercise physiology, sociology, health, fitness and teaching are among the topics introduced. Special emphasis is devoted to the aims and objectives of Kinesiology and Health Science as a profession and career choices.

### **KNHS 3210** *Motor Behavior (3-0-3)*

The theory and application of motor skill development and the behavioral characteristics of participants in motor activities will be discussed.

### **KNHS 3220** *Structural Kinesiology (3-0-3)*

A study of the structural basis underlying human motion, with emphasis on the skeletal, muscular, and nervous systems. An analysis of the mechanical principles which apply to the techniques used in physical activity, sport, and dance, including principles of kinetics and kinematics.

*Prerequisite(s): BIO 2111 and BIOL 2112 with a grade of at least C.*

### **KNHS 3300** *Practicum in Exercise and Sport Science (3-0-3)*

The purpose of the Practicum is to provide the student hands-on experience in exercise testing and prescription of physical fitness. Appropriate protocols will be practiced based on the age, health status, and physical activity level of the person to be tested.

### **KNHS 3310** *Sport and Exercise Psychology (3-0-3)*

This course examines physical activity as a health behavior and health-related dimension of physical fitness. The association between physical activity and fitness are analyzed. Other topics include health habits, chronic diseases, the behavior physiology of stress and mental health. Applications of psychology and exercise are examined.

### **KNHS 3311** *Introduction to Human Sexual Behavior (3-0-3)*

This course is designed to introduce the student to the multifaceted study of human sexual behavior, each component a functional property of individual, social, and psychological development.

### **KNHS 3312** *Introduction to Human Diseases (3-0-3)*

This course is designed to introduce the student to the multifaceted study of human diseases in terms of classification, etiology, and prevention.

**KNHS 3313** *Teaching and Assessing Physical Fitness (2-0-2)*

The purpose of this course is to develop skills and knowledge related to teaching and assessing physical fitness in the K-12 public school setting. Additionally, this course is designed to provide the student with knowledge specific to the areas of health-related physical fitness testing and exercise prescription.

**KNHS 3314** *Team Sports (2-0-2)*

Included are sport skill competencies, content knowledge, and pedagogic techniques for specific team sports. This course emphasizes concepts related to the development of motor skills. Team sports included are: volleyball, basketball, flag football, softball, and soccer.

**KNHS 3315** *Individual/Dual Activities And Outdoor Education (2-0-2)*

Introduced are the skills rules, tactics, and instructional strategies for golf, tennis, badminton, track and field, hiking, backpacking, orienteering, canoeing, and other outdoor skills.

**KNHS 3316** *Movement and Dance Methods (2-0-2)*

The physical education teacher candidate is introduced to the concepts and qualities of human movement, instructional strategies for teaching dance, rhythms, stunts and tumbling, educational games and gymnastics.

**KNHS 3320** *Fitness Assessment and Exercise Prescription (3-0-3)*

This course is an introduction to basic principles of fitness and wellness. The measurement prescription and evaluation of health-related factors of physical fitness are critical elements. Practical experience in fitness and wellness programming will be an integral part of this course.  
*Prerequisite(s): BIOL 2111, BIOL 2112 with a grade of C or better.*

**KNHS 3321** *Conducting Quality HPE Programs (3-0-3)*

Conducting Quality HPE Programs is the initial pedagogy experience for health and physical education majors. The purpose of this course is to assist the teacher education candidate in developing teaching skills to promote an effective learning environment.

**KNHS 3343** *Elementary Methods of Physical Education and Health (3-0-3)*

The purpose of this course is to enable the teacher education candidate to create a variety of learning opportunities for students that will be developmentally appropriate for children.

**KNHS 3420** *Instructional Strategies in Health Science (3-0-3)*

This course is designed to offer the student a theoretical and practical introduction to the discipline of health science education as a tool in both the academic and community setting.

**KNHS 4220** *Exercise Physiology (3-0-3)*

This course is an in-depth study of the physiology of exercise. Emphasis will be placed on energy metabolism during exercise and its relationship to the circulatory, pulmonary, and neuroendocrine systems.

*Prerequisite(s): BIOL 2111 and BIOL 2112 with a grade of at least C.*

**KNHS 4311** *Epidemiology (3-0-3)*

The purpose of this course is to introduce the participant to the study of human disease and injury in terms of distribution, determinants, and etiology.

**KNHS 4312** *Biostatistics (3-0-3)*

The purpose of this course is to introduce the student to the theoretical and practical use of statistics as a tool utilized in the collection, analysis, and interpretation of mortality and morbidity data.

**KNHS 4320** *Principles of Exercise Therapy (3-0-3)*

This course will deal specifically with fitness and the factors involved in the measurements, prescription, and evaluation of adult populations. The rehabilitation of athletic and work-related injuries will be discussed. Concepts will be reinforced through laboratory experiences.

*Prerequisite(s): BIOL 2111, BIOL 2112 with a grade of C or better.*

**KNHS 4330** *History and Philosophy of Kinesiology (3-0-3)*

The history of kinesiology will be presented with emphasis on the implications for modern kinesiology and sport. Critical thinking skills, problem solving skills, and ethical decision making will be stressed.

**KNHS 4340** *Measurement and Evaluation in Kinesiology and Health Science (3-0-3)*

This course teaches how to collect, organize and analyze numerical data to find solutions to problems. Of interest is an understanding of how to measure knowledge, physical performance, and affective behavior.

**KNHS 4342** *Physical Education for Middle and Secondary School Students (3-0-3)*

Teacher education candidates will learn about developmentally appropriate physical education for youth in middle and high school (grades 6-12).

**KNHS 4360** *Physical Education for Students with Diverse Needs (2-2-3)*

This course presents foundations and techniques to teach physical education to most special populations. It is designed for both adapted and regular physical education teachers to address the needs of students with disabilities in the regular class.

**KNHS 4950** *Selected Topics (3-0-3)*

The content of this course is designed to meet the needs and interests of students who are assigned studies in selected areas of health and Physical Education Related Topics.

*Prerequisite(s): Permission from department.*

**KNHS 4960** *Internship in Exercise and Sport Science (15-0-15)*

The purpose of the internship is to provide the student an opportunity to observe and practice essential skills of health/fitness professionals. The internship will further development of professional competence which enhances classroom knowledge.

*Prerequisite(s): Permission of instructor.*

**KNHS 4970** *Apprenticeship Teaching (15-0-15)*

The purpose of the apprenticeship teaching experience is to develop the essential professional knowledge and skills of teacher education candidates who wish to enter the profession of teaching physical education and health.

*Prerequisite(s): Completion of all required Health and Physical Education Teacher Education Certification Courses.*

**KNHS 6241** *Seminar in Contemporary Kinesiology and Health Science Research (3-0-3)*

This course introduces students to research in the disciplines of kinesiology and health science.

**KNHS 6311** *Advanced Behavioral Fitness (3-0-3)*

This course examines physical activity as a health behavior and health-related dimension of physical fitness. Associations between physical activity and fitness with health habits, chronic diseases, the behavior physiology of stress, and mental health are examined.

**KNHS 6312** *Cardiovascular Response to Exercise (3-0-3)*

This course will deal specifically with the cardiovascular function of the human body during physical exertion. Concepts will be reinforced through laboratory experiences.

**KNHS 6313** *Principles of Strength and Conditioning (3-0-3)*

This course examines the principles of strength training. Included topics are the physiological responses to training as well as the practical considerations for developing a strength training program.

**KNHS 6331** *Organization and Administration of Physical Education and Athletic Programs (3-0-3)*

This course will provide the student with an understanding of personnel administration, physical education and athletic objectives, and program administration.

**KNHS 6333** *Program Design and Development (3-0-3)*

This course is intended to provide the knowledge necessary for guiding the development, maintenance, and improvement of the framework for instruction and learning in the school—the curriculum. This course will seek to identify and apply principles underlying curriculum improvement for grades K-12.

**KNHS 6334** *Methods of Presentation in Kinesiology and Health Science (3-0-3)*

The purpose of this course is to examine and understand systematic methods to improve teaching skills. Two critical subject areas of this course will be the creation of conditions for effective teaching and a review of the literature on effective teaching in physical education.

**KNHS 6339** *Trends and Issues in Kinesiology and Health Sciences (3-0-3)*

The purpose of the course is to offer the graduate student an exploration of kinesiology and health science topics which, during the offering of the course, is under great discussion and contemplation within the professional community. Topics may differ between semesters.

**KNHS 6400** *Internship in Kinesiology and Health Science (3-0-3)*

This experience is designed to offer the graduate student a pragmatic and experiential exposure to the fields of kinesiology and/or health science.

*Prerequisite(s): Permission of the instructor.*

**KNHS 6411** *Motor Learning (3-0-3)*

This course focuses on theory and application of motor skill development and the behavioral characteristics of participants in motor activities will be discussed. Topics include performance and skill, attentional factors, motivational factors, stress, and perceptual motor learning and classical research in motor learning.

**KNHS 6412** *Motor Development (3-0-3)*

This course is designed to provide the student with a knowledge base in the study of change in motor behavior across the lifespan. Topics include: reviews of cognitive, social, and perceptual development as they apply to motor development and factors that affect development.

**KNHS 6413** *Advanced Measurement and Evaluation (3-0-3)*

A study of basic statistics and other issues applied to the reliability and validity of cognitive, psychological, and physiological assessments of human movement.

**KNHS 6430** *Advanced Health and Wellness (3-0-3)*

This purpose of this course is to offer the graduate student an in-depth survey of health science. Six content areas will be reviewed: physical, mental, social, spiritual, emotional, and environmental health. Current trends and issues specific to the discipline will also be explored.

**KNHS 6442** *Applied Research Project (3-0-3)*

This course is designed to allow the student to conduct an applied research project under the supervision of a faculty member. After conducting the study, the student will prepare a written research report in the form of a manuscript.

*This course may be repeated as necessary.*

**KNHS 6950** *Selected Topics (Var)*

The content of this course is intended to meet the needs and interests of graduate students in selected areas of Kinesiology and Health Science.

*Prerequisite(s): Permission of the instructor.*