Kinesiology (KINS)

## **KINESIOLOGY (KINS)**

#### KINS 1100. Exercise and Wellness for Everyone. (3 Credits)

Overview of the five pillars of health (exercise, nutrition, sleep, stress and relationships); role of exercise in health promotion and disease prevention across the lifespan; impacts of exercise in leisure time, culture, community, careers and the workplace.

### KINS 1160. Courses in Lifetime Sports Program. (1 Credit)

A variety of lifetime sports and skills are offered. The teaching of each activity will be geared to individual, dual, and team activities. Students who have physical disabilities in the least restrictive environment possible. Participants requiring accommodations should contact the Program Coordinator.

**Enrollment Requirements:** This course may be repeated with change of activity and/or skill level, not to exceed 3 credits toward graduation of combined AH 1200 and KINS 1160 credits. Students in the Dept. of Kinesiology may count up to 6 different activities for 6 credits. May be repeated for credit

#### KINS 1200. Fundamentals of Exercise Testing. (1 Credit)

Laboratory assessment of health and fitness principles including to resting measurements, functional capacity, anaerobic power and threshold, body composition, lactate threshold, flexibility and functional movement. Emergency procedures and protocols during exercise testing and training are discussed throughout. Participation in conducting and performing fitness tests is required.

**Enrollment Requirements:** Instructor consent; CPR/AED and First Aid required prior to start of course.

## KINS 1300. Fundamentals of Resistance Training. (1 Credit)

Focuses on skills related to the fundamentals to resistance training including anaerobic ability, muscular strength, muscle endurance, power, and flexibility. Course content is meant to compliment the knowledge and fundamentals around individualized resistance training programs as discussed in KINS 3545 Resistance Training for Health and Performance. **Enrollment Requirements:** Recommended preparation: KINS 3545. Not open for credit to students who have passed KINS 1160.

### KINS 2200. Introduction to Athletic Training. (3 Credits)

An introduction to basic principles of the athletic training profession. Content includes history of the athletic training profession, sports medicine team concepts and applications, environmental influences, health assessment screenings, basic injury and illness assessment, management and treatment, protective equipment, strength and conditioning concepts, and health risks related to the physically active. An overview of athletic training professional organizations and the role the athletic trainer plays in the health care system is introduced. Risk factors associated with blood-borne pathogens (BBP) and common diseases that affect the active population are investigated. Concepts of universal precautions and BBP training will also be provided.

## KINS 2227. Exercise Prescription. (3 Credits)

Addresses the Frequency, Intensity, Time, and Type or FITT principle of exercise prescription for apparently healthy adults; healthy populations with special considerations such as children, older adults, and women who are pregnant; and special populations with chronic disease and health conditions such as overweight and obesity, and cardiovascular, pulmonary, metabolic, and musculoskeletal disease. CA 3.

Enrollment Requirements: Recommended preparation: KINS 1100.

Content Areas: CA3: Science & Technology Topics of Inquiry: TOI6: Science & Empirical Inq

#### KINS 3091. Internship. (1-12 Credits)

Field service or experiences in cooperating agencies.

**Enrollment Requirements:** Students must complete all concentration requirements excluding Athletic Training prior to taking an internship. Open to Kinesiology majors.

May be repeated for credit

#### KINS 3098. Variable Topics. (1-6 Credits)

May be repeated for credit

#### KINS 3099. Independent Study for Undergraduates. (1-6 Credits)

Laboratory or library research to expand understanding of a specialized topic in sport, leisure, or exercise sciences.

Enrollment Requirements: Must be of senior standing.

May be repeated for credit

### KINS 3099W. Independent Study for Undergraduates. (1-6 Credits)

Laboratory or library research to expand understanding of a specialized topic in sport, leisure, or exercise sciences.

Enrollment Requirements: ENGL 1007 or 1010 or 1011; open only to

seniors with consent of the Department Head.

May be repeated for credit

Skill Codes: COMP. Writing Competency

## KINS 3212. Field Experiences in Rehabilitation, Health Care, and Sport. (3 Credits)

For students interested in a career in healthcare (physical therapy, athletic training or related field) and/or sport a chance to engage in observation opportunities within the various clinical settings of healthcare, sports medicine, and/or sport performance. Inter-professional discussion with topics related to professional development, transition to practice, job readiness, interviewing, job negotiations, and effective communication in the workforce.

**Enrollment Requirements:** Instructor consent. Recommended preparation: KINS 1160, CPR/First Aid.

preparation. Kins 1100, CPN/First Aid.

### KINS 3222. Mental Health in Sport. (3 Credits)

Examines the impact that sport performance can have on the athlete's mind and body as they devote time, energy, and effort into developing their skills in their given sport. Student-athletes navigate unique stressors and can be at greater risk to experience a negative impact on their mental health and well-being. Topics to be covered may include athlete identity, personality disorders, disordered eating, substance abuse, body dysmorphia, depression, suicide ideation, anxiety, as well as mental health resources for athletes and care providers.

Enrollment Requirements: PSYC 1100.

#### KINS 3320. Exercise Psychology. (3 Credits)

The psychological components associated with exercise and sport performance. Specifically, how the psychosocial aspects (e.g., group cohesion, motivation, leadership, team vs. individual sport) and health related aspects (e.g., exercise behavior and adherence, burnout/overtraining, and injury) of sport and exercise relate.

### KINS 3522. Biomechanics of Injury and Sport. (3 Credits)

Introduction to biomechanics related to injury and sport. Explores both the statics and dynamics of motion including kinetics and kinematics. Examines biomechanical issues of human movement related to exercise/sport and injury and the biomechanics of different body tissues. Uses examples from research and mass media to complement the teaching materials in the course.

Enrollment Requirements: PNB 2264 and 2265.

#### KINS 3530. Aerobic Training for Health and Performance. (3 Credits)

Focuses on the knowledge, skills, and understanding of the scientific principles on which to design individualized aerobic training programs needed for optimal performance, health improvement, disease treatment, and injury prevention. Presents analysis techniques of human physiology specific to aerobic training and performing. Laboratory and field methods to evaluate aerobic ability, lactate threshold, economy, anthropometrics, and aerobic performance characteristics will be discussed.

**Enrollment Requirements:** KINS 4500; open only to students in Kinesiology programs, others by consent of instructor.

# KINS 3531W. Scientific Writing in Aerobic Training for Health and Performance. (1 Credit)

A writing intensive class integrated with course content in KINS 3530. **Enrollment Requirements:** KINS 4500; ENGL 1007 or 1010 or 1011; open only to students in Kinesiology programs, others by consent of instructor. Corequisite: KINS 3530. Not open for credit to students who have passed KINS 3530W.

Skill Codes: COMP. Writing Competency

## KINS 3545. Resistance Training for Health and Performance. (3 Credits)

Focuses on the knowledge, skills, and understanding of the scientific principles on which to design individualized resistance training programs needed for optimal performance, health improvement, disease treatment, and injury prevention. Presents analysis techniques of human physiology specific to resistance training and performing. Laboratory and field methods to evaluate anaerobic ability, flexibility, muscular strength and power and body composition will be discussed.

**Enrollment Requirements:** Open only to students in Kinesiology programs; others by consent of instructor. Corequisite: KINS 4500.

# KINS 3546W. Scientific Writing in Resistance Training for Health and Performance. (1 Credit)

A writing intensive class integrated with course content in KINS 3545. **Enrollment Requirements:** ENGL 1007 or 1010 or 1011; open only to students in Kinesiology programs. Corequisite: KINS 3545. Recommended Preparation: KINS 4500. Not open for credit to students who have passed KINS 3545W.

Skill Codes: COMP. Writing Competency

KINS 3550. Exercise Prescription for Clinical Populations. (3 Credits) Introduction to theories and techniques of exercise prescription for a variety of special populations. Emphasis is placed on pathophysiology, clinical exercise testing, and the acute and chronic effects of exercise on clinical populations. Populations will include cardiovascular, pulmonary, metabolic, and neuromuscular disease among other diseases and chronic conditions. Guidelines to appropriate cardiovascular and resistance training protocols for these and other populations will be discussed in detail.

**Enrollment Requirements:** KINS 2227. Recommended preparation: Enrollment as an Exercise Science undergraduate student.

#### KINS 3610. Introduction to Honors Research. (3 Credits)

The student will meet with KINS faculty members and attend laboratory/ program staff meetings to survey the opportunities available for future Honors Thesis research.

**Enrollment Requirements:** Open only to Honors Students in Kinesiology Programs.

**Grading Basis:** Honors Credit

#### KINS 3615. Honors Literature Review. (3 Credits)

The student will identify specific Honors Thesis research questions and will write a library research paper that will serve as the thesis Literature Review.

**Enrollment Requirements:** Open only to Honors Students in Kinesiology Programs.

**Grading Basis:** Honors Credit

#### KINS 3697W. Honors Thesis. (3 Credits)

The student will collect and interpret data and will write the Honors Thesis, completing work begun during KINS 3615.

Enrollment Requirements: ENGL 1070 or 1010 or 1011; open only to

Honors Students in Kinesiology Programs.

Grading Basis: Honors Credit

Skill Codes: COMP. Writing Competency

### KINS 4204. Exercise Science Capstone. (2 Credits)

Introduction to the fundamental concepts of research and scientific inquiry as these concepts apply to understanding and evaluating published research. Students will be able to make informed decisions about the relevance of published research to their own practice and research.

Enrollment Requirements: ENGL 1007 or 1010 or 1011; KINS 4500. Not

open for credit to students who have passed KINS 4205W.

### KINS 4206W. Scientific Writing in Exercise Science. (1 Credit)

A writing intensive course integrated with course content from KINS 4204. Students will prepare a scientific manuscript and present their work in a public presentation.

Enrollment Requirements: ENGL 1007 or 1010 or 1011; KINS 4500.

Corequisite: KINS 4204.

Skill Codes: COMP. Writing Competency

#### KINS 4500. Exercise Physiology. (3 Credits)

An organ systems approach to optimal human performance including metabolism, energy transfer, nerve transmission, muscle contraction, endocrine control, and cardiopulmonary physiology.

Enrollment Requirements: PNB 2264 and 2265.

## KINS 4510. Advanced Topics in Health and Sport Performance. (3 Credits)

Fundamental concepts and physiology in Exercise Science with focus on special topics and conditions that challenge the human exercise response. These include stressful environments, use of ergogenic aids and special diets, exercise in special conditions, and advanced topics associated with fatigue, the immune system and stress/sleep deprivation: incorporating current research in these and other select

**Enrollment Requirements:** KINS 4500. Open only to students in Kinesiology programs; others by consent of instructor.

## KINS 4511W. Scientific Writing in Advanced Topics in Health and Sport Performance. (1 Credit)

A writing intensive course integrated with course content from KINS 4510.

Enrollment Requirements: KINS 4500. Corequisite: KINS 4510. Not open

for credit to students who have passed KINS 4510W.

Skill Codes: COMP. Writing Competency