

# HEALTH, HUMAN PERFORMANCE AND ATHLETICS

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## Faculty

Sarah Coste, Ph.D.  
 Laura Kenow, Ph.D.  
 Emily Kosderka, Ph.D.  
 Jackie Leung, J.D.  
 Jeff McNamee, Ph.D. (Chair)  
 G.F. "Cisco" Reyes, Ph.D.  
 Daniel Zajic, Ph.D.

## Lab Coordinator

Andrew Clements, M.S.

## Instructional Associates

Kaitlyn Macuk, M.S.

## Curriculum and Degree Programs

The Department of Health, Human Performance, and Athletics offers undergraduate majors in Exercise Science and Public Health: Health Promotion, an interdisciplinary major in Sport Management, and a minor in Coaching.

The curriculum and instruction within the department's programs utilize an evidence-based model that fosters critical thinking in an experiential learning, hands-on environment. Programs provide foundational science and practical skills to prepare students for either further education and/or employment within all aspects of health, rehabilitation, human performance, and sport science. In addition, the programs provide students with opportunities to learn concepts needed to earn nationally recognized certifications within health, fitness, human performance, and rehabilitation.

Majors in Exercise Science and Public Health: Health Promotion are available as Bachelor of Arts or Bachelor of Science degrees, as defined in the section on degree requirements for all majors in this course catalog.

For Oregon Preliminary Teaching Licensure in Health Education a student needs to major in Public Health: Health Promotion and must also complete a Secondary Education major with Licensure. For Oregon Preliminary Teaching License in Physical Education a student needs to major in Exercise Science and must also complete a Secondary Education major with Licensure. In order to complete the Secondary Education major with Licensure, students should begin taking education courses no later than their sophomore year. The student must be advised by faculty in in both majors.

### Organizations and Honors

The HHPA department recognizes graduating seniors who achieve at least a 3.500 GPA and performed service in their field.

## Course/Lab Fees

Many HHPA paracurricular and academic courses have associated fees. Please consult your registration materials for fee assessment.

## UNDERGRADUATE PROGRAMS

- Exercise Science Major (<http://catalog.linfield.edu/programs-az/arts-sciences/health-human-performance-athletics/exercise-science-major/>)
- Public Health: Health Promotion Major (<http://catalog.linfield.edu/programs-az/arts-sciences/health-human-performance-athletics/public-health-promotion-major/>)
- Coaching Minor (<http://catalog.linfield.edu/programs-az/arts-sciences/health-human-performance-athletics/coaching-minor-non-hhpa-major-track/>)

For an interdisciplinary major or minor in Sport Management: Refer to the Sport Management (<http://catalog.linfield.edu/programs-az/business/sport-management/>) section of the catalog.

For interdisciplinary minors in Global Health (<http://catalog.linfield.edu/programs-az/arts-sciences/global-health/>) and Health Administration (<http://catalog.linfield.edu/programs-az/arts-sciences/health-administration/>): Refer to those sections of the catalog.

## GRADUATE PROGRAMS

- Sports Science and Analytics (M.S.) (<http://catalog.linfield.edu/programs-az/arts-sciences/health-human-performance-athletics/master-of-science-sports-science-and-analytics/>)

## Courses

### Paracurricular Courses: HHPA

#### HHPA 001 INTERCOLLEGIATE FOOTBALL (1 credit)

Paracurricular courses are repeatable for credit.  
 (EXPERIENTIAL LEARNING)

#### HHPA 003A INTERCOLLEGIATE CROSS COUNTRY: MEN (1 credit)

Paracurricular courses are repeatable for credit.  
 (EXPERIENTIAL LEARNING)

#### HHPA 003B INTERCOLLEGIATE CROSS COUNTRY: WOMEN (1 credit)

Paracurricular courses are repeatable for credit.  
 (EXPERIENTIAL LEARNING)

#### HHPA 004A INTERCOLLEGIATE SOCCER: MEN (1 credit)

Paracurricular courses are repeatable for credit.  
 (EXPERIENTIAL LEARNING)

#### HHPA 004B INTERCOLLEGIATE SOCCER: WOMEN (1 credit)

Paracurricular courses are repeatable for credit.  
 (EXPERIENTIAL LEARNING)

#### HHPA 005B INTERCOLLEGIATE VOLLEYBALL: WOMEN (1 credit)

Paracurricular courses are repeatable for credit.  
 (EXPERIENTIAL LEARNING)

#### HHPA 006A INTERCOLLEGIATE BASKETBALL: MEN (1 credit)

Paracurricular courses are repeatable for credit.  
 (EXPERIENTIAL LEARNING)

#### HHPA 006B INTERCOLLEGIATE BASKETBALL: WOMEN (1 credit)

Paracurricular courses are repeatable for credit.  
 (EXPERIENTIAL LEARNING)

**HHPA 008A INTERCOLLEGIATE SWIMMING: MEN (1 credit)**

Paracurricular courses are repeatable for credit.  
(EXPERIENTIAL LEARNING)

**HHPA 008B INTERCOLLEGIATE SWIMMING: WOMEN (1 credit)**

Paracurricular courses are repeatable for credit.  
(EXPERIENTIAL LEARNING)

**HHPA 010A INTERCOLLEGIATE TRACK AND FIELD: MEN (1 credit)**

Paracurricular courses are repeatable for credit. 1 credit. (EL)  
(EXPERIENTIAL LEARNING)

**HHPA 010B INTERCOLLEGIATE TRACK AND FIELD: WOMEN (1 credit)**

Paracurricular courses are repeatable for credit.  
(EXPERIENTIAL LEARNING)

**HHPA 011 INTERCOLLEGIATE BASEBALL (1 credit)**

Paracurricular courses are repeatable for credit.  
(EXPERIENTIAL LEARNING)

**HHPA 012 INTERCOLLEGIATE SOFTBALL (1 credit)**

Paracurricular courses are repeatable for credit.  
(EXPERIENTIAL LEARNING)

**HHPA 013A INTERCOLLEGIATE TENNIS: MEN (1 credit)**

Paracurricular courses are repeatable for credit.  
(EXPERIENTIAL LEARNING)

**HHPA 013B INTERCOLLEGIATE TENNIS: WOMEN (1 credit)**

Paracurricular courses are repeatable for credit.  
(EXPERIENTIAL LEARNING)

**HHPA 014A INTERCOLLEGIATE GOLF: MEN (1 credit)**

Paracurricular courses are repeatable for credit.  
(EXPERIENTIAL LEARNING)

**HHPA 014B INTERCOLLEGIATE GOLF: WOMEN (1 credit)**

Paracurricular courses are repeatable for credit.  
(EXPERIENTIAL LEARNING)

**HHPA 015B INTERCOLLEGIATE LACROSSE: WOMEN (1 credit)**

Paracurricular courses are repeatable for credit.  
(EXPERIENTIAL LEARNING)

**HHPA 016 INTERCOLLEGIATE CHEERLEADING (1 credit)**

Paracurricular courses are repeatable for credit.  
(EXPERIENTIAL LEARNING)

**HHPA 020 BADMINTON (1 credit)**

Paracurricular courses are repeatable for  
Total Course fees: \$70.00  
(EXPERIENTIAL LEARNING)

**HHPA 023 TENNIS (1 credit)**

Paracurricular courses are repeatable for  
Total Course fees: \$70.00  
(EXPERIENTIAL LEARNING)

**HHPA 024 POWER LIFTING (1 credit)**

Paracurricular courses are repeatable for credit.  
Total Course fees: \$70.00  
(EXPERIENTIAL LEARNING)

**HHPA 025 WEIGHT TRAINING (1 credit)**

Paracurricular courses are repeatable for credit.  
Total Course fees: \$70.00  
(EXPERIENTIAL LEARNING)

**HHPA 028 VOLLEYBALL (1 credit)**

Paracurricular courses are repeatable for credit.  
Total Course fees: \$70.00  
(EXPERIENTIAL LEARNING)

**HHPA 032 AIKIDO (1 credit)**

Introduction to the physical techniques, philosophy, vocabulary and etiquette of traditional Aikido and to provide a supervised environment for students to practice these techniques safely both individually and with partners.  
Total Course fees: \$70.00  
(EXPERIENTIAL LEARNING)

**HHPA 033 PICKLEBALL (1 credit)**

Paracurricular courses are repeatable for credit.  
Total Course fees: \$70.00  
(EXPERIENTIAL LEARNING)

**HHPA 034 PERSONAL DEFENSE (1 credit)**

Paracurricular courses are repeatable for credit.  
Total Course fees: \$70.00  
(EXPERIENTIAL LEARNING)

**HHPA 035 CAPOEIRA FUNDAMENTALS (1 credit)**

This course is designed to familiarize students with the fundamentals of the afro-Brazilian martial art of Capoeira. Capoeira is a Brazilian cultural experience/martial art created by African slaves in Brazil as a form of self-defense and cultural preservation. It is a game combining martial arts with music and acrobatic movements to create a spontaneous corporal dialogue between players. Paracurricular courses are repeatable for credit.  
Total Course fees: \$70.00  
(EXPERIENTIAL LEARNING)

**HHPA 036 DOWNHILL SKIING (1 credit)**

Paracurricular courses are repeatable for credit.  
Total Course fees: \$250.00  
(EXPERIENTIAL LEARNING)

**HHPA 040 COMMUNITY SERVICE (1-2 credits)**

Paracurricular courses are repeatable for credit.  
(EXPERIENTIAL LEARNING)

**HHPA 042 BASKETBALL ACTIVITY (1 credit)**

Paracurricular courses are repeatable for credit.  
Total Course fees: \$70.00  
(EXPERIENTIAL LEARNING)

**HHPA 050 STRESS MANAGEMENT PRACTICE (1 credit)**

Introduction, performance and monitoring of stress management techniques. Paracurricular courses are repeatable for credit. OFFERED THROUGH ONLINE AND CONTINUING EDUCATION (OCE) ONLY.  
(EXPERIENTIAL LEARNING)

**HHPA 060 AQUATIC FITNESS (1 credit)**

Paracurricular courses are repeatable for credit.  
Total Course fees: \$70.00  
(EXPERIENTIAL LEARNING)

**HHPA 062 AEROBIC FITNESS (1 credit)**

Paracurricular courses are repeatable for credit.  
Total Course fees: \$70.00  
(EXPERIENTIAL LEARNING)

**HHPA 065 SPEED/AGILITY/QUICKNESS CONDITIONING (1 credit)**

Paracurricular courses are repeatable for credit.  
Total Course fees: \$70.00  
(EXPERIENTIAL LEARNING)

**HHPA 067 SCUBA (1 credit)**

In addition to the course fee of \$400, there will be added costs for equipment & open dives. Paracurricular courses are repeatable for credit.  
*Total Course fees: \$400.00*  
*(EXPERIENTIAL LEARNING)*

**HHPA 068 ADVANCED SCUBA (1 credit)**

In addition to the course fee of \$300, there will be added costs for equipment & open dives. Paracurricular courses are repeatable for credit.  
*Total Course fees: \$300.00*  
*Prerequisites: HHPA 067.*  
*(EXPERIENTIAL LEARNING)*

**HHPA 071A YOGA: MINDFULNESS (1 credit)**

Principles of mindfulness and basic understanding of yoga. Physical practice of hatha yoga. Emphasis on physical and mental benefits and employment of breathing techniques (pranayama). Offered Fall and Spring. Paracurricular courses are repeatable for credit.  
*Total Course fees: \$70.00*  
*(EXPERIENTIAL LEARNING)*

**HHPA 071B YOGA: VINYASA (1 credit)**

Various aspects of a vinyasa flow style of yoga and discussion of traditional and current views of the practice. Emphasis on developing core stability and improving flexibility, balance and mental focus. Paracurricular courses are repeatable for credit. Prerequisite: none; HHPA 071a recommended. Offered fall and spring.  
*Total Course fees: \$70.00*  
*(EXPERIENTIAL LEARNING)*

**HHPA 071C YOGA: EXPLORATORY (1 credit)**

Exploration of various styles of yoga in class and via field trips. Contrasting and comparing teaching techniques and styles with various teachers. Paracurricular courses are repeatable for credit. Offered fall and spring.  
*Total Course fees: \$70.00*  
*Prerequisites: HHPA 071A or HHPA 071B or instructor consent.*  
*(EXPERIENTIAL LEARNING)*

**HHPA 072 MINDFULNESS: DAILY PRACTICE (1 credit)**

Students will develop a daily practice of mindfulness in order to increase healthfulness and resilience to improve their ability to calm their bodies and to bring more present moment attention into their daily tasks and activities. Students will have opportunities to integrate mindfulness into their daily lives "beyond the cushion."  
*Total Course fees: \$70.00*  
*(EXPERIENTIAL LEARNING)*

**HHPA 073 PILATES (1 credit)**

To familiarize students with the series of Pilates mat exercises created by Joseph Pilates in the early 20th Century. This is a progressive course designed to introduce students to the basic principles of Pilates and to build on this foundation each week. Paracurricular courses are repeatable for credit.  
*Total Course fees: \$70.00*  
*(EXPERIENTIAL LEARNING)*

**HHPA 086 ADVANCED TENNIS (1 credit)**

Paracurricular courses are repeatable for credit.  
*Total Course fees: \$70.00*  
*(EXPERIENTIAL LEARNING)*

**HHPA 088 BACKPACKING (2 credits)**

Field-based course for individuals with minimal or no backpacking experience. Focus on packing, safe travel, navigation, environmental ethics, and nutrition in the backcountry. Includes selecting and using proper equipment for average weekend backpacking trips in Pacific Northwest. One Saturday meeting and one three-day field-based trip. Paracurricular courses are repeatable for credit.  
*Total Course fees: \$50.00*  
*(EXPERIENTIAL LEARNING)*

**HHPA 091A INTERCOLLEGIATE WINTER TRACK AND FIELD: MEN (1 credit)**

Paracurricular courses are repeatable for credit.  
*Total Course fees: \$70.00*  
*(EXPERIENTIAL LEARNING)*

**HHPA 091B INTERCOLLEGIATE WINTER TRACK AND FIELD: WOMEN (1 credit)**

Paracurricular courses are repeatable for credit.  
*Total Course fees: \$70.00*  
*(EXPERIENTIAL LEARNING)*

**HHPA 093 RESCUE DIVER (2 credits)**

In addition to the course fee of \$300, there will be added costs for equipment & open dives. Paracurricular courses are repeatable for credit.  
*Total Course fees: \$300.00*  
*(EXPERIENTIAL LEARNING)*

**HHPA 095 MARCHING BAND (ALSO LISTED AS MUSC 095) (1 credit)**

Para-curricular course designed for students in any major. Marching band, consisting of dance team, color guard, drumline, twirlers, wind, and brass performers, is an athletic band meaning that there is a focus on both musical and physical performance. Performs at athletic events (football and basketball primarily), as well as special events on and off campus. Open to all students interested in performing in a collegiate level athletic band, no prior experience required. MUSC 095 is not a substitute or equivalent for MUSC 110. Consent of Athletic Band director required. Offered every semester.  
*Prerequisites: Consent of Athletic Band director required.*  
*(EXPERIENTIAL LEARNING)*

**HHPA 099 TOPICS IN HEALTH & FITNESS (1-2 credits)**

Enables students engaged in a formal health and fitness class offered outside of Linfield College to obtain college credit for the activity. Paracurricular courses are repeatable for credit.  
*(EXPERIENTIAL LEARNING)*

**Health, Human Performance and Athletics Courses**

*A list of the department's infrequently taught courses can be found on the Registrar's webpages.*

**HHPA 100 DRUG USE IN THE UNITED STATES (3 credits)**

Overview of problems, issues, and research surrounding use and misuse of alcohol and other drugs in the United States. Emphasis on effective approaches toward prevention.  
*(U.S. PLURALISM)*

**HHPA 112 INTRODUCTION TO HUMAN BIOLOGY (4 credits)**

Introduces normal human anatomy and physiological processes to students in the liberal arts curriculum. Emphasizes functional mechanisms of cells, tissues, organs and organ systems. Laboratory experience provides direct observation and participation.  
*Total Course fees: \$30.00*  
*Typically offered: Spring Semester*  
*(NATURAL WORLD)*

**HHPA 164 LIFEGUARD TRAINING (2 credits)**

Skill acquisition and background content for lifeguards as prescribed by the American Red Cross, including water safety, artificial respiration, actions appropriate to choking, management of spinal injury, first aid and CPR.

*Total Course fees: \$50.00*

**HHPA 165 WATER SAFETY INSTRUCTION (2 credits)**

Swimming skills and aquatics teaching progressions as prescribed by the American Red Cross for Water Safety Instruction Certification.

*Total Course fees: \$50.00*

**HHPA 170 PEER HEALTH EDUCATION METHODS: WELLNESS (2 credits)**

Information, methods, and resources for planning and implementing peer health education programs in wellness.

*(EXPERIENTIAL LEARNING)*

**HHPA 171 PEER HEALTH EDUCATION METHODS: INFORMED CHOICES (1 credit)**

Information, methods, and resources for planning and implementing peer health education programs for alcohol and drug prevention.

*(EXPERIENTIAL LEARNING)*

**HHPA 172 PEER HEALTH EDUCATION METHODS: CATS (2 credits)**

Information, methods, and resources for planning and implementing peer health education programs for sexual assault prevention.

**HHPA 180 PERSONAL HEALTH PROMOTION (2 credits)**

Health status assessed, information provided and skills taught to optimize an individual's pursuit of a healthy lifestyle. Personal responsibility in managing one's mental health, fitness, nutrition and stress.

**HHPA 183 SEMINAR IN HEALTH AND HUMAN MOVEMENT (1 credit)**

For students considering careers, fields or professions in areas relating to health and human performance including exercise science, athletic training, physical education and health education. Examination of the past, present and future of education, disciplines and careers that relate to health and human performance in contemporary society.

**HHPA 184 PREVENTION AND CARE OF ATHLETIC INJURIES (3 credits)**

Emphasis on study of etiology and mechanism of injury, pathology, and recognition of clinical signs and symptoms of athletic injury. Knowledge required for proper recognition, management, and prevention of athletic injuries.

*Total Course fees: \$15.00*

**HHPA 210 AQUATIC TRAINING & CONDITIONING FOR EXERCISE & FITNESS SPECIALISTS (3 credits)**

Theoretical principles and practices of training and conditioning in an aquatic environment; introduction to basic fluid mechanics; basic water safety and rescue; aquatic skill development; emphasis on program and course development for fitness practitioners. Lecture and lab. Focus for human performance majors.

*Typically offered: Spring Semester*

**HHPA 215 INTRODUCTION TO YOGA (ALSO LISTED AS RELS 215) (2 credits)**

Overview of philosophy, history and practice of yoga; discussion of its progression and incorporation in the west over last 100 years; emphasis on benefits of yoga and mindfulness for the individual. LECTURE. OFFERED THROUGH ONLINE AND CONTINUING EDUCATION (OCE) ONLY.

*Prerequisites: HHPA 071A or instructor consent.*

**HHPA 221 ATHLETIC TRAINING PROFESSIONAL EXPERIENCE I: PORTFOLIO/INTRO SKILLS (2 credits)**

Professional experience in athletic training and application of athletic training courses. Clinical field experience required.

*Total Course fees: \$70.00*

*Prerequisites: HHPA 184, HHPA 284, sophomore or junior standing, and consent of instructor.*

*Typically offered: Fall Semester*

**HHPA 230 STRESS MANAGEMENT (2 credits)**

Physiological response to stress, health consequences of unmanaged stress, models of effective stress management, and exposure to various stress management techniques. Applications to health education.

**HHPA 231 PROFESSIONAL EXPERIENCE II: TAPING, BRACING AND EMERGENCY MANAGEMENT (2 credits)**

Professional experience in athletic training and application of athletic training courses. Clinical field experience required.

*Total Course fees: \$50.00*

*Prerequisites: HHPA 221, sophomore or junior standing, and consent of instructor.*

*Typically offered: Spring Semester*

**HHPA 242 HUMAN SEXUALITY (3 credits)**

An introductory overview of human sexuality topics as they relate to health including components of healthy sexuality, influences on sexuality, sexual structure and function, human sexual response, contraception, pregnancy and birth, sexually transmitted diseases, communication, love and intimacy, lifestyles, and sexual victimization. Emphasis on gender, sociocultural factors, and sexual orientation.

*(INDIVID/SYSTEMS/SOCIETIES)*

**HHPA 250 PREVENTION AND CONTROL OF DISEASE (3 credits)**

An introduction to epidemiological principles as they relate to the understanding of communicable and non-communicable diseases in humans. Special emphasis on prevention and control of diseases through health education and health promotion orientations and strategies.

*Typically offered: Fall Semester*

**HHPA 260 FUNDAMENTALS OF NEUROSCIENCE (ALSO LISTED AS BIOL 260 AND PSYC 260) (4 credits)**

Introduction to cellular, organismal and behavioral neuroscience. Examining principles of neurons, synapses, and brain systems; including structural and functional mechanisms of neurons in sensory systems, perception, movement and neural development.

*Prerequisites: PSYC 101, BIOL 210, and BIOL 211.*

*Typically offered: Spring Semester*

**HHPA 270 CORE CONCEPTS OF HEALTH & HUMAN PERFORM (4 credits)**

An overview of the core concepts of health and human performance as they relate to a practitioner in the field of fitness, exercise, and athletics; laws and principles of human performance as they relate to movement and training of the human body; emphasis on the scientific foundations of training and conditioning for human performance and health from a practical perspective. Lecture and lab. Focus for non-majors.

**HHPA 280 NUTRITION (3 credits)**

Nutrients in foods and their relation to the physical well-being and behavior of people. Issues of current national and international concern.

*Total Course fees: \$12.00*

*(NATURAL WORLD)*



**HHPA 281 FUNDAMENTALS OF FOOD SCIENCE (4 credits)**

Insights into the chemical and physical properties of foods and beverages; factors influencing food quality during processing, preparation and storage; safety concepts; preservation, fermentation and cooking methods; recipe modification; sensory and objective evaluation of foods; Includes laboratory (in home kitchen). OFFERED THROUGH ONLINE AND CONTINUING EDUCATION (OCE) ONLY.

*Prerequisites:* HHPA 280

**HHPA 282 FOOD, CULTURE AND SOCIETY (4 credits)**

Explores the historical, cultural, economic and geopolitical interactions of food in a variety of cultures and examines the regional and environmental influences on taste and flavors. Topics include food related to nations, religions, class/caste, communities and other societal boundaries. Assignments, readings, and activities combined to facilitate understanding of commonalities as well as diversities in cuisines and cultures. OFFERED THROUGH ONLINE AND CONTINUING EDUCATION (OCE) ONLY.

**HHPA 284 FIRST AID & CPR I (2 credits)**

In-depth study and training in the techniques and procedures for giving emergency care to the suddenly ill or injured. Lectures, videos, demonstrations, and practice. Preparation for CPR and First Aid certification. Does not alone fulfill athletic training requirement. Not designed for Nursing majors.

*Total Course fees:* \$50.00

**HHPA 287 FOUNDATIONS OF LEADERSHIP IN PHYSICAL ACTIVITY (4 credits)**

Focus on evidence-based educational methods and adult learning strategies in physical activity environments. Effective leadership principles in schools, clinics and fitness facilities.

*Prerequisites:* HHPA 183.

**HHPA 288 PHYSICAL ACTIVITY FOR CHILDREN AND YOUTH (4 credits)**

Focus on developmentally appropriate physical activities for children and youth ages 5-17, scope and sequence of activities, planning and critical elements of movement.

*Total Course fees:* \$25.00

*Prerequisites:* HHPA 287.

*Typically offered:* Spring Semester

**HHPA 289 GROUP PHYSICAL ACTIVITY AND FITNESS (3 credits)**

Focus on developmentally appropriate physical activities and fitness for children and adults, scope and sequence of activities, planning and management in group contexts. Lab and lecture. 40 hours co-instructing at local fitness facility or within Linfield paracurricular program.

*Total Course fees:* \$25.00

*Prerequisites:* HHPA 287.

**HHPA 297 INTRODUCTION TO RESEARCH IN PHYSICAL ACTIVITY (3 credits)**

Techniques needed to examine, analyze, conduct and report research in the area of health and human performance. Emphasis on quantitative techniques and accompanying statistical analyses. Lecture and laboratory.

*(QUANTITATIVE REASONING)*

**HHPA 301 FOOD SCIENCE (ALSO LISTED AS CHEM 301) (4 credits)**

Food Science General (also listed as CHEM 301) overview of the chemical and physical properties of food and beverage; quality and safety; preservation, fermentation and cooking methods; objective and subjective food evaluation, recipe modification.

*Total Course fees:* \$35.00

*Prerequisites:* Nutrition, Chemistry, and/or Biology Recommended.

*Typically offered:* January Term, Alternate Years  
*(NATURAL WORLD)*

**HHPA 308 HEALTH CARE IN KENYA (3 credits)**

Off-campus service learning experience focusing on health care outreach in rural areas of Eldoret, Kenya with an Open Arms International medical team. In addition to health promotion activities, students will gain cultural insights and understanding through collaboration with local partners, visit historical and cultural sites, and engage in integrative group discussions. Students considering applying to this course should be aware that there is a U.S. Department of State Travel Warning in place in Kenya. Linfield University will continue to consult with the State Department to monitor the situation and will also survey what other institutions with programs in Kenya are doing. Linfield reserves the right to cancel this course in the event of heightened risk which we consider insurmountable. We encourage applicants to discuss this matter with their parents. OFFERED THROUGH ONLINE AND CONTINUING EDUCATION (OCE) ONLY.

*Prerequisites:* Consent of instructor.

*Typically offered:* Summer Term

*(GLOBAL PLURALISM, INDIVID/SYSTEMS/SOCIETIES)*

**HHPA 310 FOOTBALL COACHING THEORY (2 credits)**

An examination of current defensive, offensive, and kicking game schemes and strategy. Analysis of common defensive fronts and popular offensive systems from integrated offensive and defensive perspectives.

**HHPA 315 BASKETBALL COACHING THEORY (2 credits)**

System of offensive and defensive play, analysis of fundamentals, conditioning, game strategy, team travel, finance, care of equipment, officiating at contests, and public relations.

**HHPA 320 TRACK & FIELD COACHING THEORY (2 credits)**

Conditioning, development, and selection of individuals for events; planning, officiating, and conducting meets; strategy and psychology of individual and team competition.

*Typically offered:* Spring Semester

**HHPA 321 PROFESSIONAL EXPERIENCE III: INJURY ASSESSMENT AND EVALUATION (2 credits)**

Professional experience in athletic training and application of athletic training courses. Clinical field experience required.

*Total Course fees:* \$50.00

*Prerequisites:* HHPA 231, junior or senior standing, and consent of instructor.

*Typically offered:* Fall Semester

**HHPA 331 PROFESSIONAL EXPERIENCE IV: GENERAL MEDICAL AND THERAPEUTIC EXERCISE (2 credits)**

Professional experience in athletic training and application of athletic training courses. Clinical field experience required.

*Total Course fees:* \$50.00

*Prerequisites:* HHPA 321, junior or senior standing, & consent of instructor.

*Typically offered:* Spring Semester

**HHPA 335 SOFTBALL COACHING THEORY (1 credit)**

Fundamentals, techniques of position play, problems and duties of the coach, strategy, rules, scoring, conditioning, scheduling and team problems.

*Typically offered:* Spring Semester, Odd Years

**HHPA 336 VOLLEYBALL COACHING THEORY (2 credits)**

An examination of the current fundamental techniques and coaching strategies involved with successful performance in volleyball.

*Typically offered:* Fall Semester

**HHPA 340 SOCCER COACHING THEORY (2 credits)**

Fundamentals, techniques, conditioning, game strategy, team travel problems, finance, care of equipment, officiating and conducting games, strategy and psychology of competition.

**HHPA 342 RESEARCH SEMINAR (3 credits)**

Initial stages of field or laboratory research on topics in Human Performance. Further development and refinement of research design and use of statistical analysis. Library work and extensive written report, including literature review and research design proposal. Oral presentation required.

*Prerequisites:* HHPA 297 and junior standing.

*Typically offered:* Fall and Spring Semesters

*(MAJOR WRITING INTENSIVE)*

**HHPA 345 BASEBALL COACHING THEORY (2 credits)**

An examination of the current fundamental techniques and coaching strategies involved with successful performance in baseball.

**HHPA 350 PSYCHOLOGICAL ASPECTS OF SPORT AND PHYSICAL ACTIVITY (3 credits)**

Thoughts, feelings, and behaviors of people in physical activity contexts. Foundations approach to theory/research in sport and exercise psychology. Application in youth through adult age groups will be addressed.

*Prerequisites:* HHPA 297 (HHPA majors) or 30 credits at time of registration (for majors outside HHPA).

**HHPA 352 KINESIOLOGY (3 credits)**

Human movement related to anatomical structure and mechanical principles; kinesiological analysis by means of a motor skills classification system and an outline for a systematic analysis that includes description, evaluation, and prescription.

*Prerequisites:* BIOL 212.

**HHPA 355 PRINCIPLES AND THEORY OF COACHING (4 credits)**

An examination of the fundamental coaching techniques and strategies involved with successful performance in interscholastic sports. A variety of topics will be discussed using the American Sport Educational Program stressing athletes first winning second. Topics include developing a coaching philosophy, communicating and motivating today's athletes, coaching technical and tactical skills, fitness, organizing a team, problem solving and developing personal skills when communicating with players, parents and colleagues.

*Typically offered:* Spring Semester

**HHPA 360 PHYSIOLOGICAL BASIS OF EXERCISE, TRAINING, AND CONDITIONING (4 credits)**

Laws and principles of exercise science as they relate to physical activity and training of the human body; emphasis on physiological foundations of training and conditioning for human performance and health from physiological perspective. Lecture and Lab.

*Total Course fees:* \$25.00

*Prerequisites:* HHPA 352, BIOL 212, BIOL 213. HHPA 280 recommended.

**HHPA 375 PATHOPHYSIOLOGY AND THERAPEUTIC EXERCISE (3 credits)**

Analysis of the physiological response to injury and the use of rehabilitative techniques for athletic injuries. Lecture, discussion and laboratory.

*Total Course fees:* \$10.00

*Prerequisites:* HHPA 376 or consent of instructor.

*(MAJOR WRITING INTENSIVE)*

**HHPA 376 THERAPEUTIC MODALITIES (3 credits)**

Principles of electrophysics and biophysics, specific physiological effects, and therapeutic indications and contraindications associated with use of therapeutic modalities. Lectures, discussion, and laboratory.

*Total Course fees:* \$25.00

*Prerequisites:* HHPA 184, BIOL 212 and BIOL 213, or consent of instructor.

**HHPA 381 SCHOOL HEALTH PROGRAMS (3 credits)**

Policies and practices within the school program of health services, healthful environment, and health curriculum. Speakers and resources from various state and local health agencies; field experience in the public school health program.

**HHPA 383 HEALTH EDUCATION METHODS (3 credits)**

Materials, resources, and methods for health instruction. Construction, organization and delivery of lessons in health education, including use of technology. Health Education standards and assessment training. Application of andragogical and pedagogical principles. *Prerequisites:* 180, junior standing, and Health Major status, or consent of instructor.

*Prerequisites:* HHPA 180, junior standing, and Health Major status, or consent of instructor.

**HHPA 384 ADVANCED ASSESSMENT OF ATHLETIC INJURIES (4 credits)**

Outlines the more common types of athletic injuries occurring to various anatomical structures. Advanced techniques in evaluation, recognition of clinical signs and symptoms, pathology, and management. Lecture, discussion, and laboratory.

*Prerequisites:* HHPA 184, BIOL 212, or consent of instructor.

**HHPA 387 PERFORMANCE ENHANCEMENT FOR THE INJURED ATHLETE (3 credits)**

Course will discuss psychological and sociological issues present in sport injury and sport injury rehabilitation. Antecedent factors, pain perception, athletic identity, psychosocial response to injury, and psychosocial intervention techniques included.

*Prerequisites:* HHPA 184 and PSYC 281, or consent of instructor.

*(EXPERIENTIAL LEARNING)*

**HHPA 389 TOPICS IN ATHLETIC TRAINING (2 credits)**

Emphasis on contemporary issues in athletic training. Topics include organization and administration of athletic training, legalities, pharmacology, special populations, and medical practices in relation to the field of athletic training.

*Prerequisites:* HHPA 184 or instructor consent.

**HHPA 390 ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION (3 credits)**

Emphasis on the nature of administration and management in sport and physical education within intramural, interscholastic, and intercollegiate athletic programs; principles and practices of organizational leadership, policy, politics, and power; practicalities of program development, management, and supervision; issues of laws, risk management, professionalism, and ethics.

**HHPA 395 PHYSICAL ACTIVITY AND FITNESS ASSESSMENTS (3 credits)**

Focus on valid physical activity and health-related physical fitness assessment practices. Emphasis placed on authentic assessments used by teachers and clinicians to evaluate student/client progress.

*Prerequisites:* HHPA 287.

*Typically offered:* Fall Semester

*(MAJOR WRITING INTENSIVE)*

**HHPA 398 SPECIAL TOPIC: HHPA JAN TERM TRAVEL (4 credits)**

See individual sections in specific terms for descriptions. 4 credits.

*Prerequisites:* IDST 098 previous fall.

**HHPA 401 NUTRITION IN HEALTH & DISEASE (4 credits)**

Examines the role of nutrition in the prevention and treatment of chronic disease. Basic overview of the etiology of chronic disease through a nutrition lens. Critical analysis of popular and recommended eating patterns related to wellness and chronic disease. Topics include disease process and prevention, public health concerns and scientific progress in the role of nutrition in disease. Introduction to the role of nutrition in medical treatment. OFFERED THROUGH ONLINE AND CONTINUING EDUCATION (OCE) ONLY.

*Prerequisites:* HHPA 280

**HHPA 402 NUTRITION IN SPORT & PHYS ACT (4 credits)**

Presents the scientific basis for nutrition needs during physical activity and sport. Course topics include energy expenditure during physical activity and sport, weight control, nutritional supplements and ergogenic aids. Timing of meals and macronutrient composition to optimize performance will be explored. Special topics include making weight and eating disorders. Designed to provide evidence based information for competitive athletes and those engaging in regular physical activity as part of a healthy life. OFFERED THROUGH ONLINE AND CONTINUING EDUCATION (OCE) ONLY.

*Prerequisites:* HHPA 280

**HHPA 410 GENDER ISSUES IN EDUCATION & SPORT (3 credits)**

An overview of gender issues in education and sport, with special attention on understanding gender bias and evolving educative, legislative and legal efforts to overcome historic gender biases.

*(INDIVID/SYSTEMS/SOCIETIES, U.S. PLURALISM)*

**HHPA 412 HUMAN ANATOMY II (3 credits)**

Advanced regional study of human gross anatomy with dissection of upper limb and in-depth study of one area of the human body chosen by student. Recommended for students interested in health care professions. Lecture, discussion and laboratory with prosection of human cadaver.

*Total Course fees:* \$60.00

*Prerequisites:* BIOL 212 and consent of instructor. HHPA 412L required co-requisite.

**HHPA 421 ATHLETIC TRAINING PROFESSIONAL EXPERIENCE V: THERAPEUTIC MODALITIES (3 credits)**

Professional experience in athletic training and application of athletic training courses. Clinical field experience required.

*Total Course fees:* \$50.00

*Prerequisites:* HHPA 331, junior or senior standing, and instructor consent.

*Typically offered:* Fall Semester

**HHPA 422 PLANNING & EVALUATION IN HEALTH EDUCATION (3 credits)**

Principles of program planning, including needs assessment, health promotion planning models, intervention theories and approaches, elements of marketing, implementation strategies, and evaluation. Practical application of all aspects of the program planning process to address a selected health problem affecting groups.

*Prerequisites:* HHPA 180, junior standing, and Health Education or Public Health major status or instructor consent.

*Typically offered:* Fall Semester

*(MAJOR WRITING INTENSIVE)*

**HHPA 425 SPORT IN AMERICAN SOCIETY (3 credits)**

The impact of sports on American society and the social order. The cultural response to sports in this country and abroad.

*(INDIVID/SYSTEMS/SOCIETIES)*

**HHPA 431 PROFESSIONAL EXPERIENCE VI: STRENGTH, CONDITIONING AND PROFESSIONAL PREPARATION (3 credits)**

Professional experience in athletic training and application of athletic training courses. Clinical field experience required.

*Total Course fees:* \$50.00

*Prerequisites:* HHPA 421, junior or senior standing, and instructor consent.

*Typically offered:* Spring Semester

**HHPA 439 PEER INSTRUCTION (1-3 credits)**

Advanced study opportunity for outstanding students to assist faculty members in the classroom or laboratory. Focus on course content and pedagogy. May be repeated for up to 5 credits.

*Prerequisites:* Application and consent of instructor required.

*(EXPERIENTIAL LEARNING)*

**HHPA 442 SENIOR SEMINAR (1 credit)**

Field or laboratory research on topics in Human Performance. Data collection, statistical analysis and discussion of results. Written report in scientific journal format and oral presentation required. Possibility for presentation at regional/national conferences and/or publication.

*Total Course fees:* \$55.00

*Prerequisites:* HHPA 297, HHPA 342 and senior standing.

*(MAJOR WRITING INTENSIVE)*

**HHPA 445 MOTOR LEARNING AND MOTOR DEVELOPMENT (4 credits)**

An examination of fundamental motor learning principles and theory. Application of those principles toward physical education, coaching, and the therapeutic setting. Analysis of current motor developmental models and viewpoints.

*Prerequisites:* BIOL 212, BIOL 213, and PSYC 101.

**HHPA 452 APPLIED BIOMECHANICS OF SPORT AND EXERCISE (3 credits)**

Mechanical laws and principles applied to the human body; forms of motion, linear and angular kinematics and kinetics; quantitative and qualitative analysis of sport techniques. Lecture and laboratory.

*Total Course fees:* \$10.00

*Prerequisites:* HHPA 352.

**HHPA 455 ADAPTED PHYSICAL EDUCATION (3 credits)**

Principles and practices of adapted physical activity programs emphasizing the nature and needs of exceptional persons. History, recent legislation, growth and developmental factors, assessments, and individualized education plans related to adapted physical activity programming. Service project in the community serving special needs populations.

**HHPA 465 MENTAL AND SOCIAL VARIABLES IN SPORT & PERFORMANCE (3 credits)**

Principles of the behavioral sciences applied to studying and enhancing human physical performance. Socialization, motivation, personality, anxiety and stress management, concentration and attention styles. Application to sport performance at all skill levels and to fitness, health, and rehabilitation.

**HHPA 470 MENTAL HEALTH (2 credits)**

Topics designed to lead students through a self-growth process. Lecture-discussion on individual personality traits, self concept, and learned defense mechanisms and coping devices.

**HHPA 480 INDEPENDENT STUDY (1-5 credits)**

Opportunity to pursue special interests, conduct research, or obtain work experience. Credit often dependent upon submission of a paper.

*Prerequisites:* Departmental approval required.

**HHPA 482 APPLIED EXERCISE PHYSIOLOGY (4 credits)**

Study of acute and adaptive physiological responses to exercise in regard to nutrition, bioenergetics, cardiovascular, clinical and environmental effects on performance. Specific focus includes the study of hemodynamic function in diseased and stressed states, clinical exercise physiology and environmental influences. Laboratory components include electrophysiology, stress testing, and wellness programming.

*Total Course fees:* \$35.00

*Prerequisites:* HHPA 280, HHPA 360, HHPA 440 and one from PSYC 101, PSYC 281, PSYC 282, PSYC 283, PSYC 284, PSYC 286, PSYC 287, PSYC 288.

*Typically offered:* Spring Semester

**HHPA 486 PRACTICUM (2 credits)**

Application of evidence-based practices. Firsthand experiences with feedback from a mentor. Reflection on implementation of specific evidence-based practices in physical activity and sport settings.

**HHPA 487 INTERNSHIP (1-10 credits)**

Practical experience delivering programs in athletic training, health, exercise science, or physical education. Opportunities in private organizations (YMCA, Health/Fitness Centers), corporate education or fitness programs, or public organizations (schools, correctional institutions, hospitals, day care centers). Open to advanced students who have completed prerequisites including requirements for entrance into a teacher education program, if applicable. Maximum 5 credits count toward the major.

*Prerequisites:* Junior or senior standing, internship contract and instructor approval.

*(EXPERIENTIAL LEARNING)*

**HHPA 490 SENIOR THESIS (1 credit)**

Intensive field or laboratory research on a topic in human performance. Requires a comprehensive written report and public oral presentation of the project. For the advanced, self-reliant student.

*Prerequisites:* HHPA 342. HHPA 442 (concurrent) and senior standing.

**HHPA 491 SENIOR CAPSTONE IN PUBLIC HEALTH (4 credits)**

The Public Health Capstone is an integrative experience in which students bring together the knowledge, skills and abilities acquired during their time in the Public Health - Health Promotion Major course of study. The theory learned is applied in a real world setting providing students opportunities to identify, assess and address current public health issues. *Prerequisites:* Senior Standing: Public Health: Health Promotion, HHPA 250, 422 or with Instructor Consent. Offered spring. 4 credits (MWI)

*Prerequisites:* Senior Standing: Public Health: Health Promotion required.

HHPA 250 and HHPA 422, or consent of instructor.

*Typically offered:* Spring Semester

*(MAJOR WRITING INTENSIVE)*

**HHPA 492 SENIOR SEMINAR IN HEALTH AND HUMAN PERFORMANCE (1 credit)**

This course is designed to bring together content covered throughout students' programs of study. Students will integrate overlapping health and human performance concepts and theories that are critical as they transition to professional careers and/or graduate studies. Various career tools will be explored and applied, including the creation of a professional portfolio for graduate school or professional career.

*Prerequisites:* Senior standing.

*Typically offered:* Fall and Spring Semesters

**HHPA 495 EXERCISE SCIENCE CAPSTONE (4 credits)**

A capstone experience required of all Exercise Science majors. Students complete one of the following options: a) an original research study [*Prerequisite:* HHPA 342 - Research Seminar]; b) literature review; c) internship (90 hours) with an associated project; or, d) project.

*Prerequisites:* Senior standing or consent of instructor.

*Typically offered:* Fall and Spring Semesters

**Paracurricular Courses: Health Sciences****HSCI 098 MEDICAL AND HEALTH TERMINOLOGY (2 credits)**

Instructor mentored, hybrid in-class/on-line course in medical and health care terminology. Lecture, workbook assignments, CD-ROM and Blackboard. Emphasis on origin, use, pronunciation, and spelling. Covers structures and human body systems.

**Health Sciences Courses****HSCI 198 SPECIAL TOPICS: JAN TERM TRAVEL (4 credits)**

Topics vary according to faculty availability and interest. The major topic offered in the past has been Traditional and Modern Health Care in Southeast Asia. Offered only as student interest and university resources permit. May be repeated for credit with different topics.

*Prerequisites:* IDST 098 previous fall.

*Typically offered:* January Term

**HSCI 250 INTRO TO PUBLIC & COMMUNITY HEALTH (3 credits)**

Introduction to the field of public health. Focus on human biology, environmental health, lifestyle factors, and health care organizations as these four factors relate to one another and to the overall concept of health, health care, and health care delivery in the U.S.

*(INDIVID/SYSTEMS/SOCIETIES, U.S. PLURALISM)*

**HSCI 298 SPECIAL TOPICS: JAN TERM TRAVEL (4 credits)**

Topics vary according to faculty availability and interest. The major topic offered in the past has been Traditional and Modern Health Care in Southeast Asia. Offered only as student interest and university resources permit. May be repeated for credit with different topics.

*Prerequisites:* IDST 098 previous fall.

*Typically offered:* January Term



**HSCI 310 RESEARCH METHODS (4 credits)**

Methods used in conducting research on problems arising in health care. Exploration of a research topic that includes collecting and analyzing data, writing a research report, and presenting results of research.

*Prerequisites:* MATH 140.

*(MAJOR WRITING INTENSIVE)*

**HSCI 320 HEALTH & SOCIAL POLICY (3 credits)**

Examination of U.S. health and social policy. Analysis of the public policy process, major public social and health programs, special interests, and political differences. The role of federal, state, as well as local governments and the legal system in policy implementation. Understanding complex health and social problems as they are translated into standards of conduct.

*(MAJOR WRITING INTENSIVE)*

**HSCI 325 SCIENTIFIC ILLUSTRATION (ALSO LISTED AS ARTS 325) (3 credits)**

Application of the scientific method to the artistic process to increase visual awareness of scientific subject matter.

*Total Course fees:* \$30.00

*Prerequisites:* ARTS 120 and BIOL 210 or instructor consent.

*Typically offered:* Spring Semester, Odd Years

*(CREATIVE STUDIES)*

**HSCI 330 GLOBAL HEALTH (3 credits)**

A multi-disciplinary introduction to key public health issues in the developed world, the emerging world, and developing world. Intended for students from any major who want a foundation in global health issues from a science, social, political, economic and business perspective.

*(GLOBAL PLURALISM, INDIVID/SYSTEMS/SOCIETIES)*

**HSCI 340 HEALTH CARE IN AMERICA (3 credits)**

Exploration of the history, structure, economics, politics, and technology of health, health care, and health care delivery in the U.S. from the mid-1700s to the present.

*Prerequisites:* Co-requisite HSCI 310.

*(MAJOR WRITING INTENSIVE)*

**HSCI 360 SCIENCE: A CANDLE IN THE DARK (3 credits)**

Seminar examining how science has changed our view of our world and the universe in which we live through critical examination of some of our most fundamental beliefs and cultural practices. Possible topics: science as a method of discovery; scientific discoveries that change the way humans perceive themselves, their world, and the universe; connections between natural sciences, social sciences, and humanities. Emphasis on historical conflicts between science and religion including evolution and creationism.

*(ULTIMATE QUESTIONS)*

**HSCI 398 SPECIAL TOPICS: JAN TERM TRAVEL (4 credits)**

Topics vary according to faculty availability and interest. The major topic offered in the past has been Traditional and Modern Health Care in Southeast Asia. Offered only as student interest and university resources permit. May be repeated for credit with different topics.

*Prerequisites:* IDST 098 previous fall.

*Typically offered:* January Term

**HSCI 410 HEALTH SYSTEMS SCIENCE: QUALITY IMPROVEMENT THEORY (3 credits)**

Theory course focusing on process management, systems improvement concepts, organizational research, objective decision making, problem solving, leadership for quality, program implementation and evaluation in health care organizations, and statistical process control (SPC) as an analysis tool.

*Prerequisites:* HSCI 310.

**HSCI 420 HEALTH ADMINISTRATION (3 credits)**

Introduction to the concepts of health care administration. Focus on the U.S. health care system, general concepts of health care management, and aspects of leadership as they apply to the health care system. Theories of motivation, budgeting concepts, strategic planning, quality improvement principles, control in health care service organization, health care reform, government regulations, and private, state and local health care insurance structures.

**HSCI 431 INTERNATIONAL HEALTH (3 credits)**

Examines health, health care, and health care delivery in developed, developing, and newly developed countries and regions of the world. Diseases (old and emerging), disease processes, health care practices and beliefs, and international world health organizations.

*Prerequisites:* HSCI 340.

*(GLOBAL PLURALISM, INDIVID/SYSTEMS/SOCIETIES, MAJOR WRITING INTENSIVE)*

**HSCI 440 EPIDEMIOLOGY (ALSO LISTED AS ENVS 440) (3 credits)**

Introduction to epidemiology of disease. Acute and chronic diseases are discussed from population point of view. Topics include modes of transmission, outbreak investigation, surveillance of acute infections and chronic diseases, and microbial and environmental causes.

*Prerequisites:* ENVS 201 or BIOL 210 and BIOL 285 or MATH 140.

*Typically offered:* Fall Semester, Odd Years

*(QUANTITATIVE REASONING)*

**HSCI 450 ENVIRONMENTAL HEALTH (ALSO LISTED AS ENVS 450) (3 credits)**

Study of the effects of water and air pollution, food additives, pesticides, heavy metals, organic solvents, mycotoxins, and radiation. Examines concepts of toxicology, epidemiology, risk assessment, safety control, and environmental law.

*Prerequisites:* ENVS 201 or BIOL 210.

*Typically offered:* Fall Semester, Even Years

*(GLOBAL PLURALISM, INDIVID/SYSTEMS/SOCIETIES)*

**HSCI 487 INTERNSHIP (2-5 credits)**

Intensive learning experience on-site in health-related organization. May be repeated once. A total of 3 credits required for a major.

*Prerequisites:* Senior standing.

*(EXPERIENTIAL LEARNING)*

**HSCI 490 RESEARCH/THESIS (1-5 credits)**

Intensive research and writing on a topic of special interest to the student under the direction of a member of the faculty. Thesis and public oral presentation required. Required for honors thesis students. May be repeated, up to a maximum of 5 total credits.

*Prerequisites:* Approval of supervising faculty member and department chair.