

# CUMBERLAND COUNTY COLLEGE

## **Course: HS 145 Exercise Science I**

**Credits:** 3

### **Prerequisites**

College level Reading, English and Mathematics.

### **Course Description**

This course provides the student with a foundation of exercise science. This foundation includes the following: history and philosophy, careers, professional organizations, certifications, sub-disciplines, research methods, and professional issues.

### **Learning Outcomes**

At the completion of this course, students will be able to:

- Describe the historical development of the exercise science profession.
- Explain the roles and responsibilities of exercise science professionals in a variety of settings and with a variety of populations.
- Demonstrate knowledge of the professional affiliations that the exercise science professional may belong to, including the American College of Sports Medicine (ACSM), National Strength and Conditioning Association (NSCA), American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD), and other professional organizations.
- Demonstrate management responsibilities (equipment, and supplies and develop a budget for ordering of these items).
- Describe the opportunities for a career in exercise science, including benefits and compensation to be expected.
- Compare and contrast the career sub-disciplines in exercise science.
- Demonstrate ability to perform appropriate information- research as related to exercise science and fitness.

### **Topical Outline**

- The Emergence of Exercise Science
  - The Field of Exercise Science
    - Definition of Discipline and Sub-disciplines
    - The Sciences of Exercise Science
  - Historical Perspective
    - Physical Educators
    - Exercise Scientists
    - Biomechanics
    - Effects of Technology
    - Motor Behavior
    - Exercise Physiology
  - Research Foundations
    - Introduction to Research
    - Role of Research

- Exercise and Society
  - Cultural Studies
    - Societal Changes in Exercise
  - Exercise Science trends
  - Exercise in Society
- Professional Organizations
  - Exercise Science Professional Organizations
    - Exercise Science Umbrella Organizations
    - Specific Sub-discipline Organizations
  - Other Exercise Science Organizations
  - Professional Organizations with an Interest in Exercise Science
  - Major Governmental Agencies with an Interest in Exercise Science
    - U.S. Department of Health and Human Services
    - Office of Public Health and Science
    - Centers for Disease Control
    - National Institutes of Health
- Exercise Science and Fitness Certifications
  - Overview of Certification, Licensure, and Registration
  - Exercise Science Certifications (National Athletic Trainers' Association, American College of Sports Medicine, National Strength and Conditioning Association, Professional Ergonomists, Association for the Advancement of Applied Sport Psychology,)
  - Fitness Certifications (Aerobics and Fitness Association of America, American Council on Exercise, YMCA, Cooper Institute for Aerobics Research, International Health, Racquet, & Sportclub Association)
- Job Activities and Employment
  - Dimensions of Exercise Science and Practice
  - Career Paths in Exercise Science
    - Health and Fitness
    - Health Rehabilitation
    - Teaching and Higher Education
    - Fitness Specialties
    - Research
    - Government
- Management and Marketing Concerns
  - Sports and Fitness Management
    - The Managerial Role
    - Organizational Program Development
    - Leadership
    - Risk Management
  - Sports and Fitness Marketing
    - Primary and Secondary Services
    - Target Market
- Professional Issues
  - Exercise Science as a Profession

- Certification or Licensure
- Issues Regarding Encroachment
- Relationships with Other Allied Health Professions
- Role Delineation
- A Name for the Discipline
- Exercise Science Sub-disciplines
  - Exercise Physiology
  - Exercise and Sports Nutrition
  - Physical Activity Epidemiology
  - Clinical Exercise Physiology
  - Sports Medicine and Kinesiology Knowledge Base
  - Exercise and Sports Biomechanics
  - Athletic Training
  - Exercise and Sports Psychology
  - Motor Behavior
  - Exercise and Sports History
  - Exercise and Sports Sociology
- Future of Exercise Science

### **Required Texts and Other Materials**

Hoffman, S., *Introduction to Kinesiology*, Human Kinetics.

### **Student Assessment**

Assessment may be accomplished through projects, portfolios, exams, presentations and/or papers.

### **Academic Integrity**

Plagiarism is cheating. Plagiarism is presenting in written work, in public speaking, and in oral reports the ideas or exact words of someone else without proper documentation. Whether the act of plagiarism is deliberate or accidental [ignorance of the proper rules for handling material is no excuse], plagiarism is, indeed, a “criminal” offense. As such, a plagiarized paper or report automatically receives a grade of ZERO and the student may receive a grade of F for the semester at the discretion of the instructor.

### **Available Resources**

If you are having difficulty with work in this class, tutoring is available through the Success Center. If you think that you might have a learning disability, contact Project Assist at 856.691.8600, x1282 for information on assistance that can be provided to eligible students.

### **(List availability of open labs and/or writing center)**

### **Before Withdrawing From This Course**

If a student experiences adverse circumstances while enrolled in this course and considers withdrawing, s/he should see an advisor (division or advisement center) BEFORE withdrawing from the class. A withdrawal may cause harmful repercussions to completion rate standards and overall GPA which can limit or eliminate future financial aid in addition to causing academic suspension.