Course Information Form (CIF)

Course Code: KIN 101

Course Title: Human Performance

Department: Natural Sciences
PCS Code: 1.1 - Baccalaureate/Transfer
CIP Code: 31.0501
Repeatability: 0

Effective Date: Summer 2026

Credit Hours

Catalog Notation: 3-3-4
Credit Hour Distribution:

Lecture: 3	Lab: 3	Clinical: 0	**Total: 4**

General Course Information

Catalog Description

Comprehensive course for aspiring fitness, strength, and therapeutic professionals. Techniques from the National Strength and Conditioning Association in strength, energy systems, plyometrics, speed, and sport and exercise nutrition.

General Course Objectives

To comprehensively begin preparing the student to work in the fitness, strength, and therapeutic professions that fall under the discipline of kinesiology. The student will be prepared to sit for the NSCA-Certified Personal Trainer examination after completion of Human Movement I and II.

Minimum Placement Levels

English	Reading	Math
None	Placement out of CCS 098	None

Prerequisites

None

Recommended before enrolling (not required):

Credit or concurrent enrollment in KIN 186, BIO 111, or BIO 121

Methods of Evaluation

15-25 objective exams, 15-25 lab exercises, and 1-3 fitness component testing/exercise prescription projects.

Instructional Materials and Additional Supplies

NSCA's Essentials of Personal Training, Roger Earle and Thomas Baechle. Published by Human Kinetics.
Exercise Technique Manual for Resistance Training, National Strength and Conditioning Association. Published by Human Kinetics.

Course Content

General Learning Outcomes (GLOs)

- Communication: Students will demonstrate the ability to read, write, listen, and speak effectively.
- Reasoning and Inquiry: Students will demonstrate the ability to solve problems using deductive reasoning and logic, quantitative reasoning, or the scientific method.
- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
The Scientific Basis of Personal Training	1. Describe the structure, role, and function of skeletal muscle. Examine the sliding-filament theory of muscular contraction. Describe the structure and function of the motor unit. Explain the electrical conduction system of motor nerves. 2. Describe the structure and role of bone of the skeletal system. Discuss the composition of all connective tissue. Discuss the interrelation of muscle, bone, and connective tissue in force production. 3. Describe the anatomical and physiological characteristics of the cardiovascular system. Describe the electrical conduction system of the heart and the basic electrocardiogram. Describe the mechanisms that control the circulation of blood throughout the body. 4. Describe the anatomical and physiological characteristics of the respiratory system. Explain the exchange of gases between the lungs and the blood. Identify the mechanisms that control respiration. 5. Summarize the basic terminology of bioenergetics and metabolism related to exercise and training. Discuss the central role of adenosine triphosphate in muscular activity. Explain the basic energy systems present in the human body and the ability of each to supply energy for various activities. Discuss the effects of training on the bioenergetics of skeletal muscle. Identify the substrates used by each energy system and discuss patterns of substrate use with various types of activities. 6. Identify the various types of levers of the musculoskeletal system. Quantify linear and rotational work and power. Categorize the factors contributing to human strength and power. Evaluate the resistive force and power patterns of exercise devices based on their sources of resistance. Analyze movements in sport, work, and daily life and make movement-oriented exercise prescriptions. 7. Design resistance training programs that maximize the specific adaptations of interest and avoid over-training. Design training programs that demonstrate an understanding of human bioenergetics and metabolism, especially the metabolic specificity of training. 8. Identify acute physiological responses to aerobic training. Identify chronic physiological adaptations to aerobic training. Recall the factors that influence adaptations to aerobic training.	15	8	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Initial Consultation and Evaluation	1. Demonstrate the ability to conduct an initial client interview to assess compatibility, develop goals, and establish a client-trainer agreement. Interpret clues that may require an individual to be referred to a health care professional. 2. Appraise a client by administering a pre-participation health appraisal screening. Identify positive coronary risk factors associated with cardiovascular disease. Risk stratify and evaluate the health status of potential clients. 3. Employ test protocols properly and safely. Explain the purposes of performing physical assessments on a client. Examine a test's validity and reliability. Apply risk stratification criteria to an individual client to determine suitability for specific tests. Specify appropriate tests for individual client. 4. Analyze a client's fitness level and select appropriate tests for individual clients. 5. Compare clients' results with normative data.	10	10	0
Safe and Effective Exercise Technique	1. Explain the basic techniques for properly performing and teaching a comprehensive list of resistance training exercises, including the correction of common technique problems. 2. Describe and execute techniques for spotting free weight exercises. 3. Identify and correct common exercise technique errors. 4. Recognize general guidelines for safe participation in cardiovascular activities, including proper hydration, clothing, and footwear; warm-up and cool-down; and exercise frequency, intensity, and duration. 5. Apply proper technique for a number of cardiovascular machines. 6. Practice safe participation principles for strength training, energy systems development, plyometrics, and speed training. 7. Propose cardiovascular activities that match the client's preferences and physical capabilities.	20	27	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
45	45	0