

Course Information Form (CIF)

Course Code: KIN 186

Course Title: Introduction to Human Movement

Department: Natural Sciences

Effective Date: Summer 2026

PCS Code: 1.1 - Baccalaureate/Transfer

CIP Code: 31.0101

Repeatability: 0

Credit Hours

Catalog Notation: 2.5-1.5-3

Credit Hour Distribution:

Lecture: 2.5

Lab: 1.5

Clinical: 0

Total: 3

General Course Information

Catalog Description

Introduction to human movement through development of skills and knowledge relative to the study of musculoskeletal anatomy.

General Course Objectives

To develop student understanding of human movement both as a mover and as an observer of movement.

Minimum Placement Levels

English	Reading	Math
None	Placement out of CCS 098	None

Prerequisites

None

Methods of Evaluation

10-13 module quizzes, 10-13 hands-on labs with reports, 10-13 graded discussions, and 1 comprehensive final exam.

Instructional Materials and Additional Supplies

Dynatomy w/DVD: Dynamic Human Anatomy, Whiting and Rugg, Current Edition, Human Kinetics.

Course Content

General Learning Outcomes (GLOs)

- Reasoning and Inquiry: Students will demonstrate the ability to solve problems using deductive reasoning and logic, quantitative reasoning, or the scientific method.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Introduction to Human Movement Lab	<ol style="list-style-type: none"> Analyze numeric data and explain results in own words. Use lab equipment to gather quantitative data. Research reputable sources and articulate information in the lab report. 	0	2	0
Introduction to Human Anatomy and Movement	<ol style="list-style-type: none"> Define the terms anatomy and physiology and describe the relationship between those two areas of study. Explain importance of movement in daily life. Understand how movement changes across the lifespan. Describe importance of understanding motor behavior and its subareas of motor control, motor learning, and motor development. Explain movement considerations in younger and older populations. Describe importance of differences in movement ability among individuals. Explain anatomical concepts of complexity, variability, individuality, adaptability, connectivity, and asymmetry. Describe the levels of structural organization and primary tissue types. Explain the structure and function of muscle and connective tissues. Define and explain anatomical terms describing body regions, positions, planes, and axes. Appraise the multidisciplinary perspective necessary to understand human movement. 	3.5	2	0
Osteology and the Skeletal System	<ol style="list-style-type: none"> Describe the functions of the skeletal system. Name and describe the function of bone cells. Explain the macroscopic and microscopic structure of bone. Describe the skeletal system organization, including bones of the lower body, upper body, and trunk. Explain the processes of bone modeling and remodeling. Explain the primary factors involved in bone health, including exercise, diet, and aging. 	3.5	2	0
Joint Motion and the Articular System	<ol style="list-style-type: none"> Describe joint structure and classification. Classify synovial joints according to their structure and function. Explain concepts of joint stability and mobility. Describe movement planes and joint motion. Describe types of joint movement. Identify movements of hip and pelvis, knee, ankle, and foot. Identify movements of shoulder, elbow, forearm, wrist, and hand. Identify movements of head, neck, and spine. Describe spinal deformities (scoliosis, kyphosis, lordosis). 	3.5	2	0
Myology and the Muscular System	<ol style="list-style-type: none"> Describe structure and function of skeletal muscle. Describe types of muscle contraction. Explain the steps in a muscle contraction. Identify muscle fiber types and muscle fiber arrangement. Explain the length-tension and force-velocity relationships of muscle. Describe the stretch-shorten cycle and its functional implications. Explain the concept of muscle hypertrophy. Describe muscle injury and its consequences. 	3.5	2	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Muscles of Movement	<ol style="list-style-type: none"> 1. Explain how muscles are named. 2. Determine functional actions of muscle. 3. Identify muscles acting at the major joints of the body. 	3.5	2	0
Mechanics of Movement	<ol style="list-style-type: none"> 1. Identify the major areas of biomechanics relevant to human movement: movement mechanics, fluid mechanics, joint mechanics, and material mechanics. 2. Explain general biomechanical concepts and measures, including linear and angular motion, center of gravity, stability, mobility, and movement equilibrium. 	3.5	2	0
Muscular Control of Movement and Movement Assessment	<ol style="list-style-type: none"> 1. Describe concepts of muscle function: agonist action, neutralization, stabilization, antagonist action, and co-activation. 2. Use the muscle control formula to determine muscle action for any movement. 3. Explain movement concepts of coordination, efficiency, and economy. 4. Describe sources of movement inefficiency. 5. Describe methods of kinematic, kinetic, and electromyographic movement assessment. 	3.5	2	0
Fundamentals of Posture, Balance, and Walking	<ol style="list-style-type: none"> 1. Describe movement concepts related to posture and balance. 2. Describe standing, sitting, and lying postures. 3. Explain the mechanism of postural control. 4. Describe developmental aspects of balance and balance dysfunction. 5. Define walking and the gait cycle. 6. Describe the components of gait analysis. 7. Explain the role of lower-extremity muscles in the control of walking. 8. Describe gait development across the life span. 9. Describe examples of pathological gait. 	3.5	2	0
Fundamentals of Running, Jumping, Throwing, Kicking, and Lifting	<ol style="list-style-type: none"> 1. List fundamental sport skills. 2. Describe the movement characteristics and muscle control of fundamental sport skills. 3. Explain how these movements are affected by age and skill. 4. Give examples of injuries common to these movement skills. 	3.5	2	0
Analysis of Exercise and Sport Movements	<ol style="list-style-type: none"> 1. Explain biochemical aspects of weight lifting, dance, and cycling including sport and exercise-specific considerations and terminology. 	3.5	2	0
Future Directions of Human Movement	<ol style="list-style-type: none"> 1. Identify advances in medicine and technology that affect the study of human movement. 2. Identify demographic trends and explain how they will create movement challenges in the future. 3. Describe movement-related social trends that will affect society. 4. Explain the concept of limits to human performance. 	3.5	2	0
Capstone Information	<ol style="list-style-type: none"> 1. Correlate concepts of human movement discussed during the semester. 	1.5	0	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
40	24	0