# JAMESTOWN COMMUNITY COLLEGE

**State University of New York** 

## INSTITUTIONAL COURSE SYLLABUS

**Course Title:** Kinesiology

Course Abbreviation and Number: HCR 2100 Credit Hours: 3 Course Type: Lecture

**Course Description:** Students will understand human movement and the physical and physiological principles upon which it depends. Analyses of motion and biomechanics based on anatomical, mechanical and physiological principles will be explored. Additionally this course will introduce various conditions and how they impact biomechanics. Students will explore various scientific fields that are the foundation of kinesiology and investigate careers related to the field of kinesiology.

Prerequisite: BIO 1500 or BIO 2510.

## **Student Learning Outcomes:**

Students who demonstrate understanding can:

- 1. Accurately use basic terminology of kinesiology.
- 2. Relate biomechanics to normal and abnormal human movement and performance.
- 3. Apply knowledge of musculoskeletal structures to functions of the human body.
- 4. Explain the similarities and differences in muscle function in a closed kinetic chain versus open kinetic chain environment.
- 5. Analyze movements in terms of movement planes and axis of rotation.
- 6. Explain basic human movement patterns using scientific terminology.

### **Topics Covered:**

- Overview of Kinesiology
  - · What is Kinesiology
  - · Foundational Sciences
  - · History of Kinesiology
  - · Significant Figures
  - · Careers
  - · Health and Wellness
- Biomechanics and Movement Terminology
  - · Anatomical Position
  - · Positional Terms
  - · Body Movement Terms
  - · Planes of Motion
  - · Axis of Rotation
- Body Systems, Anatomy and Physiology
  - · Body Systems

- · Skeletal System
- · Joints
- · Synovial Joints, Tendons, Ligaments
- · Muscle System
- · Nervous System
- · Tendons, Ligaments
- Movement Analysis
  - · Biomechanical Review
  - · Description of Classification of Movement
  - $\cdot$  Abnormal states, injuries and unique movement patterns
  - · Open and closed chain movements
  - · Analyzing Every Day Task
  - · Analyzing Sport Specific Task
  - · Analyzing Occupational Task

#### **Information for Students**

- Expectations of Students
  - Civility Statement
  - Student Responsibility Statement
  - Academic Integrity Statement
- Accessibility Services

Students who require accommodations to complete the requirements and expectations of this course because of a disability must make their accommodation requests to the Accessibility Services Coordinator.

- Get Help: JCC & Community Resources
- Emergency Closing Procedures
- Course grade is determined by the instructor based on a combination of factors, including but not limited to, homework, quizzes, exams, projects, and participation. Final course grade can be translated into a grade point value according to the following:

A 4.0	D. 25	D 2	0.05	$\alpha$	D. 15	D 1	ГΛ
A=4.0	B+=3.5	B=3	C+=2.5	C=2	D+=1.5	D=1	F=0

• Veterans and active duty military personnel with special circumstances (e.g., upcoming deployments, drill requirements, VA appointments) are welcome and encouraged to communicate these to the instructor.

Effective Date: Fall 2022