

# COURSE OUTLINE: OPA0104 - HUMAN MOVEMENT

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Approved: Martha Irwin, Chair, Community Services and Interdisciplinary Studies

Course Code: Title	OPA0104: HUMAN MOVEMENT FOR CICE	
Program Number: Name	1120: COMMUNITY INTEGRATN	
Department:	C.I.C.E.	
Semesters/Terms:	21F	
Course Description:	This course will provide the CICE student, with the assistance of a Learning Specialist, with a foundation in the principles of normal functional human movement. Essential terminology and concepts related to normal human movement, the articular system, components of movement, biomechanics, motor development and skill acquisition will be introduced. In addition, students will develop an understanding of normal growth and motor development, posture, balance, and body mechanics.	
Total Credits:	4	
Hours/Week:	4	
Total Hours:	60	
Prerequisites:	There are no pre-requisites for this course.	
Corequisites:	There are no co-requisites for this course.	
Essential Employability Skills (EES) addressed in this course:	EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.  EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.  EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.  EES 10 Manage the use of time and other resources to complete projects.  EES 11 Take responsibility for ones own actions, decisions, and consequences.	
General Education Themes:	Science and Technology	
Course Evaluation:	Passing Grade: 60%, C	
	A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.	
Books and Required Resources:	Clinical Kinesiology and Anatomy (with glued-in access) by Lippert, Lynn Publisher: F.A. Davis Company. Edition: 6th ISBN: 9780803658233 See the professor. by Additional Texts may be used.	
Course Outcomes and Learning Objectives:	Upon successful completion of this course, the CICE student, with the assistance of a Learning Specialist will acquire varying levels of skill development relevant to the following learning	

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#### outcomes:

Course Outcome 1	Learning Objectives for Course Outcome 1	
1. Demonstrate an understanding of terminology and concepts related to normal movement of the human body.	1.1 Identify and describe anatomical terms including: planes of movement, body surfaces and directions of movement.  1.2 Describe the following aspects of normal functional movement and where appropriate, normal changes across the lifespan:  a)motor b)sensory c)cognitive d)perceptual e)psychosocial f)environmental  1.3 Explain the following biomechanical concepts and the implications of these on normal functional movement: a)weight b)gravity c)force d)leverage e)momentum f)inertia g)equilibrium h)base of support	
	i)center of mass	
Course Outcome 2	Learning Objectives for Course Outcome 2	
2. Describe the basic structure of connective tissue and muscle and function.	2.1 Define the following, endomysium, perimysium, epimysium tendon, aponeurosis. 2.2. Describe the structure and function of synovial membrane ligaments, tendons, cartilage, synovial membrane and the intervertebral disc.	
Course Outcome 3	Learning Objectives for Course Outcome 3	
3. Demonstrate an understanding of the articular system and resulting movement.	3.1 Identify and describe: a)types of joints and associated movements including normal range of motion for each joint. b)directional terms (abduction, adduction, extension etc.). 3.2 Identify the normal curvatures of the vertebral column and explain their normal development. 3.3Identify and describe scoliosis, lordosis and kyphosis. 3.4 Identify normal age related changes of the articular system throughout the lifespan.	
Course Outcome 4	Learning Objectives for Course Outcome 4	
4. Demonstrate an understanding of the role of muscles in the production of movement.	4.1 Define the following terms: origin, insertion, prime mover/agonist, antagonist, synergist, fixator. 4.2 Describe graded response, tetanus, muscle fatigue and muscle tone as they apply to skeletal muscle. 4.3 Identify and describe different types of muscle contractions: a) isometric b) isotonic, eccentric and concentric	

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	c) isokinetic
	4.4 Describe and demonstrate the following types of movement: resistive, active, active assistive, passive. 4.5 Describe the length-tension relationship of muscle tissue (active and passive insufficiency). 4.6 Demonstrate skill in manual muscle testing. 4.7 Identify normal age related changes of the muscular system throughout the lifespan.
Course Outcome 5	Learning Objectives for Course Outcome 5
5. Demonstrate an understanding of normal motor development throughout the lifespan.	5.1 Identify normal motor milestones in gross and fine motor development. 5.2 Identify and explain the role of infant reflexes in normal motor development.
Course Outcome 6	Learning Objectives for Course Outcome 6
6. Demonstrate knowledge of normal posture and postural control throughout the lifespan.	6.1 Explain how the sensory system (vestibular, vision, somatosensory systems) controls posture. 6.2 Describe balance strategies and their impact on postural control. 6.3 Identify and describe proper body alignment. 6.4 Identify normal age-related changes related to posture. 6.5 Describe how to maintain good posture and body alignment.
Course Outcome 7	Learning Objectives for Course Outcome 7
7. Demonstrate knowledge and skill in the application of good body mechanics.	7.1 Identify, describe and demonstrate best practice of body mechanics required for work in health and human services. 7.2 Analyze and correct body mechanics of another.
Course Outcome 8	Learning Objectives for Course Outcome 8
8. Demonstrate knowledge of terminology and concepts related to normal gait patterns.	8.1 Identify the normal functional sequence of gait throughout the lifespan. 8.2 Describe normal gait using correct terminology. 8.3 Identify factors affecting gait (vertical and horizontal displacement, width of base of support, lateral pelvic tilt, step length, stride length).
Course Outcome 9	Learning Objectives for Course Outcome 9
9. Demonstrate knowledge of terminology and concepts related to the mechanics respiration.	<ul> <li>9.1 Identify the gross anatomy of the respiratory system.</li> <li>9.2 Explain the functions of the components of the respiratory system.</li> <li>9.3 Describe the normal movement patterns of the chest wall during respiration throughout the lifespan.</li> <li>9.4 Describe normal breathing patterns and rates of respiration throughout the lifespan.</li> <li>9.5 Describe and demonstrate diaphragmatic breathing.</li> </ul>
Course Outcome 10	Learning Objectives for Course Outcome 10
10. Demonstrate knowledge of the process of motor learning.	10.1 Identify and describe the three stages of motor learning (cognitive, associative and autonomous). 10.2 Recognize the characteristics of the learner during each

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stage of learning.  10.3 Identify appropriate instructional strategies for each stage
of learning. 10.4 Describe intrinsic and extrinsic feedback and the timing of
providing such feedback.

# **Evaluation Process and Grading System:**

Evaluation Type	<b>Evaluation Weight</b>
1. Learning Activity/Participation	10%
2. Lab Acttivity	20%
3. Online Quizzes	20%
5. Final Exam	20%
Tests	30%

#### **CICE Modifications:**

### Preparation and Participation

- 1. A Learning Specialist will attend class with the student(s) to assist with inclusion in the class and to take notes.
- 2. Students will receive support in and outside of the classroom (i.e. tutoring, assistance with homework and assignments, preparation for exams, tests and guizzes.)
- 3. Study notes will be geared to test content and style which will match with modified learning outcomes.
- 4. Although the Learning Specialist may not attend all classes with the student(s), support will always be available. When the Learning Specialist does attend classes he/she will remain as inconspicuous as possible.
- A. Further modifications may be required as needed as the semester progresses based on individual student(s) abilities and must be discussed with and agreed upon by the instructor.

#### B. Tests may be modified in the following ways:

- 1. Tests, which require essay answers, may be modified to short answers.
- 2. Short answer questions may be changed to multiple choice or the question may be simplified so the answer will reflect a basic understanding.
- 3. Tests, which use fill in the blank format, may be modified to include a few choices for each question, or a list of choices for all questions. This will allow the student to match or use visual clues.
- 4. Tests in the T/F or multiple choice format may be modified by rewording or clarifying statements into layman's or simplified terms. Multiple choice questions may have a reduced number of choices.
- C. Tests will be written in CICE office with assistance from a Learning Specialist.

#### The Learning Specialist may:

- 1. Read the test question to the student.
- 2. Paraphrase the test question without revealing any key words or definitions.
- 3. Transcribe the student's verbal answer.
- 4. Test length may be reduced and time allowed to complete test may be increased.

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# D. Assignments may be modified in the following ways: 1. Assignments may be modified by reducing the amount of information required while maintaining general concepts. 2. Some assignments may be eliminated depending on the number of assignments required in the particular course. The Learning Specialist may: 1. Use a question/answer format instead of essay/research format 2. Propose a reduction in the number of references required for an assignment 3. Assist with groups to ensure that student comprehends his/her role within the group 4. Require an extension on due dates due to the fact that some students may require additional time to process information 5. Formally summarize articles and assigned readings to isolate main points for the student 6. Use questioning techniques and paraphrasing to assist in student comprehension of an assignment E. Evaluation: Is reflective of modified learning outcomes. NOTE: Due to the possibility of documented medical issues, CICE students may require alternate methods of evaluation to be able to acquire and demonstrate the modified learning outcomes Date: August 29, 2021 Addendum: Please refer to the course outline addendum on the Learning Management System for further information.

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