

Virginia Western Community College
OCT 110
Introduction to Occupational Therapy

Course Description

Focuses on the study of human movement and its impact on function by examining the relationship between systems of osteology, arthrology, myology, neurology, arthrokinematics, and biomechanics and their role in facilitating or inhibiting movement. Provides an opportunity to analyze occupational performance based on the knowledge of human body systems.

Prerequisites: BIO 141; OTA program placement

Semester Credits: 2

Lecture Hours: 1

Laboratory Hours: 2

Required Materials

Textbooks:

1. Short, N., Vilensky, J., & Suárez-Quian, C.A. (2021). *Functional anatomy for occupational therapy*. Books of Discovery.

Course Objectives

1. Introduce foundational concepts of kinesiology, physics, and biomechanics as they relate to purposeful movement and occupational performance. (SLO #1, 2)
2. Provide opportunities to explore the structure and function of the musculoskeletal and nervous systems through applied anatomical study. (SLO # 2, 3, 4)
3. Facilitate analysis of purposeful movement and occupational performance through the study of joint motion, muscle function, and biomechanical principles. (SLO #5, 6, 7)
4. Support development of clinical assessment skills through instruction and practice in goniometry and manual muscle testing (SLO #8)
5. Highlight the impact of disease, trauma, and disability on occupational performance and movement patterns. (SLO #9)

Student Learning Outcomes

At the completion of this course, the student will:

1. Identify the foundational concepts of kinesiology, physics, and biomechanics as they apply to purposeful movement and occupational performance.
2. Recognize the relationships between the design and function of anatomical structures of the human body.
3. Outline the nervous system as it relates to functional anatomy.
4. Identify the bones, joints, and muscles contributing to purposeful movement of the spine, shoulder complex, elbow and forearm, wrist and hand, pelvis and hip, and ankle and foot.
5. Describe the primary purposeful movements of the spine, shoulder, elbow and forearm, wrist and hand, pelvis and hip, and ankle and foot within the context of occupational performance.
6. Recognize positioning, postural alignment, and functional mobility as they relate to

occupational performance.

7. Analyze atypical posture and gait patterns and their impact on occupational performance.
8. Demonstrate competency in goniometry and manual muscle testing as clinical assessments techniques for the upper extremity.
9. Understand how occupational performance is affected by the effects of disease processes including heritable diseases, genetic conditions, mental illness, disability, trauma, and injury. (ACOTE B.2.6.)

Major Topics to be Included

- Anatomy and Physiology: Bones, Muscle, Nerves and Normal motor behavior.
- Biomechanical Foundations
- Physiology of movement
- Functional mobility
- Therapeutic exercise
- Ergonomics and body Mechanics
- Posture Assessment: Range of motion; Muscle strength

[ADA Statement](#) (PDF)

[Title IX Statement](#) (PDF)