

SES-2330: MOTOR LEARNING AND DEVELOPMENT

Cuyahoga Community College

Viewing: SES-2330 : Motor Learning and Development

Board of Trustees:

December 2021

Academic Term:

Fall 2022

Subject Code

SES - Sport and Exercise Studies

Course Number:

2330

Title:

Motor Learning and Development

Catalog Description:

Covers the field of physical growth and motor behavior across the lifespan and employs multiple theories to help understand the multicausal and complex nature of motor development. Students examine and understand how interactions of the developing and maturing individual, the environment, and the task being performed bring about changes in a person's movements.

Credit Hour(s):

3

Lecture Hour(s):

3

Requisites

Prerequisite and Corequisite

SES-1040 Teaching Exercise Training Techniques, or departmental approval.

Outcomes

Course Outcome(s):

Identify fundamental concepts, principles and theories of motor development/learning, motion, and stability and explain the changes in mobility and stability patterns over the lifespan.

Objective(s):

1. Define motor development and motor learning.
2. Define key terms associated with growth, physiology, and aging.
3. Describe some of the basic tools used by researchers in motor development.
4. Describe the theories currently used to study motor development and motor learning.
5. Discuss the principles of motion and stability and their relationship with motor behaviors of individuals of various skill levels.
6. Describe the course of body growth, maturation and aging over the lifespan.
7. Describe the influence of extrinsic factors on growth and development.

Course Outcome(s):

Evaluate the development of motor skills across the lifespan through examination of motor development and motor skill acquisition during infancy and the acquisition and changes in locomotor, ballistic and manipulative skills during the lifespan.

Objective(s):

1. Describe the movements that occur in infancy.
2. Examine postural development and balance in infancy.
3. Discuss the development of locomotor patterns throughout the lifespan.
4. Identify developmental changes in throwing, kicking, punting, and striking movements.
5. Identify developmental changes in catching.

6. Examine the interaction of the individual, task, and environmental constraints and their interactions impacting an individual's movement patterns.

Course Outcome(s):

Examine aspects of perceptual-motor development and demonstrate knowledge of the relationship of perception to motor development across the lifespan.

Objective(s):

1. Examine the role of vision in reaching for objects and other manipulative skills.
2. Discuss developmental changes in vision, auditory and kinesthetic systems during the lifespan.
3. Examine the development of kinesthetic perception, especially perception of tactile locations, the body, limb movements, spatial orientation, and direction.
4. Examine interaction between perception and action in maintaining balance after infancy.

Course Outcome(s):

Analyze exercise constraints, including physical fitness components of cardiorespiratory endurance, muscular strength, flexibility and body composition on motor development and behavior over the lifespan, and demonstrate an ability to observe changes in movement patterns across the lifespan.

Objective(s):

1. Examine the body's response to short- and long-term exercise and endurance training over the lifespan.
2. Explore the relationship between muscle mass and strength and how these change in relation to each over the lifespan.
3. Describe changes in flexibility training over the lifespan.
4. Examine the effects of strength training and flexibility training over the lifespan.
5. Describe the changes on body composition over the lifespan.
6. Examine the effects of exercise on body composition over the lifespan.
7. Structure developmentally appropriate learning environments and design developmentally appropriate learning tasks for an individual or individuals.
8. Provide a framework for charting constraints to enhance developmentally appropriate teaching for motor developmental skills.
9. Assess motor performance and design safe instructional environments, considering developmental needs in the physical, social, cognitive, and affective domains.

Methods of Evaluation:

1. Case studies
2. Written assignments
3. Discussion boards
4. Video assignments
5. Motor learning skill analysis
6. Exams

Course Content Outline:

1. Introduction to motor development and motor learning
 - a. Fundamental concepts
 - b. Theoretical perspectives
 - c. Principles of motion and stability
2. Physical growth and aging
 - a. Physical growth, maturation, and aging
 - b. Development and aging body systems
3. Development of motor skills across the lifespan
 - a. Early motor development
 - b. Development of human locomotion
 - c. Development of ballistic skills
 - d. Development of manipulative skills
4. Perceptual motor development
 - a. Sensory-perceptual development
 - b. Perception and action in development
5. Functional constraints in motor development

- a. Social and cultural constraints
 - b. Psychosocial constraints
 - c. Knowledge as functional constraint
6. Interaction of exercise and structural constraints
- a. Development of cardiorespiratory endurance
 - b. Development of strength and flexibility
 - c. Development of body composition
 - d. Interactions between concepts

Resources

Haywood, K. & Getchell, N. (2020) *Lifespan Motor Development with Web Study Guide, 7th ed.*, Champaign, IL: Human Kinetics.

Lee, T. & Schmidt, R. (2020) *Motor Learning & Performance, 6th ed.*, Champaign, IL: Human Kinetics.

Gabbard, C.P. (2021) *Lifelong Motor Development, 8th ed.*, Philadelphia, PA: Lippincott, Williams, & Wilkins.

Santrock, J. (2020) *A Topical Approach to Lifespan Development, 10th ed.*, New York: McGraw-Hill.

Resources Other

Handouts, websites, and videos provided by instructor

Top of page

Key: 4030