

**STATE UNIVERSITY OF NEW YORK  
COLLEGE OF TECHNOLOGY  
CANTON, NEW YORK**



**COURSE OUTLINE**

**HEFI 203 – Motor Development**

**Prepared By: Janet L. Parcell Mitchell, PT, DPT, ATC, CSCS**

**SCHOOL OF SCIENCE, HEALTH, AND CRIMINAL JUSTICE  
HEALTH & FITNESS PROMOTION**

**FEBRUARY 2014**

**Revised May 2015**

- A. **TITLE:** Motor Development
- B. **COURSE NUMBER:** HEFI 203
- C. **CREDIT HOURS:** 3
- D. **WRITING INTENSIVE COURSE:** No
- E. **COURSE LENGTH:** 15 weeks
- F. **SEMESTER(S) OFFERED:** Spring
- G. **HOURS OF LECTURE, LABORATORY, RECITATION, TUTORIAL, ACTIVITY:**  
3 lecture hours per week

H. **CATALOG DESCRIPTION:**

This course covers the concepts of motor learning and motor development, how they affect motor learning, and what normal motor skills are for the various age groups. Students explore how our motor responses progress and develop from the very young, to the very old, and how differing motor, cognitive, and social abilities will affect our motor skills. Students learn how an individual learns motor skills, what things affect their ability to learn, and how to structure a motor learning environment to positively influence the physical, instructional, and affective factors in motor learning. Students practice designing and structuring effective practice sessions, and how to demonstrate, verbalize, and provide feedback.

- I. **PRE-REQUISITES/CO-REQUISITES:** Sophomore level status or permission of instructor.

J. **GOALS (STUDENT LEARNING OUTCOMES):**

By the end of this course, the student will be able to:

| <i>Course Objective</i>   | <i>Institutional SLO</i>  |
|---|---|
| a. Explain the evolution of fundamental movement skills for all age groups                              | 2. Crit. Thinking<br>3. Prof. Competence                        |
| b. Identify different levels of competency in fundamental movement skills                               | 2. Crit. Thinking<br>3. Prof. Competence                        |
| c. Summarize what factors interfere with the development of skilled fundamental movements               | 3. Prof. Competence<br>4. Inter-intrapersonal                   |
| d. Explain the interactions between motor development, cognitive development, and affective development | 2. Crit. Thinking<br>3. Prof. Competence                        |
| e. Express the role of the practitioner in each stage of motor learning                                 | 1. Communication<br>4. Inter-intrapersonal                      |
| f. Identify ways to enhance motivation of learners  | 1. Communication<br>2. Crit. Thinking<br>4. Inter-intrapersonal |

**K. TEXTS:**

Haywood, Kathleen. Life Span Motor Development. Champaign, IL: Human Kinetics, 2009.

Haibach, Pamela. Motor Learning and Development. Champaign, IL: Human Kinetics, 2011.

**L. REFERENCES:**

Shumway-Cook A., Woollacott, M.,. Motor Control: Translating Research into Clinical Practice, 4th Ed. New York: Lippincott Williams & Wilkins, 2011. ISBN 13: 978-1-6083-1018-0

**M. EQUIPMENT: Technology enhanced classroom**

**N. GRADING METHOD: A-F**

**O. MEASUREMENT CRITERIA/METHODS:**

Exams

Quizzes

Homework

Final paper/project

Participation

**P. DETAILED COURSE OUTLINE:**

- I. Perspectives in Motor Behavior
  - a. Defining terms in motor behavior
  - b. The evolution of motor development
  - c. Theoretical constructs in motor behavior
- II. Classifying Motor Skills
  - a. Skills classification
  - b. Distinction between skill and ability
  - c. Games classification
- III. Stages of Skill Acquisition
  - a. Motor development
  - b. Motor learning stages
- IV. Methodological Considerations
  - a. Indicators of motor skill learning
  - b. Performance and learning tests
  
- V. Physical Growth and Aging
  - a. Prenatal development
  - b. Postnatal development
  - c. Development of the skeletal system
  - d. Development of the muscular system
  - e. Development of the adipose system
  - f. Development of the endocrine system
  - g. Development of the nervous system
- VI. Fundamental Skills in Childhood
  - a. Early motor development
  - b. Reflexes
  - c. Fundamental movement skills/motor milestones

- d. Development of human locomotion
- e. Development of ballistic skills
- f. Development of manipulative skills
- VII. Perceptual Motor Development in Childhood
  - a. Visual development
  - b. Kinesthetic development
  - c. Auditory development
  - d. Intermodal perception
  - e. The role of action in perception
  - f. Postural control and balance
- VIII. Structural Constraints in Childhood and Adolescence
  - a. Nature and nurture
  - b. Physical growth and maturation
  - c. Body system constraints
- IX. Functional Constraints in Childhood and Adolescence
  - a. Cognitive development
  - b. Types of knowledge
  - c. Attention
  - d. Memory
  - e. Sport expertise
  - f. Psychosocial constraints
  - g. Social-affective constraints
  - h. Self-regulation
- X. Movement in Adulthood
  - a. Aging
  - b. Physical activity
  - c. Peak athletic performance
  - d. Movement patterns
- XI. Structural Constraints in Adulthood
  - a. Skeletal system
  - b. Muscular system
  - c. Aerobic capacity
  - d. Cardiovascular system
  - e. Nervous system
  - f. Endocrine system
  - g. Body composition
  - h. Sensory systems
- XII. Functional Constraints in Adulthood
  - a. Psychosocial constraints
  - b. Cognitive function
- XIII. Designing Appropriate Programs for Motor Learning
  - a. Physical, affective, and instructional factors
  - b. Prepractice considerations
  - c. Practice
  - d. Detecting and correcting errors
- XIV. Social and Cultural Constraints in Motor Development
  - a. Social and cultural influences as environmental constraints
  - b. Society and socialization as environmental constraints
  - c. Other sociocultural constraints: race, ethnicity, socioeconomic status

**Q. LABORATORY OUTLINE: N/A**