

# Global Learning Semesters

## Course Syllabus

Course: SPSC-230 Motor Control & Learning

Department: Liberal Arts

Host Institution: Intercollege, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
SPSC-230	Motor Control & Learning	3
Semester Offered	Contact Hours	Prerequisites
Please contact us	42-45	None
Department	Level of Course	Language of Instruction
Liberal Arts	Lower Division	English

### Course Description

The primary aim of the course is to examine the basic principles governing learning and performance of motor skills, and discuss the application of teaching motor skills. Topics include the development of motor learning and performance, performance assessment and movement skills, and the assessment, remediation, and adaptation of activities for individuals throughout the lifespan.

### Prerequisites

None

### Topic Areas

1. The information processing and energetic capacities of the learner that underpin motor performance.
2. Movement control during practice condition.
3. Characteristics of the perceptual-motor system such as memory, attention, reaction time, speed-accuracy trade-off, force control, economy of energy, coordination, automat city, lateralisation, arousal and stress, talent and expertise.
4. Examination of features of the learning environment that can be manipulated to promote motor learning such as goals, motivation, instruction, practice conditions and feedback.
5. Applications to teaching motor skills and the principles of motor control and learning.

### Learning Outcomes

1. Explain the importance of motor development as a pursuit of study within the sport sciences.
2. Describe the relationship between motor development and the following: Cognitive Development, Social Development, Perceptual Motor Development.
3. List and discuss the early factors that affect motor development.
4. Explain the influences of growth and maturation in motor development.
5. Describe how the development of visual senses impact motor performance and development.
6. List and discuss the common infant reflexes and stereotypes and their relationship to motor development.
7. Analyze the effects of voluntary movements in infants during the growth process.
8. Identify the fundamental movement acquired during childhood.
9. Classify fundamental movements into appropriate stages of development.
10. Observe children and identify their current motor developmental stages.
11. Analyze the implications of youth sport programs on growth and development.

12. Describe the implications for motor development across the lifespan.
13. Identify the components of assessment in motor development.
14. Describe the neurological basis of movement.
15. Identify ecological and environmental influences in children's motor development.
16. Demonstrate an understanding of motor learning concepts including:
  - a. Theories of motor control and learning
  - b. Scientific measurements in motor control and learning
  - c. Neuromotor analysis
  - d. Sensory contributions to movement (feedback)
  - e. Memory and learning
  - f. Movement skills learning theory
  - g. Practice organization (whole-part)
  - h. Feedback and knowledge of results

#### Assessment

Midterm:	(25%)
Final Examination:	(50%)
Mini Essay:	(15%)
Attendance and Participation:	(10%)

### Readings and Resources

#### Required Textbooks

1. Latash M L (ed), (1998). Progress in motor control. Bernstein's traditions in movement studies, Champaign IL: Human Kinetics.
2. Schmidt, R. A., & Wrisberg, C.A. (2000). Motor Learning and Performance (2nd ed.) Champaign, IL: Human Kinetics.

#### Recommended Textbooks

1. Shea, C. H., Shebilske, W. L., & Worchel, S. (1993). Motor Learning and Control. Engelwood Cliffs, NJ: Prentice Hall.
2. Zelaznick H N (ed), (1996). Advances in Motor Learning & Control, Champaign IL: Human Kinetics.
3. Haywood, K.M & Getchell, N. (2001). Life span motor development. Champaign IL: Human Kinetics.