

#### SCHOOL OF HEALTH AND SCIENCES

### **SYLLABUS**

**TITLE:** Perceptual Motor Development

CODE: CFI 201

PREREQUISITE: N/A

**CREDITS:** 3 credits | 45 contact hours | 1 term

### **DESCRIPTION**

Theoretical course aimed at knowing the influence of the nervous system on perceptual motor development emphasizing the relationship between cognitive and perceptual motor development, between the growth of the brain and the total development of the individual. It provides the knowledge to determine the influence of vision, hearing, and touch and the importance of physical development on perceptual motor development. The implications for learning and education of the different stages of perceptual and motor development are studied.

### **JUSTIFICATION**

Perceptual motor development is considered as the acquisition of those fundamental and basic skills that best enable the child to intervene more efficiently with his or her environment and daily exercise. There is also a relationship between perceptual motor development and cognitive functioning. Therefore, the discussion and analysis of the topic of motor behavior is necessary for those professionals who work with human beings. Students formalize the application of integrating movement and play to improve academic skills.

# **COMPETENCES**

The course develops the following competences in students:

- Critical questioning
- Research and exploration

### **OBJECTIVES**

After completion of the course, students will be able to:

- 1. Analyze sensory theory and considerations in perceptual motor development.
- 2. Explain the motor and physical aspects involved in perceptual motor development.
- 3. Describe "movement education" and the integration of academic concepts through movement.
- 4. Describe the subdivisions of motor behavior, motor control, and motor development.
- 5. Describe the social factor as a method of intervention in motor development.
- 6. Identify factors that affect development.
- 7. Identify chronic physical and motor adaptations.
- 8. Identify the components for implementing a motor development program.
- 9. Know the different measurement instruments, where through practical learning, the individual can be evaluated.

#### **CONTENTS**

- I. History of motor development
  - A. Interdisciplinary presentation of motor development
  - B. Factorial and longitudinal research on motor development
- II. Sensory theory and considerations in perceptual motor development
  - A. Relationship between perceptual motor development and cognitive development
  - B. Growth and development of the nervous system
  - C. Visual perception process
  - D. Characteristics in the development of visual perception
  - E. Intra-sensory development: tactile, kinesthetic, and auditory skills
  - F. Intersensory integration
- III. Motor and physical aspects in perceptual motor development
  - A. Development of fine motor control
  - B. Development of gross motor control
  - C. Balance
  - D. The concept of the physical self
- IV. Movement Education
  - A. Purpose
  - B. Activities and strategies
  - C. Tests and criteria for measuring and evaluating perceptual motor development

- V. Social Phase and Motor Development
  - A. Socialization
  - B. Social influences from childhood to adolescence
  - C. Team play
  - D. Role identification
  - E. Social learning
- VI. Factors That Affect Development:
  - A. Prenatal development
  - B. Drugs
  - C. Genetic factors
  - D. Infections
  - E. Exercise and nutrition in pregnancy
  - F. Neonate weight and birth injuries
  - G. Effects of early stimulation or deprivation

# VII. Physical changes:

- A. Growth and measurements
- B. Maturation and developmental age
- C. Physiological changes: Physical fitness
- D. Movements and changes in vision

### VIII. Movements

- A. Primitive reflexes and posture
- B. Voluntary movements
- C. Fine motor development
- D. Fundamental movements: walking, running, jumping, throwing, receiving, and hitting
- E. Youth sports: competition and the physiological and psychological effects
- F. Movement in adulthood: regression
- IX. Identification of the Different Evaluation and Testing Methodologies in the Motor Development Program
  - A. Instruments: measurement and evaluation tests

# **METHODOLOGY**

The following strategies from the active learning methodology are recommended:

- Lectures
- Discussion
- Project based learning
- Collaborative learning

### **EVALUATION**

Total	100%
Immersion experiences	20%
Final project or exam	20%
Compositions	15%
Oral reports	15%
Partial assignments	30%

## LEARNING ASSESSMENT

The institutional assessment rubric is applied to the course's core activity.

## **BIBLIOGRAPHY**

### **TEXTBOOK**

Payne, V. G., Isaacs, L. D. (2016). *Human Motor Development: A Lifespan*. (9<sup>th</sup> ed.). Routledge.

## REFERENCES

Enoka, R. (2015). *Neuromechanics of Human Movement*. (5<sup>th</sup> ed.). Human Kinetic, Inc.

Fahey, T., Insel, P., & Walton, P. (2020). *Fit and Well: Core concepts and Labs in Physical Fitness and Wellness*. (14<sup>th</sup> ed.). McGraw Hill.

Floyd, R. T. (2020). Manual of Structural Kinesiology. (21st ed.). Mc Graw Hill.

- Haibach-Beach, P. S., Reid, G. D., & Coller, D. H. (2018). *Motor Learning and Development*. (2<sup>nd</sup> ed.). Human Kinetics, Inc.
- LaPres, J. (2020). *Gunstream's anatomy and Physiology Laboratory Textbook*. (7<sup>th</sup> ed.).

  McGraw Hill.
- Magill, R., Anderson, D. (2020). *Motor Learning and Control: Concepts and Applications*. (12<sup>th</sup> ed.). McGraw Hill.
- Marieb, E.N. (2015). Essentials of Human Anatomy and Physiology. (11th ed.). Pearson.

Milner, C.E. (2019) Functional Anatomy for Sport and Exercise. (2<sup>nd</sup> Ed.). Routledge.

Schmidt, R.A., Lee, T.D., Winstein, C., Wulf, G., & Zelaznik, H.N. (2018). *Motor Control and Learning: A Behavioral Emphasis*. (6<sup>th</sup> ed.). Human Kinetics, Inc.

Thomas, J.R., Nelson, J.K., & Silverman, S.J. (2015). *Research Methods in Physical Activity*. (7<sup>th</sup> ed.). Human Kinetics, Inc.

For more information resources related to the course's topics, access the library's webpage <a href="http://biblioteca.sagrado.edu/">http://biblioteca.sagrado.edu/</a>

### REASONABLE ACCOMMODATION

For detailed information on the process and required documentation you should visit the corresponding office. To ensure equal conditions, in compliance with the ADA Act (1990) and the Rehabilitation Act (1973), as amended, any student in need of reasonable accommodation or special assistance must complete the process established by the Vice Presidency for Academic Affairs.

### **ACADEMIC INTEGRITY**

This policy applies to all students enrolled at Universidad del Sagrado Corazón to take courses with or without academic credit. A lack of academic integrity is any act or omission that does not demonstrate the honesty, transparency, and responsibility that should characterize all academic activity. Any student who fails to comply with the Honesty, Fraud, and Plagiarism Policy is exposed to the following sanctions: receive a grade of zero in the evaluation and / or repetition of the assignment in the seminar, a grade of F (\*) in the seminar, suspension, or expulsion as established in the Academic Integrity Policy effective in November 2022.

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