College of William and Mary Department of Kinesiology

Kin 340-01 Motor Development

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Course Description

This course is designed to examine the growth and development of motor skills throughout the entire life span, and to investigate the changes in motor development from childhood and adolescence through older adulthood.

Credit Hours: 3

Course Objectives

1&2. The Developmental Perspective

At the end of this unit, the student should be able to:

- A. Describe the motor performance age-related changes during the individual's life span.
- B. Have a clear understanding of the terminology related to the field of motor development..
- C. Have a cursory understanding of the different theoretical perspectives of motor development.

3&4. Physical Growth and Maturation, and Aging

At the end of this unit, the student should be able to:

- A. Describe the different ways in which one can assess physical growth and maturation.
- B. Have an understanding of how genetic and environmental factors influence normal embryonic and fetal growth.
- C. Describe how abnormal prenatal development can result from genetic and environmental factors.
- D. Describe postnatal growth among the different body system.
- E. Understand how environmental factors influence postnatal growth and the maturation process.

5&6. Early Motor Behavior

At the end of this unit, the student should be able to:

- A.. Describe how motor development is reflected in the appearance of new skills and their refinement.
- B. Describe how the random and reflexive movements that are evident in the

- first months of life influence later voluntary skills.
- C. Understand how infants achieve control of their environment by acquiring motor milestones skills in a sequence fashion.
- D. Describe how the environment can facilitate or delay a child motor development.
- E. Describe principles of motion and stability.

6,7&9. Motor Behavior During Early Childhood and Pre-adolescence

At the end of this unit, the student should be able to:

- A. Understand how developmental change in basic skill performance (locomotion, ballistic, and manipulative skills) benefits from application of the laws of motion and stability.
- B. Describe a child development in terms of qualitative changes that mark steps in a developmental sequence.
- C. Describe how the product (quantity) of skill performance improves during pre-adolescence and adolescence .
- D. Describe how adults can refine their skills and how the aging process affects skill performance.

10,11,&12. Perceptual-Motor Development

At the end of this unit, the student should be able to:

- A. Understand how visual, kinesthetic, and auditory development contribute to skill development.
- B. Describe how intersensory integration improves during childhood.
- C. Describe how balance improves throughout childhood and adolescence and how balance degrades in older adulthood.
- D. understand how early motor experience is important to perceptual-motor development.

13&14. Psychosocial and Cultural Influences in Motor Development

At the end of this unit, the student should be able to:

- A. Describe how are people socialized into physical active lifestyles.
- B. Describe how self-esteem influences sport participation and skill mastery as a function of age.
- C. Describe how racial and ethnic differences in motor development are related to environmental variables and how this affects group members.
- 15. Knowledge, Information Processing, Memory, and Knowledge Development At the end of this unit, the student should be able to:
 - A. Describe how one can study perceptual-cognitive processes by using information processing models.
 - B. Describe how information processing increases during childhood and declines in older adulthood.

C. Describe how memory systems increase and decrease in efficiency as a function of maturation and age.

16,17&18. Physical Fitness Through the Life Span

At the end of this unit, the student should be able to:

- A. Understand how an individual's response to endurance activities improves with physical growth and training.
- B. Describe how muscle strength improves with age and training and the relationship between muscle volume and strength.
- C. Describe the relationship between an individual's flexibility and training.

Evaluation

Four examinations will be given over the semester.

Grading

The following will be used to determine grades.

| Exam I | 30% |
|----------|-----|
| Exam II | 20% |
| Exam III | 10% |
| Exam IV | 40% |

Total 100%

Grades will be determined as follows:

| A | 93 - 100% | 4.00 |
|----|-----------|------|
| A- | 90 - 92% | 3.67 |
| B+ | 87 - 89% | 3.33 |
| В | 83 -86% | 3.00 |
| B- | 80 - 82% | 2.67 |
| C+ | 77 - 79% | 2.33 |
| C | 73 - 76% | 2.00 |
| C- | 70 - 72% | 1.67 |
| D+ | 67 - 69% | 1.33 |
| D- | 62 - 66% | 0.67 |
| E | <60% | 0.00 |

Text

Haywood, K.M. & Getchell, N. (2005) <u>Life span motor development</u>. Champaign, IL: Human Kinetics.