

M: Course Objectives / Learning Outcomes

After having completed the course as outlined below, students will be able to demonstrate a basic knowledge of:

1. Terminology, language, and research methods used in this area of study.
2. Individual characteristics that influence human physical growth, motor development, perceptual motor development, psychosocial, cognitive and social and therefore affect the learning and control of motor skills.
3. The information processing model and factors affecting decision making
4. Describe & assess fundamental movement patterns
5. Describe the application of physical growth and motor development programs & practices
6. Characteristics of the learning environment & practice conditions which affect skill acquisition and performance.

N: Course Content:**1. Physical Growth & Development**

- 1.1 Describe factors that influence physical growth: growth charts, anthropometric measures
- 1.2 Describe the relationship between physical growth and participation in physical activity
- 1.3 Understand the skeletal system, muscular system, adipose system, nervous system & implications for activity
- 1.4 Describe the concepts of developmental, skeletal and chronological age and their relationship to participation in sport and fitness activities
- 1.5 Be able to identify a child's stage of learning
- 1.6 Signs and symptoms of early stimulation and deprivation

2. Motor Development

- 2.1 Motor Development Overview
 - 2.1.1 the four phases: reflexive, rudimentary, fundamental and specialized
 - 2.1.2 factors influencing motor development: direction, rate of growth, differentiation & integration, variability and readiness, critical & sensitive learning periods, phylogeny & ontogeny
 - 2.1.3 bodies of motor development research: motor control, motor behaviour and motor learning
 - 2.1.4 research issues of motor development research: methodology, measurement, validity, objectivity, reliability and graphical representation
 - 2.1.4 gentiles classification systems to daily physical activity
 - 2.1.5 understanding individual differences of children through a knowledge of motor abilities
- 2.2 Principles of Motion and Stability
 - 2.2.1 principles of movement to physical activity: balance (static & dynamic), Newton's law of inertia, action-reaction, open kinetic chain, stability, absorption & production of force, acceleration
 - 2.2.2 error detection and correction of basic movements
- 2.3 Fundamental Locomotion Skills of Children
 - 2.3.1 locomotory movement stages: walk, run, jump, hop, gallop, slide & skip
 - 2.3.2 application of locomotory stages to physical education
- 2.4 Fundamental Object Control Skills of Children
 - 2.4.1 manipulative movement stages: throw, catch, kick, strike, punt, grasp, draw writing, tapping
 - 2.4.2 application of manipulative stages to physical education

3. Perceptual Motor Development

- 3.1 Application of information processing & decision making factors to motor skill acquisition: sensory information, balance, spatial awareness, body awareness, temporal awareness & vision factors
- 3.2 fundamental concepts of motor programs: open loop control, closed loop control
- 3.3 effect of reaction time, stimulus response compatibility, attention, memory, bimanual skills, Hicks Law, schema & task interference to participation of movement skills
- 3.4 the process of parameterization to better prepare children for changing environments that sport provides
- 3.5 principles of accuracy in motor skill acquisition
 - 3.5.1 gait analysis in children & adults
 - 3.5.2 applied problems and solutions to movement inaccuracies: Fitts Law, speed and amplitude, spatial & temporal accuracy, spatial and temporal anticipation

4. Psychosocial and Cognitive Development

- 4.1 Jean Piaget four stages of Cognitive Development
- 4.2 self esteem and motivation and its affects on performance
- 4.3 effects of arousal and anxiety on performance: inverted U, perceptual narrowing
- 4.4 concept of causal attributions into practical settings

5. Social Influences on Motor Development

- 5.1 impacts of gender, teacher or coach, race, family position
- 5.2 the “theory of play” and its impact on motor skills
- 5.3 challenges and adaptations of adapted physical activity: developmentally delayed, special needs, blindness, perceptual motor difficulties

6. Creating an effective learning environment

- 6.1 reasons children participate in sports
- 6.2 activity options that maximize learning & retention: blocked, constant, variable and random
- 6.3 adjusting surface features of a motor program to ensure appropriate variations
- 6.4 demonstration, instruction, manual guidance, transfer of learning and slow motion from a motor learning perspective
- 6.5 delivery of effective feedback: bandwidth, precision, frequency and amount
- 6.6 effective motor skill evaluations: outcome, process, retention tests and standardized tests

<p>O: Methods of Instruction</p> <ul style="list-style-type: none"> Lectures Labs Discussion Groups Field Observation Technology Assisted Learning 										
<p>P: Textbooks and Materials :</p> <p>A list of recommended textbooks and materials is provided on the <i>Instructor's Course Outline</i>, which is available to students at the beginning of each semester.</p>										
<p>Q: Means of Assessment</p> <p>The selection of evaluation tools for this course is based upon:</p> <ol style="list-style-type: none"> 1. Adherence to college evaluation policy regarding number and weighing of evaluations, for example a course of three credits or more should have at least three separate evaluations. 2. A developmental approach to evaluation that is sequenced and progressive. 3. Evaluation is used as a teaching tool for both students and instructors. 4. Commitment to student participation in evaluation through such processes as self and peer evaluation, and program/ instructor evaluation. <p>The following is presented as an example assessment format for this course</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Mid-term Examination</td> <td style="text-align: right;">25%</td> </tr> <tr> <td>Final Examination</td> <td style="text-align: right;">25%</td> </tr> <tr> <td>Case Study or Video</td> <td style="text-align: right;">25%</td> </tr> <tr> <td>Research Project</td> <td style="text-align: right;"><u>25%</u></td> </tr> <tr> <td>Total</td> <td style="text-align: right;">100%</td> </tr> </table>	Mid-term Examination	25%	Final Examination	25%	Case Study or Video	25%	Research Project	<u>25%</u>	Total	100%
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<p>R: Prior Learning Assessment and Recognition: specify whether course is open for PLAR</p> <p>Yes open for PLAR</p>										

Course Designer(s)
Alison Gill

Education Council / Curriculum Committee
Representative

Dean / Director

Registrar