Physical Growth & Human Development – KNES 202  
Kinesiology Program

Course Outline

GENERAL COURSE DESCRIPTION:

This course introduces characteristics of physical growth and motor development throughout the lifespan, with particular reference to the effects of physical activity on growth, development and health. Developmental differences in the motor ability of children is studied.

Program Information: This is a required course in the Kinesiology Diploma Program and may be used as an elective for students in other disciplines.

Delivery: This course is delivered face to face.

COTR Credits: 3

Hours for this course: 45 hours

<table>
<thead>
<tr>
<th>Instructional Activity</th>
<th>Duration</th>
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<tbody>
<tr>
<td>Lecture Hours</td>
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<tr>
<td>Seminars / Tutorials</td>
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</tr>
<tr>
<td>Laboratory / Studio Hours</td>
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<tr>
<td>Practicum / Field Experience Hours</td>
<td></td>
</tr>
<tr>
<td>Other Contact Hours</td>
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<td><strong>Total</strong></td>
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Practicum Hours (if applicable):

<table>
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<tr>
<th>Type of Practicum</th>
<th>Duration</th>
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<tr>
<td>On-the-job Experience</td>
<td>N/A</td>
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<tr>
<td>Formal Work Experience</td>
<td>N/A</td>
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<tr>
<td>Field Experience/Research</td>
<td>N/A</td>
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<tr>
<td><strong>Total</strong></td>
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</table>
Course Outline Author or Contact:
Jani Vogell, BSc, MKin, CEP

APPROVAL SIGNATURES:

Acting Department Head  Acting Dean of Health and Human Services
Sandi Hill  Norma Sherret
E-mail: shill@cotr.bc.ca  E-mail: nsherret@cotr.bc.ca

Valid from: September 2018 – March 2023

EDCO

COURSE PREREQUISITES AND TRANSFER CREDIT:

Prerequisites:  KNES 163 with a minimum grade of C- (55%)

Corequisites:  None

Flexible Assessment (FA):

Credit can be awarded for this course through FA  ☑ Yes  ☐ No

Learners may request formal recognition for flexible assessment at the College of the Rockies through one or more of the following processes: External Evaluation, Worksite Assessment, Demonstration, Standardized Test, Self-assessment, Interview, Products/Portfolio, Challenge Exam. Contact an Education Advisor for more information.

Transfer Credit: For transfer information within British Columbia, Alberta and other institutions, please visit http://www.cotr.bc.ca/Transfer.

Students should also contact an academic advisor at the institution where they want transfer credit.

Prior Course Number:  HKIN 202 ⇔ KNES 202

Date changed:  September 2012
Textbooks and Required Resources:

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date the following textbooks were in use:


*Please see the instructor’s syllabus or check COTR’s online text calculator http://www.cotr.bc.ca/bookstore/cotr_web.asp?IDNumber=164 for a complete list of the currently required textbooks.*

LEARNING OUTCOMES:

Upon the successful completion of this course, students should be able to

- demonstrate knowledge of and be able to describe the process of “typical” biological growth, maturation and motor development as it relates to the total body, body systems, the environment and tasks/skills through the life span, with emphasis on the first two decades of life;
- identify and describe the different types of research designs and methods employed in paediatric research studies;
- describe and/or demonstrate with basic methods of growth and methods employed in paediatric research studies;
- describe the role of physical activity during childhood and adolescence for healthy growth and motor development;
- identify and/or describe key psychological and social factors related to growth, maturation and involvement in physical activity and/or sport; and
- study first hand and have the opportunity for social development by participating in cooperative learning experience and group discussion on topical concerns.

COURSE TOPICS:

Unit I: Introduction to Human Development and Physical/Biological Growth Patterns
Unit II: Motor Behaviour across the Lifespan
Unit III: Principles of Perceptual Development /Assessment and Socio cultural Influences on Motor Development
Unit IV: Long Term Athlete Development (LTAD)

Unit I: Introduction to Human Development and Physical/Biological Growth Patterns

A. Introduction to the Developmental Perspective
   a. Terminology
   b. Periods of Lifespan Development
   c. The Developmental Continuum
   d. Research Methodology
   e. Theoretical Perspective in Motor development
B. Heredity and Neurological Changes
   a. Heredity
   b. Neurological Changes

C. Physical Growth Changes over the Lifespan
   a. Overview of Physical Growth and Development
   b. Changes in Body Proportions and Physique
   c. Structural Development
   d. Body Mass
   e. Maturity estimates
   f. Implications for Motor performance

D. Physiological Changes over the Lifespan
   a. Cardiovascular Changes
   b. Muscular Strength and Flexibility Changes
   c. Changes with aging

E. Factors Affecting Growth and Development
   a. Prenatal Development
   b. Nutrition and Physical Activity/Postnatal
   c. Glands and Hormone activity

Unit II: Motor Behaviour across the Lifespan

A. Early Motor Behaviour
   a. Reflexive Behaviour
   b. Spontaneous Movements
   c. Rudimentary Behaviour

B. Motor Behaviour During Early Childhood
   a. Fundamental Motor Skill Development
   b. Movement Patterns
   c. Fine Motor Manipulative Behaviour
   d. Functional Asymmetries

C. Motor Behaviour During Later Childhood
   a. Quantitative Motor Performance Changes
   b. Qualitative Changes in Motor Behaviour
   c. Motor Skill Refinement

D. Motor Behaviour in Adult Years
   a. Peak Motor Performance
   b. Regression
   c. Physical Activity and Longevity
Unit III: Principles of Perceptual Development/Assessment and Socio cultural Influences on Motor Development

A. Perceptual Development
   a. Visual Perception
   b. Kinesthetic Perception
   c. Auditory Perception
   d. Tactile Perception
   e. Perceptual Integration
   f. Changes with Aging

B. Information Processing and Motor Control
   a. Attention
   b. Memory
   c. Processing Speed and Movement Time
   d. Programming
   e. Changes with Aging

C. Assessment

D. Sociocultural Influences on Motor Development
   a. Terminology/Socialization
   b. Primary Influences during Childhood and Adolescence
   c. Primary Influences during Adulthood

Unit IV: Long Term Athlete Development (LTAD) – Canadian Sport For Life

See instructor’s syllabus for the detailed outline of weekly readings, activities and assignments.

EVALUATION AND ASSESSMENT:

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<th>Assignments</th>
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<tr>
<td>Assignments</td>
<td>60%</td>
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<tr>
<td>Midterm</td>
<td>15%</td>
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<tr>
<td>Final Exam</td>
<td>25%</td>
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<tr>
<td>Total</td>
<td>100%</td>
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EXAM POLICY:

Students must attend all required scheduled exams that make up a final grade at the appointed time and place.

Individual instructors may accommodate for illness or personal crisis. Additional accommodation will not be made unless a written request is sent to and approved by the appropriate Department Head prior to the scheduled exam.

Any student who misses a scheduled exam without approval will be given a grade of “0” for the exam.

COURSE GRADE:

Course grades are assigned as follows:

<table>
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<tr>
<th>Grade</th>
<th>A+</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D</th>
<th>F</th>
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<tbody>
<tr>
<td>Mark (Percent)</td>
<td>≥ 90</td>
<td>89-85</td>
<td>84-80</td>
<td>79-76</td>
<td>75-72</td>
<td>71-68</td>
<td>67-64</td>
<td>63-60</td>
<td>59-55</td>
<td>54-50</td>
<td>&lt; 50</td>
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A grade of "D" grants credit, but may not be sufficient as a prerequisite for sequential courses.

ACADEMIC POLICIES:

See [www.cotr.bc.ca/policies](http://www.cotr.bc.ca/policies) for general college policies related to course activities, including grade appeals, cheating and plagiarism.

COURSE CHANGES:

Information contained in course outlines is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational, employment and marketing needs. The instructor will endeavour to provide notice of changes to students as soon as possible. The instructor reserves the right to add or delete material from courses.