

## YORK UNIVERSITY Faculty of Health School of Kinesiology and Health Science

## HH KINE 3340 3.0 Growth, Maturation and Physical Activity

Course Director: Dr. Ian Patton Email: ipatton@yorku.ca

2024 Winter Term Monday/Wednesday 1:00 – 2:30 pm, SLH E Office Hours: By appointment Course website: EClass

## COURSE DESCRIPTION:

This course introduces human physical growth and maturation, and examines these processes as they relate to lifespan motor and psychological development from prenatal to early adulthood. A main objective is to provide students with a framework for understanding the interaction between the biological/physical and psychological aspects of human development as it relates to physical activity and physical activity programs. Special emphasis will be placed on factors that impact physical activity participation such as gender, socio-economic class, ethnicity, disabilities, etc and examination of good practices aimed at promoting physical activity among youth and throughout the lifespan.

## COURSE OBJECTIVES:

Upon successful completion of this course, students will be able to:

- 1. describe the normal sequence of biological growth and maturation during the first two decades of life and their relationship to motor performance associated with physical activity
- 2. explain foundations of motor development related to human functional development and how they impact physical activity and physical activity participation
- 3. identify appropriate research designs, and understand methods of growth measurement and physical activity/fitness assessment in children and youth
- 4. describe how other areas of human functional development (e.g. social, cognitive) relate to growth and maturation
- 5. identify and evaluate methods of measuring physical activity of children and adolescents

- 6. develop and apply critical thinking skills regarding the physical growth, maturation, and development of children in relation to physical education, physical activity, and training
- 7. Given a set of examples, discuss how factors such as ethnicity, gender, socioeconomic class, disabilities, etc. impact physical activity participation.
- 8. Given a set of constraints, identify and justify good practices and successful programs aimed at promoting physical activity across the lifespan (including special populations).

# COURSE LEARNING OUTCOMES:

Students should be able to demonstrate mastery of the following abilities:

- *Identify* and *communicate* basic facts and terminology related to growth, maturation and physical activity.
- *Contextualize and communicate information* of generally accepted concepts and principles in growth, maturation and physical activity
- Be able to *think critically* and *understand* theory(ies) and recurrent developmental issues in growth, maturation and physical activity.
- *Apply knowledge* to particular problems or situations (*problem-solve*) encountered within growth, maturation and physical activity be aware of the limits in knowledge and methodologies when analyzing, evaluating, interpreting and disseminating information.

# SUGGESTED COURSE TOPICS

The instructor will attempt to cover the following sections and topics but not necessarily in the order presented below and/or in formal lectures. Some topics may be covered less formerly in assigned readings and/or assigned projects depending on the circumstances and needs of the class. The instructor will provide a list of lecture topics and pertinent readings during class.

# Human Development

- 1. Definitions and introduction to the study of human development ages and stages; research designs;
- 2. Cognitive development
- 3. Social development
- 4. Moral development

# Factors that affect Development

- 1. Prenatal development concerns
- 2. Early stimulation and deprivation

# Physical changes across the lifespan

- 1. Growth and maturation
- 2. Physiological changes
- 3. Movement and the changing senses

Movement across the lifespan

- 1. Infant reflexes
- 2. Voluntary movement
- 3. Fine motor development
- 4. Fundamental movement skills
- 5. Youth sports
- 6. Developmental delays

Physical Activity as a function of development

- 1. Developmental trends and tracking of physical activity and motor performance
- 2. Physical activity and trainability in children and youth;
- 3. Consequences of obesity on motor performance and activity for children and adolescence;
- 4. Physical activity of children and adolescence with chronic conditions;

# **READINGS and TEXTBOOKS:**

## **Required Readings**

- Course Lecture Notes; Selected Assigned Mandatory/Required Readings: Throughout the course the instructor will provide lecture material as required readings, normally in the form of PowerPoint slides, on EClass – the learning management software for KINE 3340. <u>It is the student's</u> responsibility to access EClass. [NOTE: Information on lecture slides may only be partially complete and students are required to fill-in material, incorporate supplemental information discussed by the instructor/students and participate in class discussions]. As well, selected required readings (from research papers, websites and/or textbook) will be identified in class. All in-class lecture material and required readings will be used for assessments.
- Payne, G.V & Isaacs, L.D, (2020) Human Motor Development: A Lifespan Approach (10th Edition).

## Supplemental resources:

\*[While students do not necessarily have to purchase their own copy of these textbooks, specific information and/or pages may be identified as suggested readings.]

• Growth, Maturation and Physical Activity by R.M. Malina, C. Bouchard and O. Bar-Or, Second Edition, Human Kinetics Publishers Inc.; Champaign, II in 2004.

### COURSE EVALUATION:

Assignment 1	Feb 2	15%
In-class test	Feb 14	20%
Written Assignment	March 23	25%
Final Exam	TBD	35%
Quizzes	In class	5%

Final exam is <u>cumulative</u> and will be comprised of questions from the entire course. In the case where a student does not complete the mid-term test (and appropriate documentation is provided by the student) then the weighted percentage from the missed test will be added to the weight of the final exam. Assessments/exams will include combinations of multiple choice, short answer and written long answers and will cover content from lectures and any mandatory/required readings. Tests/assessments will require students to demonstrate in-depth knowledge and application of course content.

"Several platforms will be used in this course (e.g., Moodle, Canvas, Zoom, etc.) through which students will interact with the course materials, the course director / TA, as well as with one another. Please review the syllabus to determine how the class meets (in whole or in part), and how office hours and presentations will be conducted. Students shall note the following: • Zoom is hosted on servers in the U.S. This includes recordings done through Zoom. • If you have privacy concerns about your data, provide only your first name or a nickname when you join a session. • The system is configured in a way that all participants are automatically notified when a session is being recorded.

### Grading, assignment submission, lateness penalties and missed tests

The grading scheme for this course conforms to the 9-point grading system used in undergraduate programs at York. Assignments and tests/exams will be given a numeric grade out of 100 which will correspond to a letter grade (e.g. A+= 90 to 100, A = 80 to 90, B+ = 75 to 79, etc). Should a student have issue with the grade received, a written submission to the Course Director must be received within one week of receiving the grade with specific detail on why the grade should be changed. Re-marking may result in the grade going up, down, or staying the same.

**Assignment submission:** Proper academic performance depends on students completing their work not only well, but on time. Accordingly, the written assignment for this course must be received on the due date specified and <u>must</u> be submitted electronically through EClass/Turnitin. Assignments not submitted before the due date will be considered late.

**Lateness penalty:** Assignments received later than the due date will be penalized (10% <u>per day</u> starting on the first day after the due date and including weekend days). Exceptions to the lateness penalty for valid reasons such as illness, compassionate grounds, etc., may be entertained by the Course Director but will require supporting documentation (e.g. doctor's letter).

**Missed test/exam**: Students with a documented reason for missing a course test/exam, such as illness, compassionate grounds, etc. which is confirmed by supporting documentation (e.g. doctor's letter) may request accommodation from the Course Director. At the discretion of the Course Director, <u>students who have missed the in-class</u> test will have the value of their missed test added to the value of their final exam. Further extensions or accommodation will require students to submit a formal petition to the Faculty.

Learning Management Platform - EClass: Students will receive class lecture notes, reminders and notifications re: additional required readings via York's EClass platform. Under normal circumstances, class lecture materials will be posted to students approximately 24 hours before the class. The EClass Platform is the most effective means of communication with the instructor between classes and/or to request an appointment. This course will utilize an EClass forum for questions. Please post questions in the forum for the instructor or other students to address. This will allow for quicker responses and avoid multiple responses to the same questions. Students who email questions that would be appropriate for the forum, will be directed there.

Email Policy: ALL students are expected to check their York email address on a regular basis as it is the only email that EClass notifications will go to and the only email address that the course director has access to for communication with students. The instructor will answer emails from students Monday – Friday between 9:00 and 10:00 am provided that the question has not been addressed in class previously and is not the subject of a discussion on the course website. Emails received later than 10:00 am Friday will not be addressed until the following Monday morning. Any email regarding course content that cannot be answered in 3 lines or less will result in the student being instructed to make an appointment and bring their question(s) to the appointment with the instructor.

## IMPORTANT COURSE INFORMATION FOR STUDENTS

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Curriculum & Academic Standards webpage (see Reports, Initiatives, Documents) at

http://www.yorku.ca/secretariat/policies/index-policies.html

- York's Academic Honesty Policy and Procedures/Academic Integrity Website
- Ethics Review Process for research involving human participants
- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities
- Student Conduct Standards
- Religious Observance Accommodation

### Academic Honesty

Members of the University Community accept a commitment to maintain and uphold the purposes of the University and, in particular, its standards of scholarship. It follows, therefore, that acts of a nature which prejudice the academic standards of the University are offences subject to discipline. Any form of academic dishonesty that undermines the evaluation process, also undermines the integrity of the University's degrees. The University will take all appropriate measures to promote academic integrity and deal appropriately with scholastic offences. Academic honesty requires that persons do not falsely claim credit for the ideas, writing or other intellectual property of others, either by presenting such works as their own or through impersonation. Similarly, academic honesty requires that persons do not cheat (attempt to gain an improper advantage in an academic evaluation).

### Turnitin

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between York University and Turnitin.com (http://www.turnitin.com ).

### **Assignment 1 Physical Activity Guidelines**

Students will review the Canadian Physical Activity/24 HR Movement Guidelines (5-17yrs old). You will be tasked with creating a promotional resource targeted to parents and/or kids that will outline the key points of the guidelines, importance of PA, and interesting ways kids can meet the recommendations. This can be done as a poster, infographic, brochure, video (1-2 Min max) or audio (think radio commercial). If you have other creative ways to present the assignment, please talk to the instructor first.

### Assignment 2

The final assignment is worth 25% of the final grade for the course. Assignment due March 23 through EClass/Turnitin. The final assignment will be a 5–8-minute recorded presentation.

Students will research a condition/disability that is related with intellectual and/or motor delays during childhood development. Students will prepare a recorded presentation that demonstrates that they understand the condition and how it impacts childhood development using what you have learned in the course as well as from your own research. The key elements of the presentation will include a background/description of the condition, how the condition can impact growth, maturation and development, and finally a discussion of physical activity in this population. Students will prepare slides/visuals to support their presentation and include references.

### In Class Quizzes

Throughout the course there will be 5 quizzes randomly spaced that cover a topic that was covered either the lecture prior or on that specific day. Each quiz will be graded out of 4 marks there is no make-ups for missed quizzes and the total accumulated marks across all 5 quizzes will make up 5% of the final grade.