

**Faculty of Health  
School of Kinesiology and Health Science**

**Course:**

Fundamentals of Epidemiology, KINE 3635 B

*Blended format*

**Term:**

Fall term 2022

Tuesday and Thursday from 11:30am-1:00pm

On-campus classroom meetings will take place in ACW 307

**Prerequisite / Co-requisite:**

KINE 2050 3.00 Analysis of Data in Kinesiology I

**Course webpage:**

<https://eclass.yorku.ca/>

**Course Instructor:**

Hala Tamim, PhD

Office: Bethune College / room: 359

Phone: (416)736-2100 Extension: 33338

E-mail: [htamim@yorku.ca](mailto:htamim@yorku.ca)

Office hours (through zoom): By appointment- please contact the instructor at [htamim@yorku.ca](mailto:htamim@yorku.ca) to set a meeting to discuss course-related questions.

**Expanded course description:**

**Organization of the course**

This is a *blended format course* that combines on-campus classroom meetings with online delivery of content in a purposeful and integrated approach. On-campus classroom meetings will take place on Tuesdays and Thursdays 11:30am-1:00pm (**ACW 307**). Please refer to the “schedule” section below for detailed information on the days when on-campus classroom meetings will take place. A substantial amount of the course work occurs online. The online portion of the course uses a combination of synchronized live online lectures, recorded lectures, assigned readings, videos, exercises and self-assessment short quizzes. Any synchronized live online lectures will be recorded and posted on the course website so that students could listen to them as needed. On-campus classroom meetings will include lectures and problem-based learning exercises. Students are encouraged to use the Discussion platform of eClass to post questions, answers and discussions regarding course material. The course is supported by eClass. All material will be posted on eClass at least a week in advance. Please check the course website regularly.

**Course objectives**

The course will provide an introduction to the basic principles of Epidemiology with emphasis on studies undertaken in the field of kinesiology. Types and sources of data will be explained.

Emphasis will be on the understanding of the different epidemiological study designs (observational and experimental), analytic methods used and validity (information, selection and confounding biases). Other topics will include diagnostic tests and causation.

### **Brief list of specific learning objectives of the course**

The objective of this introductory course in epidemiology is to provide the students with basic epidemiologic tools relevant to the field of kinesiology and public health. By the end of the course, students are expected to:

1. Understand basic epidemiologic language
2. Differentiate between different sources and types of data in health-related disciplines
3. Differentiate between the various epidemiologic study designs and recognize the advantages and disadvantages of each study design
4. Critically evaluate the evidence for the relationship between factors and health outcomes
5. Understand how to assess the reliability and validity of diagnostic and screening tests

### **Course Text / Readings:**

No specific book will be required for the course. The emphasis will be on the lectures and assigned readings; however, suggested books are:

- Gordis, L. Epidemiology. WB Saunders Co., Philadelphia (5<sup>th</sup> edition Edition), 2014
- Lilienfeld: Foundations of Epidemiology, Oxford (Third Edition), 1994
- Hennekens: Epidemiology in Medicine, Little, Brown and Company, 1987
- Mausner and Kramer: Epidemiology: An Introductory text, Saunder, 1985
- Rothman: Modern Epidemiology, Little, Brown and Company, 1986

### **Evaluation:**

The final grade for the course will be based on the following items weighted as indicated:

Test 1	25%
Test 2	25%
Poster	15%
Final exam (cumulative)	35%

### **Poster presentation**

Students have to choose one article out of three articles that will be posted on eClass and summarize it in a poster format. The due date for submitting the poster for the summary of the article is noted under “schedule” at the end of the syllabus. Students can work individually on the poster or in groups of 2 or 3 students; in this case all students in the group will receive the same grade.

### **Grading, Assignment Submission, Lateness Penalties and Missed Tests:**

#### **Grading**

The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A+ = 9, A = 8, B+ = 7, C+ = 5, etc.). Presentations and tests will bear either a letter grade designation or a corresponding number grade (e.g. A+ = 90 to 100, A = 80 to 90, B+ = 75 to 79, etc.). (For a full description of York grading system see the York University Undergraduate Calendar-<http://calendars.registrar.yorku.ca/2010-2011/academic/index.htm>)

### **Missed Tests**

Test 1, Test 2 and the Final exam will take place in person on campus. There will be no make-up test scheduled for either Test 1 or Test 2. Students with a documented reason for missing Test 1 OR Test 2, such as illness, compassionate grounds, etc., which is confirmed by supporting documentation (e.g., doctor's letter) may request accommodation from the Course Instructor. In this event, the percentage allocated to Test 1, or Test 2 will be added to the Final Exam. A student who misses the final exam (but has taken Test 1 and Test 2) will only be allowed to write a deferred final exam if the student submits to the instructor, immediately after the final exam has been written, the attending physician's statement (showing incapability of writing the final exam) and a deferred standing agreement. A note that the format of the deferred final exam may not be the same as the regularly scheduled final exam. Further extension or accommodation will require students to submit a formal petition to the faculty.

### **Poster presentation**

Students who are unable to submit their poster on the specified date for valid reasons are to submit documentation to the course director and alternate arrangement will be made. Assignments received after due date (with no supporting documents) will be penalized by one-half letter grade for every day missed. No submission will be accepted after 3 days of the due date.

### **NOTE**

Students have one week after the posting of the exam grade or poster grade to contact the instructor about marking concerns. Any request for remarking must be made in writing and must include a statement of the reason for the request and any supporting documentation. For consistency, such a request may involve re-evaluation of the entire test or assignment, and not an individual question in isolation.

### **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)

<https://secretariat.info.yorku.ca/files/CourseInformationForStudentsAugust2012-.pdf>

- Senate Policy on Academic Honesty and the 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

In this course, we strive to maintain academic integrity to the highest extent possible. Please familiarize yourself with the meaning of academic integrity by completing SPARK's [Academic Integrity module](#) at the beginning of the course. Breaches of academic integrity range from cheating (i.e., the improper crediting of another's work, the representation of another's ideas as your own, etc.) to aiding and

abetting (helping someone else to cheat). All breaches in this course will be reported to the appropriate university authorities, and can be punishable according to the [Senate Policy on Academic Honesty](#).

### **Calumet and Stong Colleges' Student Success Programming:**

[Calumet](#) and [Stong](#) Colleges aim to support the success of Faculty of Health students through a variety of **free programs** throughout their university career:

- [Orientation](#) helps new students transition into university, discover campus resources, and establish social and academic networks.
- [Peer Mentoring](#) connects well-trained upper-year students with first year and transfer students to help them transition into university.
- [Course Representative Program](#) supports the academic success and resourcefulness of students in core program courses through in-class announcements.
- [Peer-Assisted Study Sessions \(PASS\)](#) involve upper-level academically successful and well-trained students who facilitate study sessions in courses that are historically challenging.
- [Peer Tutoring](#) offers one-on-one academic support by well-trained Peer Tutors.
- Please connect with your Course Director about any specific academic resources for this class.
- Calumet and Stong Colleges also support students' [Health & Wellness](#), [leadership and professional skills development](#), [student/community engagement and wellbeing](#), [Career Exploration](#), [Indigenous Circle](#), [awards and recognition](#), and [provide opportunities to students to work or volunteer](#).
- For additional resources/information about Calumet and Stong Colleges' Student Success Programs, please consult our websites ([Calumet College](#); [Stong College](#)), email [scchelp@yorku.ca](mailto:scchelp@yorku.ca), and/or follow us on Instagram ([Calumet College](#); [Stong College](#)), Facebook ([Calumet College](#); [Stong College](#)) and [LinkedIn](#).
- Are you receiving our weekly email (Subject: "Calumet and Stong Colleges - Upcoming events")? If not, please check your Inbox and Junk folders, and if it's not there then please contact [ccscadm@yorku.ca](mailto:ccscadm@yorku.ca), and request to be added to the listserv. Also, make sure to add your 'preferred email' to your [Passport York personal profile](#) to make sure you receive important news and information.

**SCHEDULE:**

<b>Date</b>	<b>On-campus classroom meetings versus online sessions</b>	<b>Topic</b>
September 8	ONLINE	Reading- John Snow
September 13	On campus meeting	Introduction of course / Indices of morbidity and mortality
September 15	ONLINE	Indices of morbidity and mortality
September 20	ONLINE	Descriptive studies (case report/ case series, correlational studies, cross sectional studies)
September 22	ONLINE	Analytic studies (cohort studies)
September 27	ONLINE	Analytic studies (cohort studies)
September 29	ONLINE	Analytic studies (cohort studies)
October 4	On-campus meeting	Analytic studies (case control studies)
October 6	ONLINE	Randomized controlled studies
October 11/13	NO CLASS	Reading week
October 18	On-campus meeting	<b>TEST 1</b>
October 20	ONLINE	Overview of statistics
October 25	ONLINE	Internal Validity
October 27	ONLINE	Internal Validity
November 1	On-campus meeting	Internal Validity
November 3	ONLINE	Critique of a paper
November 8	On-campus meeting	<b>TEST 2</b>
November 10	ONLINE	Critique of a paper
November 15	ONLINE	How to prepare a poster
November 17	ONLINE	Outbreak investigation
November 22	ONLINE	Causality
November 24	On-campus meeting	Evaluation of screening tests
November 29	ONLINE	Evaluation of screening tests
December 1	ONLINE	<b>POSTER IS DUE</b>
December 6	ONLINE	Review of material