

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

Course:

Fundamentals of Epidemiology, KINE 3635 3.0- Section A

Term:

Fall term 2016-2017

Prerequisite / Co-requisite:

KINE 2050 3.00 Analysis of Data in Kinesiology I

Course webpage:

<https://moodle.yorku.ca>

Course Instructor:

Hala Tamim, PhD

Office: Bethune College / room: 359

Phone: (416)736-2100 Extension: 33338

E-mail:htamim@yorku.ca

Course consultation hours: Monday 8:00-10:00 a.m. by skype or by appointment

Skype account: tamim.kine

To download skype go to: www.skype.com

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 11:30-1:00 pm (VH 1152A). 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, assignments, exercises and self-assessment short quizzes. The synchronized live online lectures will take place on Thursdays during the time of the class (11:30-1:00 pm). During these sessions, the students will have the opportunity to ask the instructor questions related to the course material being covered. The 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, problem based learning exercises and students’ presentations. Students are encouraged to use the Discussion platform of moodle to post questions, answers and discussions regarding course material. The course is supported by moodle. All material will be posted on moodle 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 diagnostics and screening tests

Course Text / Readings:

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

- Gordis, L. Epidemiology. WB Saunders Co., Philadelphia (5th 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:

Assignment	15%
Exam 1	30%
Presentation / Poster	15%
Final exam (cumulative)	40%

Final course grades may be adjusted to conform to Program or Faculty grades distribution profiles.

Assignment

Students are expected to work in groups of 2 or 3 on a take-home assignment. The assignment will be posted a week before the due date (please refer to the “schedule” section at the end of the syllabus).

Exams

Both Exam 1 and the Final Exam will be based on multiple-choice questions. Final exam will be based on all material covered in this course.

Students' oral presentation / poster

Students have the choice between summarizing an article and presenting it as an oral presentation during the on-campus classroom meetings or summarizing an article in a poster format and submitting it on moodle.

- Students will form their own groups for the oral or poster presentation (groups could be formed of 2 or 3 students).
- During the second and third week of the course, one of the students in each group should take the responsibility to e-mail the instructor the names of the group members and whether they want to present an oral presentation or submit a poster. If the group is presenting an oral presentation, the student should also indicate the date for a preferred class session for their oral presentation out of the list of dates that the instructor will provide. Confirmation of the date is based on first come first serve basis. The due date for submitting the poster for the summary of the article is noted under "schedule" at the end of the syllabus.
- For the oral presentation, students should use a power point presentation and **should NOT exceed 10 minutes.** All students in a group are expected to present. Details about how to prepare a poster and a power point presentation will be presented to the students in one of the class sessions (please refer to the "schedule" section at the end of the syllabus).

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

Students with a documented reason for missing exam 1, 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 exam 1 will be added to the Final Exam. Students with a documented reason for missing the Final Exam, which is confirmed by supporting documentation, may request accommodation from the Course Instructor. In this event, a Make-up Final Exam will be scheduled. Further extensions or accommodation will require students to submit a formal petition to the Faculty.

Presentations and assignments

Students who elected to do an oral presentation and who are unable to do their presentation on the specified date for valid reasons are to submit documentation to the course director and alternate arrangement will be made. Students who are unable to submit their assignment or poster presentation 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, assignment, or oral or poster presentation grade to contact the instructor about marking concerns. Any request for remarking must be made in writing, and 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) -

<http://www.yorku.ca/secretariat/senate/committees/ascp/documents/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

SCHEDULE:

Date	On-campus classroom meetings versus online sessions	Topic
September 8	ONLINE	Introduction
September 13	On campus meeting	Indices of morbidity and mortality I
September 15	On-campus meeting	Indices of morbidity and mortality II
September 20	On-campus meeting	Descriptive studies (case report/ case series, correlational studies, cross sectional studies)
September 22	On-campus meeting	Analytic studies (cohort studies I)
September 27 and 29	ONLINE	Analytic studies (cohort studies II) Analytic studies (case control studies)
October 4 and 6	ONLINE	Randomized controlled studies Overview of biases / mock presentation
October 11 and 13	ONLINE	Overview of statistics 1
October 18	On campus meeting	Presentations
October 20	On campus meeting	TEST 1
October 25	On campus meeting	How to prepare a poster
October 27	No class / Reading week	
November 1 and 3	ONLINE	Internal Validity I
November 8 and 10	ONLINE	Internal Validity II POSTER is due on November 10
November 15 and 17	ONLINE	Evaluation of screening tests / causality
November 22	On campus meeting	Presentations
November 24	On campus meeting	Presentations and review of material for final exam
November 29 and December 1	ONLINE	ASSIGNMENT IS DUE on November 29 Review of material for final exam on December 1