Faculty of Health School of Kinesiology and Health Science

Course:

Fundamentals of Epidemiology, KINE 3635 3.0- Section A *BLENDED format*

<u>Term:</u> Fall term 2018-2019

<u>Prerequisite / Co-requisite</u>: 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:<u>htamim@yorku.ca</u> Office hours: Wednesdays 11:30-12:30 pm or by appointment

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 (SLH C). 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. 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:

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

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

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 3 or 4 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 <u>should</u> <u>NOT exceed 10 minutes.</u> 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-<u>http://calendars.registrar.yorku.ca/2010-2011/academic/index.htm</u>

Missed Tests

Students with a documented reason for missing an exam, 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 the exam 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 extension or accommodation will require students to submit a formal petition to the Faculty.

Presentation / poster

Students who are unable to do their presentation / 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.

<u>NOTE</u>

Students have one week after the posting of the exam grade or 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/CourseInformationForStude ntsAugust2012.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	Торіс
	versus online sessions	
September 6	ONLINE	Reading- John Snow
September 11	On campus meeting	Introduction of course / Indices of morbidity and mortality
September 13	On campus meeting	Descriptive studies (case report/ case series, correlational studies, cross sectional studies)
September 18	ONLINE	Indices of morbidity and mortality
September 20	ONLINE	Analytic studies (cohort studies)
September 25	On-campus meeting	Analytic studies (cohort studies)
September 27	On-campus meeting	Analytic studies (case control studies)
October 2	ONLINE	Analytic studies (case control studies)
October 4	ONLINE	Randomized controlled studies
October 9 / 11	NO CLASS	Reading week
October 16	ONLINE	Outbreak investigation
October 18	ONLINE	Mock presentation / How to prepare a poster
October 23	On-campus meeting	TEST 1
October 25	ONLINE	Overview of statistics
October 30	ONLINE	Internal Validity
November 1	On-campus meeting	Internal Validity
November 6	ONLINE	Causality
November 8	ONLINE	Evaluation of screening tests
November 13	On campus meeting	TEST 2
November 15	ONLINE	How to critique a paper
November 20	ONLINE	Critique of a paper
November 22	On campus meeting	Presentations / Critique of a paper
November 27	On campus meeting	Presentations / Critique of a paper
November 29	On campus meeting	Presentations / Review of material for final exam
December 4	ONLINE	POSTER IS DUE