

School of Population and Public Health
SPPH 503 – Epidemiologic Methods II
Winter 2016

Course dates: January 4, 2016 to April 8, 2016
Time: Tuesdays and Thursdays from 14:00 to 15:30
Location: SPPH, 2206 East Mall, Room B151
Instructor: Amee R. Manges, MPH, PhD (amee.manges@ubc.ca)
Office hours: By appointment
Tutorial: Tuesdays from 16:30 to 17:30 (tentative)

Pre-requisites

SPPH 502 (Introduction to Epidemiology); SPPH 400 (Statistics for Health Research)

Contact information

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Teaching assistants

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Course email

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Course description

This is a second level (intermediate) epidemiologic methods course. The goal of the course will be to expand student knowledge in epidemiologic methods and to develop professional skills in epidemiology. Topics covered will include study design, causality, confounding, effect measure modification, analysis of biases, tabular and regression analyses. The emphasis of this course will be to reinforce and extend student knowledge in epidemiologic methods and inference and facilitate the practical application and mastery of this knowledge.

Learning objectives

Appreciate approaches to causal inference in epidemiology
Critically evaluate basic study designs in epidemiology
Understand, identify and quantitatively evaluate major sources of bias in epidemiologic studies
Master basic techniques for analyzing epidemiologic data

Course Materials and readings

Szklo M, Nieto FJ. Epidemiology: Beyond the Basics (3rd Edition). Burlington, MA: Jones & Bartlett, 2012 is the required text. Students should consult the course website regularly for announcements. The complete course schedule, including non-textbook required readings and supplementary readings via pdf files or URLs linked to full-text files, all homework assignments (and solutions), statistical software sites, reference materials and other web-based tools or resources are provided on the Connect course website.

Statistical computing resources

<http://cran.r-project.org/>

(download R)

<http://www.rstudio.com/>

(download integrated development environment (IDE) for R)

Methods of evaluation

Five homework assignments (45%)

Mid-term exam (25%)

Final exam (30%)

Homework assignments

The homework assignments for the course are very important. These assignments allow you to integrate and practice the skills you learn during class time. Some homework assignments will require the analysis of data. We recommend you use R, but you can use other statistical programs, although we will not be able to provide support for any other statistical programs. You may work together on the assignments, but each person must submit their own work. The assignments should be submitted by email at 5pm on the date they are due. **Late assignments will be penalized 20% per day and a zero will be assigned if the work is submitted after the solutions become available.** If you feel there has been error in marking either the assignments or the exams please bring this to our attention. If you are seeking additional points for any responses on an assignment or exam, be aware that the entire assignment or exam will be reviewed and points may be awarded OR subtracted from the total.

Course format and expectations

Students are expected to complete the assigned reading prior to class. We will be following the text by Szklo and Nieto in sequence for the most part. The required textbook can be purchased at the UBC Bookstore, but copies are usually available from on-line vendors at a lower price. Classes will consist of lectures, seminar style discussion (large and small group) and in-class problem-solving; hence attendance will be very important. Students are expected to actively participate. There will be an OPTIONAL weekly tutorial tentatively scheduled for Tuesdays from 16:30 to 17:30. The purpose of the tutorial is provide additional support for students, to provide more time to work through problems (not from the homework), and to trouble-shoot issues associated with using the R program.

Academic integrity

A detailed description of academic integrity, including the University's policies and procedures around violations of academic integrity and honesty may be found in the Academic Calendar.

<http://calendar.ubc.ca/vancouver/index.cfm?tree=3,54,111,0>.