

Department of Epidemiology and Biostatistics

Epidemiology 9515B

Epidemiology of Major Diseases: Global Perspectives
Winter 2021

Lecture: Mondays 11:30am-1:20pm

Location: Online

Tutorial: Wednesdays 11:30am-12:30 pm

Location: Online

Office Hours: By email

Instructor: Dr. Saverio Stranges

Email: saverio.stranges@uwo.ca

Phone Extension: 86267

Co-instructor/TAs: Ishor Sharma
(isharm9@uwo.ca), Jason Mulimba Were
(jwere2@uwo.ca)

Course Information

Pre-requisites: Epidemiology 9551A and Biostats 9509A. Unless you have either the requisites for this course or written special permission from the Undergraduate Chair to enroll, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

Course Syllabus

This survey course aims to provide students with an overview of the descriptive epidemiology (incidence and prevalence) and analytic epidemiology (risk and protective factors) of some of the infectious and chronic non-communicable diseases that are the leading causes of death and disability in Canada and globally. Students will learn measures of disease burden applied at the individual and population levels, including cost of illness, years of life lost due to mortality, and health adjusted life years. The effects of personal characteristics, place, and time are emphasized. Key methodological considerations for the execution or interpretation of studies of each disease will be highlighted.

Learning outcomes

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

- Describe the epidemiological characteristics and relative impact of major infectious and chronic non-communicable diseases, both nationally and globally
- Explain approaches to the prevention and control of these diseases from a public health perspective
- Identify methodological challenges associated with epidemiological studies of each condition

Course Schedule

Week	Date	Instructor	Topic
1	January 11-13	Saverio Stranges	Course Overview, Epidemiological Transition & Global Burden of Disease
2	January 18-20	Brenda Coleman	Introduction to Infectious Disease Epidemiology
3	January 25-27	Brenda Coleman	Introduction to Infectious Disease Epidemiology
4	February 1-3	Lauren Cipriano Mike Silverman Saverio Stranges	Global Epidemiology of COVID-19
5	February 8-10	Saverio Stranges Neville Suskin	Global Epidemiology of Cardiovascular Disease
-	February 15-17	Reading Week - No Classes	
6	February 22-24	Kristin Clemens Lillian Barra	Global Epidemiology of Diabetes, Kidney Disease
			Global Epidemiology of Immunological Disease
7	March 1-3	Igor Karp	Global Epidemiology of Cancer
8	March 8-10	F Olea Popelka Jessica Prodger	One Health in a Global Perspective
			Global Epidemiology of HIV/AIDS
9	March 15-17	Kathryn Nicholson	Global Epidemiology of Multimorbidity/Aging
10	March 22-24	Kelly Anderson	Global Epidemiology of Mental Disorders
11	March 29-31	Jorge Burneo Luciano Sposato	Global Epidemiology of Epilepsy
			Global Epidemiology of AF, Stroke, & Dementia
12	April 5-7	Shehzad Ali	Understanding the Role of Social Determinants of Health and Health Equity

Course Materials, Lectures & Tutorials

Required: Custom Course Book available at the campus book store.

Additional readings, lecture notes, and assignments will be posted to the course OWL page as required.

All the lectures and tutorials will be delivered in a synchronized fashion and recorded as well and posted on OWL in case students cannot attend.

Methods of Evaluation

- 10% - Tutorial participation
- 10% - Weekly “one sentence” quizzes
- 20% - Midterm exam
- 30% - Assignment: Epidemiology of other diseases
- 30% - Final exam

Tutorial Participation (10%):

- Students are expected to actively participate in all tutorial discussions and activities.
- Note that participation will be assessed by the TA on a weekly basis. Absences without a valid reason will be assigned a mark of zero.

Weekly “one sentence” quizzes (10%):

- At the end of each Monday session, students will complete a “one sentence quiz” on a topic covered during the lesson.
- The best ten quiz marks will be used to calculate this grade.
- Students who are absent will receive a grade of zero for that week’s quiz.

Midterm exam (20%):

- The midterm exam will consist of a combination of multiple choice and short answer questions, and will include material from lectures, readings, and tutorials for the first half of the term (up to reading week).
- **Date: February 10, 2021**

Assignment: Epidemiology of other diseases (30%):

- Each student will select a disease that has NOT been previously covered in the course and will prepare a written report on the descriptive and analytic epidemiology of the condition, as well as public health efforts towards prevention and control. Students will further provide a critical analysis of challenges to study design and interpretation for their disease of choice. (25% of grade).
- Students will also give a 5 to 8-minute presentation on the topic (5% of grade).
- Proposed topics must be cleared with the instructor by **January 31, 2020**.
- **Student Presentations:** they will be recorded and uploaded on OWL
- **Due Date: March 31st, 2021 on OWL by 12:00 pm**

Final Exam:

- The final exam will consist of a combination of multiple choice and short answer questions, and will include material from all lectures, readings, and tutorials over the course of the semester.
- The exam will be scheduled during the final exam period.

Marking reassessments:

Should you have concerns about a mark you have received on an exam or assignment, you are welcome to request a reassessment from the instructor. In order to request a reassessment, please write one paragraph explaining why you believe you deserve a different mark from the one that you received. This will be read in conjunction with your original submission. The instructor will reassess your exam or assignment based on this information. Requests for changes in marking made in any other manner will not be considered.

Late assignment policy:

Please negotiate an alternative deadline with the instructor in advance if you foresee difficulties meeting the assigned due date.

General information**Western Academic Policies and Statements****Policy on Accommodation for Medical and Non-Medical Absences**

All non-medical absences must be approved in advance. In the case of an unexpected absence on compassionate grounds, documentation may be requested. If documentation is required for either medical or non-medical academic accommodation, then such documentation must be submitted by the student to the instructor.

Statement on Academic Offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_grad.pdf

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 The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Statement on Copyright and Audio/Video Recording

All of the remote learning sessions for this course will be recorded. The data captured during these recordings may include your image, voice recordings, chat logs and personal identifiers (name displayed on the screen). The recordings will be used for educational purposes related to this course, including evaluations. The recordings may be disclosed to other individuals participating in the course for their private or group study purposes. Please contact the instructor if you have any concerns related to session recordings.

Participants in this course are not permitted to record the sessions, except where recording is an approved accommodation, or the participant has the prior written permission of the instructor.

You must always ask permission to record another individual and you should never share or distribute recordings.

Course material produced by faculty is copyrighted and to reproduce this material for any purposes other than your own educational use contravenes Canadian Copyright Laws.

Support Services

As part of a successful student experience at Western, we encourage students to make their health and wellness a priority. Western provides several on campus health-related services to help you achieve optimum health and engage in healthy living while pursuing your degree. For example, to support physical activity, all students, as part of their registration, receive membership in Western's Campus Recreation Centre. Numerous cultural events are offered throughout the year. Please check out the Faculty of Music web page <http://www.music.uwo.ca/>, and our own McIntosh Gallery <http://www.mcintoshgallery.ca/>. Information regarding health- and wellness-related services available to students may be found at <http://www.health.uwo.ca/>

Registrarial Services: <http://www.registrar.uwo.ca>

USC Student Support Services: <http://westernusc.ca/services/>

Student Development Centre: <http://www.sdc.uwo.ca/>

SGPS Life & Community web page: https://grad.uwo.ca/life_community/self/index.html

Students seeking help regarding mental health concerns are advised to speak to someone they feel comfortable confiding in, such as their faculty supervisor, their program director (graduate or undergraduate chair), or other relevant administrators in their unit.

Students who are in emotional/mental distress should refer to Mental Health@Western <http://www.uwo.ca/uwocom/mentalhealth/> for a complete list of options about how to obtain help.

Student Accessibility Services

Western is committed to achieving barrier-free accessibility for all its members, including graduate students. As part of this commitment, Western provides a variety of services devoted to promoting, advocating, and accommodating persons with disabilities in their respective graduate program.

Graduate students with disabilities (for example, chronic illnesses, mental health conditions, mobility impairments) are encouraged to register with Student Accessibility Services, a confidential service designed to support graduate and undergraduate students through their academic program. With the appropriate documentation, the student will work with both SAS and their graduate programs (normally their Graduate Chair and/or Course instructor) to ensure that appropriate academic accommodations to program requirements are arranged. These accommodations include individual counselling, alternative formatted literature, accessible campus transportation, learning strategy instruction, writing exams and assistive technology instruction.

Department & Faculty Offices

The Epidemiology & Biostatistics main office is located in K201 in the Kresge Building on Main campus.