

The University of Western Ontario School of
Health Studies
Health Sciences: Chronic Disease Prevention
HS4740A
Sep-Dec 2022

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Office Hours: Mondays 11:30 AM to 1:00 PM or by appointment
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Times: Mondays 9:30 AM to 11:30 AM, Wednesdays 12:30-1:30;
Location: Arts and Humanities Building (AHB)– 1B06
Delivery method: In-person
Course Website: <https://owl.uwo.ca/>

Prerequisite Checking

Health Sciences 2711A/B; or registration in third or fourth year of the Honours Specialization or Specialization in Global Health Studies at Huron University College.

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, 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 Description

Chronic disease is a major burden for our health care system and an economic burden for Canada. This course will examine the prevalence of chronic disease, key factors associated with the significant increase in chronic diseases, and strategies for primary prevention such as an active lifestyle, good nutrition, healthy weight, as well as secondary prevention of complications.

Learning Objectives

On completion of this course, students will be able to:

1. Identify factors contributing to the increase of chronic disease among the population.
2. Identify and define the relationship between psychosocial health and chronic disease.
3. Recognize the impact of health behaviours such as physical activity and diet on chronic disease prevention.
4. Grasp how smoking and drug/substance use and abuse relate to the development of chronic diseases.
5. Describe most common chronic diseases and their impact on the Canadian health care system.

6. Identify, examine, and critique primary and secondary prevention strategies for chronic disease prevention and management.

Textbook & Reading List

Mandatory textbook: Remington RL. *Chronic Disease Epidemiology, prevention and Control*, 4th edition. APHA, 2016

Bookstore link: https://bookstore.uwo.ca/textbook-search?campus=UWO&term=W2022A&courses%5B0%5D=001_UW/HTH4740A

Public Health Agency of Canada Resources

a. Chronic Diseases:

<http://www.phac-aspc.gc.ca/cd-mc/index-eng.php>

b. Canadian Chronic Disease Surveillance System:

<https://health-infobase.canada.ca/ccdss/data-tool/>

World Health Organization; Chronic Diseases and Health Promotion:

https://www.who.int/chp/about/integrated_cd/en/

Additional readings will be posted in OWL. A main requirement is arrangement for a strong internet connection for accessing online materials.

Statement on contingency plan for in-person class pivoting to online learning:

In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, all remaining course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will not change. Any remaining assessments will also be conducted online as determined by the course instructor.

In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, tests and examinations in this course will be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide personal information (including some biometric data) and the session will be recorded. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at:

<https://remoteproctoring.uwo.ca>.

Statement on Multiple Choice Exams:

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 Use of Electronic Devices:

During Exams: Unless you have medical accommodations that require you to do so, or explicit permission from the instructor of the course, you may not use any electronic devices during ANY tests, quizzes, midterms, examinations, or other in-class evaluations.

During Lectures and Tutorials: Although you are welcome to use a computer during lecture and tutorial

periods, you are expected to use the computer for scholastic purposes only, and refrain from engaging in any activities that may distract other students from learning. From time to time, your professor may ask the class to turn off all computers, to facilitate learning or discussion of the material presented in a particular class.

Unless explicitly noted otherwise, you may not make audio or video recordings of lectures – nor may you edit, re-use, distribute, or re-broadcast any of the material posted to the course website.

Class Schedule (subject to change):

The three sections of this course are designed to systematically address issues related to chronic disease.

Lecture Date	Topic(s) Covered	Required Reading (s)
Section 1: Understanding Chronic Disease		
Week 1 Sep. 12 & 14, 2022	- Course overview -What is a chronic disease -Leading causes of morbidity and mortality -Measurement of the burden of diseases	- Course outline - Remington, Chapters 1, 2
Week 2 Sep. 19 & 21, 2022	-Models of Chronic diseases -Social determinants	- Remington, Chapter 6 - Extra reading on OWL
Week 3 Sep. 26 & 28, 2022	-Prevention	- Remington, Chapter 5 - Extra reading on OWL
Section 2: Major Risk Factors		
Week 4 Oct. 3 & 5, 2022	- Smoking/Alcohol use	- Remington, Chapters 7, 10
Week 5 Oct. 12, 2022	Oct. 10, no class: Thanksgiving -Diet/Physical activity	- Remington, Chapters 8, 9
Week 6 Oct. 17 & 19, 2022	-Obesity -Midterm exam	- Remington, Chapter 11
Section 3: Selected chronic diseases		
Week 7 Oct. 24 & 26, 2022	-Metabolic issues -Diabetes Dyslipidemia	- Remington, Chapters 12, 14
Oct. 31-Nov. 4 Fall Reading Week		
Week 8 Nov. 7 & 9, 2022	-Hypertension -Cardiovascular disease	- Remington, Chapters 13, 15
Week 9 Nov. 14 & 16, 2022	-Cancer	- Remington, Chapter 16
Week 10 Nov. 21 & 23, 2022	- Mental Disorders	- Remington, Chapter 18
Week 11 Nov. 28 & 30, 2022	- Respiratory Diseases	- Remington, Chapter 17
Week 12 Dec. 5 & 7, 2022	- Musculoskeletal Diseases -wrap up	- Remington, Chapter 20

Assessment	Weight of Final Mark	Due Date
Midterm	20%	October 19, 2022
Group assignment		
Presentation	10%	Varies (After Oct. 24, 2022)
Written report	25%	One week after the presentation
Final Exam	40%	During the exam period (Dec 10-22, 2022)
Attendance	5%	Ongoing

Evaluation and assignments

By **November 9th**, 2022, students will know 20% of their final grade.

Attendance: 5% of the overall grade

Upper year students are expected to follow an active learning approach and contribute to creating a dynamic learning environment. There will be opportunities for in-class constructive discussions and structured activities. Some in-class activities will have follow-up questions and students are expected to submit their work to OWL.

Group Assignment: Presentation 10%; written report 25% of the overall grade

In groups of 6-7 students will be assigned to a specific chronic disease and briefly describe the selected disease and its clinical importance as well as public health significance in Canada. The main components will be the prevalence and incidence of the disease at national and global levels and major variations between demographic (eg. sex, age) or social (eg. Place of residence, income, etc.) groups.

Each group will present their description of the disease in a related section 3 class in 5-7 minutes to a receive peer-evaluation. This can be presented in traditional report format, or via something that is more creative and practical (e.g., an “infographic”, a YouTube video, etc ... creativity is welcomed).

Written report (to be submitted one week after the presentation date) might include additional information such as: Are there sub-populations within Canada that are particularly vulnerable? What are main contextual and individual risk factors for the disease? How do these risk factors affect some Canadian populations? All claims should be supported by reliable evidence such as global and Canadian statistics (PHAC, WHO, ...) and high-quality literature. Teaching team will help students in this process.

Diseases will be assigned randomly but **students are allowed to choose their group members**. Those who do not select a group by Friday September 23, 2022, will be randomly assigned to a vacant spot. Detailed information about this assignment will be provided at the first meeting (September 12, 2022).

Midterm and Final Exams: 20% & 35% of the overall grade

At the end of section 2 (October 19, 2022) an in-class midterm exam will be held. The goal is assessment of understanding topics covered in first two sections before moving to specific chronic diseases.

Final exam will evaluate students’ deep understanding of **ALL** course materials and will be scheduled by the Office of the Registrar during the formal exam period (Dec XX to Dec XX; 2022).

Missed Work

Attendance to all classes is **mandatory**, and it is not possible to provide equal opportunity for all students to make-up the missed classes. **All materials** covered in the classes are **testable**.

Missed Exams

If you are too ill to write a quiz or exam or there are other 'extenuating circumstances beyond your control' you **must** document this either with a medical certificate (if available) or by notifying the instructor in writing (with your signature). If you are ill for an extended period of time, it is your responsibility to contact the instructor immediately on your return to campus.

Only **one** make-up time will be scheduled for missed midterm one week after on **October 26**. **TENTATIVE final examination make-up** dates will be provided when the Final Exam schedule is released in October.

ADDITIONAL STATEMENTS

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, at the following Web site: [Academic Calendar - Western University \(uwo.ca\)](http://www.uwo.ca/academiccalendar/)

Statement on Academic Consideration:

The University recognizes that a student's ability to meet their academic responsibilities may, on occasion, be impaired by extenuating circumstances, including short-term illness or injury. Reasonable academic consideration is a cooperative process between the University, the student, and academic staff. All participants in the process must act in good faith, and fulfil their respective obligations, if it is to succeed.

Students who experience an extenuating circumstance (illness, injury, or other extenuating circumstance) sufficiently significant as to temporarily render them unable to meet academic requirements, may submit a request for academic consideration through the following routes:

- (i) For medical absences, submitting a Student Medical Certificate (SMC) signed by a licensed medical or mental health practitioner, in order to be eligible for Academic Consideration; or
- (ii) For non-medical absences, submitting appropriate documentation (e.g., obituary, police report, accident report, court order, etc.) to academic advising office in their Faculty of registration, in order to be eligible for academic consideration.

Students seeking academic consideration:

- Are advised to consider carefully the implications of postponing tests or midterm exams or delaying handing in work;
- Are encouraged to make appropriate decisions, based on their specific circumstances, recognizing that minor ailments (e.g., upset stomach) or upsets (e.g., argument with a friend) are not normally an appropriate basis for a self-reported absence;
- **Must communicate with their instructors no later than 24 hours** after the end of the period covered by the SMC, or immediately upon their return following a documented absence;

- **Are advised that all necessary documentation, forms, etc. are to be submitted to academic advising office within two business days after the date specified for resuming responsibilities**

Support Services:

There are various support services around campus and these include, but are not limited to:

1. Student Development Centre -- <http://academicsupport.uwo.ca/>
2. Student Health -- <https://www.uwo.ca/health/>
3. Registrar's Office -- <http://www.registrar.uwo.ca/>
4. Ombudsperson Office -- <http://www.uwo.ca/ombuds/>

Health and Wellness:

The undergraduate experience is rewarding and challenging socially, emotionally, and intellectually. Finding ways to balance scholarly life with our personal lives can be tough, but it's important to learn how to manage stress. Western provides several health and wellness-related services to students, which may be found at <http://www.health.uwo.ca/> . You can also check out the Campus Recreation Centre or the McIntosh Gallery (<http://www.mcintoshgallery.ca/>), for alternative spaces to reconnect with your bodies and restore your spirit. You may also want to access local resources that are closer to where you are living during the school year. Recalibrating ourselves emotionally begins with slowing down, reminding ourselves that we are ok, and taking a few deep, slow breaths. This remarkably effective strategy brings the body from stress mode into a more relaxed state.

If you are in emotional or mental distress should refer to Mental Health@Western [Mental Health Support - Health & Wellness - Western University \(uwo.ca\)](http://www.uwo.ca/mentalhealth) for a complete list of options about how to obtain help or Thames Valley Family Services (<https://www.familyserVICETHAMESVALLEY.COM/>), a trusted provider within the community. To help you learn more about mental health, Western has developed an interactive mental health learning module, found here: [Health & Wellness - Western University \(uwo.ca\)](http://www.uwo.ca/healthandwellness). It's also advisable to have a wellness safety plan if you don't want to reach out to formal services. Having the numbers of a few trusted individuals is another strategy.

Grading scheme:

This grading scheme, which is the university-wide scale that has been approved by the Western University Senate will be used in this course. It should also be noted that **I DO NOT ROUND UP MARKS.**

A+	90-100	One could scarcely expect better from a student at this level
A	80-89	Superior work that is clearly above average
B	70-79	Good work, meeting all requirements and eminently satisfactory
C	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable.
F	below 50	Fail

It is expected that the grades for this course will fall **between 74-80%**. In the event that the course average falls outside this range, a constant may be added (or subtracted) from each student's grade, by the instructor, to bring the class average in line with school policy. It is anticipated that the course averages in years 1 through 4 grades will vary and this is the normative breakdown of average grades/year