

The University of Western Ontario  
School of Health Studies  
Health Sciences 3840B  
Introduction to Health Economic Evaluation Methods

Winter 2021

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Time: Online, Asynchronous

**Prerequisite Checking**

*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*

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**Course Information**

This course will introduce basic concepts in methods for the economic evaluation of health interventions, and discuss how they are used to assess “value for money” in health care. Students will learn how to recognize and interpret health economic studies in the literature and develop skills to critically appraise economic evaluations. No prior background in economics is required.

The learning objectives of this course are to:

- Understand the role of economic evaluations in the process of health care resource allocation and health policy making;
- Identify components necessary to conduct an economic evaluation;
- Identify different types of economic evaluations and when to use them;
- Recognize the strengths and weaknesses of existing evidence in the medical literature (critical appraisal)

## **Course Materials**

Required Textbook: M. F. Drummond et al. Methods for the Economic Evaluation of Health Care Programmes. 4<sup>th</sup> Edition. Oxford University Press.

Additional readings may be posted on the course OWL website throughout the term.

## **Evaluation**

### *Quizzes (15%)*

There will be five weekly quizzes throughout the term, consisting of multiple choice questions based on material from lecture and assigned readings of the previous week. Quizzes will be written on OWL. Each quiz will have 5 questions and you will have 10 minutes to complete the quiz.

### *Midterm Exam (35%)*

The midterm will consist of approximately 40 questions and the format will be a combination of multiple choice and short answer. Questions will evaluate your understanding of the course material and ability to apply the concepts to different contexts.

### *Group Assignment (50%)*

*Presentation (10%); Peer Evaluation (5%); Final Paper (35%)*

In groups of approximately 4 students (depending on course enrollment), you will be responsible for developing a research proposal for an economic evaluation in your choice of clinical area or healthcare field of interest. Each group will prepare a 10-15 minute presentation to the class, and every student will be required to complete a peer evaluation for each presentation. Detailed instructions will be provided on OWL. An electronic submission of the final paper must be uploaded to the course OWL site on Friday April 9<sup>th</sup>. Late submissions will be deducted 20% each day. A mark of zero will be assigned to papers not received by April 15<sup>th</sup>.

*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*

## Course Schedule

This course will consist primarily of online lectures, student-facilitated virtual presentations, and online learning exercises. The following is a tentative timetable of class topics, which is subject to modification.

<b>Date</b>	<b>Topic</b>	<b>Assigned Readings</b>	<b>Online Quiz Due</b>
Week 1	Introduction & Course Overview Types of Economic Evaluation	Eddy DM. The individual vs. society. Is there a conflict? <i>Journal of the American Medical Association</i> . 1991; 265:1446  Chapter 1 and Chapter 2 pp 19-27 (up to the end of section 2.3.6)	
Week 2	Quiz 1 Measuring Healthcare Costs	Drummond Text: Chapter 7	January 22, 2021
Week 3	Quiz 2 Measuring Healthcare Outcomes	Chapter 5: pp123-127  Drummond Text: Chapter 2	January 29, 2021
Week 4	Quiz 3 Cost Effectiveness Analysis & Cost Utility Analysis	Reading posted in Owl  Chapter 5, pp127-170; Chapter 8, pp274-282	February 5, 2021
Week 5	Midterm Exam		February 12, 2021
Week 6	Reading Week (No Class)		
Week 7	Economic evaluation alongside clinical trials	Chapter 8, pp267-293	February 26, 2021
Week 8	Quiz 4 Economic evaluation using a decision model	Drummond Text: Chapter 9	March 5, 2021
Week 9	Quiz 5 Analysis and Interpretation of		March 12, 2021

	Results; Critical Appraisal of Economic Evaluations	Drummond: Chapter 3	
Week 10	Group Presentations		
Week 11	Group Presentations		
Week 12	Group Presentations		

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### **ADDITIONAL STATEMENTS**

#### **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.***

#### **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: [http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf)

#### **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) Submitting a Self-Reported Absence form, provided that the conditions for submission are met;

- (ii) 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
- (iii) For non-medical absences, submitting appropriate documentation (e.g., obituary, police report, accident report, court order, etc.) to Academic Counselling 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 either the self-reported absence or SMC, or immediately upon their return following a documented absence;
- **Are advised that all necessary documentation, forms, etc. are to be submitted to academic counselling within two business days after the date specified for resuming responsibilities**

Students who experience an unexpected illness or injury or an extenuating circumstance (48 hours or less) that is sufficiently severe as to temporarily render them unable to meet academic requirements (e.g., attending lectures or labs, writing tests or midterm exams, completing and submitting assignments, participating in presentations) should self-declare using the online Self-Reported Absence portal. This option should be used in situations where the student expects to resume academic responsibilities within 48 hours or less. The following conditions are in place for self-reporting of medical or extenuating circumstances:

- a. Students will be allowed a maximum of two self-reported absences between September and April, and one self-reported absence between May and August;
- b. The duration of the excused absence will be for a maximum of 48 hours from the time the Self-Reported Absence form is completed through the online portal, or from 8:30am the following morning if the form is submitted after 4:30pm;
- c. The duration of the excused absence will terminate prior to the end of the 48 hour period, should the student undertake significant academic responsibilities (e.g., write a test, submit a paper) during that time;
- d. The duration of an excused absence will terminate at 8:30am on the day following the last day of classes each semester, regardless of how many days of absence have elapsed;
- e. Self-reported absences will not be allowed for scheduled final examinations; for midterm examinations scheduled during the December examination period; or for final lab examinations (i.e., “bellringers”);

- f. Self-reporting may not be used for assessments (e.g., midterm exams, tests, reports, presentations, or essays) worth more than 30% of any given course;

Students must be in touch with their instructors no later than 24 hours after the end of the period covered by the Self-Reported Absence form, to clarify how they will be expected to fulfil the academic expectations they may have missed.

### **Support Services**

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

1. Student Development Centre -- <http://www.sdc.uwo.ca/ssd/>
2. Student Health -- <http://www.shs.uwo.ca/student/studenthealthservices.html>
3. Registrar's Office -- <http://www.registrar.uwo.ca/>
4. Ombuds Office -- <http://www.uwo.ca/ombuds/>

### **Health and Wellness:**

As part of a successful undergraduate experience at Western, we encourage you to make your 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 receive membership in Western's Campus Recreation Centre as part of their registration fees. Numerous cultural events are offered throughout the year. Please check out the Faculty of Music web page (<http://www.music.uwo.ca/>), or the McIntosh Gallery (<http://mcintoshgallery.ca/>). Further information regarding health and wellness-related services available to students may be found at <http://www.health.uwo.ca/>.

If you are in emotional or mental distress, please visit Western Psychological Services (<https://www.uwo.ca/health/psych>) for a list of options for obtaining help. To help you learn more about mental health, Western has developed an interactive mental health learning module, found here: <https://uwo.ca/health/wec/education/learning.html>.

### **The university-wide descriptor of the meaning of letter grades, as approved by Senate:**

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 74-78. 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.