Course Information

Pre-requisite: Epidemiology 9572Q or equivalent

Unless you have either the requisites for this course or written special permission from the Undergraduate Chair to enrol, 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.

Students are expected to be comfortable with the materials covered in the Introductory Health Economics course.

Course Syllabus

This course will provide students with a theoretical foundation of cost-effectiveness analysis and empirical methods to evaluate health interventions from an economics perspective. Emphasis will be placed on the methods to evaluate health programs, policies, and interventions arising in the field of health economics evaluation. The topics to be covered include cost-effectiveness analysis,
cost-utility analysis, cost-benefit analysis, identification, measurement and valuation of health care costs. Students will learn to analysis person-level data using the R software package.

**Learning Outcomes:**

By the end of this course, students will be able to:
- Define cost-minimization, cost-effectiveness, cost-benefit and cost-utility analyses and identify the strengths and weaknesses of each approach;
- Perform all types of economic evaluation accounting for key factors such as perspective, time horizon and discounting;
- Calculate incremental cost-effectiveness ratios and interpret the meaning;
- Critically appraise published literature on health economic evaluations; and
- Conduct analysis of person-level data using the R software package.

**Topics**

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<tr>
<th>Session</th>
<th>Dates</th>
<th>Topic</th>
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<tr>
<td>1</td>
<td>January 9</td>
<td>Overview and Introduction to Economic Evaluation</td>
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<td>Cost Analysis: Part I</td>
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<td>2</td>
<td>January 16</td>
<td>Cost Analysis: Part II</td>
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<td>Cost-Effectiveness Analysis</td>
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<td>3</td>
<td>January 23</td>
<td>Cost-Utility Analysis</td>
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<td>Interpreting the ICUR</td>
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<td>4</td>
<td>January 30</td>
<td>Analysis of Costs and Data Sources</td>
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<td>Economic Evaluation Using Patient-Level Data and Uncertainty</td>
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<td>5</td>
<td>February 6</td>
<td>Cost-Benefit Analysis</td>
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<td>Canadian and International Cost Sources</td>
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<td>6</td>
<td>February 13</td>
<td>Final Exam</td>
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**Course Materials**

Textbook:

The textbook will be supplemented by selected materials from books, journal articles and handouts.

Useful Text:


**Methods of Evaluation**

A. Assignment 1 (30%)
B. Assignment 2 (30%)
C. Final Exam (40%)

Note that:
1. If you miss an assignment, project or exam without a valid documented reason (medical or bereavement), you will be assigned a grade of 0% for that part.
2. For the final exam, students will be allowed to use a calculator and a one-page self prepared double-sided formula sheet, but will not be allowed internet excess, phones or computers.

**Policy on Accommodation for Medical and Non-Medical Absences**

For assignments worth 10% or more, refer to Western University’s Policy on Accommodation for Medical Illness: [https://studentservices.uwo.ca/secure/index.cfm](https://studentservices.uwo.ca/secure/index.cfm).

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 by the instructor for either medical or non-medical academic accommodation, then such documentation must be submitted by the student directly to the appropriate Faculty Dean’s office and not to the instructor. It will be the Dean’s office that will determine if accommodation is warranted.

**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: [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)
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/

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. Campus mental health resources may be found at http://www.health.uwo.ca/mental_health/resources.html

To help you learn more about mental health, Western has developed an interactive mental health learning module, found here: http://www.health.uwo.ca/mental_health/module.html. This module is 30 minutes in length and provides participants with a basic understanding of mental health issues and of available campus and community resources. Topics include stress, anxiety, depression, suicide and eating disorders. After successful completion of the module, participants receive a certificate confirming their participation.

Department & Faculty Offices

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

Technology Requirements

Students are responsible for all materials and announcements posted to the course OWL website. Please ensure after the first class that when you log in you are able to access the course site. A copy of the course outline will be available on both OWL and the departmental website.