

**Cost-Benefit Analysis
Economics 2184B-001
Department of Economics
Western University**

January 2023

Instructor: Sunghoon Cho

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Office Hours: M/W 1:30 – 2:30 pm

Delivery mode: In-person

Meeting time(s) and location: Tue 3:30 – 4:30 pm, SSC2036

Thu 3:30 – 5:30 pm, SSC2036

Course website: <https://owl.uwo.ca/portal>

Undergraduate inquiries: 519-661-3507 or SSC Room 4075 or econugrd@uwo.ca

Registration:

You are responsible for ensuring you are registered in the correct courses. If you are not registered in this course, the Department will not release any of your marks until your registration is corrected. You may check your timetable by using the Login on the Student Services website at <https://student.uwo.ca>. If you notice a problem, please contact your home Faculty Academic Counsellor immediately.

Prerequisite Note:

The prerequisite for this course is **Economics 2151A/B**.

You are responsible for ensuring that you have successfully completed all course prerequisites, and that you have not taken any anti-requisite courses. Lack of prerequisites may not be used as a basis for appeal. If you are found to be ineligible for a course, you may be removed from it at any time and you will receive no adjustment to your fees. This decision cannot be appealed.

If you find that you do not have the course prerequisites, it is in your best interest to drop the course well before the end of the add/drop period. Your prompt attention to this matter will not only help protect your academic record but will ensure that spaces become available for students who require the course in question for graduation.

Technical Requirements

- Laptop or computer
- Stable internet connection
- Microphone (for virtual office hours and possible online exams)
- Webcam (for virtual office hours and possible online exams)

Course Objectives:

The purpose of cost-benefit analysis (CBA) is to help in public sector decision making – to determine whether proposed public projects and policies will ultimately benefit or disadvantage society. Most economists view this area as applied welfare economics, and this course is designed to acquaint students with this area of economics. CBA is a normative tool used to describe how decisions *should be* made. As such, it is not a description of how political and bureaucratic decision makers *actually make* decisions. Basic concepts and methods will be fully integrated with illustrations and practical examples in order to effectively convey the essential tools of CBA.

Course Learning Outcomes:

Upon successful completion of the course,

- Students will be able to explain how to use microeconomic theory to assess social costs and benefits in cost-benefit analysis.
- Students will learn how to analyze problems of social choice using cost-benefit analysis.
- Students will be able to apply discounting methods for intertemporal comparisons of social costs and benefits.
- Students will be able to understand the meaning of an efficient distribution of resources.
- Students will learn how cost-benefit analysis can contribute to, as well as provide a useful vehicle for, understanding the practical value of welfare economics.
- Students will be able to understand the concept of market failure and the efficiency justification for government intervention.
- Students will be able to identify the distributional consequences of changes in social surplus that result when new policies, programs, or projects are implemented.
- Students will learn about the main problems that arise in a typical cost-benefit exercise, including double-counting and the monetization of intangibles.
- Students will understand the importance of accounting for the efficiency impacts of taxes on government inflows and outflows.
- Students will be able to analyze the impact of uncertainty on cost-benefit analysis.
- Students will be able to use cost-benefit analysis as a normative tool to formulate economic advice and evaluate government policy.

Textbook(s):

A.E. Boardman, D.H. Greenberg, A.R. Vining, and D.L. Weimer, *Cost-Benefit Analysis: Concepts and Practice*, 5th Edition, Cambridge University Press, 2018.

Bookstore link: [Textbook Search | The Book Store at Western \(uwo.ca\)](#)

Assessments and Grading:

The course grade will be based on a midterm exam and a final exam. All of the exam questions will be multiple choices. The material for all exams consists of the topics covered in the textbook

as well as issues covered in the lectures. The distribution of the marks and tentative date for the exams are:

Assessment	Weight	Location	Length	Date	Time
Midterm	40%	TBA	120 minutes	Sat, Mar 4 th	10:00 am - 12:00 pm
Final Exam	60%	TBA	120 minutes	TBA	TBA

All times are ET. All dates and times are tentative and subject to change. Note that in the event that classes move to an online status, the assessment dates, times, and choices may change.

Students with conflicts in schedule with the midterms (other exams, religious reasons, varsity sports etc.) will be given make-up exams conditional on approval by the academic counseling office in advance. For all other approved absences, including medical and compassionate reasons, the weight of the missed midterm will be transferred to the final exam weight. Students who have an approved absence from the final exam will be given a make-up for the final exam. The make-up exams may differ in length and format from the original ones. The make-up final exam may include essay format.

Topics/Chapters:

Part I: Introduction to Cost-Benefit Analysis

Ch 1: Introduction to Cost-Benefit Analysis

Ch 2: Conceptual Foundations of Cost-Benefit Analysis

Part II: Microeconomic Foundations of Cost-Benefit Analysis

Ch 3: Microeconomic Foundations of Cost-Benefit Analysis

Part III: Valuing Benefits and Costs in Primary and Secondary Markets

Ch 5: Valuing Impacts in Output Markets

Ch 6: Valuing Impacts in Input Markets

Ch 7: Valuing Impacts in Secondary Markets

Part IV: Discounting, Compounding, and Dealing with Uncertainty

Ch 9: Discounting Future Impacts and Handling Inflation

Ch 10: The Social Discount Rate

Ch 11: Dealing with Uncertainty: Expected Values, Sensitivity Analysis, and the Value of Information

*Part V: Techniques for Valuing Benefits and Costs

Ch 13: Existence Value

Ch 4: Valuing Impacts from Observed Behavior: Direct Estimation of Demand Schedules

Ch 15: Valuing Impacts from Observed Behavior: Indirect Market Methods

Ch 16: Contingent Valuation: Using Surveys to Elicit Information about Costs and Benefits

Ch 17: Shadow Prices from Secondary Sources

*If time permits

Email and Communication Policy

Students must use their uwo email address when emailing the instructor so it does not end up in spam and can be verified. **Subject line must include course and section number and should include the topic of the email.** Emails need to be respectful and concise listing your issues, what you have done to solve it, and what you hope the faculty member can help you with.

All course changes and updates will be communicated via the OWL course website, so please check the website frequently.

Professionalism, Privacy and Copyright:

- Students are expected to follow the [Student Code of Conduct](#).
- All lectures and course materials, including slides, presentations, outlines, and similar materials, are protected by **copyright**. Students may take notes and make copies of course materials for their own educational purposes only.
- Students may not record lectures, reproduce (or allow others to reproduce), post or distribute lecture notes, assessments, or any other course materials publicly and/or for commercial purposes without written consent of the instructor.
- Recordings (audio or video) are not permitted without explicit, written permission of the instructor. Permitted recordings may not be distributed or shared.

Please Note
Department & University Policies for Winter 2023

The University expects all students to take responsibility for their own Academic Programs. Students should also check their registration to ensure they are enrolled in the correct courses.

1. **Guidelines, policies, and your academic rights and responsibilities** are posted online in the current Western Academic Calendar at: <http://westerncalendar.uwo.ca>. Claiming that “you didn’t know what to do” is not an acceptable excuse for not following the stated policies and procedures.

2. Students must familiarize themselves with the “**Rules of Conduct for Examinations**” http://www.uwo.ca/univsec/pdf/academic_policies/exam/administration.pdf.

3. **Cheating as an academic offence:** Students are responsible for understanding what it means to “cheat.” The Department of Economics treats cheating incidents very seriously and will investigate any suspect behavior. Students found guilty will incur penalties that could include a failing grade or being barred from future registration in other Economics courses or programs. The University may impose further penalties such as suspension or expulsion.

4. **Plagiarism:** Students must write their essays and assignments in their own words. When taking an idea/passage from another author, it must be acknowledged with quotation marks where appropriate and referenced with footnotes or citations. Plagiarism is an academic offence (see Scholastic Discipline for Undergraduate Students in the Western Calendar at http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_20).

Western University uses software to check for plagiarism and students may be required to electronically submit their work. Those found guilty will be penalized as noted in point 3.

5. It is a Department of Economics policy that **NO** assignments be dated, stamped, or accepted by staff. Students must submit assignments to the instructor.

6. **Appeals:** University policies and procedures for appealing a mark can be found in the Student Academic Appeals section in the current Western Academic Calendar at: http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_14. **Please note the relevant deadlines.**

Department of Economics procedures for appealing a mark can be found here: https://economics.uwo.ca/undergraduate/program_counselling/responsibilities_policies.html#appeals. The Department will not consider an appeal unless an attempt has been made to settle the matter with the instructor first. Students who remain dissatisfied with the outcome may proceed to submit an appeal to econugrd@uwo.ca. Please follow the instructions and use the appeal form shown in the above link.

7. **Systematic adjustments of a class grade distribution** (either up or down) can occur in Economics courses. The fact that grades have been adjusted is **not** grounds for an appeal.

8. Note the following **add and drop deadlines**:

- Deadline to add a second term half course: **Tuesday, January 17, 2023**
- Deadline to drop a second term half course: **Tuesday, March 7, 2023**

Policy Regarding Makeup Tests and Final Examinations

Faculty of Social Science policy states that oversleeping or misreading an exam schedule is NOT grounds for a makeup. This rule applies to midterm and final exams in the Department of Economics.

Policies Regarding Academic Accommodation

- Academic accommodation will not be granted automatically on request. Students must demonstrate by documentation that there are compelling medical or compassionate grounds before academic accommodation will be considered. The Faculty of Social Science's policies on academic accommodation are found at https://counselling.ssc.uwo.ca/procedures/academic_consideration.html
- **Accommodation for Students with Disabilities:** Students with disabilities or accessibility challenges should work with Accessible Education (formerly SSD, see http://academicsupport.uwo.ca/accessible_education/index.html), which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: [Academic Accommodation for Students with Disabilities](#).
- **Rewriting Exams and Retroactive Reweighting are NOT Permitted:** Students who proceed to write a test or examination must be prepared to accept the mark. Rewriting tests or examinations, or retroactive reweighting of marks, is **not** permitted. Students must also book travel arrangements AFTER final exam dates have been posted as they must not conflict with tests or final exams.
- Unless medically incapable of doing so, students must notify their instructor prior to the test date or at least within **24 hours** when requesting a makeup exam. Failure to follow this procedure may result in denial of academic accommodation and a grade of zero. Students should also set up an appointment as soon as possible to meet with their instructor. If the instructor is not available, send an email message to the instructor, copying the Undergraduate Coordinator at econugrd@uwo.ca. **Notifying instructors of a missed exam does not automatically entitle students to a makeup.**

- For medical illnesses, students may consult Student Health Services and request a Student Medical Certificate from the physician. If assessed by an off-campus doctor, students must obtain a certificate from his/her office at the time of the visit/assessment. Student Medical Certificate (SMC) is available here:

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

- **Documentation for Accommodation:** Individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds or for other reasons.
- **Western University policy on Consideration for Student Absence** is available here: https://counselling.ssc.uwo.ca/procedures/probation_rtw/appeals.html
- **Religious Accommodation:** Students should consult the University's list of recognized religious holidays and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the [Western Multicultural Calendar](#).

Policy Regarding Class Attendance and Engagement:

If the instructor deems a student's attendance or engagement in the class to be unsatisfactory, that student may be prohibited from writing the final examination. Examples of unsatisfactory class engagement include frequent absences from an in-person or synchronous online class, lack of assignment submissions, and inadequate use of online course materials. Instructors who intend to make use of this policy will notify the student in advance.

Statement on Mental Health and Support Services:

Students under emotional/mental distress should visit http://uwo.ca/health/mental_wellbeing/ for more information and a complete list of resources on how to obtain help.

Statement on Remote Proctoring:

While Western intends to hold most classes, mid-terms, and finals in person, the London-Middlesex Health unity may require western to teach in a remote format. If this occurs, all assessments will be done remotely and may involve the use of remote proctoring software (i.e., Proctorio, ProctorTrack). Instructors will provide information on the details should the need arise.