

COST-BENEFIT ANALYSIS
ECONOMICS 2184B-001
Department of Economics
Western University

January 2019

General Information:

Instructor: I. Trela
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E-mail: itrela@uwo.ca
Classroom meeting time(s) and location: T 3:30-4:30; Th 3:30-5:30, SSC 2032
Office Hours: M 12:30-1:30, W 2:30-3:30 or any time my office door is open
Course website: <https://owl.uwo.ca/portal>
Undergraduate inquiries: 519-661-3507 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 a 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.
Prerequisite(s) for your course found at: <http://westerncalendar.uwo.ca/2017/pg904.html>

You are responsible for ensuring that you have successfully completed all course prerequisites, and that you have not taken an anti-requisite course. Lack of pre-requisites 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.

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. For exams, students will be required to not only understand the theory of CBA, but also how to apply it to analyze independent cases.

Course Learning Outcomes:

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:

A.E. Boardman, D.H. Greenberg, A.R. Vining, and D.L. Weimer, *Cost-Benefit Analysis: Concepts and Practice*, 4th Edition, Prentice Hall, 2011.

The textbook is also available as a **Pearson E-Text**, which you can order through the campus book store.

The textbook is also available on 2 hr reserve at D.B. Weldon Library.

Course Website:

<http://owl.uwo.ca> : this site gives you access to lecture notes, homework questions, review questions, and announcements (i.e. assignment due dates, class cancellations, final exam information, and other announcements). The lecture notes posted on the course website are supplementary material and should not be regarded as a substitute for lectures. There will be a significant amount of additional material covered in class that is NOT in the posted lecture notes. Students are reminded that all class material (including posted lecture notes and additional material covered in class that is not in the posted lecture notes), homework questions and review questions will be subject to examination.

Grading:

Midterm*	Scheduled for Thursday, February 28, 7-9pm	40%
Final Exam*	To be announced by the Registrar's Office	60%

* The midterm and final exams will each be 2 hours in length and in multiple choice format. Questions will be a mix of theory questions (in multiple choice format), true and false statements (in multiple choice format), problems (in multiple choice format), and questions based on information presented in graphs (in multiple choice format). Students will know the result of their midterm grade by Sunday March 4th in order to make a decision regarding dropping the course by the drop deadline.

Note: 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.

Note: Use of electronic devices (cell phones, iPods, iPads, laptops, etc) and dictionaries are not allowed during exams; electronic devices caught in a student's possession or on will be taken as an attempt to cheat. Students are also banned from wearing or having on their desk any kind of wristwatch/timepiece during exams (time will be displayed on either a wall clock, board or projector). During exams students may use only a non-programmable/non-graphing calculator (but lids/covers must be removed).

Missed Exam Policy:

Makeups will be granted **with approved documentation only**. Please follow these procedural instructions:

- If you have a conflict with one of the exam dates, you must seek approval from your Faculty's Academic Counselling Office for accommodation and notify me **at least one week before** the regularly scheduled exam so that I can schedule you for a makeup exam.
- If you **miss an exam** due to illness or other extenuating circumstances, you must notify me of your absence **within 24 hours of the start-time of the missed exam** and provide documentation to your Faculty's Academic Counselling Office. If you miss an exam for medical reasons, you should visit a doctor to obtain documentation of your illness (I strongly urge you to do this **the day of the missed exam**) and, when you are well enough, fill in the Student Medical Certificate form https://studentservices.uwo.ca/secure/medical_document.pdf and return it to your Faculty's Academic Counseling Office. If your Academic Counsellor and I agree that your reason for missing the exam is legitimate and supported by your documentation, you will be allowed to write a makeup exam.

Note: Make-up exams will be in the same format as the regularly scheduled exam.

Course Outline:

- I. Introduction to Cost-Benefit Analysis
Ch. 1, pp. 1-7 (up to, but not including Decide whose benefits and costs count (standing)), 8-15 (up to, but not including Bureaucratic and Political "Lenses")
- II. Microeconomic Foundations of Cost-Benefit Analysis
Ch. 3, pp. 1-61 (up to, but not including Profits and Factor Surplus), 62-65
- III. Valuing Benefits and Costs in Primary and Secondary Markets
Ch. 4, pp. 78-89 (up to, but not including Information Asymmetry), 91-97 (up to, but not including Intrapersonal Externalities: Consumption under Addiction), 99-108 (up to, but not including Purchases from a Monopoly)
Ch. 5, pp. 115-123, 126-129

IV. Discounting, Compounding and Dealing with Uncertainty

Ch. 6, pp. 133-141 (up to, but not including Continuous Compounding), 142-145 (up to, but not including Problems with Indices Based on Consumer Prices), 147-148 (up to, but not including Estimates of Expected Inflation), 149-151 (up to, but not including Relative Price Changes), 152-155 (up to, but not including Reprise of Horizon Values)

Ch. 6 Appendix, pp. 159-162

Ch. 10, pp. 238-242 (up to *and including* the first paragraph of Equality of Discount Rates in Perfect Markets), pp. 249-251 (up to, but not including Numerical Values of r_z), pp. 254-255

Ch. 7, pp. 167-177

V. Techniques for Valuing Benefits and Costs

Ch. 9, pp. 224-231

Ch. 13, pp. 320-332 (but not all the material will be covered)

Ch. 14, pp. 341-365 (but not all the material will be covered)

Ch. 15, pp. 372-393 (but not all the material will be covered)

Ch. 16, pp. 406-437 (but not all the material will be covered)

Please Note

Department Policies for 2018-2019

Remember that 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 and policies for the Faculty of Social Science and the Department of Economics are posted online in the current Western Academic Calendar at: <http://westerncalendar.uwo.ca>.
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 a notation on an official academic transcript, 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&SelecteCalendar=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 in class or to the instructor during office hours.
6. When appealing a mark, students should refer to the Student Academic Appeals section in the current Western Academic Calendar at: http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelecteCalendar=Live&ArchiveID=#Page_14
Please note the relevant deadlines.

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 with a written appeal (e-mails are not acceptable) to the Undergraduate Director in Economics, stating the reasons for their appeal. A checklist is provided at: http://economics.uwo.ca/undergraduate/program_counselling/responsibilities_policies.html#appeals.

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:
Deadline to drop a second term half course:

Tuesday January 15, 2019
Thursday March 7, 2019

9. 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.

Policy Regarding Makeup Tests and Final Examinations

*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.*

Students who proceed to write a test or examination must be prepared to accept the mark. Rewriting tests or examinations, or having their value reweighted on a retroactive basis, is **not** permitted. Students must also book travel arrangements **AFTER** final exam dates have been posted as they must not conflict with test 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, copying the Undergraduate Coordinator at econugrd@uwo.ca. **Notifying instructors of a missed exam does not automatically entitle students to a makeup.**

Students who seek a makeup exam must also provide supporting medical or other relevant documentation that their absence from a scheduled test or exam is beyond their control. Documentation should be submitted to the Academic Counselling Office of the student's *home* Faculty **as soon as possible (preferably within 24 hours of the scheduled test)**. Failure to follow this procedure may result in denial of academic accommodation and a grade of zero. If the documentation submitted is not acceptable, students will receive a zero for the missed test.

For personal illness, 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. The off-campus medical certificate form must also be used and can be found at: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

Notes stating "For Medical Reasons" are not considered sufficient.

For religious or compassionate circumstances, students should ask their Academic Counsellor what documentation to provide. If documentation is judged sufficient, the Academic Counsellor will issue a Recommendation for a Special Examination (a single form for midterms or a triple-color form for final exams). Once students have this form, they must contact their instructor as soon as possible to make arrangements. Even if approved by their Academic Counsellor, there is no guarantee that students will be allowed to write the makeup test/exam.

For final examinations, students need to seek permission from their *home* Faculty Counsellor, Instructor, and the Department Undergraduate Director. Failure to follow this procedure may result in a grade of zero. Students must ensure that the Special Examination form has been signed by the Instructor and Department Undergraduate Director and that the form is returned to the Academic Counselling Office for approval without delay. If approved, makeup examinations will be written within one month of the end of the exam period.

Policies Regarding Academic Accommodation

The Faculty of Social Science's policies regarding academic accommodation is found at http://counselling.ssc.uwo.ca/procedures/having_problems/index.html.

"Academic Rights and Responsibilities" are also outlined in the Western Calendar at <http://westerncalendar.uwo.ca/PolicyPages.cfm?PolicyCategoryID=1&command=showCategory&SelectedCalendar=Live&ArchiveID=>. Claiming that "you didn't know what to do" is not an acceptable excuse for not following the stated procedures.

Policy Regarding Class Attendance

If the instructor deems a student's class attendance as unsatisfactory, that student may be prohibited from writing the final examination. If there is intent to make use of this University policy, the student will be notified in writing.

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.