

University of Illinois at Urbana-Champaign  
College of Liberal Arts & Sciences  
Department of Economics  
Fall 2018

## **ECON 417: Cost-Benefit Analysis**

### **Section A3**

**Instructor:** Yi Huang

**Office Room:** DKH 15

**Email:** yihuang4@illinois.edu

**Lecture location:** DKH 113

**Lecture time:** Tue Thu 11:00-12:20

**Office hours:** Sign up at <https://calendly.com/yihuang4>

### **Description**

We will examine (1) the role, underlying principles, and practice of cost-benefit analysis as a tool for public-sector project evaluation; (2) techniques used to value non-market goods; and (3) alternative methods of project evaluation, such as cost-effectiveness analysis. We will consider a wide range of applications of cost-benefit analysis.

Prerequisite: ECON 302.

### **Course Textbook**

The **suggested textbook** for the course is "Cost-Benefit Analysis: Concepts and Practice," by Anthony E. Boardman, David H. Greenberg, Aidan R. Vining and David L Weimer, 5<sup>th</sup> edition, Cambridge University Press, 2018.

### **Grading**

Evaluation will be as follows:

Assignments	20%	
Class Participation	5%	
Midterm Exam 1	20%	In-class on Tuesday October 2 <sup>nd</sup>
Midterm Exam 2	20%	In-class on Tuesday November 13 <sup>th</sup>
Final Exam	35%	

### **Assignments**

You will have 4 assignments during the term, with each containing 3 questions. Each assignment will be worth 5% of the course grade and will be graded out of 30 marks. Marks will be awarded for effort, accuracy, and presentation.

Assignments can be complete either individually or in groups of 2 or 3 students. If you work in a group, your group must submit only one set of solutions with the names and NetIDs of all group members clearly indicated on the cover page.

Assignments are due at the start of lecture. **No late assignments will be accepted.** If you have a documented medical or family emergency that causes you to miss 1 or more assignments, the other assignments will be weighted up to compensate.

## **Class Participation**

You will have 5 in-class quick quizzes during the term. The 5 quick quizzes taken together will be worth 5% of the course grade as class participation. You will not know ahead of time when you will write the quizzes and each quiz will be related to concepts learned that week.

## **Exam Policies**

Exams will consist of a combination of true/false, multiple choice, and free response questions. The final exam will cover the entire course and **you must get at least 50% on the final exam to pass the course.**

You must take exams at their scheduled times and locations. If you do not, you will receive a grade of zero. Exceptions will be made only for the medical or family emergency (supported by a formal written documentation such as physician's note specifying the nature of the emergency). If you miss one of the midterm exam due to emergency, your other midterm will count for 40% of your grade. No special accommodations will be made if travel plans conflict with exam dates.

Students cannot take an exam and then drop the exam. Receiving the exam on exam day means that you will receive a grade for that exam.

For each exam, you will be required to bring a Number 2 pencil, calculator, and your student ID Card. You will also be required to know your NetID. No outside materials are permitted which includes, notes and textbooks. Cell phones are not permitted in the exam room. If we see your cell phone, you will be considered to be cheating.

Exam solutions will be posted on course website the day after each exam. All requests for grading corrections must be submitted in class on the day you get back your exam paper, so read the solutions beforehand.

## **Conflict Final Exam**

Students must take the final exam. The Provost prohibits students from taking final exams before the final exam week. The only exception to this is with a Dean-approved excuse.

The conflict exam will be scheduled by the Department of Economics and the time and

date will be announced the final week of class. Students who would like a conflict exam must contact the professor before the last day of classes ([http://studentcode.illinois.edu/article3\\_part2\\_3-201.html](http://studentcode.illinois.edu/article3_part2_3-201.html)). In the event that a student cannot attend the exam or the conflict exam, undergraduate students must obtain the approval of the dean of their college to defer a final examination without receiving a grade of ABS.

Undergraduate students who must miss a final examination should report this fact to the dean of their college as soon as possible. For satisfactory reasons, students may be "excused" by the dean of their college and be examined later by their instructor (<http://www.las.illinois.edu/faculty/advising/incompletes/>). The date of the deferred exam will be scheduled by the Department of Economics and will be within the first two weeks of the next semester.

## **Course Website**

The course website is an important resource for this course. During the course, you are expected to log on to the site regularly to download slides, assignments and their solutions, as well as other course materials as the class progresses. To access the course website, go to Compass2g, log in using your NetID.

I will post slides for each lecture ahead of time on the course website. Typically, slides for each lecture of the course will be posted at or before 6:00 pm on the day before. Make sure you print a copy of the slides that are posted.

The lecture slides are published as PDF files. If you are using your own computer and have trouble reading the files, please download and install any PDF reader.

## **Attendance**

You are expected to attend all the class meetings according to university policy. While I am not going to take attendance, I reserve the right to issue warnings and to take actions. Naturally, each student is personally responsible for learning the material covered during any class period that is missed.

## **Outline of Topics**

1. Introduction to cost-benefit analysis
2. Conceptual foundations of cost-benefit analysis
3. Rationale for cost-benefit analysis
4. Estimating costs and benefits in primary markets
5. Estimating costs and benefits in secondary markets
6. Valuing the environment and other non-market goods

7. Valuing human life
8. Net present value and related decision criteria
9. The public sector discount rate
10. Dealing with risk and uncertainty
11. Cost-effectiveness analysis

## **Laptop Use**

Students are allowed to use laptops in class.

## **Email Communication**

I will only respond to polite emails that contain an appropriate salutation and that clearly indicate who is sending the email in the body of the email. I will do my best to answer any questions you pose via email within 24 hours, but it is often more efficient to discuss the matter in person during office hours or after class.