ECON 268: The Economics of Cost-Benefit Analysis

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Office Hours: TBD

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Room: TBD

Course Objectives:
The primary goal of this course is to teach you the technical details of economically sound cost-benefit analysis (CBA). In its most basic essence, cost benefit analysis is a means of choosing policies that yield the greatest economic output. At the end of this course you should be prepared to participate in the production of, and discussion surrounding, cost benefit analysis for projects concerning local, state, and federal governments as well as non-profit organizations.

Course Organization:
The beginning of the course is devoted to understanding the important theoretical underpinnings of cost-benefit analysis. The second portion of the course will be spent reading an existing report describing the costs and benefits of various options for reducing greenhouse gas emissions on the Carleton campus. The third portion of the course aims to extend the previously described analysis and conducting Monte Carlo simulations to explore the sensitivity of the model results. The final portion of the course will be devoted to the skills and tools needed to successfully present the results of a cost-benefit analysis.

Expectations:
I expect students to be actively engaged in the course. This means participating in class discussion, doing the assigned readings before class and staying informed of current related issues in the news. Each class students should be prepared to complete a quiz based on the material. I expect students to have a working knowledge of microeconomics at the level of Michael Parkin's textbook *Economics* or Cowen and Tabarrok's *Modern Principles: Microeconomics.*

Textbooks:

> Cost-Benefit Analysis: Concepts and Practice by Anthony Boardman, David Greenberg, Aidan Vining, and David Weimer. Prentice Hall / Pearson. 3rd Edition. 2005. **(BGVW)**

Grading:

Your final grade will be the weighted average for five major categories:

1. **Quizzes – 10%**
2. **Assignments – 20%**
3. **Exams – 30%**
4. **Citizenship – 10%**
5. **Final Project – 30%**

Quizzes – 10%

Students should come to each class prepared to answer a short quiz on the recent material in the class. These quizzes will likely contain one or two questions similar to the questions at the end of the chapters in the BGVW textbook.

Lab Assignments – 20% (2 @ 10% each)

There will be two major lab assignments for the course. Each will be worth 10% of the final grade.

- Does it Make Economic Sense to Buy a Hybrid? (4^{th} Week)
- What is the Effect of Parks of Housing in Northfield? (8^{th} Week)

Exams – 30% (2 @ 15% each)

There will be two in-class exams in the course, each worth 15 percent of the final grade. The exams will contain theoretical as well as application questions. Exams are expected to occur in 5^{th} and 9^{th} week.

Citizenship – 10%

I consider course citizenship to be a vital part of your grade. A few of the characteristics of good class citizens are: attending all course meetings, using office hours, asking questions, offering to answer questions, actively listening when others are talking, and posting to online discussion forums, among others. Citizenship is more a function of quality than quantity. Note that the "default" citizenship score is 5 out of 10, which allows students who actively and productively contribute to class to substantially increase their grade.

Final Project – 30%

The final project for this course will be to extend the cost-benefit analysis of a greenhouse gas reduction strategy for the College. We will work together to find a suitable topic. Intermediate steps include model creation, input generation, sensitivity analysis, and final presentation. The final deliverables will include an oral presentation, a poster presentation, and the generation of a collaborative report for the Carleton community.