

PUBP 4803/8803: Cost Benefit Analysis

TuTh 1:30-2:45 | DM Smith 11 | Fall 2018

Instructor: Emanuele Massetti

Contacts and office hours

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Overview and broad learning objectives

This course provides an introduction to theory and methods used for Cost-Benefit analysis.

How much should Governments spend in public health or in infrastructure? Should the State invest in better schools or in improving road conditions? Should the City provide subsidies to build a new football stadium? How can NGOs prioritize investment in development projects? What is the optimal balance of investments between climate change mitigation and climate change adaptation?

These are all very relevant policy questions that can be addressed using Cost-Benefit analysis. At the end of the semester students will be able to correctly frame a large variety of public policy problems using Cost-Benefit analysis. Students will be able to perform Cost-Benefit assessments of simple projects and they will be able to critically review Cost-Benefit studies.

The course is dividend in three parts. The first part will introduce conceptual foundations of Cost-Benefit analysis. The second part will present the fundamentals of Cost-Benefit Analysis (Microeconomic foundation, discounting future costs and benefits, uncertainty, distributional issues, option price and existence value). The third part (if time permits) will cover methods to value impacts (observation, contingent valuation, shadow prices). Throughout the course case studies will be used to practice Cost-Benefit Analysis.

Key learning objectives

Upon successful completion of the course the student will be able to:

- Master theory of cost-benefit analysis
 - Microeconomic foundations
 - Discounting

- Aggregation of social preferences
- Option value
- The value of information
- The value of a statistical life
- Benefit transfer
- Risk and uncertainty
- Master all the steps to prepare a cost-benefit assessment
 - Estimation of costs
 - Estimation of benefits
 - Choice of discount rate
 - Robustness tests
 - Critical assessment of the limits of the study
- Critically assess advantages and limitations of cost-benefit analysis
 - A critical appraisal of strengths and weaknesses of cost-benefit analysis for public policy

Assessment

- Attendance (10%)
- Homework (5) (20%)
- Midterm exam (30%)
- Final exam (40%)

Grading:

- A: ≥ 90 ; B: between 80 and 89; C: between 70 and 79; D: between 60 and 69; F: below 51.

Class materials

I will follow very closely the following textbook:

Boardman, A., D. Greenberg, A. Vining and D. Weimer (2011). *Cost Benefit Analysis – Concepts and Practice*. Fourth Edition, Pearson.

At the end of each class I will provide lecture notes and slides (if used).

Case studies and additional readings will be assigned to cover applied cost-benefit analysis problems.

I suggest the reading of Sunstein, C (2004). *Risk and Reason*. Cambridge University Press. It provides a general discussion of why cost-benefit analysis should be considered an important guiding principle in public policy.

Participation

Attendance is rewarded with 10% of total points. When students are in class they must be focused: cellphones cannot be used. No web surfing, email, no social networking when using laptops for class activities.

Honor code, disabilities and special arrangements

Compliance with the Georgia Tech Academic Honesty Policy and Honor Code will be strictly enforced in the class. The text of the honor code can be found at: <https://ovpi.uga.edu/academic-honesty>. Please read it.

If you have a documented disability and wish to discuss academic accommodations, please contact me as soon as possible. Please also let me know if you are an athlete with special requirements.

Statement on diversity and inclusion

The Ivan Allen College of Liberal Arts supports the Georgia Institute of Technology's commitment to creating a campus free of discrimination on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status. We further affirm the importance of cultivating an intellectual climate that allows us to better understand the similarities and differences of those who constitute the Georgia Tech community, as well as the necessity of working against inequalities that may also manifest here as they do in broader society.