

Economics 581**Cost Benefit Analysis**

W.E. Diewert Email: diewert@econ.ubc.ca

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Daily problem sets will count for 70% of the course and a midterm for 20% . There will be a final term paper assignment which counts for 10%. This paper will review a cost benefit paper or an applied general equilibrium modelling paper of the student's choice. The term paper could be written as if it were lecture notes to the class, explaining what is important in the paper. The paper will be graded on whether it presents the main ideas in the paper in an analytically sound manner and on its use of English. Ideally, PhD students could add some analytical extensions to the existing analysis. Lecture notes on each topic are available at Diewert's departmental website under Courses: Economics 581. However, Chapters 10-12 have not yet been posted. Not all chapters will be covered. Please note that there are 3 Mathematics for Economists chapters posted as well and it is expected that students know the material in these chapters.

1. Introduction
2. Inequalities
3. Convex Sets and Concave Functions
4. Microeconomic Theory: A Dual Approach
5. General Equilibrium Models: A Dual Approach
6. Consumer Surplus and the Measurement of Ex Post Welfare Change
7. Project Evaluation and Willingness to Pay
8. Nonlinear Programming
9. Measurement of Waste
10. Climate Change and Carbon Taxes
11. Cost Benefit Analysis and Regulation
12. Uncertainty and Risk and the Social Discount Rate

The course is more a course in microeconomic theory rather than a "practical" cost benefit course. In order to learn how practitioners do cost benefit analysis, the following textbooks are recommended:

Boardman, A.E., D.H. Greenberg, A.R. Vining and D.L. Weimer (2006), *Cost-Benefit Analysis: Concepts and Practice*, Third Edition, Upper Saddle River, New Jersey: Pearson Prentice Hall.

Campbell, H. and R. Brown (2003), *Benefit-Cost Analysis: Financial and Economic Appraisal using Spreadsheets*, Cambridge: Cambridge University Press.

Sugden, R. and A. Williams (1978), *The Principles of Practical Cost-Benefit Analysis*, Oxford: Oxford University Press.