

THE UNIVERSITY OF MICHIGAN
School of Public Policy
and
Department of Economics

BENEFIT-COST ANALYSIS

Subject of the Course:

The aim of this course is to teach you how to do benefit-cost analysis. On one level, this is pretty simple: just sum all the benefits of a program, subtract all the costs, and there you are. If net benefits are positive, the program is a winner; if not, not. In choosing among programmatic options, take the one with the highest level of net benefits.

But obviously there are complications. First, it is not always easy to measure benefits and costs -- you have to know some economics and perhaps even some philosophy. Second, benefits and costs can occur at different times, and you have to adjust for that problem. Third, benefits and costs are received and borne by different people, and both the economics and the politics of dealing with distributional issues can get tricky. Fourth, there are many different types of programs for which an aspiring public servant might want to do a benefit-cost analysis. This list goes on, and it will easily fill a semester for us to cover it adequately.

Prerequisite:

SPP/Econ 555 or equivalent

Organization:

The course meets twice a week, Tuesdays and Thursdays, 8:30-10, in room 1309 SEB. The TA, Holly Anderson, and I will also hold regular office hours:

Deardorff	458 Lorch	Mondays, 2:00 - 3:00 PM
		Thursdays, 10:30 - 11:30 AM

Anderson	To be announced
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Also, feel free to call us or e-mail us for an appointment. We may be reached as follows:

Deardorff	764-6817	alandear@umich.edu
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Anderson	913-2441	hbandrsn@umich.edu
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Holly will also hold review sessions on alternate Fridays at a time and place to be announced.

Home Page:

Whenever possible, materials for the course will be posted on the course home page:

<http://www.econ.lsa.umich.edu/~alandear/courses/573/573.html>

Requirements:

Requirements for the course consist of a series of problem sets, a “case exercise,” two in-class mid-term exams, and a term paper. There is no final exam.

The most important requirement for the course is the term paper, in which you will do a benefit-cost analysis on a topic of your choice. This will be done in two parts: a one page outline or prospectus due February 6, and the paper itself of 10-15 pages due on the last day of class, April 22. The paper topic must be approved by me, so come and talk to me about your paper ideas as early in the semester as possible. The paper may be done in groups, limited to 3 persons maximum, but the writing must be your own, and you should be warned that grading will be slightly tougher in this case.

The schedule for the requirements and their contributions to your final grade are as follows:

Problem sets (20%)

#1	Jan. 16	5%
#2	Jan. 23	5%
#3	Feb. 13	5%
#4	Feb. 27	5%

Case Exercise	Mar. 13	20%
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Midterm exam #1	Jan. 30	10%
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Midterm exam #2	Mar. 27	15%
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Term paper (35%)

Prospectus	Feb. 6	5%
Paper	Apr. 22	30%

All of the problems sets, as well as the case exercise, the prospectus and term paper are due at the beginning of class on the stated day. Late assignments will be penalized by one-third of a letter grade per 24 hour period beyond the deadline.

Text:

The textbook for the course is *A Guide to Benefit-Cost Analysis*, 2nd edition, by Edward M. Gramlich, Prentice Hall, 1990. It is available from the usual bookstores around campus. A coursepack containing the supplementary required readings will be available at Dollar Bill Copying, 611 Church St.

COURSE OUTLINE AND READING LIST

I. Principles of Valuation

A. Introduction

Gramlich, Ch. 1, 2, 3

B. Partial Equilibrium

Gramlich, Ch. 4

Porter, Richard C., "Michigan's Experience with Mandatory Deposits on Beverage Containers," *Land Economics*, May 1983

C. General Equilibrium

Gramlich, Ch. 5

Brown, Drusilla K, Alan V. Deardorff, and Robert M. Stern, "A North American Free Trade Agreement: Analytical Issues and a Computational Assessment," *The World Economy*, January 1992, pp. 11-29.

D. Timing and Discount Rates

Gramlich, Ch. 6

U.S. General Accounting Office, "Discount Rate Policy," May 1991

E. Applications

Devaney et al., "Medicaid Costs and Birth Outcomes: The Effects of Prenatal WIC Participation and the Use of Prenatal Care"

Hatziaandreu et al., "A Cost-Effectiveness Analysis of Exercise as a Health Promotion Activity"

Eddy, D., "Screening for Cervical Cancer," *Annals of Health Medicine*, 1990, pp. 214-226.

II. Issues and Complications

A. Distribution

Gramlich, Ch. 7

Johnson, George E. and Gary R. Solon "The Attainment of Pay Equity between the Sexes by Legal Means: An Economic Analysis," *Journal of Law Reform* 20, Fall 1986, pp. 183-207.

B. Physical Investment

Gramlich, Ch. 8

C. Human Investment

Gramlich, Ch. 9

Gramlich, E., "Evaluation of Education Projects: The Case of the Perry Preschool Program," *Economics of Education Review*, 1986.

D. International Considerations

Tarr, David G. and Morris E. Morkre, "The Costs of Voluntary Restraint Agreement on Japanese Automobiles," Chapter 3 in *Aggregate Costs to the United States of Tariffs and Quotas on Imports*, Federal Trade Commission, December 1984, pp. 54-74.

E. Grants and Tax Expenditures

Gramlich, Ch. 10, 11

F. Regulation

Gramlich, Ch. 12

III. Other Perspectives

Aaron, H., "Public Policy, Values, and Consciousness," *Journal of Economic Perspectives*, Spring 1994.

Railton, "Cost-Benefit Analysis as a Source of Information about Welfare"

Sudgen, R., "Welfare, Resources, and Capabilities: A Review of Inequality Reexamined," *Journal of Economic Literature*, December 1993.