CourseNo: PLANA6217_001_2015_1
Meeting Time: T 09:00A-11:00A **Meeting Location:** BUELL HALL 200

Instructor Information:
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Techniques of Project Evaluation

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Course Description

Governments engage in two types of activities. They provide goods and services and they engage in economic development projects that create jobs and a tax base for their communities. The course covers the mains tools for analyzing these two types of government activities.

The tool for determining whether the government should deliver a particular good or service is Cost/Benefit Analysis. This is a method for placing a monetary value on goods such as museums, reduced pollution or saving endangered specie, which are typically not traded in the private market and therefore have no market price that can be used to measure their benefits. Cost/Benefit Analysis also shows how to sum streams of costs and benefits that accrue over different time periods and how to evaluate projects that will yield uncertain benefits, such as a dam that would be useless unless there is a storm. Cost/Benefit Analysis analyzes the consequences of a project to all members of society.

The tools for assessing the value of an economic development project are Location Quotients, Shift-share and Input/Output analysis. Location Quotients are used to identify strength and weaknesses in the industrial structure of a community while Shift-share analysis identifies industries and occupations that are sources of job growth and decline. Input/Output analysis is a technique for predicting the economic impact of an investment by the government in a particular industry.

All methods require statistical analysis of data. The course covers the use and analysis of both government and opinion survey data.

The course has two parts: cost benefit analysis and economic development. Cost benefit analysis deals with the taxpayer as a consumer while economic development, which has become an important function of government, deals with the taxpayer as a worker in need of employment and with businesses as a source of tax revenues.

The text for the first part of the course is *Cost-Benefit Analysis: Concepts and Practice* by Anthony Boardman et al. That part covers methods for estimating the demands for goods that are not traded in the marketplace and for pricing natural risk and health hazards; the use of statistical analysis for the assessment of demonstration projects; the differences between public and private finance and techniques for choosing between projects that are mutually exclusive yet are not comparable. In addition, in the first part of the course we will use statistical packages to analyze demographic and economic data from the American Community Survey and the Current Population Survey. The second part of the course covers the techniques used in economic development. How does a local government choose where to invest? How successful are economic development policies? Statistical data will be used for shift-share, location-quotient and Input/Output analyses and a commercial economic impact software that is widely used by all levels of government will be introduced together with a discussion of its effectiveness.

The course grade will be based on assignments from the book (25%), additional assignments (25%), a midterm (20%), and a final (30%).

I. Introduction

Chapters 1-2

II-III. Consumers' and producers' surpluses

Chapters 3-4

WTP vs. WTA: Horowitz, J.K. and K.E. McConnell (2002). "A Review of WTA/WTP Studies". *Journal of Environmental Economics and Management* 44, 426-47. (Courseworks).

Estimating Demand Curves

Chapter 12, 13

IV-V. Discounting

Chapters 6, 10

Consumer Price Index

Class discussion

VI. Uncertainty

Chapter 7, 165-171 3rd Edition,156-162 2nd Edition.

Chapter 8.

VII. Existence Price: Chapter 9, 14

Pricing of non-traded goods:

Illness: KIp VISCUSI, WESLEY A. MAGAT AND JOEL HUBER, Pricing Environmental Health Risks: Survey Assessments of Risk- Risk and Risk- Dollar Trade-Offs for Chronic Bronchitis JOURNAL OF ENVIRONMENTAL ECONOMICS AND MANAGEMENT 21, 32-51 (1991)

VIII. Midterm

IX. Demonstration Projects: Chapter 11

How big a sample?

Lenth, R. V. (2006-9). Java Applets for Power and Sample Size [Computer software]. http://www.stat.uiowa.edu/~rlenth/Power .

Statistical Testing

Tennessee Student/Teacher ratio study: Alan B. Krueger, "Experimental Estimates of Education Production," The Quarterly Journal of Economics, May 1999, pp. 497-532

Chetty, R., Friedman, J. & Rockoff, J. (2011, December, revised 2012, January). "The Long-Term Impacts of Teachers: Teacher Value-Added and Student Outcomes in Adulthood." National Bureau of Economic Research. *Working Paper No. 17699* .

X. Economic Development I

Michael Greenstone and Enrico Moretti, "BIDDING FOR INDUSTRIAL PLANTS:

DOES WINNING A 'MILLION DOLLAR PLANT' INCREASE WELFARE?" July 2003 http://www.nber.org/papers/W9844

Ryan S. King, Marc Mauer and Tracy Huling, "Big Prisons, Small Towns: Prison Economics in Rural America," February 2003, http://www.sentencingproject.org/pdfs/9037.pdf

Location Quotient and Shift Share Analysis

Mary McLean and Kenneth Voytek, Understanding Your Economy: Using Analysis to Guide Local Strategic Planning: On reserve

XI. Economic Development II

How NYC Can Compete More Effectively in Information Technology Office, of the Comptroller City of New York Alan G. Hevesi, Comptroller April 1999 http://www.comptroller.nyc.gov/bureaus/bud/SOFT46a.pdf

Battelle, "State Government Initiatives in Biotechnology 2001"

http://www.bio.org/tax/battelle.pdf

I/O and Economic Multipliers

I-O Accounts

http://www.bea.gov/bea/an/io1992/maintext.htm

Wayne Miller, "Economic Multipliers: How Communities Can Use them for Planning"

http://www.uaex.edu/Other_Areas/publications/PDF/FSCDD-6.pdf

Cletus Coughlin and Thomas Mandelbaum, A Consumer's Guide to Regional Economic Multipliers

http://research.stlouisfed.org/publications/review/91/01/Consumer_Jan_Feb1991.pdf

How NYC Can Compete More Effectively in Information Technology Office of the Comptroller City of New York Alan G. Hevesi, Comptroller April 1999
http://www.comptroller.nyc.gov/bureaus/bud/SOFT46a.pdf

Battelle, "State Government Initiatives in Biotechnology 2001"

http://www.bio.org/tax/battelle.pdf

XII. The Value of Everything

Chapter 15

Ackerman, Heinzerling: *Priceless*, chapters 4, 9 (on reserve)

XIII. Topics