

**Policy Analysis and Program Evaluation  
Cost Benefit Analysis  
PST 530  
Graduate Program in Public Policy  
UMASS-Dartmouth  
Summer 2008**

6:00 – 9:00 MTuW  
Lib Arts 103

**Instructor:**

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**Course Overview**

This class builds on two other core courses within the Public Policy curriculum (Microeconomics for Public Policy and Statistical Analysis). The aim is to build on the quantitative tools acquired in these classes by using them to do quantitative policy evaluations. In the end this class should equip students to balance the qualitative and quantitative aspects of policy analysis.

Market failures are widespread in societies, resulting in the non provision of some goods and services deemed desirable to society, and the failure of firms to take into account the negative effects of their actions on the society as a whole. In these situations government intervention is deemed necessary. Cost-Benefit Analysis (CBA) is a tool used by government agencies to determine the effectiveness of public works projects. CBA is the application of economic, financial and quantitative reasoning tools to issues of resource allocation in public policy. It identifies, quantifies and aggregates the positives (benefits) and negative (costs) effects associated with a public policy decision.

**Student evaluation**

Grades will be based on performance on problem sets, class presentations, a mid-term and final exam.

Weighing for the final grade is as follows:

Problem Sets	15%	
Mid-term	25%	<b>June 16</b>
Presentations	15%	
Final Exam	40%	<b>June 30</b>

The final 5% of your grade will come from class attendance/participation and/or quizzes that may be given as the need arise.

## **Tentative Course Outline**

### **Introduction:**

Public Goods and Externalities

### **Cost-Benefit Analysis: The Fundamentals**

#### **Reading:**

Harvey Rosen, Public Finance (McGraw-Hill/Irwin) (7<sup>th</sup> ed.), Chapter 11

**Case Studies:** *Bridge over the Tempisque River*

### **Issues in Discounting**

#### **Readings:**

Boardman, Greenberg, Vining, and Weimer (1996), Chapter 6

### **Application of Cost-Benefit Analysis: Transportation**

#### **Readings:**

Benefit-Cost Analysis of the Proposed Monorail Green Line

Benefit-Cost Analysis for the Rock County Airport (JVL) Runaway extension

### **Application of Cost-benefit Analysis: Crime**

#### **Readings:**

Morrison Piehl, Anne, Useem Bert, and DiIulio John J. "Right-Sizing Justice: A Cost-Benefit Analysis of Imprisonment in Three States"

Tara Gray and Kent Olson. "A Cost-Benefit Analysis of Sentencing Decision for Burglars"

Tara Gray, Clark R. Larsen, Peter Haynes, and Kent Olson. "Using Cost-Benefit Analysis To Evaluate Correctional Sentences"

Tara Gray. "Research Note: Using Cost-Benefit Analysis to Measure Rehabilitation and Special Deterrence"

### **Double-counting and Secondary markets**

#### **Readings:**

Boardman, Greenberg, Vining, and Weimer (1996), Chapter 5

### **Dealing with Uncertainty**

#### **Reading:**

Boardman, Greenberg, Vining, and Weimer (1996), Chapter 7

## **Application of Cost-Benefit Analysis: Health**

### **Readings:**

Willingness to Pay as a Measure of Health Benefits by Mohan V. Bala, Josephine A. Mauskopf and Lisa L. Wood.

Benefit-Cost Analysis of Hepatitis B Vaccine Programs for Occupationally Exposed Workers by Josephine A. Mauskopf, et al

Estimating the Costs and Benefits of New Drug Therapies: Atypical Antipsychotic Drugs for Schizophrenia by Josephine A. Mauskopf, et al

## **Application of Cost-Benefit Analysis: Environment**

### **Readings:**

Goodstein, Eban S. Economics and the Environment.

## **The Cost-Benefit Analysis Debate**

- i) Critiques
- ii) Arguments in favour
- iii) Assessing both sides

### **Readings:**

Campan, James. Benefit, Cost and Beyond: The Political Economy of Benefit-Cost Analysis, chapters 3 – 5.