PPA 220B
“Applied Economic Analysis II”
California State University, Sacramento
Spring 2009

Instructor: Bill Leach
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Office Hours: Thursdays, 2:30 to 5:30, and by appointment, 3033 Tahoe Hall
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Class Hours: Thursdays 6:00PM - 8:50PM, Mariposa Hall 1011
January 29 through May 14, 2009
Spring Break, April 2
Final: Policy analysis report due May 21, 7:15pm

SacCT: The course website will contain assigned readings and other materials.
Students can access their grades for each assignment via SacCT.

Synopsis

This course is designed to serve three interrelated purposes.

First, building off of PPA 220A, the course illustrates how to apply microeconomic theory to predict the social consequences of government intervention in a market-oriented economy. We'll consider various options, such as public investment, taxation, and regulation for correcting market failures including public goods, externalities, and monopoly. This course mainly considers prospective analysis — predicting the consequences of proposed policies — rather than evaluating the effectiveness of existing policies.

Second, the course provides classic training in quantitative techniques for policy analysis, focusing on benefit-cost analysis. Students in MPPA programs across the country typically enter graduate school with a wide range of academics backgrounds, work experiences, and varying levels of comfort with quantitative methods. One goal of the course is to help every student in the program develop a basic degree of proficiency and confidence using quantitative methods to inform policy questions. To that end, we'll begin the course by practicing some of the techniques presented in Stokey and Zeckhauser, a classic text in the sense of being not only revered but also quite old. This is an intentional effort to build core, fundamental skills. While learning each technique, we will contemplate its advantages and limitations as well as its proper role in the broader context of public policy and administration.

Third, the course provides students with an opportunity to tie together the concepts learned in 220A and 220B by writing a policy analysis white paper. Students are encouraged to analyze their policy issue from a variety of perspectives, and must include a prospectus for conducting a full-fledged benefit-cost analysis.
Learning Objectives

1. Learn how to analyze, from an economic perspective, how different types of government intervention (e.g. subsidies, taxation, and regulation) can be used to correct various forms of market failure (e.g. public goods, externalities, and monopoly).
2. Develop a basic level of proficiency and confidence using quantitative methods to inform policy questions.
3. Understand the basic theory and techniques for conducting a benefit-cost assessment.
4. Know the limitations of benefit-cost analysis, and know how to integrate the technique into a comprehensive policy analysis.
5. Gain sufficient knowledge to critique an actual benefit-cost analysis, such as one issued by a government agency, think tank, or interest group.

Required Textbooks and Readings

3. Lab manual. Instructions for each lab session will be distributed through SacCT the day before the lab.
4. Additional articles and reports will be distributed via SacCT throughout the course.

Course Format and Main Assignments

1. Labs. For each of the seven weeks that include a lab assignment, we’ll spend the first 60 to 80 minutes in lecture and discussion. The lectures introduce the topic of the week, and provide the background you need (in conjunction with the required readings) to complete the lab. After a 10-minute break, we’ll work on the lab itself. Each lab introduces a quantitative technique for policy analysis that can be carried out using a spreadsheet or other readily available software. The value of each lab comes through learning by doing, each student will have his/her own terminal in the computer lab, and you should try to work through the assignment individually. However, to encourage a cooperative and supportive learning environment, you should seek assistance from the instructor and your classmates as needed. If you complete the computational parts of the lab before 8:50 p.m., you should stay and tutor your classmates until the end of class. It is likely, however, that some of the labs will require that you continue working either after class or at home. In addition to a computational assignment, each lab includes a number of short-answer essay questions that prod you to think about the policy implications of your calculations, and the strengths and limitations of each quantitative technique. Lab assignments are due at the beginning of class the following week. Labs will be graded on a three-point scale: plus, check, minus.

2. Essay assignments and small group discussion. For each of the seven weeks that include an essay assignment, we’ll generally spend the first 60 minutes in lecture. (For the final week of class, the lecture will take the form of a guest presentation). After lecture, we’ll break into six groups of 6-7 students to discuss the assigned readings and to work on in-class exercises. Each week, one student from each group will volunteer to prepare several discussion questions and to lead their small group discussion. All students will have an opportunity to lead one discussion, and doing so earns the privilege of dropping the lowest score among the seven labs and the lowest score among the seven essays. Short essay assignments that reflect on the lecture and discussion topics will be handed out near the end of class. Completed essays are due at the
beginning of class the following week. Essays will be graded on a three-point scale: plus, check, minus.

Exams. Two closed-book, one-hour exams will be given in class on March 12 (week 7) and May 14 (week 15). The second exam will emphasize material covered after the first exam.

Policy analysis report. The capstone assignment is a policy analysis white paper that includes a prospectus for conducting a full-fledged benefit cost analysis. Each student will choose one of the following policy topics:
(a) Building a peripheral canal in the Sacramento San Joaquin Delta (as proposed by Governor Schwarzenegger)
(b) Creating a unified national system for computerizing patients' medical records (as proposed by President Obama)
(c) Retiring the one-cent penny from circulation in the United States (as proposed by various economists and lawmakers)
The report is due at the end of the final exam period for the course.

Grading

Exam 1 10% Closed-book, in-class, March 12
Exam 2 10% Closed-book, in-class, May 14
Lab assignments 30% 7 labs; keep best 6 scores*; each worth 5%
Short essays 30% 7 essays; keep best 6 scores*; each worth 5%
Policy analysis report 20% A policy and BCA prospectus, due May 21, 7:15pm
Lead one small-group discussion *0% (Earns the privilege of dropping lowest lab and essay)

Course Policies

Missed exams. Requests in advance for early or makeup exams will be granted only in extreme circumstances.

Missed classes. Please notify me in advance if you will miss a class. To pass the class, your attendance is required at a minimum of 11 of the 15 class sections; a student who misses more than 4 classes should drop the course. Exceptions will be granted only in extreme circumstances.

Missed deadlines. Late labs and essays will be docked one grade per week (from plus to check, from check to minus, or from minus to no-credit). No more than two assignments will be accepted late. Exceptions will be granted only in extreme circumstances.

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Calendar

Week 1, January 29

Read before class Assignment during class (due 2/5)
S&Z Chapter 1, “Policy Choices” Lab 1. Introduction to spreadsheet models and
S&Z Chapter 3, “The Model of Choice” "Who wants to be a millionaire?"

Week 2, February 5

Read before class Assignment during class (due 2/12)
S&Z Chapter 4, "Difference Equations" Lab 2. Difference equation models.
"Optimal harvest in a fishery."

**Week 3, February 12**

- **Read before class**
  - S&Z Chapter 5, "Simulation"

- **Assignment during class (due 2/19)**
  - Lab 3. Simulation models.
  - "Stochasticity in a fishery."

**Week 4, February 19**

- **Read before class**
  - S&Z Chapter 11, "Linear Programming"

- **Assignment during class (due 2/26)**
  - Lab 4. Optimization models with technical and financial constraints.
  - "Choosing an optimal technology mix."

**Week 5, February 26**

- **Read before class**
  - S&Z Chapter 12, "Decision Analysis"

- **Assignment during class (due 3/5)**
  - Lab 5. Decision trees.

**Week 6, March 5**

- **Read before class**
  - Bromley 1990 "The ideology of efficiency"
  - Sagoff 1981 "Why political questions are not all economic"

- **Assignment during class (due 3/12)**
  - Essay 1. "The virtues and limitations of economic efficiency"

**Week 7, March 12**

- **Read before class**
  - F&W, Ch. 1, "BCA History"
  - F&W, Ch. 2, "BCA Analysts & Decision Makers"
  - F&W, Ch. 3, "Advocates & Adversaries"
  - Kelman 1981 "CBA: An Ethical Critique"

- **Assignments**
  - Exam #1 in class
  - Essay 2. Premises of BCA (due 3/19)

**Week 8, March 19**

- **Read before class**
  - F&W, Ch. 4, "Economics and BCA"
  - S&Z, Ch. 9, "Benefit-Cost Analysis"

- **Assignment during class (due 3/26)**
  - Lab 6. Benefit-cost analysis

**Week 9, March 26**

- **Read before class**
  - F&W, Ch. 5, "Valuing Individual Preferences"
  - F&W, Ch. 6, "Who is Society?"
  - F&W, Ch. 7, "With and Without Analysis"
  - F&W, Ch. 8, "Aggregate Benefits & Costs"

- **Assignment during class (due 4/9)**
  - Essay 3. Standing, baselines, and opportunity costs

**Spring Break, April 2**

**Week 10, April 9**

- **Read before class**
  - S&Z, Ch. 10, "Discounting"
  - F&W, Ch. 9, "Present Value"
  - F&W, Ch. 10, "Decision Criteria"
  - F&W, Ch. 11, "Discount Rate"
  - F&W, Ch. 12, "Inflation"

- **Assignment during class (due 4/16)**
  - Lab 7. Benefit-cost analysis and inter-generational equity
Week 11, April 16

Read before class
F&W, Ch. 13, "Time Horizon"
F&W, Ch. 14, "Uncertainty and Risk"
F&W, Ch. 15, "Principles of BCA"
Solow 1991 "Sustainability: An economist's perspective"

Assignment during class (due 4/23)
Essay 4. Investment, consumption, and sustainability

Week 12, April 23

Read before class
F&W, Ch. 16, "Identifying Benefits & Costs"
F&W, Ch. 17, "Market Valuation"
F&W, Ch. 18, "Contingent Valuation"
F&W, Ch. 19, "Travel Cost Method"

Assignment during class (due 4/30)
Essay 5. Estimating economic value when markets don't exist (part A).

Week 13, April 30

Read before class
F&W, Ch. 20, "Hedonic Pricing Method"
F&W, Ch. 21, "Valuing Human Life"
Mrozek and Taylor 2002 "What determines the value of life? A meta-analysis"
Frank 2000 "Why is CBA so controversial?"

Assignment during class (due 5/7)

Week 14, May 7

Read before class
To be determined.

Assignment during class (due 5/14)
Essay 7. Reflections on the guest lecture

Guest Lecture (invited), Matthew Zafonte, Economist, California Department of Fish and Game, Office of Spill Prevention and Response

Week 15, May 14

Read before class
none

Assignment during class
Exam #2 in class

Week 16, May 21

Papers due electronically by 7:15 p.m.