#### **Cost Benefit Analysis**

Professor Stuart Shapiro Course: 34:833:632 EJB 536 Monday 9:50-12:30 Office Hours Thursday 10:00 am – noon Phone 848-932-2384

Website: http://policy.rutgers.edu/faculty/shapiro/

Email: stuartsh@rutgers.edu

#### Overview

The goal of this course is for students to be able to conceptualize the costs and benefits of public policy decisions and to effectively critique professional cost-benefit analyses. After an introduction to the utilitarian roots of cost-benefit analysis, we will deal with particular issues in doing cost benefit analysis. These include identification of costs and benefits, discounting, dealing with uncertainty, valuing health and human life and comparisons with cost-effectiveness analysis. The course will conclude with a series of case studies where students will be asked to evaluate a cost benefit analysis that played a role in a policy decision.

### Requirements

The class is divided into two parts. The first nine weeks of the class are mostly lecture oriented. During this period of the class there will be 8 take home assignments (worth 50% of the grade though I will drop the lowest grade so only 7 are required). The second portion of the class will be case studies of cost-benefit analyses. The class will be divided into three-six groups with each group leading the discussion on one of the cases and each individual writing an evaluation of the analysis. Leading the discussion will be worth 10% of the grade in the course (there will be one grade for the group) and the papers will be worth 20% of the grade. The remaining 20% of your grade is class participation, which will be particularly valuable during the case study section of the course.

While students are encouraged to work in small groups on the take home assignments, they must be written up individually. Late assignments are not accepted.

You are also required to uphold the university standards for academic integrity found here: http://academicintegrity.rutgers.edu/

#### Readings

The required text is *An Introduction to Cost-Benefit Analysis* by Gines de Rus. Numerous readings in the first portion of the class are from this text. Other readings are available on the course website on Canvas or have links below.

#### Section I The Mechanics

### Class 1 January 27, Introduction and Economic Roots of CBA

Arrow, Kenneth, et al. 1996. "Benefit-Cost Analysis in Environmental, Health, and Safety Regulation: A Statement of Principles" AEI-Brookings Joint Center.

Chapter 1 de Rus (not appendix)

Sunstein, Cass R. *The cost-benefit revolution*. MIT Press, 2018. Chapter 1.

### Class 2 February 3, Ethical Debate over CBA

Frank Ackerman and Lisa Heinzerling *Priceless: On Knowing the Price of Everything and the Value of Nothing* The New Press, 2004. Chapters 1,2, and 9 on sakai.

John Graham "Saving Lives Through Administrative Law and Economics" *University of Pennsylvania Law Review* 157:395. 2008. Sections I and II on sakai.

Memo 1 Due

# Class 3 February 10, Measuring Costs and Using Market Prices to Measure Benefits.

De Rus, Sections 2.1 - 2.3, 3.1-3.2

"On the Accuracy of Regulatory Cost Estimates" by Winston Harrington, Richard Morgenstern, and Peter Nelson. *Journal of Policy Analysis and Management* 19:297-322 (2000) available on Sakai

Farrow, Scott, ed. *Teaching Benefit-cost Analysis: Tools of the Trade*. Edward Elgar Publishing, 2018. Defining the Baseline – Charles Griffiths and Chris Dockins

# Class 4 February 17, Other Techniques for Measuring Benefits and Marginal Analysis

De Rus ch.5, 6.1-6.2

Carson, Richard. T. "Contingent Valuation: A Practical Alternative when Prices Aren't Available" *Journal of Economic Perspectives* 2012. available on Sakai.

Farrow, Scott, ed. *Teaching Benefit-cost Analysis: Tools of the Trade*. Edward Elgar Publishing, 2018. The Arithmetic of Efficiency -- or the Value of Marginal Analysis – John Mendeloff

#### **Class 5 February 24, Discounting**

De Rus Chapters 7 and 8.

Mark Moore, Anthony Boardman, Aidan Vining, David Weimer, and David Greenberg, "Just Give Me a Number: Practical Values for the Social Discount Rate." *Journal of Policy Analysis and Management* 23:789 (2004)

Blog post: http://www.economist.com/blogs/freeexchange/2014/05/long-run?fsrc=scn/tw\_ec/weighing\_the\_future

Blog post: http://www.regblog.org/2014/04/07-farber-discount-rates.html

Memo 3 due

# Class 6 March 2, Uncertainty, Sensitivity Analysis, Simulations, and Climate Change

De Rus. Chapter 9

Graham, John D. "Historical perspective on risk assessment in the federal government." *Toxicology* 102, no. 1 (1995): 29-52.

Schroeder, Christopher, "The Precautionary Principle," Center for Progressive Regulation *Perspectives*, accessed on February 9, 2005, at <a href="http://www.progressivereform.org/perspprecaution.cfm">http://www.progressivereform.org/perspprecaution.cfm</a>

John Graham, "Risk and Precaution," transcript of remarks delivered at AEI-Brookings Joint Center conference, "Risk, Science, and Public Policy: Setting Social and Environmental Priorities," October 12, 2004.

http://georgewbush-whitehouse.archives.gov/omb/inforeg/speeches/101204 risk.html

Memo 4 due

#### Class 7 March 9, Valuing Life and Health and Cost Effectiveness Analysis

Hahn, Robert W. & Scott Wallsten. 2003. "Is Granny Worth \$2.3 Million or \$6.1 Million?" AEI-Brookings Joint Center.

http://www.aei.org/publication/is-granny-worth-2-3-million-or-6-1-million/print/

Ashenfelter, Orly, "Measuring the Value of a Statistical Life", National Bureau of Economic Research Working Paper 11916, January 2006, available on Sakai

Sunstein, Cass, "Lives, Life-Years, and Willingness to Pay" *Columbia Law Review* (2004) available on sakai

Memo 5 due

#### Class 8 March 23, Climate Change and Cost-Benefit Analysis

US Government, Social Cost of Carbon Derivation

Masur, Jonathan S., and Eric A. Posner. "Climate regulation and the limits of cost-benefit analysis." *California Law Review* 99 (2011): 1557. Available on sakai. *Memo* 6 Due

#### Class 9 March 30, How Does Government Regulation Affect Employment?

Jonathan S. Masur & Eric A. Posner, <u>Regulation, Unemployment, and Cost-Benefit Analysis</u>, 98 Va. L. Rev. 579 (2012).

Available on sakai.

Institute for Policy Integrity Report, "Regulatory Red Herring: The Role of Job Impact Analyses in Environmental Policy Debates" available on Sakai

Blog post: http://www.economist.com/node/21534767

Memo 7 Due

#### Class 10 April 7, Privacy, National Security and Cost Benefit Analysis

Sunstein, Cass R. The cost-benefit revolution. MIT Press, 2018.chapter 9

#### Section II Case Studies

# Class 11 April 14, Should Government Help You Help Yourself? and Labeling for Trans-Fatty Acids

Debate between Susan Dudley and Cass Sunstein articles available on Sakai.

Kip Viscusi and Ted Gayer: "Behavioral Public Choice: The Behavioral Paradox of Government Policy" *Harvard Journal of Law and Public Policy* 38 (2015) 973 available on sakai.

Federal Register July 11, 2003. pp.41466-41492 Available on Sakai

#### Optional Memo 8 Due

## <u>Case Studies – Group Presentations</u>

This guidance will help you throughout the case work.

OMB guidance on cost-benefit analysis.

http://www.whitehouse.gov/sites/default/files/omb/assets/regulatory\_matters\_pdf/a-4.pdf

#### Class 12 April 21. Group 1: Smoke Free Public Housing:

https://www.regulations.gov/document?D=HUD-2015-0101-0002

## **Group 2**: Establishing Paid Sick Leave for Federal Contractors

https://www.federalregister.gov/documents/2016/09/30/2016-22964/establishing-paid-sick-leave-for-federal-contractors (in rule)

#### Class 13 April 28 Group 3: Restricting the Sale of Tobacco Products

 $\underline{https://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Reports/EconomicAn}\ alyses/UCM500254.pdf$ 

# **Group 4:** Performance Standards for Municipal Solid Waste Landfills

https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0451-0086

or

Energy Efficiency Program for Residential Central Air Conditioners and Heat Pumps: https://www.regulations.gov/document?D=EERE-2014-BT-STD-0048-0098

or

Occupational Exposure to Beryllium: <a href="https://www.regulations.gov/document?D=OSHA-H005C-2006-0870-2042">https://www.regulations.gov/document?D=OSHA-H005C-2006-0870-2042</a>

#### Class 14 May 4 Wrap up

"Rethinking Cost-Benefit Analysis" by Matthew Adler and Eric Posner *Yale Law Journal* 109:165 (1999) available on Sakai