BENEFIT-COST ANALYSIS Syllabus and Reading List Economics 654/Public Administration 680 University of Kentucky

Fall 2015 TR 3:30-4:45pm, BE233

Professor: Glenn Blomquist

Office: Gatton Business and Economics Building 223V Hours: TR 1:45-3:15pm & 5:00-5:45pm. Other times arranged. E-mail: gcblom@uky.edu Phone: 257-3924 (voice mail) Web page: <u>http://gatton.uky.edu/Faculty/blomquist/index.html</u>

Texts: Boardman, Anthony E., David H. Greenberg, Aidan R. Vining, and David L. Weimer. Cost-Benefit Analysis: Concepts and Practice. 4th ed., (Upper Saddle River, NJ: Pearson Prentice Hall, 2011). Required. [Boardman]

Course Description: Principles, practices and applications of applied welfare analysis are the content of this course. The basic theory of benefit-cost analysis (BCA) is presented and the relevance of implementation analysis in policy analysis is examined. Applications of benefit-cost analysis are examined.

Prerequisite: Knowledge of economics at the level of ECO/PA 652 is necessary. Familiarity with regression analysis will be helpful.

Grades: Grades will be based on two exams (25 points each), homework (15 points), BCA study critiques (25 points) and class participation (10 points). A curve based on the total of 100 points will be used, but 90 points guarantee an A, 80 a B, and 70 a C. Exam 1 is planned for approximately October 8th. Exam 2 will be given approximately December 3rd. In lieu of a final exam, BCA critiques presentations are planned for the last class or two and the regularly scheduled 2-hour time for the final exam. The scheduled time for the final is 3:30-5:30pm on Tuesday, December 15th in our regular classroom. PhD students will make two presentations in class on topics chosen after consultation. The grade on presentations will be combined with the grade on class participation.

Reading List: Many required readings are chapters in the text. Additional required readings will be available electronically through Blackboard or the UK library.

I. POLICY ANALYSIS AND BENEFIT-COST ANALYSIS

*Chapter 1 "Introduction to Cost-Benefit Analysis"

*Phaneuf, Dan. "Benefit-Cost Analysis" in *Environmental and Natural Resource Economics: An Encyclopedia*, Timothy C. Haab and John C. Whitehead, eds., (ABC-CLIO, 2014).

*Abrams, Burton A. and George R. Parsons. "Is CARS a Clunker?" *The Economists' Voice* (August 2009): 1-4.

Mian, Atif and Amir Sufi. "The Effects of Fiscal Stimulus: Evidence from the 2009 Cash for Clunkers Program" *Quarterly Journal of Economics* (2012): 1107-1142.

*Center for Business and Economics, University of Kentucky, A Measure of the Economic Impact of Keeneland Racing and Sales on Lexington-Fayette County (April 20, 2015). <u>http://cber.uky.edu/Downloads/Keenlandreport_final.pdf</u>

Howe, Charles W. "Project Benefits and Costs from National and Regional Viewpoints: Methodological Issues and Case Study of the Colorado-Big Thompson Project" *Natural Resources Journal* 26 (Winter 1986): 77-92.

Harberger, Arnold C. and Richard Just. "A Conversation with Arnold Harberger" *Annual Review of Resource Economics* 4 (2012): 1–377

Banzhaf, H. Spencer. "Objective or Multi-Objective? Two Historically Competing Visions for Benefit-Cost Analysis" *Land Economics* 85 (February 2009): 3–23.

II. BENEFIT-COST ANALYSIS, GOVERNMENT FAILURE AND IMPLEMENTATION STRATEGIES

*Wolf, Charles, Jr. "A Theory of Nonmarket Failure: Framework for Implementation Analysis" *Journal of Law & Economics* 22 (April 1979): 107-139.

*Kristof, Nicholas. "Profiting from a Child's Illiteracy" *New York Times* (December 7, 2012). <u>http://www.nytimes.com/2012/12/09/opinion/sunday/kristof-profiting-from-a-childs-illiteracy.html?pagewanted=all&_r=0</u>

*Acharya, Viral, Matthew Richardson, Stijn Van Nieuwerburgh, and Lawrence J. White. "Guaranteed to Fail: Fannie Mae and Freddie Mac and What to Do about Them" *The Economists' Voice* 10 (2013): 15-19.

Frame, W. Scott, Andreas Fuster, Joseph Tracy and James Vickery. "The Rescue of Fannie Mae and Freddie Mac" *Journal of Economic Perspectives* 29 (Spring 2015): 25-52.

Kellogg, Ryan and Hendrik Wolff. "Daylight Time and Energy: Evidence from an Australian Experiment" *Journal of Environmental Economics and Management* 56 (2008): 207-220.

*Brandt-Rauf, Sherry I. and Paul W. Brandt-Rauf, "Occupational Health Ethics: OSHA and the Courts," *Journal of Health Politics, Policy and Law* 5 (Fall 1980), 523-534.

Viscusi, W. Kip. "Risk-Risk Analysis" *Journal of Risk and Uncertainty* 8 (Jan. 1994): 5-17.

*Jenkins-Smith, Hank C. "Professional Roles for Policy Analysts: A Critical Assessment," *Journal of Policy Analysis and Management* 2 (Fall 1982), 88-100.

*Farrow, Scott. "How (Not) to Lie with Benefit-Cost Analysis" *The Economists' Voice* 10, 1 (2013): 45-50.

Blomquist, Glenn C. "Tolley, George S." in Timothy C. Haab and John C. Whitehead, eds., *Environmental and Natural Resource Economics: An Encyclopedia* (Santa Barbara, CA: Greenwood, 2014.)

*Executive Order 12866 Regulatory Planning and Review (1993) http://www.archives.gov/federal-register/executive-orders/pdf/12866.pdf http://www.whitehouse.gov/omb/inforeg_default

Sunstein, Cass R. "The Stunning Triumph of Cost-Benefit Analysis" *Bloomberg* (September 12, 2012).

Dudley, Susan E. "OMB's Reported Benefits of Regulation: Too Good to Be True? *Regulation* (Summer 2013): 26-30.

Lutter, Randall. Regulatory Policy: What Role for Retrospective Analysis and Review? *Journal of Benefit Cost Analysis* 4 (2013): 17-38.

III. BASICS OF BENEFIT-COST ANALYSIS

*Chapter 2 "Conceptual Foundations of Cost-Benefit Analysis" *Chapter 3 "Basic Microeconomic Foundations of Cost-Benefit Analysis" *Chapter 4 "Valuing Benefits and Costs in Primary Markets" *Chapter 5 "Valuing Benefits and Costs in Secondary Markets"

Hines, James R. "Three Sides of Harberger Triangles" *Journal of Economic Literature* 13 (Spring 1999): 167-188.

*Chandra, Amitabh and Eric Thompson. "Does Public Infrastructure Affect Economic Activity? Evidence from the Rural Interstate Highway System" *Regional Science and Urban Economics* 30 (July 2000): 457-490.

Bartik, Timothy J. "Including Jobs in Benefit-Cost Analysis" *Annual Review of Resource Economics* 4 (2012): 55-73.

*Barro, Robert J. "Voodoo Multipliers" The Economists' Voice (February 2009): 1-4.

Haveman, Robert H. and David L. Weimer. "Public Policy Induced Changes in

Employment: Valuation Issues for Benefit-Cost Analysis" *Journal of Benefit-Cost Analysis* 6,1 (Spring 2015): 112 – 153.

Belova, Anna, Wayne B. Gray, Joshua Linn, Richard D. Morgenstern, and William Pizer. "Estimating the Job Impacts of Environmental Regulation" *Journal of Benefit-Cost Analysis* 6 (forthcoming 2015).

Resources for the Future. "How Do Environmental Policies Affect Jobs? Webcast (May 16, 2015). <u>http://www.rff.org/events/event/2015-05/how-do-environmental-policies-affect-jobs</u>

IV. DISCOUNTING NET BENEFITS

*Chapter 6 "Discounting Benefits and Costs in Future Time Periods" *Chapter 10 "The Social Discount Rate"

*Cropper, Maureen. "How Should Benefits & Costs Be Discounted Across Generations?" RFF *Resources* 183 (2013).

Harberger, Arnold C. and Glenn P. Jenkins. "Musings on the Social Discount Rate" *Journal of Benefit-Cost Analysis* 6,1 (Spring 2015): 6-32.

Solow, Robert M. "Sustainability: An Economist's Perspective" Lecture at Marine Policy Center, Woods Hole, MA, June 14, 1991. Printed in R. Stavins *Economics of the Environment: Selected Readings* (New York: W.W. Norton, 2005). <u>http://www.isites.harvard.edu/fs/docs/icb.topic203569.files/Solow.Sustainability_An_Economists_Perspective._1993.pdf</u>

Arrow, Kenneth J., et al. "How Should Benefits and Costs Be Discounted in an Intergenerational Context? Views of an Expert Panel" RFF Discussion Paper 12-53, (December 2012). <u>http://www.rff.org/RFF/Documents/RFF-DP-12-53.pdf</u>

V. RISK AND UNCERTAINTY

*Chapter 7 "Dealing with Uncertainty: Expected Value, Sensitivity Analysis, and the Value of Information" *Chapter 8 "Option Price and Option Value"

Krutilla, Kerry, David H. Good and John D. Graham. "Uncertainty in the Cost-Effectiveness of Federal Air Quality Regulations" *Journal of Benefit-Cost Analysis* 6,1 (2015): 66-111.

VI. VALUING IMPACTS AND NONMARKET GOODS

*Chapter 13 "Valuing Impact from Observed Behavior: Direct Estimation of Demand Curves"

*Chapter 14 "Valuing Impacts from Observed Behavior: Indirect Market Methods"

*Blomquist, Glenn C. "Rosen, Sherwin" in Timothy C. Haab and John C. Whitehead, eds., *Environmental and Natural Resource Economics: An Encyclopedia* (Santa Barbara, CA: Greenwood, 2014.)

Blomquist, Glenn C. "Self Protection and Averting Behavior, Values of Statistical Lives, and Benefit Cost Analysis of Environmental Policy" *Review of Economics of the Household* 2 (March 2004): 89-110.

Berger, Mark C., Glenn C. Blomquist, and Klara Sabirianova Peter "Compensating Differentials in Emerging Labor and Housing Markets: Estimates of Quality of Life in Russia" *Journal of Urban Economics* (2008)

Hoehn, John P., Mark C. Berger, and Glenn C. Blomquist. "A Hedonic Model of Interregional Wages, Rents and Amenity Values," *Journal of Regional Science* 27 (November 1987): 605-620.

*Chapter 9 "Existence Value" *Chapter 15 "Contingent Valuation: Using Surveys to Elicit Information about Costs and Benefits"

*Haab, Timothy and John C. Whitehead. "Contingent Valuation" in T. Haab and J. Whitehead, eds., *Environmental and Natural Resource Economics: An Encyclopedia* (Santa Barbara, CA: Greenwood, 2014.)

Kling, Catherine L., Daniel J. Phaneuf, and Jinhua Zhao. "Form Exxon to BP: Has Some Number Become Better than No Number?" *Journal of Economic Perspectives* 26 (Fall 2012): 3-26.

Diamond, Peter A. and Jerry A. Hausman. "Contingent Valuation: Is Some Number Better than No Number?" *Journal of Economic Perspectives* 8 (Fall 1994): 45-64.

Viscusi, W. Kip and Richard Zeckhauser. "Sacrificing Civil Liberties to Reduce Terrorism Risks" *Journal of Risk and Uncertainty* 26 (March 2003): 99-120.

*Blomquist, Glenn C., Paul A. Coomes, Christopher Jepsen, Brandon Koford, and Kenneth R. Troske. "Estimating the Social Value of Higher Education: Willingness to Pay for Community and Technical Colleges" *Journal of Benefit-Cost Analysis* 5,1 (2014): 3-41.

Blomquist, Glenn C., Mark Dickie, and Richard M. O'Conor. "Willingness to Pay for Improving Fatality Risks and Asthma Symptoms: Evidence for Children and Adults of All Ages" *Resource and Energy Economics* 33 (May 2011): 410-425. Blumenschein, Karen, Glenn C. Blomquist, Magnus Johannesson, Nancy Horn, and Patricia Freeman. "Eliciting Willingness to Pay without Bias: Evidence from a Field Experiment" *The Economic Journal* 118 (January 2008): 114-137.

*Chapter 16 "Shadow Prices from Secondary Sources" (Value of Statistical Life ...)

*Blomquist, Glenn C. "Value of Life, Economics of" in the Economics Section edited by Tom Nechyba of the *International Encyclopedia of the Social and Behavioral Sciences*, 2nd edition, edited by James Wright (Oxford, UK: Elsevier, 2015).

*Chapter 18 "Cost-Effectiveness Analysis" (Cost-Utility Analysis ...)

Kenkel, D. "On Valuing Morbidity, Cost-effectiveness Analysis, and Being Rude" *Journal of Health Economics* 16 (December 1997): 749–757.

Chandra, A., A. Jena and J. Skinner. "The Pragmatist's Guide to Comparative Effectiveness Research" *Journal of Economic Perspectives* 25 (Spring 2011): 27-46.

Cook, Joseph, et al. "Using Private Demand Studies to Calculate Socially Optimal Vaccine Subsidies in Developing Countries" *Journal of Policy Analysis and Management* 28 (2009): 6-28.

VII. BEHAVIORAL ECONOMICS AND BENEFIT-COST ANALYSIS

*Madrian, Brigette C. "Applying Insights from Behavioral Economics to Policy Design" *Annual Review of Economics* 6 (2014): 663-688.

Chetty, Raj. "Behavioral Economics and Public Policy: A Pragmatic Perspective" American Economic Review 105,5 (May 2015): 1-33

Hammitt, James K. "Positive versus Normative Justifications for Benefit-Cost Analysis: Implications for Interpretation and Policy" *Review of Environmental Economics and Policy* 7,2 (2013): 199-218.

Gayer, Ted and W. Kip Viscusi. "Overriding Consumer Preferences with Energy Regulations" *Journal of Regulatory Economics* 43 (2013): 248-264.

Jin, Lawrence, Don Kenkel, Feng Liu and Hua Wang. "Retrospective and Prospective Benefit-Cost Analyses of U.S. Anti-Smoking Policies" *Journal of Benefit-Cost Analysis* 6,1 (Spring 2015): 154-186.

Cutler, David M., Amber Jessup, Donald Kenkel, and Martha A. Starr. "Valuing Regulations Affecting Addictive or Habitual Goods" *Journal of Benefit-Cost Analysis* 6,2 (forthcoming 2015).

Brennan, Timothy J. "Behavioral Economics and Policy Evaluation" *Journal of Benefit*-Cost Analysis 5,1 (2014): 89-109.

Smith, V. Kerry and Eric M. Moore. "Behavioral Economics and Benefit Cost Analysis" *Environmental and Resource Economics* 46 (2010): 217–234.

VIII. CRITIQUES OF BENEFIT COST ANALYSES

Example: Chen, Greg and Rebecca N. Warburton. "Do Speed Cameras Produce Net Benefits? Evidence from British Columbia, Canada" *Journal of Policy Analysis and Management* 25,3 (2006): 661-678.

Presentations will be about 20 minutes. Each study presented will have a discussant.

Additional Rules for the Course:

Excused Absences:

Students need to notify me of absences prior to class when possible. Senate Rule 5.2.4.2 defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit "reasonable cause for nonattendance" by the professor. Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Information regarding dates of major religious holidays may be obtained through the religious liaison, Mr. David Beach (859-257-2754). Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused or unexcused) per university policy.

Verification of Absences:

Students may be asked to verify their absences in order for them to be considered excused. Senate Rule 5.2.4.2 states that faculty have the right to request "appropriate verification" when students claim an excused absence because of illness or death in the family. Appropriate notification of absences due to university-related trips is required prior to the absence.

Academic Integrity:

Per university policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the university may be imposed. Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website: http://www.uky.edu/Ombud. A plea

of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited. Part II of Student Rights and Responsibilities (available online http://www.uky.edu/StudentAffairs/Code/part2.html) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about the question of plagiarism involving their own work, they are obliged to consult their instructors on the matter before submission. When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgement of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing someone else's work, whether it be a published article, chapter of a book, a paper from a friend or some file, or something similar to this. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work which a student submits as his/her own, whoever that other person may be.

Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone. When a student's assignment involves research in outside sources of information, the student must carefully acknowledge exactly what, where and how he/she employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas which are so generally and freely circulated as to be a part of the public domain (Section 6.3.1). Please note: Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

Accommodations due to disability:

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (725 Rose Street, Multidisciplinary Science Building, Suite 407, 257-2754, email address: dtbeac1@uky.edu) for coordination of campus disability services available to students with disabilities.