B.E. International Program

Faculty of Economics, Thammasat University

Course Outline

EE 465/EE463 Project Evaluation

Semester 2/2015 (January 18 – May 14, 2016)

Number of credits: 3 credits

Lecture Time: Tuesdays and Thursdays, 9.30 – 11.00 hrs

Lecture Venue: Room 203, Faculty of Economics

Instructor: Phatta Kirdruang, PhD

Office: Room 15 (60th anniversary annex),
Faculty of Economics
E-mail: phatta@econ.tu.ac.th
Office hours: Tuesdays and Thursdays, 14.00 – 15.00 hrs
and by appointment

Course Description:

Welfare economics framework as a basis for project evaluation in economics; project evaluation in the forms of cost-benefit analysis, cost effectiveness analysis, and other analytical methods, with the application to various case studies.

Course Objectives:

1. Students are expected to understand microeconomic and welfare economics concepts, and to be able to apply these concepts for project evaluation.
2. Students should be able to conduct a project evaluation by using cost-benefit analysis.

Prerequisites:

a) EE212 and EE311 or b) EE214 and EE311 and c) Completion of at least one 400-level subject in field 3 to field 9.

Required Textbooks/Readings:

- Boardman, A., Greenberg, D., Vining, A., & Weimer, D. (2010). *Cost-Benefit Analysis: Concepts and Practice.* Fourth Edition. Prentice Hall. [Call no.: HD47.4 .C67 2006]
- Journal articles as specified in the lecture schedule.

Complementary Textbooks:

- Mishan, E. J., & Quah, E. (2007). *Cost-Benefit Analysis*. Routledge. [Call no.: HD47.5 .M528 2007]
- Curry, S., & Weiss, J. (2000). *Project Analysis in Developing Countries*. Macmillan. [Call no.: HC59.72.E44 P76 2000]
- Campbell, H. F. (2003*). Benefit-Cost Analysis: Financial and Economic Appraisal Using Spreadsheets*. Cambridge University Press. [Call no.: HD47.4 .C357]

Lecture Schedule:

Week	Topic and Readings (*= Required)	Activity
1 (Jan 19, 21)	**Introduction to Cost-Benefit Analysis and Conceptual Foundation** Readings: - *Boardman et al., ch. 1-2 - Arrow, K.J. et al. 1996. "Is There a Role for Benefit-Cost Analysis in Environmental, Health and Safety Regulation?" *Science*. 272:221-222.	
2 (Jan 26, 28)	**Microeconomics of Cost-Benefit Analysis** Readings: - *Boardman et al., ch.3	
3 (Feb 2, 4)	**Valuing Benefits and Costs in Primary Markets** Readings: - *Boardman et al., ch.4	
4 (Feb 9, 11)	**Valuing Benefits and Costs in Secondary Markets** Readings: - *Boardman et al., ch.5	Quiz #1
5 (Feb 16, 18)	**Discounting Benefits and Costs in Future Time Periods** Readings: - *Boardman et al., ch.6	

	- Arrow, K. et al. 2013. "Determining Benefits and Costs for Future Generations." *Science.* 341: 349-350.	
6 (Feb 23, 25)	**The Social Discount Rate** Readings: - *Boardman et al., ch.10	Quiz #2
7 (Mar 1, 3)	**Dealing with Uncertainty** Readings: - Boardman et al., ch. 7	Quiz #3
8 **(March 10)**	**MIDTERM**	
9 (Mar 15, 17)	**Valuing Impacts from Observed Behavior: Indirect Market Methods** Readings: - Boardman et al., ch. 14 - Fezzi, C., I.J. Batemen, and S. Ferrini. 2014. "Using Revealed Preferences to Estimate the Value of Travel Time to Recreation Sites." *Journal of Environmental Economics and Management.* 67: 58-70	Quiz #4
10 (Mar 22, 24)	**Nonmarket Valuation Using Stated Preferences: Contingent Valuation Method** Readings: - Boardman et al., ch. 15 - Corso, P.S., J.K. Hammitt, and J.D. Graham. 2001. "Valuing Mortality-Risk Reduction: Using Visual Aids to Improve the Validity of Contingent Valuation." *Journal of Risk and Uncertainty.* 23(2):165-184. - Robinson, Lisa A., and James K. Hammitt. 2014. "Research Synthesis and the Value per Statistical Life." *Regulatory Policy Program Working Paper RPP-2014-14*. Cambridge, MA: Mossavar-Rahmani Center for Business and Government, Harvard Kennedy School, Harvard University.	Quiz #5
11 (Mar 29, 31)	**Case Study- Project Evaluation in Transportation** Readings: - Boardman, A. E., Laurin, C., Moore, M. A., & Vining, A. R. (2009). A cost-benefit analysis of the privatization of Canadian national railway. *Canadian Public Policy*, *35*(1), 59-83.	
12 (Apr 5, 7)	**Case Study- Project Evaluation in Environment** Readings:	

	- Choe, K., Whittington, D., & Lauria, D. T. (1996). The economic benefits of surface water quality improvements in developing countries: a case study of Davao, Philippines. *Land Economics*, 519-537.	
13 (Apr 19, 21)	**Case Study- Project Evaluation in Health Care** Readings: - Whittington, D., Jeuland, M., Barker, K., & Yuen, Y. (2012). Setting priorities, targeting subsidies among water, sanitation, and preventive health interventions in developing countries. *World Development*, *40*(8), 1546-1568. - Robinson, L.A. and J.K. Hammitt. 2013. “Skills of the Trade: Valuing Health Risk Reductions in Benefit-Cost Analysis.” Journal of Benefit-Cost Analysis, 4(1):107-130.	
14 (Apr 26, 28)	**Cost-Effectiveness Analysis** Readings: - Boardman et al., ch. 17	
15 (May 3, 10)	**Shadow Prices: Applications to Developing Countries** Readings: - Boardman, ch. 16	
16 (May 12)	**Students' Project Presentations and Class Wrap-Up**	
May 16	**FINAL EXAM**	

Note: The class schedule and required readings shown above may be adjusted during the semester as needed.

Assessment:

Class Participation	5 %	
Quizzes	10 %	
Term Report	20 %	
Midterm exam	**30 %**	**(Thursday, March 10, 2016, 9.30-11.00 hrs)**
Final exam	**35 %**	**(Monday, May 16, 2016, 13.30 – 16.30 hrs)**

*Note: I reserve the right to modify the percentage of each assessment component.

Term report:

Each group of 2 students is required to write a term report based on their cost-benefit analysis of suggested projects (to be distributed in class). In conducting a cost-benefit analysis, each group needs to identify and measure the benefits and costs of the projects. In doing so, students need to illustrate how the relevant impacts are quantified and monetized. Moreover, students need to estimate the NPVs of different alternatives of the project, and to conduct any relevant sensitivity analysis. Based on the above results, students will make a recommendation and policy implications, if any.

The report should not exceed 5 pages, excluding the reference (Time New Roman Font 12, with 1.5 space and 1-inch margin for A4-size paper). Any additional information, such as graphs and tables, can be put in the appendix. The reference must be in APA style.

Each group will present their report at the end of the semester, and the report must be submitted by email to phatta@econ.tu.ac.th. The subject of the email should start with the course number followed by students' IDs. (Ex. EE465/463_560464xxxx_560464yyyy).

Important Dates:

♦ Second semester begins	January 18, 2016
♦ Period of withdrawal without "W"	January 18 - February 1, 2016
♦ **Mid-Term Examination**	**March 10, 2016 (9.30-11.00 hrs)**
♦ Period of withdrawal with "W"	March 23-28, 2016
♦ **Final Examination**	**May 16, 2016 (13.30 –16.30 hrs)**

Last updated – January 4, 2016.