

Course ID Number: ADC6765

Course Title: Cost Benefit Analysis

No. of Credits: 2 credits

Graduate School of International Relations
International University of Japan

Winter 2011

Instructor: Kaliappa Kalirajan

Course description:

This course is intended to provide a clear understanding and guidance in the use of benefit-cost analysis while evaluating development projects that bear major resource and policy implications. This course requires a basic knowledge of microeconomics. Wherever possible, examples are used to aid the exposition. Certainly, this is not a course on pure microeconomics or welfare economics exclusively. Microeconomic and welfare concepts that are relevant in benefit-cost analysis will be discussed. Particular attention will be given to practical analysis with emphasis on the use of shadow prices, the use of consumers' surplus and the problems of valuing goods that do not have market prices. Students are encouraged to participate effectively in class discussions. Take home problems will be given during the course. There will be a final examination at the end of the course. Power point presentation of lecture notes will be distributed to students.

The course contents are:

Lecture 1 - 4: Introduction – Development projects - The need to choose - The concept of Pareto Optimality – Actual or potential Pareto improvements – From individual to Social improvements.

Lecture 5 - 8: The general principles of valuation of benefits and costs - The concept of net social benefit-- Pareto Optimality and Public Goods- The

competitive market – Valuation with market prices – A sample analysis: a third international airline for Japan.

Lecture 9 - 12: Market Distortions - Valuation without market prices — Discounting to a present value – Benchmark discount rates- Choosing the base date for discounting- Calculating the annual value of benefits and costs.

Lecture 13- 16: Allowing for inflation – Risk-neutrality and risk aversion – Techniques for handling uncertainty – Sensitivity analysis.

Lecture 17-20: Benefit-cost analysis of Health projects – Benefit-cost analysis of environment projects - Criticisms and limitations of benefit-cost analysis.

Final Examination.

Assessment:

Final Examination: 100%

Required Text:

Tevfik F. Nas, (1996), *Cost-Benefit Analysis: Theory and Application*, Sage Publications, Thousand Oaks, California.

Other Relevant Readings:

Belli, P., J. Anderson, J.Dixon and T. Jee-Peng, (2000), *Economic Analysis of Investment Operations: Analytical Tools and Practical Applications*, WBI, World Bank, Washington, D.C.

Sinden, J.A. and D.J. Thampapillai, (1995), *Introduction to Benefit-Cost Analysis*, Longman, Sydney.

Sugden, R. and A. Williams, (1990), *The Principles of Practical Cost-Benefit Analysis*, Oxford University Press, Oxford.