# uc3m Universidad Carlos III de Madrid

# Cost-Benefit Analysis

Academic Year: ( 2023 / 2024 ) Review date: 10-09-2020

Department assigned to the subject: Economics Department

Coordinating teacher: MORENO RUIZ, DIEGO

Type: Electives ECTS Credits: 6.0

Year: 1 Semester: 2

## REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Intermediate microeconomics and basic calculus.

#### **OBJECTIVES**

- Teaches students the standards of precision and rigor in economic analysis and professional communication.
- Emphasizes autonomous and group learning.
- Familiarizes students with a set of tools appropriate for cost-benefit analysis.
- Teaches students to set up and analyze some the most common applications.

#### **DESCRIPTION OF CONTENTS: PROGRAMME**

- 1. Introduction
- 2. The economic evaluation of social benefits
- 3. Indirect effects and wider economic benefits
- 4. Opportunity costs, market and shadow prices
- 5. Economic valuation of non-marketed goods
- 6. Discounting and decision criteria
- 7. Uncertainty and risk analysis
- 8. Applications

### LEARNING ACTIVITIES AND METHODOLOGY

- -Lectures in which the basic material is presented and discussed. Basic textbook references are provided with to complete and deepen students understanding.
- Solving and discussing practical exercises in the classroom as well as problem sets to provide students with feedback on their level of understanding and difficulties.
- When applicable, resolution of case studies individually and/or in group.
- Discussion in class under instructor moderation of topics.
- Production of papers and reports individually or in group.

# ASSESSMENT SYSTEM

Discussion of Case Studies (20%); Practical Problems in CBA (20%); Final Exam: 60%.

% end-of-term-examination: 60

% of continuous assessment (assignents, laboratory, practicals...): 40

## **BASIC BIBLIOGRAPHY**

- Boardman, A., D. Greenberg, A. Vining and D. Weimer Cost-Benefit Analysis: Concepts and Practice. 3rd edition, Prentice Hall, 2005
- De Rus, Ginés Introduction to Cost-Benefit Analysis: Looking for Reasonable Shortcuts, Edward Elgar, 2010
- Johansson, P-O An Introduction to Modern Welfare Economics, University Press, Cambridge, 1991
- Johansson, P.-O. Cost-Benet Analysis of Environmental Change., Cambridge University Press, Cambridge., 1993
- P.-O. Johansson and B.Kriström Cost-Benefit Analysis for Project Appraisal, Cambridge UP, 2016