

**CARLETON UNIVERSITY**  
**DEPARTMENT OF ECONOMICS**  
**2019 LATE SUMMER**

**ECON 3509 A – Development Planning and Project Evaluation**  
**Tuesdays and Thursdays, 6:05 – 8:55 pm, TB 431**

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Instructor: Dr. Samuel Bonti-Ankomah

E-mail: samuel.bontiankomah@carleton.ca or cuLearn at [carleton.ca/culearn](http://carleton.ca/culearn)  
(please use the cuLearn e-mail facility for all course-related electronic communication)

Office: B-842 Loeb, 613-520-2600 x 3769

Office hours: Tuesdays, 5:15 – 5:55 pm

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### **Introduction**

The course will provide students some understanding of the basic principles of development planning and introduce them to the tools used in economic evaluation of development projects. It provides an analytical and practical approach to financial and economic project evaluation that looks at projects from the perspective of governments or development agencies. The course covers general economic principles that are used for evaluating the social benefits and costs of projects. It includes approaches to valuing market and non-market benefits and costs and analysis of uncertainty.

### **Learning Outcomes:**

After successful conclusion of this course, students should be able to:

- Describe the key steps involved in a standard cost-benefit analysis
- Explain the economic principle that guides cost-benefit analysis;
- Identify all relevant costs and benefits of a particular project/policy/ regulation;
- Properly classify all relevant benefits and costs of a project/policy/regulation;
- Understand how to attach a dollar value to benefits and costs;
- Evaluate the role of non-market benefits and costs in a CBA;
- Understand the importance of the discount rate in CBA;
- Conduct a basic cost-benefit analysis.

**Prerequisite:** ECON 1000 or FYSM 1003.

Students who believe they have taken similar background course or courses from another university must provide appropriate documentation to the Department of Economics Undergraduate Administrator, Amanda Wright.

## Text and Reading Materials

Materials will come from several sources and books including:

Boardman, A.E., Greenberg, D.H., Vining, A.R., and Weimer, D.L., 2018. *Cost-Benefit Analysis: Concepts and Practices*, 5<sup>th</sup> ed, Cambridge University Press

Campbell, Harry, F. and Brown, Richard, P.C., 2003. *Benefit-Cost Analysis: Financial and Economic Appraisal Using Spreadsheets*, Cambridge University Press, New York, ISBN 13-9780521528986

Pedro Belli, Jock R. Anderson, Howard N. Barnum, John A. Dixon, and Jee-Peng Tan, 2001. *Economic Analysis of Investment Operations: Analytical Tools and Practical Applications*, World Bank Institute, Washington, D.C., 292 p., ISBN 0-8213-4850-7.

Todaro, Michael and Smith, Stephen, C., 2015/2012/2009. *Economic Development* Addison-Wesley, Boston, USA

Dale, R., 2006. *Development Planning: Concepts and Tools for Planners, Managers and Facilitators*, Zed Books Limited, London, United Kingdom.

Townley, P., 1998. *Principles of Cost-Benefit Analysis in a Canadian Context*, Prentice Hall.

United Nations Development Program, 2018. *Human Development Indices and Indicators: 2018 Statistical Update*, <http://report.hdr.undp.org/>

United Nations Development Program, 2018. *Human Development Indices and Indicators: 2018 Statistical Update, Technical Notes*, [http://hdr.undp.org/sites/default/files/hdr2018\\_technical\\_notes.pdf](http://hdr.undp.org/sites/default/files/hdr2018_technical_notes.pdf)

Zerbe, R. and Dively, D., 1994. *Benefit-Cost Analysis in Theory and Practice* Harper Collins College Publishers.

Additional materials will be obtained from the following sources:

- United Nations Development Program, 2016. *Human Development Report*,
- Treasury Board Secretariat of Canada, 2007. *Canadian Cost Benefit Analysis Guide*: <http://www.tbs-sct.gc.ca/rtrap-parfa/analys/analystb-eng.asp>
- Treasury Board Secretariat of Canada, 2003. *Assessing, Selecting and Implementing Instruments for Government Action*: <http://www.tbs-sct.gc.ca/rtrap-parfa/asses-eval/asses-evaltb-eng.asp>
- World Bank, Operations Evaluation Department (OED) sub-site: [www.worldbank.org/oed](http://www.worldbank.org/oed)
- Inter-American Development Bank: [www.iadb.org](http://www.iadb.org)
- Asian Development Bank: [www.adb.org](http://www.adb.org)
- African Development Bank: [www.afdb.org/](http://www.afdb.org/)

## Course Evaluation

Each student's grade will be calculated as a weighted average of the following four components:

In-class Quiz 1:	10%
Assignment:	20%
Mid-term Examination:	30%
Final examination (scheduled by the University):	40%

### Class Quiz

There will be a class quiz to be held on Tuesday, July 16, 2019. The quiz will be worth 10% of class grade and will cover text material, class discussions and other documents discussed in class up until that time.

### Assignment

One major assignment is expected in this course. Details of the assignment will be given in class by Thursday, July 18. The assignment will be due on Thursday, August 8, 2019. This will be done in groups of not more than 4 people. All submitted assignments should be typed. Hand-written assignments will not be accepted.

Students will lose 5% per each day for submitting assignments after the due date of August 8, 2019.

### Mid-term Examination

There will be mid-term examination to be held in class on Tuesday, July 23, 2019 and will cover text materials, class discussions, and other documents discussed in class up until that time.

Students who can document a compelling reason for missing the mid-term examination will be excused and their final grade will be based on their performance in the rest of the course- i.e., the weight of each of the remaining evaluation instruments will rise by a factor of 10/7 (e.g., the final examination weight will become  $40\% \times 10/7 = 57.14\%$ ). Students must inform the instructor of such an absence in advance, if possible.

### Final Examination

The final examination will be held between August 17 and 23, 2019. The exact date, time, and place of the final examination will be determined by the University.

The final examination will cover text materials and class discussions throughout the course.

### Satisfactory Performance Criteria

Students must fulfil *all* of the preceding course requirements in order to achieve a passing grade (D- or higher). Failure to write the final examination after achieving satisfactory performance during the term will result in an average grade from the other evaluation components without the final exam. See Academic Regulation 2.3 for the official meanings of grades, and note that it stipulates that no course grades are final until

approved by the Faculty Dean. Application to write a deferred final examination must be made at the Registrar's Office.

## **Plagiarism**

Please be aware that plagiarism is serious offence at Carleton and should be recognized and avoided. For further information on how to do so, please see "Pammett on Plagiarism and Paraphrasing" at

[www.carleton.ca/economics/courses/writing-preliminaries](http://www.carleton.ca/economics/courses/writing-preliminaries).

## **Academic Accommodation Requests**

Students may need special arrangements to meet their academic obligations during the term because of disability, pregnancy, or religious obligations. Please review the course outline promptly and write to the instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist.

Students with disabilities requiring academic accommodations in this course must register with the Paul Menton Centre for Students with Disabilities (PMC) for a formal evaluation of disability-related needs. Documented disabilities could include, but are not limited to, mobility/physical impairments, specific Learning Disabilities (LD), psychiatric/psychological disabilities, sensory disabilities, Attention Deficit Hyperactivity Disorder (ADHD), and chronic medical conditions. Registered PMC students are required to contact the PMC (telephone: 613-520-6608) every term to ensure that their instructors receive their Letter of Accommodation no later than two weeks before the first assignment is due or the first in-class test/midterm requiring accommodations. Students requiring accommodations for their formally scheduled exam(s) only in this course must submit their requests for accommodations to the PMC by July 26, 2019 for the Late Summer term.

See the Equity Services Web site at [www.carleton.ca/equity/accommodation](http://www.carleton.ca/equity/accommodation) to obtain more detailed information on academic accommodation to view the associated policies.

## Course Content

### **PART I: Basic Principles of Development Planning- July 2 & 4**

1. Basic Concepts of development planning (Dale, Chapter 1, 4 & 5; Todaro *et al*, Chapter 11; UNDP Human Development 2018 Statistical Update and Technical Report)

### **PART 2: Economic Foundations of project evaluation – July 9 & 11**

2. Efficiency, and project evaluation – [Boardman, *et al*, Chap. 2 (pp. 27-40)]
3. Willingness to pay and opportunity cost [Boardman *et al*, Chap. 2 (pp. 29-31, 34-37)]
4. Consumer and producer surplus – [Boardman *et al*, Chap. 3 (pp. 53-68)]
5. Market Distortions and project evaluation– [Boardman *et al*, Chap 4 (pp. 78-110) ; Belli *et al*, Appendix 1A (pp.199-213)]

### **Quiz –July 16**

### **PART 3: Cost Benefit Analysis – A tool for Project Evaluation – July 16**

6. What is Cost Benefit Analysis? [Boardman, Chap. 1 (pp. 1-5)]
7. Why Cost benefit Analysis? [Boardman, Chap. 1 (pp. 2-5)]
8. Key Steps in Cost Benefit Analysis [Boardman, Chap. 1 (pp. 5-25)]
9. Private versus social Cost Benefit Analysis [Boardman, Chap. 1 (pp. 1-2)]

### **PART 4: Identification and Valuation of Costs and Benefits – July 16 & 18**

10. Identifying cost and benefits [Belli, Chap. 4]
11. Valuing Benefits and Cost [Boardman, Chap. 5, 6 & 7]

### **Mid-term examination- July 23**

### **PART 5: Monetising Costs and Benefits – July 25 & 30**

12. Market Approaches (Belli, Chap. 5; Campbell and Brown, Chap. 8; Townley, Chap. 6)
13. Non-market/Indirect Market approaches (Boardman, Chap. 15 & 16; Belli, Chap. 4; Campbell and Brown, Chap. 12; Townley, Chap. 9)

**PART 6: Decision Criteria for Cost Benefit Analysis – August 1 & 6**

14. Cost Benefit Analysis Criteria (Belli, Technical Appendix (pp.217-222); Campbell and Brown, Chap. 3; Zerbe and Dively, Chap. 9)
15. Cost Effectiveness [Boardman, Chap. 18; Belli, Chap. 7]

***Class Assignment Due – August 6***

**PART 7: Dealing with Risks and Uncertainties – August 8**

16. Risks and Uncertainty (Zerbe and Dively, Chap. 12)
17. Analysing uncertainty (Boardman, Chap. 11; Belli, Chap. 11; Zerbe and Dively, Chap. 12; Campbell and Brown, Chap. 9)

**CLASS REVIEW – August 13**

Note: The foregoing is a tentative list of contents. There may be changes due to questions and interests of students.