

**CARLETON UNIVERSITY**  
**DEPARTMENT OF ECONOMICS**  
**2021 LATE SUMMER**

**ECON 3509 A – Development Planning and Project Evaluation**

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Instructor: Dr. Samuel Bonti-Ankomah

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Lectures will be recorded live on BigBlueButton every Tuesday. Students are encouraged to attend the live lectures. The recording will also be accessible to students after the lecture. Power Point slides will be posted on Thursdays on Brightspace.

Whereas there will be no full live lectures on Thursdays, students will be grouped into small pods of few students with each pod having at least 30 minutes discussions on topics of interest to students every Thursday. This live pod discussions will be organised for each pod between 6:05 pm and 8:30 pm on Thursdays. Students will be notified of their pod groups before the first day of class. Students are encouraged to ask questions during the live lectures and the pod discussions.

Students can email me at any time with their questions and comments, and I will respond within 24 hours.

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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, Renee Lortie.

## 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 (**Required**)

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:

Quiz 1 (July 15):	20%
Quiz 2 (July 27):	20%
Quiz 3 (August 5):	20%
Final Take Home (Due August 17):	40%

## Class Quiz

There will be three quizzes to be held on July 14, 2020, July 23, 2020 and August 4, 2020. Each quiz will be worth 20% of class grade and will cover text material, class discussions and other documents discussed in class up until that time.

*There will be no deferred quizzes. Students who can document a compelling reason for missing any of the quiz 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 5/4 ( example, the final take home examination's weight will become  $40\% * 5/4 = 66.67\%$ ). Students must inform the instructor of such an absence in advance, if possible.*

## Doctor's note or police report

*The documentation provided by students for missed quiz may be subject to verification. Students who provide such documentation must also complete the "Consent to Release Information to a Third Party" form posted on Brightspace.*

## Final Take Home

The final take home examination will be in the form of a group assignment. Students in the same pod will belong to the same group for the assignment. The details of the assignment will be given to students on Brightspace on August 5, 2020 and submitted through Brightspace on August 17, 2020.

## Email Policy

Email should be reserved for questions relating to scheduling, administrative issues or urgent matters affecting your participation in the course. In general, it is not possible to effectively answer all questions about class material by e-mail; please reserve these questions for office hours. If you do e-mail me, I will respond within no more than 48 hours. Please include Econ 3509" in the subject line of all emails.

## Satisfactory Performance Criteria

Students must fulfil *all* of the preceding course requirements in order to achieve a passing grade (D- or higher). **See Academic Regulation 2.3 for the official meanings of the grades, and note that standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No**

**grades are final until they have been approved by the Dean.** Application to write a deferred final examination must be made at the Registrar's Office."

## **Plagiarism**

**Please be aware that plagiarism is a serious offence at Carleton and should be recognized and avoided. Please consult Carleton University's Academic Integrity Policy at <http://www2.carleton.ca/studentaffairs/academic-integrity>.**

## **Requests for Academic Accommodations**

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

### **Pregnancy obligation**

Please contact your 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. For more details, visit the [Equity Services website](https://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf):  
<https://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf>

### **Religious obligation**

Please contact your 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. For more details, visit the [Equity Services website](https://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf).  
<https://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf>

## **Academic Accommodations for Students with disabilities**

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or [pmc@carleton.ca](mailto:pmc@carleton.ca) for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. For more details, visit the [Paul Menton Centre website](#).

## **Survivors of Sexual Violence**

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and

to obtain information about sexual violence and/or support, visit: [carleton.ca/sexual-violence-support](https://carleton.ca/sexual-violence-support)

### **Accomodation for student Activities**

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your 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. For more details, see [the policy](#) at <https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

## **Course Content**

### **PART I: Basic Principles of Development Planning- July 6 & 8**

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 13**

2. Efficiency, and project evaluation – [Boardman, *et al*, Chap. 2 (pp. 28-30)]
3. Willingness to pay and opportunity cost [Boardman *et al*, Chap. 2 (pp. 31-41)]
4. Consumer and producer surplus – [Boardman *et al*, Chap. 3 (pp. 55-75)]
5. Market Distortions and project evaluation– [Belli *et al*, Appendix 1A (pp.199-213)]

### **Quiz –July 15**

### **PART 3: Cost Benefit Analysis – A tool for Project Evaluation – July 15**

6. What is Cost Benefit Analysis? [Boardman, Chap. 1 (pp. 1-2)]
7. Private versus social Cost Benefit Analysis [Boardman, Chap. 1 (pp. 1-2)]
8. Key Steps in Cost Benefit Analysis [Boardman, Chap. 1 (pp. 4-15)]
9. Why Cost benefit Analysis? [Boardman, Chap. 1 (pp. 21-23)]

### **PART 4: Identification and Valuation of Costs and Benefits – July 20 & 22**

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

### **Quiz 2- July 27**

### **PART 5: Monetising Costs and Benefits – July 27 & 29**

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 3 & 5**

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

**Quiz 3 – August 5**

**PART 7: Dealing with Risks and Uncertainties – August 10**

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

**CLASS REVIEW – August 12**

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