

Cost Benefit Analysis

(01/19/2021)

A. Course Information

Spring 2021

EPPS 7304.0h1 (CN 27153)

Tuesday, 1:00 pm - 3:45 pm. GR 3.420

B. Professor Contact Information

Professor Simon Fass

Office phone: 972 883 2938

Email: eLearning “Course Messages” (or fass@utdallas.edu if Course Messages is inoperative)

Office location: GR 3.224

Office hours by appointment: Monday, Tuesday, Wednesday: 11:00 am-12:30 pm; Thursday: 2:00-3:30 pm

- book appointment at: <https://simon-fass.youcanbook.me>
- meeting options:
 - a) live, face to face in office
 - b) via Collaborate: <https://us.bbcollab.com/guest/da4e7032c36a4374ab9345d121d0bc4c>
 - or log in by phone: +1 571-392-7650 (+1 is for int'l), Conf/Pin #: 241 859 6151
 - c) by office telephone: 972 883 2938

C. Course Modality and Expectations

Instructional Mode: Hybrid. Course is taught face-to-face in a traditional classroom setting with simultaneous (i.e. synchronously) online participation by students preferring that option, or asynchronously with students reviewing recorded lectures. Students may alternate among these options at will proceeds.

Course Platform: Lectures, discussions and recordings are on Blackboard Collaborate, accessed through the Elearning course page. See Section M below for links to information on how to navigate and use Elearning and Blackboard Collaborate.

Expectations: Students who participate in person or online synchronously should join the class on time. After a session starts, online participants should remain active in front of their computers for the duration of the session with microphones and cameras on, among other reasons because it is hard to contribute to discussions or answer questions if you are not where you indicate that you are.

Asynchronous Learning Guidelines: Students choosing to participate asynchronously must meet the same requirements and deadlines as other students. It is especially important to review recorded lectures every week, assure that you join others for group exercises, and carve out the specific times for scheduled presentations, examinations, etc. See: [Asynchronous Access for Spring 2021 FAQ](#) for further guidance.

D. COVID-19 Guidelines and Resources

The information contained in following link lists the University’s COVID-19 resources for students. See <http://go.utdallas.edu/syllabus-policies>.

E. Classroom Conduct Requirements Related to COVID-19

UT Dallas requires that all students wear a face covering that covers the nose and mouth in all university buildings and classrooms. To help protect the health and safety of students, instructors, and the University community, students who choose not to wear a face covering may not attend class in person but may attend remotely. Anyone attending class in person without a face covering will be asked to put one on or leave. Instructors may end the class if anyone present refuses to appropriately wear a face covering for the duration of class. Students should also be sure they are at least six feet away from their fellow students and faculty, and sit in a seat that is designated to ensure that distance. Students who either refuse to wear face coverings appropriately or to adhere to other social distancing protocols may face disciplinary action for [Student Code of Conduct](#) violations. Students who are unable to comply with the university policies including wearing a face covering should consult the [Comets United - Student Safety](#) webpage for further instructions.

Students who have tested positive for COVID-19 or may have been exposed should not attend class in person and should instead follow required disclosure notifications as posted on the university’s website (see “[What should I do if I become sick?](#)” webpage)

F. Class Attendance and Participation (for students attending live or synchronously)

Regular and punctual class attendance and participation are expected of students regardless of modality. Students who do not regularly attend class or fail to participate during class invite scholastic difficulty. Participation also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures. Class participation is documented by faculty. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

G. Class Recordings

The instructor will record meetings of this course. Such recordings will be available to all students registered for this class on Blackboard Collaborate. Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

H. Class Materials

The instructor will make non-textbook class materials available to all students registered for this class. These materials may be downloaded during the course. However, the materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

I. Course Pre-requisites, Co-requisites, and/or Other Restrictions

No pre-requisites. Understanding how to read graphs is an advantage, however, and it can be helpful to have completed introductory courses in welfare (or micro-) economics and statistics. We will in any case /review essentials during the course to so that everyone is up to speed.

J. Course Description

Cost-benefit analysis is a useful analytical method for policy, program and project assessment in the public, non-profit and private sectors. It is a structured approach to weighing the pros and cons of alternative courses of action. More simply, it compares the benefits that come from policies, programs, or projects to the costs that these actions incur to produce the benefits. This comparison helps to distinguish public and private actions that make better use of resources to reach their objectives from actions that make poorer use of them.

Organized around basic, mainly economic theories of behavior, the course provides a conceptual and practical introduction to the method and way of thinking. Themes covered include identification of cost and benefit components, valuation of these components, converting future to present values, dealing with uncertainty, estimating impacts in different policy areas, and accounting for transfers between winners and losers that invariably result from intervention.

K. Student Learning Objectives/Outcomes

Students will:

- become familiar with basic underpinnings and other dimensions of cost-benefit analysis;
- appreciate the wide range of applications for this method of judging the worth of actions;
- distinguish between higher and lower quality analyses, and be able to critique both well; and
- be prepared to contribute to preparation of cost-benefit studies and research in practice.

L. Required Textbooks

E.J. Mishan and Euston Quah. 2021. Cost-Benefit Analysis, 6th edition, Routledge

Ginés de Rus. 2014. Introduction to Cost-Benefit Analysis: Looking for Reasonable Shortcuts. Edward Elgar

Suggested additional text

Boardman, Greenberg, Vining & Weimer. 2018 Cost Benefit Analysis: Concepts & Practice, 5th edition. Prentice Hall.

M. Sundry Important Information

Textbooks can be ordered online or purchased at the [UT Dallas Bookstore](#).

Technical Requirements: In addition to a confident level of computer and Internet literacy, certain minimum technical requirements must be met to enable a successful learning experience. Please review the important technical requirements on the [Getting Started with eLearning](#) webpage.

Course Access and Navigation: This course can be accessed using your UT Dallas NetID account on the [eLearning](#) website. Please see the course access and navigation section of the [Getting Started with eLearning](#) webpage for more information. To become familiar with the eLearning tool, please see the [Student eLearning Tutorials](#) webpage. UT Dallas provides eLearning technical support 24 hours a day, 7 days a week. The [eLearning Support Center](#) includes a toll-free telephone number for immediate assistance (1-866-588-3192), email request service, and an online chat service.

Communication: This course utilizes online tools for interaction and communication. Some external communication tools such as regular email and a web conferencing tool may also be used during the semester. For more details, please visit the [Student eLearning Tutorials](#) webpage for video demonstrations on eLearning tools. Student emails and discussion board messages will be answered within 3 working days under normal circumstances.

Distance Learning Student Resources: Online students have access to resources including the McDermott Library, Academic Advising, The Office of Student AccessAbility, and many others. Please see the [eLearning Current Students](#) webpage for more information.

Server Unavailability or Other Technical Difficulties: The University is committed to providing a reliable learning management system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive assessment activity, the instructor will provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and also contact the online [eLearning Help Desk](#). The instructor and the eLearning Help Desk will work with the student to resolve any issues at the earliest possible time.

N. *Academic Calendar* - additional readings posted on eLearning.

1. January 19: Introduction to the Course

Suggested:

European Commission. 2014. Guide to Cost-Benefit Analysis of Investment Projects

2. January 26: Overview of Cost Benefit Analysis (CBA)

Ginés de Rus, Introduction to Cost Benefit Analysis. *Chapter 1*

Mishan & Quah, Cost-Benefit Analysis. *Part I. Scope and Method*

Layard, R., et al. 2007. *Cost-benefit analysis of psychological therapy*. National Institute Econ Rev 202: 90

Martin, L. and Richard Lotspeich. 2013. *A Benefit-Cost Framework for Early Intervention to Prevent Sex Trading*. Journal of Benefit Cost Analysis. 5(1): 43–87

3. February 2: Conceptualizing Costs and Benefits

Ginés de Rus, Introduction to Cost Benefit Analysis. *Chapter 2*

Adler, M. D. and Posner, E. A. (2000). *Implementing cost benefit analysis when preferences are distorted*. The Journal of Legal Studies, 29(S2):1105–1147

Boardman, A., Vining, A., and Waters, W. G. (1993). *Costs and Benefits Through Bureaucratic Lenses: Example of a Highway Project*. Journal of Policy Analysis and Management, 12(3):532– 555

4. February 9: Theoretical Foundations of CBA.

Mishan & Quah, Cost-Benefit Analysis. *Part II. Basic concepts of benefits and costs*

LaFrance, J. T. (1991). *Consumer's surplus versus compensating variation revisited*. American Journal of Agricultural Economics, 73(5):1496–1507

5. February 16: Valuing Costs and Benefits When Market Prices are Available

Ginés de Rus, Introduction to Cost Benefit Analysis. *Chapters 3, 4.*

Mishan & Quah, Cost-Benefit Analysis. *Part III. Shadow prices and transfer payments.*

6. February 23: Valuing Costs and Benefits When Market Prices are not Available

Ginés de Rus, Introduction to Cost Benefit Analysis. *Chapters 5 & 6.*

de Rus, G. 2011. *The BCA of HSR: Should the government invest in high speed rail infrastructure?* Journal of Benefit-Cost Analysis, 2(1):1–28

Karoly, LA. (2008). *Valuing benefits in benefit-cost studies of social programs*. Tech Report. RAND Corp

Hanemann, WM. 1994. *Valuing Environment Through Contingent Valuation*, J. of Econ Persp. 8(4), 19-43

Suggested:

Diamond, P. and J. Hausman, 1994. *Contingent Valuation: Is Some Number Better than No Number?* Journal of Economic Perspectives, 8(4), pp. 45-64

Nelson, R.H. 1996. *How Much is God Worth?* Competitive Enterprise Institute

7. March 2: Assessment Indicators

Ginés de Rus, Introduction to Cost Benefit Analysis. *Chapter 7 and 8*

Mishan & Quah, Cost-Benefit Analysis. *Part V. Investment Criteria*

Gittinger, JP. 1984. *Compounding and Discounting Tables for Project Evaluation*, World Bank

Ley, E. *Cost-benefit analysis: Evaluation criteria*, Knowledge Brief for World Bank Staff. November 2007

Lind, R. 1999. *Chapter 17: Analysis for Intergenerational Decision Making*, in P. Portney and J.P. Weyant, eds. *Discounting and Intergenerational Equity, Resources for the Future*.

Newell, R. and W. Pizer, 2002. *Discounting the Benefits of Climate Change Policies Using Uncertain Rates* Resources, Winter, Issue 146.

8. March 9: Risk and Uncertainty

Midterm Exam due before 8:00 pm.

Ginés de Rus, *Introduction to Cost Benefit Analysis. Chapter 9*

Mishan & Quah, *Cost-Benefit Analysis. Part VII. Uncertainty*

Durkin, J.T., and Greeley, A.M. 1991. *A Model of Religious Choice Under Uncertainty: On Responding Rationally to the Nonrational*, *Rationality and Society*, 3:2. 178-196

Camerer, C. and H. Kunreuther. 1989. *Decision Processes for Low Probability Events: Policy Implications*, *Journal of Policy and Management*, September. 8(4) pp.565-92.

March 16 no class Spring Break

9. March 23: Focus on Life and Limb

Mishan & Quah, *Cost-Benefit Analysis. Chapter 50*

Deven Carlson, Simon Haeder, Hank Jenkins-Smith, Joseph Ripberger, Carol Silva and David Weimer. 2020. *Monetizing Bowser: A Contingent Valuation of the Statistical Value of Dog Life*. *Journal of Benefit Cost Analysis*; 11(1):131-149

Viscusi, W. K. 2013. *Estimating the value of a statistical life using census of fatal occupational injuries data*, *Vanderbilt Law and Economics Research Paper No. 13-17*

Viscusi, W. K. (2009). *Valuing risks of death from terrorism and natural disasters*. *Journal of Risk and Uncertainty*, 38(3):191-213

Suggested:

Bovbjerg, R., F. Sloan and J. Blumstein. 1989. *Valuing Life and Limb in Tort: Scheduling Pain and Suffering*, *Northwestern Law Review*, Summer, pp. 909-76.

Herzog, H and A. Schlottman. 1990. *Valuing Risk in the Workplace: Market Price, Willingness to Pay, and the Optimal Provision of Safety*, *Review of Economics and Statistics*, pp. 463-70.

Posner, E.A. & Sunstein, C.R. 2004. *Dollars & Death*. AEI-Brookings Joint Ctr for Regulatory Studies

10. March 30: Focus on National Defense

F. Melese, A. Richter, & B. Solomon (eds). 2015. *Military CBA: Theory and Practice*. Routledge
Chapter 1. Introduction: military cost-benefit analysis
Chapter 2. Allocating national security resources
Chapter 3. Measuring defense output: an economics perspective
Chapter 14. Real options in military acquisition: ..study of Javelin missile system
Chapter 15. An application of military CBA in..defense acquisition: the C-17 transport..

11. April 6: Focus on Health and Safety

Ginés de Rus, *Introduction to Cost Benefit Analysis. Chapter 10.5*

Mishan & Quah, *Cost-Benefit Analysis. Chapters 49, 51 and 51*

Linda Thunström, Stephen C. Newbold, David Finnoff, Madison Ashworth and Jason F. Shogren. 2020. *The Benefits and Costs of Using Social Distancing to Flatten the Curve for COVID-19*. *Journal of Benefit Cost Analysis*; 11(2):179-195

Marc Jeuland, Marcelino Lucas, John Clemens, and Dale Whittington. 2009. *A Cost-Benefit Analysis of Cholera Vaccination Programs in Beira, Mozambique*. *The World Bank Economic Review*, Vol. 23, No. 2, pp. 235-267

Jensen, JD., Morten Raun Mørkbak, and Jonas Nordström. 2012. *Economic Costs and Benefits of Promoting Healthy Takeaway Meals at Workplace Canteens*. *Journal of Benefit-Cost Analysis*: Vol. 3: Iss. 4,

Suggested:

- Henrik Jaldell. 2013. *Cost-Benefit Analyses of Sprinklers in Nursing Homes for Elderly*. Journal of Benefit-Cost Analysis; 4(2): 209–235
- Minah Park et al. 2018. *Cost-benefit analysis of vaccination: a comparative analysis of eight approaches for valuing changes to mortality and morbidity risks*. BMC Medicine 16:139
- Brad Wong and Mark Radin. 2019. *Benefit-Cost Analysis of a Package of Early Childhood Interventions to Improve Nutrition in Haiti*. Journal of Benefit Cost Analysis; 10(S1):154–184

12. April 13: Focus on Saving the Planet

- Jia Li, Michael Mullan and Jennifer Helgeson. 2014. *Improving the Practice of Economic Analysis of Climate Change Adaptation*. Journal of Benefit Cost Analysis; 5(3): 445–467
- Runar Brännlund, Ola Carlén, Tommy Lundgren, and Per-Olov Marklund. 2012. *The Costs and Benefits of Intensive Forest Management*," Journal of Benefit-Cost Analysis: Vol. 3: Iss. 4,
- World Bank. 2016. The Cost of Fire: An Economic Analysis of Indonesia's 2015 Fire Crisis. Jakarta
- Scott Farrow and Douglas M Larson. 2012. *News and Social Cost: The Case of Oil Spills and Distant Viewers*. Journal of Benefit-Cost Analysis: Vol. 3: Iss. 4, Article 4.
- Almansa, C. and Martínez-Paz, J. M. (2011). *What weight should be assigned to future environmental impacts? a probabilistic cost benefit analysis using recent advances on discounting*. Science of The Total Environment, 409(7):1305 – 1314

Suggested:

- Ackerman, F. and Heinzerling, L. (2002). Pricing the priceless: Cost-benefit analysis of environmental protection. Georgetown University Law Center.
- John Weyant. 2014. *Integrated Assessment of Climate Change: State of The Literature*. 2014. Journal of Benefit Cost Analysis; 5(3): 377–409

13. April 20: Focus on Education

- Joni Hersch. 2019. *Catching Up Is Hard to Do: Undergraduate Prestige, Elite Graduate Programs, and the Earnings Premium*. Journal of Benefit Cost Analysis; 10(3):503–553
- Glenn C. Blomquist, Paul A. Coomes, Christopher Jepsen, Brandon C. Koford and Kenneth R. Troske. 2014. *Estimating the Social Value of Higher Education: Willingness To Pay For Community and Technical Colleges*. Journal of Benefit Cost Analysis. 5(1): 3–41
- Emmanuel Jimenez and Harry Anthony Patrinos. 2008. *Can Cost-Benefit Analysis Guide Education Policy in Developing Countries?* The World Bank, Public Policy Research Working Paper 4568
- Phaedra S. Walcott et al. 2018. *Benefit-Cost Analysis of Undergraduate Education Programs: An Example Analysis of Freshman Research Initiative*. CBE-Life Sciences Education, 17:rm1, 1–8
- W.S. Barnett and Leonard N. Masse. 2007. *Comparative benefit–cost analysis of the Abecedarian program and its policy implications*. Economics of Education Review 26, 113–125

14. April 27: Focus on Leisure Activities/Entertainment

- Mishan & Quah, Cost-Benefit Analysis. *Chapters 47 and 48*
- Zimmerman, D. 1997. Ch 4: *Subsidizing Stadiums: Who Benefits, Who Pays?* in Noll and Zimbalist, eds. Sports, Jobs and Taxes: The Economic Impact of Sports Teams and Stadiums," Brookings 119-45.
- Onil Banerjee, Martin Cicowiez and Adela Moreda. 2020. *Evaluating the Economic Viability of Public Investments in Tourism*. Journal of Benefit Cost Analysis. 11(1):101–130
- Whitson, D. and Horne, J. (2006). *Underestimated costs and overestimated benefits? comparing the outcomes of sports mega-events in Canada and Japan*. The Sociological Review, 54(2):73–89

Suggested:

Grinols, E. and J. Omorov, 1996, *Development or Dreamfield Delusions?: Assessing Casino Gambling's Costs and Benefits*, The Journal of Law and Commerce, Fall, 1996

Noll, R and A. Zimbalist. 1997. *The Economic Impacts of Sports Teams and Facilities*, in Noll, R and A. Zimbalist, eds. *Sports, Jobs & Taxes: The Economic Impact of Sports Teams and Stadiums*," Brookings Institution, pp.55-91.

15. May 4 : Submission and Presentation of Class Paper

May 11: Final Exam due before 4:00 pm.

O. Grading Policy

The course grade, ranging from A through F, is based on performance on:

mid-term exam (take home)	20%	final exam (take home)	30%
class paper (incl. presentation)	25%	several reading summaries	<u>25%</u>
		Total	100%

The grading structure is:

96% or more = A (4.00)	81% to 85% = B (3.00)	66% to 70% = C (2.00)
91% to 95% = A- (3.67)	76% to 80% = B- (2.67)	65% or less = F (0.00)
86% to 90% = B+ (3.33)	71% to 75% = C+ (2.33)	

P. Summaries and Research Paper:

Reading summaries comprise preparation, distribution, and presentation of synopses of class readings. Each student will complete a total of several summaries of assigned readings listed under Section N, above, or added by the instructor as the semester proceeds. The written summary will be one bulleted page, follow the guidelines detailed in Section Q, below, and be distributed to all classmates before class. The student will then present the summary during the class session, in person or virtually.

The Research Paper should be about 7 single-spaced pages in length, excluding quotes, notes, references, charts, etc. Building on discussions in the course, it should critically review a major theme or idea relevant to Cost Benefit Analysis. The paper must assure that:

- the content/argument aligns with class discussions;
- the biblio of at least 15 scholarly articles, books or reports is presented in consistent, standard format;
- all paraphrased ideas are properly attributed to their authors;
- quoted materials are in quotes with full, complete page references provided;
- all items cited in the body of the paper are properly referenced in the bibliography;
- all items in the biblio are cited in the text; and
- it faithfully adheres to the guidelines in Section Q, following.

Q. Guidelines: Professional practice typically requires adherence to some set of standards for document report preparation and submission. These are put in place to assure that written work is readable (easy on the eyes) and readily manageable in terms of transmission, storage, and retrieval. Mastering such standards is an important skill, certainly worth acquiring. Accordingly, there are 2 sets of rules that you should try to follow in all written submissions, one for document formatting/presentation and the other for document naming/submission. Grading of submissions will reflect how well you do this.

Format/presentation: (you can use this as a checklist before submitting anything):

- margins: ***1-inch on all sides***
- orientation: ***portrait***
- font: ***Times New Roman, regular, 12 points*** (not Calibri default, not HTML, not anything else)
- alignment: ***left*** (no justification)
- page numbering: ***on all pages, centered*** at the bottom
- line spacing: ***single-space within paras*** (not 1.15 MS Word default)
- paragraph spacing: ***double-space*** between paragraphs

- indentation: none (i.e. other than bulleted lists)
- assignment title: ***at top of first page on one line*** (i.e. no cover sheet)
- student name: ***next line after the title***
- citations in text: in ***any commonly accepted format*** (e.g., Smith, 2004)
- bibliography: ***any standard format*** (e.g. APA, Turabian, Chicago, MLA, Bermuda, etc.)
- spelling: ***no errors*** (i.e., use spelling checker, and review manually for wrong words)
- grammar: ***do not be horrible*** (i.e., use grammar checker set to strictest/most formal level)
- endnotes: ***place after bibliography*** (no footnotes)
- tables or graphics: ***include only if essential***, place at very end of document.

Naming/submission:

- submit electronically as ***attachment*** to message in eLearning ***Course Messages***
- save and submit attachment as ***MS Word document only*** (no pdf, Google doc, etc.)
- the document filename must be ***last name, first name, assignment number***.
 - e.g., for Bobby Smith, the first assignment filename is: ***Smith Bobby A1***
- ***filename means*** the name you use to save the assignment, not the message subject heading.

R. Course & Instructor Policies

Make-up Exams:	none
Extra Credit:	none
Late Work:	10% of assignment value lost for each day overdue
Class Citizenship:	civility and politeness are much appreciated

S. Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:
 “As a Comet, I pledge honesty, integrity, and service in all that I do.”

T. Academic Support Resources

The information contained in the following link lists the University’s academic support resources for all students. Please see <http://go.utdallas.edu/academic-support-resources>.

U. UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University’s policies and procedures segment of the course syllabus. Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor