Carleton University Department of Economics
<u>Fall 2024</u>
ECON 5060F / 4880V
Economic Analysis of Public Policy

<div style="background-color:red; color:white; text-align:center; font-weight:bold;">The Instructor</div>

Instructor: Vivian Hoffmann
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Office Location: 5140 Richcraft Hall
Office Hours: by appointment

<div style="background-color:red; color:white; text-align:center; font-weight:bold;">The Course</div>

Course Location/Delivery: Online Synchronous
Course Day and Time: Mon/Weds 6:05-7:25

Brightspace Course Page: https://brightspace.carleton.ca/d2l/home/309120

Course Description

How economic theory and empirical analysis are used to design and evaluate public policy, with emphasis on how the expectations, uncertainties, and practicalities faced by policymakers affect the design and implementation of economic policies.

This class provides a non-technical introduction to economic analysis of policy. Class meetings will consist of both lectures and discussion of assigned readings. We will begin with an overview of the standard economic model of utility maximization, welfare economics, and the conditions for economic efficiency. We then turn to externalities, public goods, imperfect information and their implications for the role of government; the rationale for social insurance; and the effect of taxes on the economy. The final month of the class introduces causal analysis with hands-on practice using the statistical software package Stata. Students will use a public-access dataset to examine a hypothesis of their choice.

Learning Outcomes

By the end of the course, students should be able to:
- Understand and critique the economic tools used to analyze public policy
- Articulate economic arguments related to current policy debates
- Investigate a policy-relevant causal claim using data

Preclusions and Prerequisites

Prerequisites: Students should normally have completed ECON 1001 and ECON 1002 (or equivalent) and have a background in university level mathematics. The course is offered in support of the GDip in Economic Policy; however, other graduate and exceptional undergraduate students at Carleton University with adequate background may be admitted with permission of the Department of Economics. Preclusions: None.

Course Calendar

We will meet for two scheduled 1 hour and 20-minute meetings per week. The first class will typically be a lecture, and in the second class we'll discuss an assigned reading and/or go over a problem set. Discussion questions will be provided, and written responses to these will be due ahead of class. Readings and problem sets are expected to take an average of 5 hours and 20 minutes of time outside of class per week (two times weekly scheduled class time).

Week 1: Introduction and overview (September 4)

Part I: Economic theory of public policy

Week 2: Economic decision-making, social efficiency, and social welfare (September 9-11)
- Gruber Chapter 2 - Theoretical Tools of Public Finance
- Rawls, J. "A Theory of Justice" (1979) in Shafer-Landau, R. ed., 2013. Ethical theory: an anthology. John Wiley & Sons. Pages 582-592.

Problem set 1 due September 13

Week 3: Externalities (September 16-18)
- Gruber, Chapter 5 – Externalities: Problems and Solutions
- Atkinson, Giles. 2018. "Chapter 14: The social cost of carbon." in Cost benefit analysis and the environment: further developments and policy use. Pages 335-370.

Week 4: Public Goods (September 23-25)
- Gruber, Chapter 7 – Public Goods
- Fehr, E. and Gächter, S., 2002. Altruistic punishment in humans. Nature, 415(6868), pp.137-140.
- Henrich, J., Ensminger, J., McElreath, R., Barr, A., Barrett, C., Bolyanatz, A., Cardenas, J.C., Gurven, M., Gwako, E., Henrich, N. and Lesorogol, C., 2010. Markets, religion, community size, and the evolution of fairness and punishment. Science, 327(5972), pp.1480-1484.

Weeks 5: Cost-benefit analysis (September 30 - October 2)
- "Chapter 1: Introduction to Cost-Benefit Analysis" in Cost-benefit analysis: concepts and practice. 5th edition. Boardman, Greenberg, Vining and Weimer. 2018.
- Jindal, A. and Shrimali, G., 2022. Cost–benefit analysis of coal plant repurposing in developing countries: A case study of India. Energy Policy, 164, p.112911.

- Samson, R. "Cost-benefit analysis is the wrong tool for tackling climate change" Policy Options.

Problem set 2 due October 4

Week 6: Social insurance and information problems (October 7-9)
- Gruber, Chapter 12 – Social insurance: the new function of government
- Agan, A. and Starr, S., 2018. Ban the box, criminal records, and racial discrimination: A field experiment. The Quarterly Journal of Economics, 133(1), pp.191-235.

Week 7: Tax incidence and efficiency (October 16)
- Gruber, Chapter 19 – The equity implications of taxation: Tax incidence
- Gruber, Chapter 20 – Tax inefficiencies and their implications for optimal taxation
- Taxation – Our World in Data. Interactive version: https://ourworldindata.org/taxation

Problem set 3 due October 18

READING WEEK – NO CLASS (October 21-23)

Week 8: Midterm oral exam, introduction to Stata (October 28-30)

Midterm exam: individually scheduled, October 28-November 1

Part II: Causal analysis

Week 9: Causal analysis and the experimental ideal (November 4-6)
- Bailey, Chapter 1
- Clemens, M. and G. Demombynes. 2013. "The New Transparency in Development Economics: Lessons from the Millennium Villages Controversy", CGD Working Paper #342.

Week 10: Omitted variable bias (November 11-13)
- Bailey Chapter 3.3 (Endogeneity and Bias, pages 61-64)
- Bailey Chapter 5 (focus especially on Section 5.2: Omitted Variable Bias; you can skip section 5.3: Measurement Error)
- Bailey Chapter 6

Problem set 4 due November 15

Week 11: Panel data, difference-in-differences (November 18-20)
- Bailey Chapter 8

1-page Research project proposal due November 22

Week 12: Individual meetings on research proposals (November 25-27)

Problem set 5 due November 29

Week 13: Individual and/or group meetings to support data analysis (December 2-4)

Research project due December 21

Textbooks and Readings

Texts

Title	Author(s)	ISBN
Public finance and public policy, 5th edition or later	Gruber, Jonathan.	9781319281106 (7th edition)
2016. Real Stats: Using Econometrics for Political Science and Public Policy	Bailey, Michael A.	9780190859497 (2nd edition)

Available from: Carleton University Bookstore, Amazon.ca

Other readings

See course calendar (previous section). All non-textbook readings will be posted on Brightspace.

Evaluation

Evaluation

Assignment/Test	Date	Mode of Delivery	Percentage of Grade
Problem sets	Various, see calendar	Online asynchronous	30%
Midterm exam	October 28-November 1	Online synchronous	20%
In-class participation	Throughout the term	Online synchronous	10%
One-page project proposal			10%
Research project			30%
			Total: 100%

Information About Assignments

All written work, including presentation slides and Stata do-files, should be submitted via Brightspace by the time class starts on the due date. Assignments due on a date when no class is scheduled are due by midnight.

Problem sets
The first three problem sets will be based on the assigned readings, with a focus on the Gruber text. The last two problem sets require you to conduct analysis on datasets to be provided by the instructor using Stata or R. Support will be provided only for Stata.

You are welcome to work together on these assignments, but it is also important that each of you masters the concepts that they cover individually. Thus, each of you must submit your own solutions. This means that each student must write your own Stata code, submit your own logs and output, etc., and submit a writeup written in your own words. You must also indicate on your answer sheet who you discussed the problem set with. If you have any questions at all about this policy, please consult me directly.

Oral midterm exam
The midterm exam will cover lectures and assigned readings up to the exam date. Students will answer questions about this material in individual online meetings with the instructor lasting 20 to 30 minutes.

In-class participation
I will call on students to answer questions about the readings. Participation will be evaluated based on students' demonstration that they have completed the assigned readings, their understanding of this material, and their ability to integrate and apply the ideas.

Research project
Describe a policy problem and potential solution and how the problem relates to at least one economic concept. Cite at least two (preferably more) academic articles and a total of at least four sources describing the issue. Find relevant data and present summary statistics, data visualizations as appropriate, and an association between at least two variables, in the form of a univariate or multivariate regression. Describe a causal relationship this association *could* represent. Describe potential omitted variables or reverse causality channels that prevent you from drawing this causal conclusion with confidence. Describe a research strategy that would allow you to identify the causal relationship. You will be provided with a list of public access datasets, among which you may choose to complete this project. You may with the instructor's permission, use a different dataset. Length: 5-10 pages including figures

Plaigiarism
Please be aware that all work submitted as a requirement of ECON 5065 must be both your own work and produced specifically for this course. Academic offences are serious infractions and

will not be tolerated. Students should consult the University's Academic Integrity Policy concerning academic integrity and instructional offences.

The University Academic Integrity Policy defines plagiarism as "presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one's own." This includes reproducing or paraphrasing portions of someone else's published or unpublished material, regardless of the source, and presenting these as one's own without proper citation or reference to the original source. Examples of sources from which the ideas, expressions of ideas or works of others may be drawn from include but are not limited to: books, articles, papers, literary compositions and phrases, performance compositions, chemical compounds, artworks, laboratory reports, research results, calculations and the results of calculations, diagrams, constructions, computer reports, computer code/software, material on the internet and/or conversations.

Examples of plagiarism include, but are not limited to:
- any submission prepared in whole or in part, by someone else, including the unauthorized use of generative AI tools (e.g. ChatGPT);
- using ideas or direct, verbatim quotations, paraphrased material, algorithms, formulae, scientific or mathematical concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another's data or research findings without appropriate acknowledgement;
- submitting a computer program developed in whole or in part by someone else, with or without modifications, as one's own; and
- failing to acknowledge sources through the use of proper citations when using another's work and/or failing to use quotations marks.

Plagiarism is a serious offence that cannot be resolved directly by the course's instructor. The Associate Dean of the Faculty conducts a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They can include a final grade of "F" for the course.

Use of AI
The use of AI and AI-assisted technologies may be used only be used to identify sources (e.g. Elicit AI) and to improve the readability and language of the work (e.g. Grammarly) and not to replace key authoring tasks such as synthesizing knowledge, drawing conclusions, or making recommendations. Students must disclose and describe any use of AI and AI-assisted technologies. AI detection software will be used by the instructor in the even of suspected inappropriate use. Unauthorized use of generative AI tools for scholarly work may be considered an offence under Carleton's Academic Integrity Policy.

Late Policies and Extensions for Term Work
Late assignments will not be accepted and a grade of zero will be entered.

Midterm/Test Policies

- If you are absent for a midterm, email me as soon as possible to reschedule. I reserve the right to request a Self-Declaration form or PMC letter of accommodation depending on the length of incapacitation.

Final Exam
There is no final exam for this course.

Satisfactory Performance Criteria
Students must fulfill all of the course requirements in order to achieve a passing grade (D- or higher).

Deferred Finals
Not applicable

E-Proctoring
E-proctoring will not be used for evaluations in this course.

Distance Exams
Not applicable

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.

Plagiarism, Resources and Mental Health, Academic Accommodations

You are responsible for reading and knowing the information about plagiarism, Carleton University resources, and academic accommodations found HERE.