

Fall 2022

ECONOMICS 1410 / KENNEDY SCHOOL SUP-125
Public Economics: Designing Government Policy
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Course Description: This course focuses on the role of the government in the economy. It is newly designed for Fall 2022. The aim is to provide an understanding of the reasons for government intervention in the economy, analyzing the benefits of possible government policies, and the response of economic agents to the government's actions. The course covers tax policy and inequality, social insurance programs (like unemployment insurance, health insurance, and disability insurance), public goods, externalities and environmental protection. The course tries to strike a balance between theory and empirics. For each topic, we will cover the theoretical models on each issue and then dive into the empirical research evidence. We will also have in-class discussions based on readings from the media and broader audience books. I will assign and post those readings as we go.

Special emphasis is on current policy issues such as health care reform, tax reform, and inequality.

Recommended prep: Economics 1010a or 1011a or permission of the instructor. Familiarity with multivariate calculus and econometrics (at the level of economics 1123 or 1126) is strongly recommended.

Important: Please check this file

<https://www.dropbox.com/s/f4ldnm4a2it7egs/Derivations%20you%20need%20to%20know.pdf?dl=0>

to see whether you are familiar with the type of math used in the course. The class will focus on content and topics. Therefore, you need to already be familiar with the mathematical tools illustrated below. We will not be able to spend time in class explaining how to solve constrained maximization problems (like consumer utility maximization or firms' profit maximization), take derivatives, or other such calculus and algebra tools. We will review these tools as we go along and I will explain intuitions, but you will likely not get as much out of the class if you are not already familiar with multivariate calculus and constrained maximization.

Course Logistics:

- 1) Lectures – Two lectures per week, MW 3:00 to 4:15, in Emerson 210
- 2) Sections – One per week. Time TBD with a poll.
- 3) Readings – Jonathan Gruber, *Public Finance and Public Policy*, is the recommended textbook. Other readings are listed below. You do not need to buy the book. I have posted all the chapters, digitized, on CANVAS. The chapter numbering in the Readings below reflect the ones in those PDFs.
- 4) Assignments will be posted on the course website, which should be checked regularly: <https://canvas.harvard.edu/courses/107612>

Grading: Grades will be based on a final exam (30%), a midterm exam (20%) and four problem sets (50% total, 12.5% each). Students choosing to write a term paper do not need to do two of the problem sets (sets 2 and 4).

Term Paper Option: Students may write a term paper that contains *original* research on a topic in public economics. The term paper satisfies the Economics Department's writing requirement for economics concentrators. See below for more details on this option.

Health guidance: Please do NOT come to class if you are feeling unwell, for the sake of your classmates. As you know, covid tests can yield false negatives and tests can take a while to turn positive even after symptoms start. We will make sure you can follow the class remotely. In Canvas, you will find Zoom links for each class. Email me if you need to skip class for health reasons and I will connect my phone or computer so you can follow remotely. If you feel too unwell to attend in real time over zoom, there will be a recording posted so you can watch it when you feel better (the recording will be up for 10 days). And sign up for office hours so we can chat more if you have questions.

Academic Accommodations: Students needing academic accommodations because of a documented disability may present their Faculty Letter from the Disability Access Office (DAO) at any time during the semester. However, the DAO does not guarantee that accommodations will be provided after the first two weeks, so please do this promptly. I will of course do everything possible to make this easier for you and help you.

Collaboration: Discussion and the exchange of ideas are essential to academic work. You are encouraged to consult with your classmates on the choice of paper topics and to share sources. You may find it useful to discuss your chosen topic with your peers, particularly if you are working on the same topic as a classmate. However, you should ensure that any written work you submit for evaluation is the result of your own research and writing and that it reflects your own approach to the topic. You must also adhere to standard citation practices in this discipline and properly cite any books, articles, websites, lectures, etc. that have helped you with your work. If you received any help with your writing (e.g., feedback on drafts), you must also acknowledge this assistance.

No collaboration of any kind is allowed during the exam. On problem sets, you may consult with your classmates and the teaching staff. However, you must write up your own solutions in your own words based on your own understanding.

Frequently Asked Questions:

1. Textbook. You do not need to buy the book. We have posted digitized versions of an older edition (due to copyright issues) in 4 separate PDFs in Canvas. You can find everything you need for the lectures there. If you wish to buy the book nevertheless, you are welcome to buy any edition of the textbook. The textbook provides useful background material, but the lectures provide more material. Therefore, attending class is critical.
2. Grading option. Students may enroll in the course on a Pass/Fail basis with permission of the instructor.
3. Adding the course late. The last day to add the course without a fee is **September 19**.

4. Cross-registration and website access. The course is open to students from other universities, departments, and from MIT. In order to view the files on the course website, students enrolled in the course will need to log-in with a Harvard University ID and pin.
5. Attendance. Students who are enrolled in the course for credit are responsible for all material covered and any course announcements made in lecture and section. You should only enroll in the class for credit if you can attend class regularly.
6. Other readings. Academic journal articles listed on the reading list below will be distributed electronically for your convenience. Please see the course website for details on the procedure that we will use. All articles should also be available to Harvard College students for free by searching for the title in Google Scholar:
<http://scholar.google.com.ezp-prod1.hul.harvard.edu/schhp?inst=harvard.edu>
 or as working papers through the National Bureau of Economic Research website:
<http://www.nber.org.ezp-prod1.hul.harvard.edu/>
7. Exams. The midterm exam will be held in class on **October 26th**. You should only enroll in the class for credit if you can be in attendance to take the midterm on this date. The date, time, and location of the final exam will be assigned by the registrar's office.

Term Paper

If you choose this option, a term paper proposal is due on 10/3. Proposals should be about 2-3 pages in length (feel free to make it longer), explaining the i) motivation; ii) question asked; iii) related literature; iv) empirical strategy or theoretical model; v) data to be used (if any); vi) results expected or hoped for. The complete paper is due on December 5th.

Most term papers use Stata or R. R is open source and Stata is available for download at: <https://downloads.fas.harvard.edu/>

LECTURE DATES

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|----------------------------|---|
| 1. Wednesday, August 31 | Intro; Income Distribution, Poverty, Taxes and Transfers |
| <i>Monday, September 5</i> | <i>No Class (Labor Day)</i> |
| 2. Wednesday, September 7 | Theoretical Tools for Public Economics (Part I) |
| 3. Monday, September 12 | Theoretical Tools for Public Economics (Part II) |
| 4. Wednesday, September 14 | Tax Incidence (Part I) [Recommended DAO letter submission] |
| 5. Monday, September 19 | Tax Incidence (Part II) |
| 6. Wednesday, September 21 | Optimal Labor Income Taxation (Part I) [PS1 assigned] |
| 7. Monday, September 26 | Optimal Labor Income Taxation (Part II) |
| 8. Wednesday, September 28 | Optimal Labor Income Taxation (Part III) [PS1 due] |
| 9. Monday, October 3 | Optimal Labor Income Taxation (Part IV) [PS2 assigned] |

<i>Wednesday, October 5</i>	<i>No Class (Yom Kippur)</i>
<i>Monday, October 10</i>	<i>No Class (Indigenous People's Day)</i>
11. Wednesday, October 12	Taxes and Labor Supply (Part I)
12. Monday, October 17	Taxes and Labor Supply (Part II)
13. Wednesday, October 19	Taxes and Reported Income (Part I) [PS2 due]
14. Monday, October 24	Taxes and Reported Income (Part II)
15. Wednesday, October 26	Midterm
16. Monday, October 31	Externalities (Part I)
17. Wednesday, November 2	Externalities (Part II)
18. Monday, November 7	Public Goods (Part I) [PS3 assigned]
19. Wednesday, November 9	Public Goods (Part II)
20. Monday, November 14	Introduction to Social Insurance
21. Wednesday, November 16	Health Insurance (Part I) [PS 3 due]
22. Monday, November 21	Health Insurance (Part II) [PS4 assigned]
<i>Wednesday, November 23</i>	<i>No Class (Thanksgiving)</i>
23. Monday, November 28	Unemployment Insurance, Disability Insurance, and Workers' Compensation (Part I)
24. Wednesday, November 30	Unemployment Insurance, Disability Insurance, and Workers' Compensation (Part II) [PS 4 due]

READINGS (All academic articles below are entirely optional reading)

August 31: Income Distribution, Poverty, Taxes and Transfers

Gruber, Chapters 17 and 18

Piketty, Thomas, and Emmanuel Saez (2003) "Income Inequality in the United States, 1913-1998," *The Quarterly Journal of Economics* 118(1): 1-41. (optional)

Atkinson, Anthony B., Thomas Piketty, and Emmanuel Saez (2011) "Top Incomes in the Long-Run of History," *Journal of Economic Literature* 49(1): 3-71. (optional)

September 7 and 12: Theoretical Tools for Public Economics

Gruber, Chapter 2

Saez, Emmanuel and Stefanie Stantcheva (2016) "Generalized Social Marginal Welfare Weights for Optimal Tax Theory," *American Economic Review* 106(1): 24-45. (optional)

September 14 and 19: Tax Incidence

Gruber, Chapter 19

Chetty, Raj, Adam Looney, and Kory Kroft (2009) "Salience and Taxation: Theory and Evidence," *American Economic Review* 99(4): 1145-1177. (optional)

Doyle Jr, Joseph J., and Krislert Samphantharak (2008) "\$2.00 Gas! Studying the Effects of a Gas Tax Moratorium," *Journal of Public Economics* 92(3): 869-884. (optional)

September 21 through October 3: Optimal Labor Income Taxation

Gruber, Chapter 20 and 21

Diamond, Peter, and Emmanuel Saez (2011) "From Basic Research to Policy Recommendations: The Case for a Progressive Tax," *Journal of Economic Perspectives* 25(4): 165-190. (optional)

Piketty, Thomas, and Emmanuel Saez (2013) "Optimal Labor Income Taxation," *Handbook of Public Economics*, Volume 5, Amsterdam: Elsevier-North Holland. (recommended!)

Saez, Emmanuel (2002) "Optimal Income Transfer Programs: Intensive versus Extensive Labor Supply Responses," *The Quarterly Journal of Economics* 117(3): 1039-1073. (optional)

October 12 and 17: Taxes and Labor Supply

Gruber, Chapter 21

Chetty, Raj, John Friedman and Emmanuel Saez (2013) "Using Differences in Knowledge Across Neighborhoods to Uncover the Impacts of the EITC on Earnings," *American Economic Review* 103(7): 2683-2721. (optional)

Eissa, Nada, and Jeffrey B. Liebman (1996) "Labor Supply Response to the Earned Income Tax Credit," *The Quarterly Journal of Economics* 111: 605-637. (optional)

Saez, Emmanuel "Do Taxpayers Bunch at Kink Points?" (2010) *American Economic Journal: Economic Policy*, 2: 180-212. (optional)

Pencavel, John (1986) "Labor Supply of Men: A Survey," *Handbook of Labor Economics*, Volume 1, Chapter 1. (optional)

Heckman, James, and Mark Killingsworth (1986) "Female Labor Supply: A Survey," *Handbook of Labor Economics*, Volume 1, Chapter 2. (optional)

October 24 and October 26: Taxes and Reported Income

Saez, Emmanuel, Joel Slemrod, and Seth H. Giertz (2012) “The Elasticity of Taxable Income with Respect to Marginal Tax Rates: A Critical Review,” *Journal of Economic Literature* 50(1): 3-50. (optional)

Piketty, Thomas, Emmanuel Saez, and Stefanie Stantcheva (2014) “Optimal Taxation of Top Labor Incomes: A Tale of Three Elasticities,” *American Economic Journal: Economic Policy*, 6(1). (optional)

Akcigit, Ufuk, Salomé Baslandze, and Stefanie Stantcheva (2016) “Taxation and the International Mobility of Inventors,” *American Economic Review* 106 (10): 2930–2981. (optional)

Goolsbee, Austan (2000) “What Happens When You Tax the Rich? Evidence from Executive Compensation,” *Journal of Political Economy* 108: 352-378. (optional)

October 31 and November 2: Externalities

Gruber, Chapter 5 and 6

Gruber, Jonathan (2001) “Tobacco at the Crossroads: The Past and Future of Smoking Regulation in the United States,” *Journal of Economic Perspectives* 15(2): 193-212. (optional)

Nordhaus, William D. (2006) “After Kyoto: Alternative Mechanisms to Control Global Warming,” *American Economic Review* 96(2): 31- 34. (optional)

November 7 and 9: Public Goods

Gruber, Chapter 1 and 7

November 14: Introduction to Social Insurance

Gruber, Chapter 12, 15, and 16

November 16 and 21: Health Insurance

Case, Anne and Angus Deaton (2017) “Mortality and Morbidity in the 21st Century,” *Brookings Papers in Economic Activity*. (optional)

Currie, Janet, and Jonathan Gruber (1997) “The Technology of Birth: Health Insurance, Medical Interventions, and Infant Health,” *NBER Working Paper* 5985. (optional)

Finkelstein, Amy, Sarah Taubman, Bill Wright, Mira Bernstein, Jonathan Gruber, Joseph P. Newhouse, Heidi Allen, and Katherine Baicker (2012) “The Oregon Health Insurance

Experiment: Evidence from the First Year,” *The Quarterly Journal of Economics* 127(3): 1057-1106. (optional)

Einav, Liran, Amy Finkelstein, and Paul Schrimpf (2013) “The Response of Drug Expenditures to Nonlinear Contract Design: Evidence from Medicare Part D,” *NBER Working Paper* 19393. (optional)

November 28 and 30: Unemployment & Disability Insurance, Workers’ Compensation

Gruber, Chapter 14

Bound, John (1989) “The Health and Earnings of Rejected Disability Insurance Applicants,” *American Economic Review* 79(3): 482-503. (optional)

Card, David, Raj Chetty, and Andrea Weber (2007) “The Spike at Benefit Exhaustion: Leaving the Unemployment System or Starting a New Job?” *American Economic Review* 97(2): 113-118. (optional)

Gruber, Jonathan (1997) “The Consumption Smoothing Benefits of Unemployment Insurance,” *American Economic Review*. (optional)