

S4465: Public Finance

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Summer 2022

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Class Hours: M/T/W/Th 3:30-5:05pm

Class Room: 520 Mathematics Building

Course Website: <https://courseworks2.columbia.edu/courses/151949>

OH Link: <https://tinyurl.com/2p9xxkvu>

Course Description

The objective of the course is to understand the role that governments play in market economies. We will be interested in addressing questions of why, how and when governments do (and/or should) intervene and in the consequences of government policies. We will start by introducing empirical and theoretical tools and concepts, and then follow up with analysis of externalities, social insurance programs and tax policy.

The class builds on microeconomic foundations, but it will be strongly motivated by actual policies. Significant attention will be devoted to empirical applications. On the theoretical side, we will be interested in both normative questions (what governments should do) and positive ones (what are the implications of what governments actually do).

Required Materials

- Course notes, assignments, extra readings, recordings, and all other materials are available on the Courseworks webpage. *The notes are adapted from Prof. Wojciech Kopczuk's course of the same name*
- There is no required textbook for this course. Here are two recommended references:
 - "Public Finance and Public Policy" by Jonathan Gruber (Worth Publishers, 6th edition, 2019)
 - Taxing Ourselves by Joel Slemrod and Jon Bakija (MIT Press, 2017) is a very accessible background reading for the second part of the course (not required).

Prerequisites

Prerequisites: ECON UN3211 and ECON UN3213. The course assumes background in intermediate microeconomics.

Teaching Assistant

There is no teaching assistant for this course at the moment.

Course Objectives

1. Evaluate the role of governments in market economies positive and normatively
2. Define market failures and assess different government interventions
3. Understand how to evaluate causal effects of government policies using applied econometric tools
4. Identify and contrast optimal government policies with actual government policies

Grading Policy

The course will have a take-home midterm (40%), take-home final (40%), and four written problem sets (20%). There will be no make-up midterm. In the rare and unusual case that an absence can be formally excused, the final will account for (80%).

- 30% of your grade will be determined by a midterm.
- 30% of your grade will be determined by a final.
- 40% of your grade will be determined by four written problem sets.

The course will be graded on a curve (approximately), using standard distribution of grades in the economics department.

All problem sets will be distributed in class, posted on the courseworks and will be due in exactly one week. No late submissions. Problem sets should be submitted online (with instructions to follow).

Working in groups on problem sets is not forbidden, but every student has to submit individual solutions in his/her own words.

Midterm and final will be take-home.

Course Policies

During Class

I understand that the electronic recording of notes will be important for class and so computers will be allowed in class. Please refrain from using computers for anything but activities related to the class. Phones are prohibited as they are rarely useful for anything in the course. Eating and drinking are allowed in class but please refrain from it affecting the course. Try not to eat your lunch in class as the classes are typically active.

Attendance Policy

For complete attendance and excused absence policies, please see [The School of Professional Studies Handbook](#). Attendance is expected in all lectures. Valid excuses for absence will be accepted before class. In extenuating circumstances, valid excuses with proof will be accepted after class. For every class missed the participation grade will be dropped 1 point.

Policies on Incomplete Grades and Late Assignments

If an extended deadline is not authorized by the instructor or department, an unfinished incomplete grade will automatically change to an F after either (a) the end of the next regular semester in which the student is enrolled (not including summer sessions), or (b) the end of 12 months if the student is not enrolled, whichever is shorter. Incompletes that change to F will count as an attempted course on transcripts. The burden of fulfilling an incomplete grade is the responsibility of the student. The university policy on incomplete grades is located at <https://www.registrar.columbia.edu/content/grade-options>.

Late assignments will be accepted for no penalty if a valid excuse is communicated to the instructor before the deadline. After the deadline, assignments will be accepted for a 50% deduction to the score up to 2 days after the deadline. After this any assignments handed in will be given 0.

Academic Integrity and Honesty

Students are required to comply with the university policy on academic integrity found in the Code of Student Conduct found at <https://compliance.columbia.edu/content/statement-ethical-conduct-and-administrative-code-conduct>. Don't cheat. Don't be that person. Yes, you. You know exactly what I'm talking about. See <https://www.college.columbia.edu/academics/academicintegrity> for a detailed explanation of academic integrity.

Accommodations by Zoom

I prefer that all of you attend lecture in person, but I understand that there are sometimes unavoidable conflicts. As such, the course will have an option to tune in via Zoom for those with an excused absence related to health, family, or other unavoidable conflicts/emergencies. If you have a reason you need to attend a lecture via Zoom, please get in touch to explain the situation. If you do not get in touch and attend a lecture via Zoom without approval, I will consider it an absence. Approval can be given after the fact, but I prefer to know about hybrid attendance ahead of time. Several of you have been in touch about this option already and do not need to seek further approval.

Accommodations for Disabilities

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with the Disability Services Office at Wien Hall, Main Flr., Ste. 108A 411 W. 116th St., Mail Code 3711 New York, NY 10027, 212-854-2388. For more information on Columbia's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation (<https://health.columbia.edu/content/disability-services>). Non-Discrimination Policy Columbia University provides equality of opportunity in education and employment for all students and employees. Accordingly, Columbia University affirms its commitment to maintain a work environment for all employees and an academic environment for all students that is free from all forms of discrimination.

Discrimination based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation is a violation of state and federal law and/or NC State University policy and will not be tolerated.

Harassment of any person (either in the form of quid pro quo or creation of a hostile environment) based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation also is a violation of state and federal law and/or NC State University policy and will not be tolerated. Retaliation against any person who complains about discrimination is also prohibited. Columbia's policies and regulations covering discrimination, harassment, and retaliation may be accessed at [. Any person who feels that he or she has been the subject of prohibited discrimination, harassment, or retaliation should contact the Office for Equal Opportunity \(OEO\) at \[eoaa@columbia.edu\]\(mailto:eoaa@columbia.edu\) or 212-854-5511.](#)

Accommodations for Families

If you are a parent or guardian of a child and you are unable to attend class and care for that child for class one day, please be in touch in case you need further accommodations. You are invited to attend the lecture via Zoom or watch it asynchronously if that will make it easier to not miss course material.

Schedule and weekly learning goals

The schedule is tentative and subject to change. The learning goals below should be viewed as the key concepts you should grasp after each week, and also as a study guide before each exam, and at the end of the semester. Each exam will test on the material that was taught up until 1 week prior to the exam (i.e. vorticity will not be tested until exam 2). The applications in the second half of the semester tend to build on the concepts in the first half of the semester though, so it is still important to at least review those concepts throughout the semester.

Chapter numbers are from Gruber's book.

5/23/2022: Introduction (Chapters 1 and 4) *Problem Set 1 Assigned, due 6/1/2022*

- Establish goal of public policy
- Review Microeconomic tools

5/24/2022: Introduction and empirical tools (Chapter 3)

- Introduce empirical methods to separate causation and correlation

5/25/2022-5/26/2022: Incidence and efficiency cost of government (Chapters 19 and 20)

- Differentiate statutory and economic incidence
- Calculate deadweight loss
- Evaluate the role of elasticity in determining economic incidence and the cost of taxation
- Contrast partial and general equilibrium incidence of taxation

5/31/2022-6/1/2022: Externalities (Chapters 5 and 6)

- Differentiate externalities from spillovers that are priced by the market
- Benchmark the market equilibrium with an externality relative to the Pareto efficient equilibrium
- Evaluate taxes, subsidies, bans, and other policies to manage externalities

6/2/2022-6/3/2022*: Social Insurance (Chapter 12) ***6/3/2022 is a makeup date – will need to have class via Zoom or extend class an extra hour on 6/2/2022** *Problem Set 2 Assigned, due 6/10/2022*

- Solve for optimal insurance provision
- Define and differentiate moral hazard and adverse selection
- Identify role of government in solving these market failures

6/6/2022-6/7/2022: Major Social Insurance Programs: Unemployment, Disability, and Social Security (Chapters 13 and 14)

- Isolate reasons government is involved in different social insurance markets
- Identify potential moral hazard in each social insurance program
- Characterize tradeoffs balanced by optimal insurance for each major program

6/8/2022: Health Insurance & Low-income Support (Chapters 15 and 16)

- Identify different health care systems in the United States
- Characterize moral hazard and adverse/advantageous selection in health insurance

6/9/2022-6/14/2022: Low-income Support (Chapter 17) **Take-home midterm assigned 6/13/2022, due by midnight** *Problem Set 3 Assigned 6/10/2022, due 6/20/2022*

- Contrast gaps filled by TANF, EITC, SSI, and Food Stamps
- Calculate implied marginal tax rate from the EITC and evaluate labor supply consequences
- Analyze the labor supply incentives associated with welfare programs
- Evaluate, in-kind transfers, role of targeting in reducing moral hazard of welfare programs

6/15/2022: Taxation in practice (Chapters 18)

- Recognize the types of taxation and know their relative size in the budget
- Understand how statutory rates, deductions, and credits change tax liability
- Define and evaluate the Haig-Simmons criterion for taxable income

6/16/2022: Optimal Taxation I: Commodity taxes

- Understand role of elasticity in determining optimal taxes that reduce excess burden

6/21/2022-6/22/2022: Optimal Taxation II: Income taxes

Problem Set 4 Assigned, due 6/29/2022

- Solve the optimal linear and non-linear income tax rates

6/23/2022-6/24/2022*: Capital income and business taxes administration (Chapters 22, 23, 24) ***6/24/2022 is a makeup date – will need to have class via Zoom or extend class an extra hour on 6/23/2022**

- Evaluate different approaches and conclusions to capital taxation
- Identify how government taxation can reduce risk through absorbing part of losses and taking part of gains
- Contrast pass-through and realization approaches to taxation

6/27/2022-6/28/2022: Behavioral responses, tax compliance and administration (Chapter 21)

- Identify and define forms of Behavioral responses like bunching, tax evasion
- Evaluate the excess burden of non-labor supply responses to taxation (evasion, fringe benefits over salary)
- Evaluate policies to increase fines and probability of detection on tax compliance

6/29/2022-6/30/2022: Tax reform (Chapter 25) & Catch-up day **Take-home final due by midnight 7/1/2022**

- Evaluate proposals to coordinate international corporate taxes and enforcement
- Evaluate proposals to introduce a VAT tax in the US