

**Economics 440
Public Finance
Summer I 2024**

**Jonathan B. Hill
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Information

Prof. Jonathan B. Hill

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Poll Everywhere: [PollEv.com/jonathanhill970](https://poll-ev.com/jonathanhill970)

Key Dates

Holiday: Mon. May 27

Midterm 1: Tues. May 28

Midterm 2: Fri. June 7

Final Exam: Sat. June 22 (9am)

1. Prerequisites

Econ 410 (Intermediate Microeconomics) and at least one semester of differential calculus. It is, however, beneficial to have had Econ 420 (Intermediate Macroeconomics), or any economics courses that present a joint model of consumption and production (e.g. the Classical Model).

2. Introduction

This course undertakes an examination of the public sector as an economic agent. There are two sides to this now classic topic: taxation (the collection of public monies = Federal/State/City receipts) and expenditure (Federal/State/City outlays). This course will focus primarily on taxation, the logical, but not necessary (as we'll see) precursor to expenditure. The course is naturally theory based: in order to grasp how systems of taxation have developed, we need to model individual and firm behavior in static (one-time period), dynamic (inter-temporal settings), partial equilibrium (one person, one market), and general equilibrium (many people, many markets; inputs and outputs) settings.

3. Questions for Students

As part of UNC's curricular "Ideas in Action", we pose the following questions:

- a. *How do I establish my point of view, take intellectual risks, and begin producing original scholarship or creative works?*
- b. *How do I narrow my topic, critique current scholarship, and gather evidence in systematic and responsible ways?*
- c. *How do I evaluate my findings and communicate my conclusions?*

4. Personal Electronic Devices

You may use a laptop/tablet for note taking ONLY. Watching movies and videos, playing games, checking the scores on espn.com, shopping, and chatting with your friends are disruptive behavior that will not be tolerated (I have seen all these things while visiting other professor's lectures). Checking texts is easily spotted (you may think you're hiding it, but you're not) and very disruptive and disrespectful. **No phone/smart-watch use allowed during class, unless approved by me (e.g. for insulin testing).**

Exception: Polling: We will use the *Poll Everywhere* during class for answering questions. Phone/Smart-Watch/Tablet etc use outside of polling is not allowed (unless approved by me: e.g. for medical purposes).

6. Resources

6.1 **Required Textbook:** "Public Finance" 10th Edition (or most recent edition), by Harvey Rosen and Ted Gayer, McGraw-Hill, 2009.

Feel free to use any edition (preferably more recent) by Rosen and Gayer. The chapter numbering may differ, but other than that there is little difference for later editions.

In general, older editions of the text book are fine, including the ones with only the author Harvey Rosen. But, the chapters may be arranged and numbered differently. The older editions also do not cover more recent economic events, of course.

6.2 **Poll Everywhere:** We will use the *Poll Everywhere app* for online polling in class. You can log in at either polleverywhere.com or by using the Poll Everywhere mobile app. With either method, you must enter your official UNC-CH email address, select the Single Sign-On link, and then enter your Onyen and Password.

Important: The email address you have listed under your profile in Poll Everywhere must **exactly** match the email address you have listed in the [UNC Directory](#). If this is not the case, your poll scores will not properly synch! (It's a problem, for example, if your email is onyen@unc.edu in the UNC directory but onyen@email.unc.edu in Poll Everywhere.) If your emails do not match exactly, please change your email address in Poll Everywhere to what is listed in the [UNC Directory](#). If you need assistance, please visit <https://poll.unc.edu/> or contact [ITS Help](#).

Poll Scores: For each poll you will get

- 0 for no answer
- 1 for an incorrect answer
- 3 for the correct answer
- The lowest 4 scores are dropped.

The sum total after dropping the lowest 4 scores will be scaled to the range 0-100.

Example: Suppose there are 30 polls. After dropping the lowest 4 scores, there are 26 scorable polls, hence 78 possible points. You have 66 total points after four 0's are dropped. Your adjusted score is $66 \times \frac{100}{78} = 84.62$.

7. Course Structure

7.1 The course grade break-down is as follows:

Component	% Course Grade	Details
Polling	10%	Lowest 4 polls will be dropped. The average of the remaining poll scores will be used.
Homework	20%	
Midterm Exam #1	20%	Each midterm will cover a subset of topics.
Midterm Exam #2	20%	
Final Exam	30%	The final is cumulative.

7.2 We will learn in class by solving and discussing poll questions. Some polls will be for participation credit only; you will earn 100 points if you answer the poll and 0 points if you do not. Other polls will be graded based on accuracy; you will earn 100 points if you answer the poll correctly, 70 points if you answer incorrectly, and 0 points if you do not answer the poll at all. The poll score you earn for a class will be calculated as the average of all individual poll scores. Polls must be answered in class only. **Answering polls outside of class is an Honor Code violation.**

7.3 Only under a documented medical/legal emergency can the midterm be skipped: in this case the final exam will be weighted 50%. If a student misses both midterms they must drop the course since there is no chance of passing.

The final exam cannot be skipped under any circumstance. If it is missed with a university approved excuse, then a course grade of "incomplete" will be given.

8. Homework

8.1 There are typically 4-5 graded homework assignments. Please do the math: if there are 5, worth 20% of the total grade, then each is worth 4% of the course grade. If you miss one you lose, without exception, 4% of the course grade. Please keep up with due dates, etc.

8.2 Students may consult with each other as they work on homework (in fact, you are invited to do so), but all students must turn in their own work. If two or more students have identical answers to some problem(s), both will receive an "F" in the course and be reported to the Dean's office for academic dishonesty.

8.3 Homework can only be turned in *early*, or on the *due date at the beginning of lecture*. Under no circumstances will *late* homework assignments be accepted, including legal/medical emergencies, since answer keys will be posted.

8.4 Homework cannot be emailed (I will not print nor grade the homework), it cannot be placed in my mailbox, nor placed under the door of my office. There are no exceptions. If you foresee a problem please contact me so we can work out a fair option that involves handing the assignment in early.

8.5 If a student cannot be present on the due date of a homework due to a UNC sanctioned event, *nor* can they reasonably turn in the assignment *early* (e.g. the student must be out of town for a week), and can provide proof of such **PRIOR TO THE DUE DATE**, then the remaining assignments will be re-weighted.

I will not retroactively alter homework weights (i.e. after the due date).

9. Examinations- Allowed Material

9.1 During *exams* students are allowed **one sheet (two sides)** of **standard** paper or smaller (not larger than 8"-by-11") with **handwritten** notes. You cannot bring photocopied material of any sort. If there is any deviation from "1 sheet", "2 sides", "standard paper" or "handwritten" the student will receive an "F" in the course and be reported to the Dean. (Example: 1 sheet, two sides, of A4 paper with photocopied material = F). I hold the right to inspect the "cheat sheet" during the exam (and I do usually walk around and check them).

2. Student may only use a **simple calculator (with exponential and natural log functions)**. **No GRAPHING or PROGRAMMABLE calculators are allowed.** Absolutely **no phones/tablets/et al** may be used as a calculator. So, bring a calculator. I hold the right to swap your calculator with mine.

10. Tentative Lecture Schedule and Readings (the week #'s may change)

Week	Topic	Chapter (text book)
1	Introduction Tools of positive analysis (empirical research) Tools of normative analysis (concepts of welfare)	2-3
2	Public Goods	4
3-4	Taxation and income distribution	14
Midterm Exam #1		
5-6	Taxation and efficiency	15
7-8	Efficient and equitable taxation	16
9-10	The personal income tax (the individual)	17
Midterm Exam #2		
11	Personal taxation and behavior	18
12	The corporate tax (the firm and profit)	19
13	Deficit finance (why taxation does not need to come before expenditure)	20
14	Taxes on consumption and wealth	21
Final Examination		

11. Other Matters

11.1 ARS

Students who have worked out an arrangement with ARS should contact me so I can make accommodations. If you need extra time for exams, and have a provable “disability”, and have not already done so, please contact ARS (<https://ars.unc.edu>).

If you take an exam outside of class via ARS it must be scheduled for the same date as the scheduled exam, no exceptions.

It is my goal to create an inclusive environment where anyone can speak out, share ideas, and provide feedback to me and their classmates. In some cases actual issues that arise in econometrics require an effort to maintain diversity and inclusivity (e.g. "gender" variables, and marital status prior to the landmark case allowing for all to marry), and it is my hope that all students will feel welcome in those, and all other, times.

11.2 CAPS

Students should be aware of UNC’s *Counseling and Psychological Services (CAPS)*: please visit <https://caps.unc.edu/> if you think their services fit your needs, or you need to find out who you should talk to.

11.3 Title IX

Title IX and the Violence Against Women Act (VAWA) are two of the federal laws that are focused on providing safe, inclusive, and welcoming learning and work environments on campus. Title IX prohibits sex discrimination and sexual harassment. Sexual assault and sexual violence are forms of sexual or gender-based harassment that are prohibited by Title IX. VAWA also requires Universities to address sexual violence, interpersonal violence, and stalking.

Please visit <https://eoc.unc.edu/> for further information.

11.4 Honor Code

All students implicitly agree to the Honor Code set forth by UNC. See <https://catalog.unc.edu/policies-procedures/honor-code/> .

11.5 Syllabus Changes

The syllabus may be changed at any time: I will announce it in Canvas.

11.6 Grade Assignment

I generally do not use a preset grade distribution because I firmly believe such is intrinsically biased and unfair. That said:

- a. If an exam score average is well below 75 then I will add points to everyone’s score such that mean is about 75 (max score capped at

100: e.g. if you have 96 and I add 8 to all scores, your score will be 100).

- b. After applying the curve in (a) I do compare total course %'s with a standard scale. If there are scores on the boundary of a letter grade, then I assign the higher grade (e.g. a standard scale has 93+ = A: if you have 92.2 then I would likely assign A).