

ECON 440 ANALYSIS OF PUBLIC FINANCE
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
SPRING 2020 SYLLABUS

Lectures:

T/Th 9:30-10:45 (440-001, Gardner 008)

T/Th 11:00-12:15 (440-002, Gardner 008)

Prerequisites: ECON 400 and 410 (C or above)

Instructor: Qing Gong

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Office: Gardner 201

Office hours: Fri 3-5 pm

Textbook: Jonathan Gruber: *Public Finance and Public Policy* (6th edition). Worth Publishers, 2019. The 5th and 4th editions are both good substitutes.

SAKAI: Course announcements and materials will be posted on SAKAI (<https://sakai.unc.edu/portal/site/econ440sp20>). Please make sure that you can access the course site for this class and check for updates regularly.

Course synopsis: In this course, we will study the role of government in the economy. The main goal is to develop a set of tools for analyzing the role the government plays and the impacts of its policies on the lives of its citizens. In particular, we will begin by discussing why government intervention is needed in a market economy; we then examine government expenditures (e.g. social security, education, health care) and government revenues (different types of taxation). We will cover a wide range of classic topics in public finance, with a focus on current policy issues on the environment, social security, health care, education, and taxation. Some examples are:

- When and why does the market fail and it's time for the government to intervene?
- What's the economic reason for environmental problems? What are the key reasons for the success of the Montreal Protocol, and for the difficulty of Kyoto Treaty?
- What are the major expenditure categories for different levels of the government? Why are different levels of the government responsible for providing different types of goods/services?
- What is an educational voucher program? What are the pros and cons of voucher programs compared with free public education?
- What is the difference between a fully funded social security system and the pay-as-you-go system? What is the nature of the U.S. social security system?
- What are the twin problems with the U.S. health care system? What are the key provisions of the 2010 Health Care Reform?
- What's the reason for the "marriage penalty" in the US tax system? Is it true that all married couples pay more taxes than if they were single?

Course requirements and grading policy: The course grade will be based on three problem sets, in-class participation, and three exams. A numeric grade for the course will then be calculated based on the weights specified below, and then converted to a letter grade according to the grading scale in the *Class Policies* at the end of this syllabus. Grades will *not* be curved.

- Problem sets (×3): 8% each

The problem sets include problems indicative of those in the exams and will be assigned throughout the semester. Due to the size of the class, we could not provide lengthy comments or corrections while grading the homeworks. Instead, detailed solutions will be posted and students are expected to read them carefully.

- Participation: 6%

Participation in the discussions during lectures is an effective way to assess and, more importantly, help with your learning. Participation is evaluated based on attendance, questions and answers in class (some of which require completing the required readings before coming to class), as well as contribution to the in-class activities.

- Exams (×3):

- Midterm 1: 20% [given in class on Tue. 2/11]
- Midterm 2: 20% [given in class on Tue. 3/24]
- Final exam: 30% [Fri. May 1 for the 9:30 section; Mon. Apr 27 for the 11:00 section]¹

Please make sure that you schedule your travels, including job interviews, to avoid the exam dates. If you do have to miss an exam, please notify the instructor as early as possible and refer to the *Class Policies* about your options.

Class schedule: Below is a tentative schedule for the semester, with the corresponding chapters in the Gruber textbook (6th edition).² I will constantly update the *Additional readings* section with reading materials (papers, articles, etc.) that are needed for in-class discussions and other activities.

***** Please carefully read the Class Policies at the end of the syllabus *****

Registering for this class implies your agreement to these policies

¹As scheduled by the Office of the University Registrar (<https://registrar.unc.edu/academic-calendar/final-examination-schedule-spring/>)

²The instructor reserves the right to make changes to the syllabus.

Week	Date	Topic	Chapter in Gruber	Additional readings
Part 0. Introduction				
1	1/9	Background and Introduction to Public Finance	1	
2	1/14	Review of Theoretical and Empirical Tools	2, 3	
Part I. The Economic Basis for Government Activity				
1	1/16	Externalities and Government Intervention	5, 6	
3	1/21	Externalities and Government Intervention	5, 6	Barro (NYT, 2014)
4	1/23	Externalities: Applications	5, 6	Gruber 6.1-6.2
4	1/28	Public Goods and Free Riding	7	
5	1/30	Public Goods: Applications	7	
5	2/4	Public Choice and Political Economy	9	
5	2/6	Review of Part I	9	
6	2/11	MIDTERM 1 (60 min, in class)		
Part II. Selected Issues of Government Expenditures and Policy in the United States				
7	2/13	State and Local Government Expenditures	10	
7	2/18	Education	11	
8	2/20	Social Insurance	12	
8	2/25	Social Security	13	
9	2/27	Health Care: Essential Health Economics	14	
9	3/3	Health Care and Health Insurance in the US	15, 16	
10	3/5	Health Care Reform	15, 16	
10		***Spring Break***		
11	3/17	Income Distribution and Welfare Programs	15, 16	
11	3/19	Review of Part II	17	
12	3/24	MIDTERM 2 (60 min, in class)		
Part III. Government Revenue, Government Debts & Economics of Taxation				
13	3/26	Introduction to Taxation	18	
13	3/31	Theory of Tax Incidence	19	
14	4/2	Theory of Tax Incidence	19	
14	4/7	Deadweight Loss of Taxation and Theory of Optimal Taxation	20	
15	4/9	Theory of Income Taxation	21	
15	4/14	The US Personal Income Tax System in Practice	21	
16	4/16	Taxation of Savings	22	
16	4/21	Taxation of Corporate Income and Ideas for Fundamental Tax Reforms	23-25	
17	4/23	Review of Part III		
17		FINAL EXAM: Fri. May 1 at 8-11a for the T/Th 9:30 section (440-001)		
17		Mon. Apr 27 at 12-3p for the T/Th 11:00 section (440-003)		

**CLASS POLICIES FOR
ECON 440 ANALYSIS OF PUBLIC FINANCE
SPRING 2019**

1. Attendance Regular attendance is both required and essential for doing well in this course. If you do have to miss a class (for example, because of a job interview), please let me know beforehand. Please note that it is your responsibility to get the content/announcements you missed during the class you did not attend. *****Per department policy, students who do not attend the first two lectures will be dropped from the class. If you have valid reasons to be absent, please notify the instructor as soon as you can BEFORE class.*****

2. Problem Sets

- a. **Due dates:** Hardcopies of the problem sets are *due at the beginning of the class* on the due dates. Late submissions *before* solutions are posted will receive discounted grades. Submissions *after* solutions are posted will not be accepted.
- b. **Submission:** Please submit your problem sets in class; do *NOT* put hardcopies in my mailbox, slip them under my office door, or give them to the econ department staff members. Also, please do *not* submit electronic copies, unless you are unable to attend the lecture on the due date, have informed me of the anticipated absence, and we have a mutual agreement.
- c. **Collaboration:** You may discuss the reading materials and questions in the problem sets with each other; however, each individual must submit a separate problem set (i.e., you need to write/type up your own answers, not copies of others' answers) and each individual will be graded separately on the assignment.
- d. **What to expect from the instructor:** Homeworks are carefully designed to assist with and assess your learning, and there should be sufficient information for you to solve it with the tools we learned in class. Hence, you should not try to get extensive help from me on how to approach the problems *before* homeworks are due. While I would be happy to answer clarificational questions if there is truly ambiguity, you should not ask for hints, instructions, or answers on the questions. I will give hints to the entire class if there is a particularly challenging problem, and will discuss common/typical mistakes after grading.

3. Exams

- a. **Aids during exams:** All exams are closed-book and closed-notes. You may not communicate or cooperate with your peers during the exams. Simple, non-programmable calculators are allowed in the exams; other calculators (including cellphone calculators) are not allowed.

- b. **Missing exams:** If a student misses a midterm, the weight of that midterm in the course grade will be added to the weight on the student's final. **There will be no make-up exams.** An exception will be made for University-approved absences;³ students with this type of absence may request a make-up examination at a time convenient to both student and instructor. Please notify the instructor before the exam (if at all possible) and provide supporting documentation within two business days of the exam.

4. Grading

- a. **The grading scale:** Participation, problem sets, and exams will be given numeric grades; they are weighted to generate a numeric course grade (0-100), which is then converted to a letter grade using the following table:

Numeric score	Letter grade	Grade points	Numeric score	Letter grade	Grade points
[93, 100]	A	4.0	[77, 80)	C+	2.3
[90, 93)	A-	3.7	[73, 77)	C	2.0
[87, 90)	B+	3.3	[70, 73)	C-	1.7
[83, 87)	B	3.0	[67, 70)	D+	1.3
[80, 83)	B-	2.7	[60, 67)	D	1.0
			[0, 60)	F	0

- b. **Regrading requests:** Please submit requests to re-grade a problem set or an exam in writing within 7 calendar days after your work is returned. Please include a short note together with the complete, original work. In such a case, I will re-evaluate the entire problem set or exam.

5. Course material re-distribution Documents for this course, regardless of whether they are physically distributed in class or are posted on SAKAI, are only intended for the currently enrolled students. Any re-posting of the documents (including lecture notes, problem sets, practice exams, exams and their solutions) online or any other forms of re-distribution is prohibited.

6. Textbook affordability I support the Textbook Affordability program by the UNC Student Government.⁴ I suggest making decisions about whether to buy/rent a textbook (and which edition) *after* attending the first (two) lectures. Older editions of the book are very good substitutes and much more affordable. I've made digital copies of chapters that are particularly important available on the course reserve, and have a personal copy of the 4th edition on reserve at the Undergraduate Library. Please talk to me if you have any remaining questions or concerns.

³See <http://catalog.unc.edu/policies-procedures/attendance-grading-examination/>

⁴<http://executivebranch.unc.edu/affordability-launches-textbook-pledge/>

7. Reasonably Accommodations I am more than happy to work with the Accessibility Resources and Service (ARS) Office to provide reasonable accommodations if you need them and are eligible. Please see the ARS Website for contact information and relevant policies: <https://ars.unc.edu>. **It is your responsibility to notify the ARS well before the exam dates to reserve a seat/time.**

8. The Honor Code Information, including your responsibilities as a student is outlined in the *Instrument of Student Judicial Governance*.⁵ Your full participation and observance of the Honor Code is expected.

⁵<https://studentconduct.unc.edu/sites/studentconduct.unc.edu/files/documents/Instrument.pdf>