

## **ECON 309: PUBLIC FINANCE**

Winter 2022

TuTh 12:30 PM – 1:50 PM, Technological Institute L361

Dr. Jeffrey T. Lewis (ECON)

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Office Hours: will be posted weekly/ (or by appointment)

### **TEACHING ASSISTANT**

TA Anran Li (anranli2024@u.northwestern.edu)

TA office hours and locations will be posted on Canvas.

### **COURSE OBJECTIVES**

In this class, students will increase their knowledge of public finance (the study of the role of the government in the economy). Public finance addresses four main questions. When should the government intervene in the economy? How might the government intervene? What is the effect of those interventions on economic outcomes? Why do governments choose to intervene in the way that they do?

### **COURSE WEBSITE**

This course has a website on Canvas. Everyone should automatically be enrolled in the Canvas website upon official enrollment in the class. I will post my lecture notes on the website by 5:00 pm the day before class. You should print out the materials and bring them to class. Problem sets, problem set solutions, and other materials will also be posted on the website. I will post announcements on the website stating what you should print out for class and when assignments are due.

### **COURSE MATERIALS**

The textbook for the course is *Public Finance and Public Policy* (6<sup>th</sup> Edition) by Jonathan Gruber. Some sections of the textbook will be assigned for the exams. You don't need to buy the book because the relevant chapters will be posted on Canvas under Course Reserves. My lecture notes are based on Gruber's text and other sources. You will need a calculator and a ruler for the problem sets and exams.

### **PROBLEM SETS**

Some problem sets you will need to hand in in class (drawing budget constraints, graphical problems, etc.). Other problem sets you will submit online on Canvas (submit numerical answers or answer multiple choice questions). Canvas will automatically grade your submissions. If you miss the deadline for submitting your answers, you will not receive credit for that problem set. For questions about how to complete the Canvas problem sets, read the policy\_canvas\_psets handout on Canvas (under Policies folder).

### **OFFICE HOURS**

During office hours, you can't check over your problem sets. You can ask us questions about the course material or the sample problems that we post.

### **QUIZZES**

We will give quizzes during lecture this term. The default is that the quizzes will be unannounced. The quizzes will be open-note (not open-phone or open-computer or open-device). Bring your calculator to every class.

## EVALUATION

Here are the assessments that will be used to determine your final grade:

Problem Sets/ Quizzes  
Exam #1  
Exam #2  
Final Exam

None of your problem set scores will be dropped. We will drop your lowest quiz score. At the end of the term, we will do this calculation:

$$[(\text{your PS points} + \text{your quiz points}) / (\text{total PS points} + \text{total quiz points})] \times 100\%$$

This percentage score will constitute 13% of your final grade.

Your final grade will be determined by whichever calculation is highest (method *a*, *b*, or *c*):

- a*)  $13\% \times (\text{Problem Sets/Quizzes}) + 29\% \times (\text{Exam \#1}) + 29\% \times (\text{Exam \#2}) + 29\% \times (\text{Final Exam})$   
*b*)  $13\% \times (\text{Problem Sets/Quizzes}) + 29\% \times (\text{Exam \#1}) + 0\% \times (\text{Exam \#2}) + 58\% \times (\text{Final Exam})$   
*c*)  $13\% \times (\text{Problem Sets/Quizzes}) + 0\% \times (\text{Exam \#1}) + 29\% \times (\text{Exam \#2}) + 58\% \times (\text{Final Exam})$

## EXAM DATES

Exam #1 will be given in class on Thursday, February 3.

Exam #2 will be given in class on Thursday, March 3.

The Final Exam will be given on Monday, March 14 from 3:00 PM – 5:00 PM.

You must take the Final Exam in our classroom on the date and time specified above.

## EXCUSED ABSENCES/ MAKEUP POLICIES/ INCOMPLETES

### Canvas Problem Sets

There are no makeup Canvas problem sets. If you miss the deadline for submitting your answers (for any reason), you will not receive credit for that problem set.

### Problem Sets That Are Due In Class/ Quizzes

If you miss a problem set that is due in class or a quiz for an excused reason, such as illness, a family emergency, or travel with a University sports team, then you need to fill out the excused absence form on Canvas, staple your documentation (form stating you went to the Student Health Service, for example) to the back of the excused absence form, and hand everything in to me during the next lecture.

In the absence of documentation, an absence will be considered unexcused. If you miss a problem set that is due in class or a quiz for an unexcused reason, you will receive a 0 on that assessment. Missing class for a job interview, a job-related activity, an internship interview, an internship-related activity, any activity related to another class, or a family event would not constitute an excused absence.

The default is that your missing score for a problem set that is due in class (for an excused reason) will just be replaced with your Final Exam score.

We are going to drop your lowest quiz score. If you only miss one quiz and you miss that quiz because of an excused reason, that score will just be dropped. If you only miss two quizzes and you miss both quizzes for excused reasons, your first missing score will be dropped and your second missing score will

be replaced with your Final Exam score. If you only miss two quizzes, and you miss one quiz for an excused reason and one quiz for an unexcused reason, your score from your excused absence will be dropped and your score of 0 from your unexcused absence will be counted.

### **Exam #1 and Exam #2**

There are no makeup exams for Exam #1 or Exam #2.

If you miss Exam #1 (for any reason), but do take Exam #2 and the Final Exam, then your final grade will be determined by whichever calculation is highest: method *a*, *b*, or *c*.

If you miss Exam #2 (for any reason), but do take Exam #1 and the Final Exam, then your final grade will be determined by whichever calculation is highest: method *a*, *b*, or *c*.

If you miss both Exam #1 (for any reason) and Exam #2 (for any reason), but do take the Final Exam, then your final grade will be determined by whichever calculation is highest: method *a*, *b*, or *c*. (Please note that if you miss both Exam #1 and Exam #2, then withdrawing from the class might be your best option.)

### **Final Exam**

If you take the Final Exam, or start to take the Final Exam, can you receive an excused absence for that exam?

No. If you take the Final Exam, or start to take the Final Exam, then you cannot receive an excused absence for that assessment. Your exam score will count and it will be used to determine your final grade in the class. If you feel that you are too unwell to take the exam, do not take the exam. Instead, you should report in person to the Student Health Service or CAPS prior to the time of the exam.

### **Incompletes**

If you take the Final Exam, or start to take the Final Exam, then you cannot receive an excused absence for that assessment. Your exam score will be recorded. You wouldn't qualify for an Incomplete.

If you miss the Final Exam for an excused reason (such as an illness or family emergency), then you would need to email me and then petition for an Incomplete through the Dean's Office.

To qualify for an Incomplete if you do not take the Final Exam:

- 1) The Dean's Office would have to approve your Incomplete petition.
- 2) You would have to have taken either Exam #1 or Exam #2. (If you miss both Exam #1 (for any reason) and Exam #2 (for any reason), then you would not qualify for an Incomplete.)
- 3) It has to be possible for you to receive a final course grade of at least 63% if you take the makeup Final Exam.

If you receive an Incomplete, then you would take the makeup Final Exam during finals week of the next term.

## GRADING POLICIES

For questions on how to deal with rounding on problem sets and exams, read the policy\_rounding handout on Canvas (under Policies folder). If a grading mistake was made on your exam, you need to give me your exam during the lecture following the lecture in which the exams were initially returned. Final grades will be decided on the following scale:

A	93.0-100		C+	77.0-79.99
A-	90.0-92.99		C	73.0-76.99
B+	87.0-89.99		C-	70.0-72.99
B	83.0-86.99		D	63-69.99
B-	80.0-82.99		F	Below 63

## CLASSROOM POLICIES

Do not have your phone out during class. Do not have your computer open during class. Shut down your computer before we start class. Do not put your head down on the desk during class. If you are feeling unwell, you should report in person to the Student Health Service or CAPS.

If, through ANU, you are permitted to use a computer or tablet to take notes during class, have ANU email me that information as soon as possible at the beginning of the term.

If you want to take notes in class on a tablet, that's fine. Just sit in the first few rows if you are going to use your tablet. Remember, however, that the quizzes are not open-device.

## NORTHWESTERN SYLLABUS STATEMENTS

### Academic Integrity

Students in this course are required to comply with the policies found in the booklet, "Academic Integrity at Northwestern University: A Basic Guide". For details regarding academic integrity at Northwestern or to download the guide, visit: <https://www.northwestern.edu/provost/policies/academic-integrity/index.html>

### Disability Accommodations

Northwestern University is committed to providing the most accessible learning environment as possible for students with disabilities. Should you anticipate or experience disability-related barriers in the academic setting, please contact AccessibleNU to move forward with the university's established accommodation process (e: [accessiblenu@northwestern.edu](mailto:accessiblenu@northwestern.edu); p: 847-467-5530). If you already have established accommodations with AccessibleNU, please have ANU email me that information as soon as possible.

### COVID-19 Classroom Expectations Statement

Students, faculty, and staff must comply with University expectations regarding appropriate classroom behavior, including those outlined below and in the COVID-19 Code of Conduct. With respect to classroom procedures, this includes:

- Policies regarding masking and social distancing evolve as the public health situation changes. Students are responsible for understanding and complying with current masking, testing, Symptom Tracking, and social distancing requirements.
- In some classes, masking and/or social distancing may be required as a result of an Americans with Disabilities Act (ADA) accommodation for the instructor or a student in the class even when not generally required on campus. In such cases, the instructor will notify the class.

- No food is allowed inside classrooms. Drinks are permitted, but please keep your face covering on and use a straw.
- Faculty may assign seats in some classes to help facilitate contact tracing in the event that a student tests positive for COVID-19. Students must sit in their assigned seats.

If a student fails to comply with the COVID-19 Code of Conduct or other University expectations related to COVID-19, the instructor may ask the student to leave the class. The instructor is asked to report the incident to the Office of Community Standards for additional follow-up.

### **COVID-19 Testing Compliance Statement**

To protect the health of our community, Northwestern University requires unvaccinated students who are in on-campus programs to be tested for COVID-19 twice per week. Students who fail to comply with current or future COVID-19 testing protocols will be referred to the Office of Community standards to face disciplinary action, including escalation up to restriction from campus and suspension.

### **Exceptions to Class Modality**

Class sessions for this course will occur in person. Individual students will not be granted permission to attend remotely except as the result of an Americans with Disabilities Act (ADA) accommodation as determined by AccessibleNU.

### **Prohibition of Recording of Class Sessions by Students**

Unauthorized student recording of classroom or other academic activities (including advising sessions or office hours) is prohibited. Unauthorized recording is unethical and may also be a violation of University policy and state law. Students requesting the use of assistive technology as an accommodation should contact AccessibleNU. Unauthorized use of classroom recordings – including distributing or posting them – is also prohibited. Under the University’s Copyright Policy, faculty own the copyright to instructional materials – including those resources created specifically for the purposes of instruction, such as syllabi, lectures and lecture notes, and presentations. Students cannot copy, reproduce, display, or distribute these materials. Students who engage in unauthorized recording, unauthorized use of a recording, or unauthorized distribution of instructional materials will be referred to the appropriate University office for follow-up.

### **Support for Wellness and Mental Health**

Northwestern University is committed to supporting the wellness of our students. Student Affairs has multiple resources to support student wellness and mental health. If you are feeling distressed or overwhelmed, please reach out for help. Students can access confidential resources through the Counseling and Psychological Services (CAPS), Religious and Spiritual Life (RSL) and the Center for Awareness, Response and Education (CARE). Additional information on all of the resources mentioned above can be found here:

<https://www.northwestern.edu/counseling/>  
<https://www.northwestern.edu/religious-life/>  
<https://www.northwestern.edu/care/>

### **TENTATIVE TOPICS COVERED**

- Income and Substitution Effects
- Budget Constraints and Indifference Curves
- Log Models

- Omitted Variable Bias

- Labor Supply

empirical evidence for primary earners and secondary earners, labor force participation decision versus hours-of-work decision

- Welfare- AFDC (pre-1996) and Welfare Reform- TANF (post-1996)

negative work incentives of AFDC, work requirement, earnings disregard program, effects of reform

- Earned Income Tax Credit (EITC)

expected effects on labor supply in regions I, II, and III, political popularity of EITC

- Food Stamps/ Housing

- Welfare- Moral Hazard

ordeal mechanisms, unlinking cash welfare and government health insurance

- Child Care

budget constraints when costs are purely hourly or purely fixed, tax treatment of child care

- Income Inequality

trends in income inequality, different measurements of poverty rate

- US Tax System

calculating individual income taxes, political process of measuring tax fairness, tax subsidy to home ownership, tax credits versus tax deductions

- Marriage Tax

competing goals of progressivity, across-family horizontal equity, and across-marriage horizontal equity

- Tax Burden

tax on producers or consumers in product market, yacht tax

- Payroll Tax

tax on firms or workers in labor market, distribution of tax burden when there are impediments to wage adjustment

- Social Insurance

diminishing marginal utility from consumption, expected utility model, asymmetric information and adverse selection, addressing adverse selection with individual mandate

- US Health Care System

the uninsured population, prevalence of employer-provided health insurance

- RAND Health Insurance Experiment

elasticity of demand for medical care, effects of generosity of insurance on health outcomes

- How Generous Should Insurance Be?

catastrophic insurance, coinsurance rate in supply and demand diagram

- Mandated Benefits

cost to firm > benefit to worker, benefit to worker > cost to firm, mandated benefit versus public provision, mandates in ACA

- Oregon Health Insurance Experiment

effects of insurance on health outcomes

- Unemployment Insurance

- Deadweight Loss of Taxation

tax on sellers, tax on consumers, DWL and elasticities, DWL and size of tax, Laffer curve

- Taxes on Savings

intertemporal budget constraint, budget constraint with general subsidy to retirement savings, IRA budget constraint

- Capital Gains Taxation

- Fundamental Tax Reform

channels by which tax rate changes affect tax revenues, flat tax

- The Federal Budget Deficit

loanable funds market, deficit to finance investment versus deficit to finance transfers

- Social Security

- Externalities/ Gas Tax

- Differences-in-Differences/ Beer Tax/ Minimum Legal Drinking Age

- Political Economy