# ECON 309: PUBLIC FINANCE

Winter 2025 TuTh 2:00 PM – 3:20 PM, 2122 Sheridan Rd Classroom 250 Dr. Jeffrey T. Lewis (ECON) Kellogg Global Hub 3475, 847-491-8238 jeffrey.lewis@northwestern.edu Office Hours: will be posted weekly/ (or by appointment)

# **TEACHING ASSISTANT**

TA Seung Hyeong Lee (seunghyeong.lee@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* (7<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 all of your final answers on the problem sets. You can, however, ask us a question if you are stuck on something on the problem set. You can ask us anything about the course material or the section problems (or sample problems that we post).

# SECTION WITH TA (Friday 2:00-2:50 PM in Harris Hall 107)

I will post section problems on Canvas. You will print out the section problems and bring them with you to section. You don't have to solve the problems ahead of time. The TA will work through the solutions. The section problems will be similar to problems that you will encounter on the problem sets and exams. If I don't post section problems in a given week, then the TA will just hold office hours during the section time slot in the section classroom.

## QUIZZES

We will give quizzes during lecture this term (not during section). The default is that the quizzes will be unannounced. The quizzes are closed-note quizzes (can't use any of your notes or devices). Bring your calculator to every class. Make sure you keep up with the course material.

## **EVALUATION**

Grades are based on the following distribution:

Problem Sets and Quizzes together	10%
Exam #1	25%
Exam #2	25%
Final Exam (cumulative)	40%

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:

[(your PS points + your quiz points)/(total PS points + total quiz points)]×100%

This percentage score will constitute 10% of your final grade.

None of your exam scores will be dropped. You cannot use a formula sheet on any of the exams.

#### **EXAM DATES**

Exam #1 will be given in class on Thursday, February 6. Exam #2 will be given in class on Thursday, March 6. The Final Exam will be given on Thursday, March 20 from 12:00-2:00 PM.

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

#### **EXCUSED ABSENCES**

If you miss an exam (or 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 to the back of the excused absence form, and hand everything in to me during the next lecture after the exam. If you are feeling unwell, you should report in person to the Student Health Service or CAPS prior to the time of the exam. In the absence of documentation, an absence will be considered unexcused. If you miss an exam or 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.

If you take an exam, or start to take an exam, can you receive an excused absence for that exam? No. If you take an exam, or start to take an exam, 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.

#### **MAKEUP POLICIES**

#### **Problem Sets**

Since you do not have to be physically present in the classroom to submit your answers to the Canvas problem sets, there are no makeup Canvas problem sets. If you miss the deadline for submitting your answers, you will not receive credit for that problem set.

If, due to illness, you miss class when a problem set is due in class (physical copy), then fill out the excused absence form and bring your documentation to the next class. The default is that your missing problem set score will just be replaced with your Final Exam score. If you fail to turn in a problem set that is due in class for an unexcused reason, you will receive a 0 on that assignment.

# **Quizzes**

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.

### <u>Exams</u>

If you miss Exam #1 or Exam #2 for an excused reason, you will not take a makeup. All of the weight from the missed exam will be added to the Final Exam.

If you miss both Exam #1 and Exam #2 for excused reasons, then your final grade will be determined by whichever calculation is lower (method a or b):

a) 100%×(Problem Sets and Quizzes together)b) 100%×Final 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:

А	93.0-100	C+	77.0-79.99
A-	90.0-92.99	С	73.0-76.99
B+	87.0-89.99	C-	70.0-72.99
В	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. You can do so.

#### NORTHWESTERN UNIVERSITY SYLLABUS STANDARDS

This course follows the Northwestern University Syllabus Standards. Students are responsible for familiarizing themselves with this information:

https://www.registrar.northwestern.edu/registration-graduation/northwestern-university-syllabus-standards.html

# **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

- •Regression Review
- •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