TEACHING ASSISTANT

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 (Fifth Edition) by Jonathan Gruber. Some sections of the textbook will be assigned for the exams. Most of my lecture notes are based on Gruber’s text. You will need a calculator and a ruler for the problem sets and exams.

PROBLEM SETS
Most weeks, I will post two problem sets on Canvas- version a and version b. Version a will involve mostly graphical problems. You will hand in version a in lecture. For version b, you will need to submit numerical answers or answer multiple choice questions on Canvas. 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). Some of the problem sets later in the term might involve Stata.

OFFICE HOURS
During office hours, you can ask us questions about version a, but you need to complete version b on your own. Make sure you attempt version a before you come to office hours. Bring your work with you to office hours so that we can look over your work to help determine where you might have made a mistake. Do not come to office hours with a blank problem set sheet.

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). Bring your calculator to every class.
EVALUATION
Grades are based on the following distribution:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Sets and Quizzes together</td>
<td>15%</td>
</tr>
<tr>
<td>Exam #1</td>
<td>20%</td>
</tr>
<tr>
<td>Exam #2</td>
<td>25%</td>
</tr>
<tr>
<td>Final Exam (cumulative)</td>
<td>40%</td>
</tr>
</tbody>
</table>

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:

\[
\left(\frac{\text{your PS points} + \text{your quiz points}}{\text{total PS points} + \text{total quiz points}}\right) \times 100\%
\]

This percentage score will constitute 15% 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, October 25.
Exam #2 will be given in class on Thursday, November 29.
The Final Exam will be given on Friday, December 14 from 12:00 PM - 2:00 PM.

You must take the Final Exam 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 lecture (during the next class that you are able to attend). If you are ill, you should report in person to the Student Health Service 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.

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 (version b). 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 version a of the problem set is due, send me an email and bring documentation to the next class. The default is that your missing version a score will just be replaced with your Final Exam score. If you fail to turn in version a of the problem set 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.
**Exams**

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 method b):

a) $100\% \times (\text{Problem Sets and Quizzes together})$

b) $100\% \times \text{Final Exam}$

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

1) Your absence from the Final Exam has to be for an excused reason.
2) You have to have either taken Exam #1 and Exam #2, taken Exam #1 and missed Exam #2 for an excused reason, or taken Exam #2 and missed Exam #1 for an excused reason. (If you miss both Exam #1 (for any reason) and Exam #2 (for any reason), you would not qualify for an Incomplete.)
3) Your course grade going into the Final Exam has to be at least 60%.

If you do not take the Final Exam and do not qualify for an Incomplete, then your score of 0 on the Final Exam will be counted.

If you do not take the Final Exam and receive an Incomplete, then your final grade will be determined by whichever calculation is lowest (method a, method b, or method c):

a) $100\% \times (\text{Problem Sets and Quizzes together})$

b) $100\% \times \text{Makeup Final Exam}$

c) $15\% \times (\text{Problem Sets and Quizzes together}) + 20\% \times \text{Exam #1} + 25\% \times \text{Exam #2} + 40\% \times \text{Makeup Final Exam}$

(For method c, if you missed either Exam #1 or Exam #2 for an excused reason, then that weight will be added to the Makeup Final Exam.)

**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:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93.0-100</td>
</tr>
<tr>
<td>A-</td>
<td>90.0-92.99</td>
</tr>
<tr>
<td>B+</td>
<td>87.0-89.99</td>
</tr>
<tr>
<td>B</td>
<td>83.0-86.99</td>
</tr>
<tr>
<td>B-</td>
<td>80.0-82.99</td>
</tr>
<tr>
<td>C+</td>
<td>77.0-79.99</td>
</tr>
<tr>
<td>C</td>
<td>73.0-76.99</td>
</tr>
<tr>
<td>C-</td>
<td>70.0-72.99</td>
</tr>
<tr>
<td>D</td>
<td>60-69.99</td>
</tr>
<tr>
<td>F</td>
<td>Below 60</td>
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CLASSROOM POLICIES

Laptop Computer Policy

Except in the case of proven medical necessity, students may not use a laptop computer or computer tablet during the lectures. Such devices must remain in your bag, and may not be placed on your desk.

Cell Phone Policy

Cell phones should have the ringer turned off and be placed in pockets or backpacks. Students may not make or receive phone calls, surf the web, or send or receive text messages during class.

If you violate a classroom policy and we ask you to leave the classroom and you decline to leave, then you will receive an F in the class for the term.

NORTHEASTERN POLICIES

Academic Integrity

The Provost's Office maintains information on resources and university principles related to academic integrity; see http://www.northwestern.edu/provost/policies/academic-integrity/.

Disability Accommodations

Any student with a documented disability needing accommodations is requested to speak directly to the AccessibleNU office (http://www.northwestern.edu/accessiblenu/) and the instructor, as early as possible in the quarter (preferably within the first two weeks of class). All discussions will be confidential.

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

● Externalities

positive or negative externality in production or consumption, gas tax

● Economics of Smoking

● Social Security

● Political Economy