# PUBPOL 330 Microeconomics for Public Policy

Class meetings: Mondays and Wednesdays 10-11:30 am in Weill 1110 Section meetings: Fridays 10-11 am *or* noon-1 pm; Weill 1230/1220

Instructor office hours: Wed 12:30-2 pm, or by appointment, in W3238

smaccini@umich.edu

GSI office hours: Rory Pulvino: Mondays 4:15-5:15 pm and Fridays 11am-noon in W3207

rorypul@umich.edu

### **Course description**

This course uses the tools and concepts of microeconomics to analyze real world public policies. First, we will develop a broad framework for policy analysis in terms of rationales for government interventions—including both efficiency and equity. We will then explore policy responses to a variety of inefficient markets involving externalities, public goods, or asymmetric information. In each case, we will consider the impact of policy options on equity. The cases include domestic policies in the US and abroad as well as a few issues in international policy.

For concepts covered in depth in Econ 101 (e.g. externalities), we will review the models, but spend most of our time discussing the nuances of real world examples. For topics not covered in depth in the prerequisite course (e.g. adverse selection), we will spend more time introducing the concept. We will end the course by discussing the policy implications of behavioral economics, a subfield that bridges the disciplines of economics and psychology.

#### Course goals

A main goal of this course is to clarify the approaches economics has taken in policy analysis—in terms of canonical concepts and tools—and ultimately, consider what economics *can and cannot offer* to policy debate. The insights of economics are sometimes counterintuitive and often complicated. In some cases, economists disagree. This becomes more common as we consider the real world, where the theory and tools are more nuanced than examples often used in introductory economics courses.

The specific aims of the course are for students to learn how to:

- Apply the concepts and tools of economics to a range of different policy issues,
- Identify and articulate the specific policy implications of economic analysis, and
- Distinguish between theoretical and empirical analysis in economics.

When I refer to economic *theory*, I mean the framework economists use to think about how people, firms, markets and societies work. Economists typically use mathematical and graphical models in order to describe the key information in a particular scenario. In our case discussions, I will link in relevant basic economic models (some of which were overviewed in economics 101) in order to illustrate the role of that theoretical model in real world analysis.

The theoretical models churn out predictions about the workings of real world economies. In order to test these models and tweak them accordingly, economists use real world data and statistical analysis—what I will call *empirical* analysis. Real-world data is (really) messy, and isolating true statistical relationships is unrelentingly complicated. This course will not cover empirical methods in depth (or presume any statistical background), but we will discuss the big picture *intuition* behind economists' empirical research relevant to our case studies.

Throughout the course, we will illustrate how economists use both theoretical and empirical approaches—often iteratively—to learn about policy impacts.

#### **Prerequisites**

The course presumes understanding of introductory economics at the level of Econ 101 at UM Ann Arbor. If you do not feel comfortable with the prerequisite material, it is your responsibility to alert us and work to catch up on this material. We will provide some structured review, particularly in early sections, but *if you* are feeling lost at any point, you should follow up immediately with Rory or me.

# **Course Format**

#### **Overview**

The most basic stage of learning involves the acquisition of information—such as facts and concepts. The application of information in new ways or in unfamiliar situations is a more complicated stage. For this course, you have already acquired introductory microeconomics in the prerequisite course. The goal of this course is to deepen *understanding* of those models; after all, the application of the intuition behind all the graphs, math and jargon is what will likely be useful to you going forward.

There is strong evidence that more complex learning requires students to be **active** in the process. Accordingly, in this course, the review of introductory information will largely happen at home on your own. Much of class time will be spent on a variety of active learning activities. I will often lecture for some part of a class, but you will work directly with economic concepts and policy cases in every class. The type of "homework" will vary, but you should expect to put time into homework for every class. When we discuss a case, for example, I will not review the basics from the reading, so *it is critical you do the assigned preparation for every class*.

My job is still to guide and explain economic thinking to you, but one simply cannot learn to think like an economist without practicing economic reasoning. Learning to reason as an economist is the best way to ascertain what economics can and cannot clarify in any policy debate. That skill is certainly important to anyone interested in policy.

# Peer Interactions in Class

You will spend substantial time in class interacting with your fellow students about course material. For example, I might present a question on a concept, model or application and have all students answer the question first on their own. I will then allow time for you to discuss your answer with other students before reconvening as a whole class. We will also use assigned groups for more formal group work in class. Successfully working with peers is a practical skill. We will assign each of you to a team shortly into the semester and to an entirely new team once again after the midterm.

# **Course requirements**

# Class attendance and participation:

I expect you to attend and actively participate in all class and section periods. Attendance records will reflect your physical presence in the classroom (as recorded by response to Learning Catalytics questions in class described in next section). If you are absent for illness or other urgent circumstance, you should email Rory in advance of class.

We will also incorporate into your participation grade our assessments of your attentiveness, and the thoughtfulness of your comments in class, section and office hours as well as in your reading responses. Your participation grade also depends on your professional conduct—especially paying full attention in class without engaging in non-class activities on line and participating fully and respectfully during class.

Given that we will be using a "bring your own device" technology for in-class interactions, I expect you to use a web-browsing device during class *for purposes directly related to the course*. But, on line extracurricular activities during class are distracting to me and other students. I view surfing and other entertaining (or dull) non-class related activities to be evidence of subpar class participation.

### Learning Catalytics

We will be using a newer technology for real-time interaction during class time—a web-based technology called Learning Catalytics (LC). I have found LC to be much more flexible than i-clickers are, and typically more cost-effective for students.

Unlike i-clickers, this technology requires no special hardware. It is a "bring your own device" technology and works with any device with a web browser (smart phone, laptop, tablet). If you do not already own such a device for every class, please let me know by email by this Friday, September 11. I do not expect anyone to buy a device with a web browser for these purposes, so if you do not have one, I will work with you to arrange one for class use. I will always bring a few i-pads to class for student use.

By next Monday, September 14, I expect you to have your LC account set up at learningcatalytics.com and be ready to use LC during class. The cost is \$12 per student for six months. There is a brief intro video for students at <a href="https://learningcatalytics.com/pages/intro">https://learningcatalytics.com/pages/intro</a>. If you do not have access to a credit card for this purpose, please see me asap and I can facilitate setting up your account.

Here are the instructions for setting up an account (from the LC website help section): On the Learning Catalytics home page, click Create student account in the menu bar. Select the 6 month \$12 purchase option, and then read/accept Privacy Policy and License Agreement. Indicate whether you already have a Pearson Education account, and then either supply your existing account credentials or create a new account when you're prompted. Enter credit card information and complete the transaction.

Note: For the first class, I will provide you with the session Id number. Thereafter, you will be linked to my course, and class sessions will automatically come up in your account.

#### **Homeworks**

There will be seven homeworks assigned during the term. The first one is due on a Wednesday, and all the others are due on Mondays. The due dates are: Sept 23 (Wed), Oct 5, Oct 12, Oct 26, Nov 16, Nov 30, and

Dec 7. These are intended to give you practice on concepts and applications we'll use in class that week, and should be relatively straightforward and brief. The homeworks are due in hard copy at the beginning of class on the due date. Late homeworks will not be accepted, but we will drop the lowest homework score in calculating the final course grade. When the graded homeworks are handed back, detailed solutions will be posted.

For the homeworks, grading will simply be: check plus, check, check minus.

- *Check plus*: student exerted sufficient effort to comprehensively and carefully respond to each question; and there are no major errors on the answers.
- *Check*: student exerted sufficient effort to comprehensively and carefully respond to each question; and there is one or more major error(s) or extensive minor errors in the answers.
- *Check minus*: student exerted insufficient effort to comprehensively and carefully respond to each question; and/or there are extensive major errors in the answers.

#### **Brief Reading Responses**

To provide incentive to keep up on the readings and come to class prepared for discussion, I will sometimes start Wednesday classes with a brief reading response. You will have a few minutes to respond either through LC or on a piece of paper handed in. These reading responses are not announced in advance.

# Quizzes

There will be two in-class 30 min long quizzes on **Oct 28 and Dec 9**. The quizzes are not cumulative and will look similar to the homeworks.

#### Final Exam

There will be a cumulative final examination during the exam period on **Monday Dec 21 from 4-6 pm** (as assigned by the University registrar) in our regular classroom.

#### **Papers**

The two papers for this course—economics policy briefs—are designed to give you practice identifying and analyzing economic issues in the real world. (Note that there are many different kinds of memos, research briefs, etc. assigned in the Ford School. The 330 papers are quite different from the assignments in 320.) In each case, you will be summarizing in your own words economic analysis on the topic as well as proposing lessons learned from that analysis.

Of course, economic analysis is only one input into policy debates, but it is the only one you should employ in these papers. A key part of your task in the papers will be to separate the economics from debates about political values and ethical issues as well as the practicalities of how policy is codified within political institutions. Narrow by design, your briefs will answer the question: what can economics as a discipline contribute to the debate of the policy at hand?

In the first 2 page brief **due Oct 14**, you will all work on the same policy topic—comparing and contrasting a series of auto pollution policies—and we will spend a fair amount of class time working together on economic analysis of these policies.

For the second 3-4 page brief, you will have a choice of four topics. For each topic, I will provide you with several articles to inform your paper. You will also do supplementary research. In order to make sure there are enough students covering each of the four topics, early in the semester you will rank order the topics according to your personal interests and preference on due dates, and we will

assign students to topics using everyone's preferences. Your first *complete* draft is due **either Nov 4** (for topics 1 and 2) **or Nov 23** (for topics 3 and 4). Your final revised draft will be due **either Nov 11** (for topics 1 and 2) **or Dec 2** (for topics 3 and 4). You will write peer reviews for fellow students working on different topics.

Further details on the papers will be handed out and posted. Late papers will be docked one letter grade increment per 24 hour period. Exceptions on deadlines will only be considered for documented emergencies.

# Semester grades

The final course grade will be assigned based on the following weighting:

Class participation	20%
Homeworks	10%
Quiz 1	5%
Quiz 2	5%
First paper	10%
Second paper	20%
Final exam	30%

The final grade will be based on the distribution of total cumulative points over the semester across all students at the end of the semester.

# **Required readings/videos**

All readings will be linked in the Course Outline tab of the course Ctools site at least one week before the class for which they are assigned. I will also post videos made by myself and others, mostly for reviewing the graphical models.

# **GSI** and sections

The time in section will be used to review old or introduce new microeconomic tools as needed and to address questions about the week's class work. There will also be several sessions throughout the semester to work on developing and getting feedback on the papers.

# **Contacting Instructor and GSI**

Rory and I are both available for questions about the course content in person during office hours or by appointment. I encourage you to meet with us in person. We enjoy getting to know students and talking about the material outside of class.

I typically respond to emails within 24 hours, though not necessarily over the weekend. For logistical questions about the course, make sure to check the syllabus and CTools website before contacting the GSI or instructor.

#### **Disabilities**

If you need an accommodation for a disability, please let me know within the first two weeks of classes (or at your earliest convenience, for disabilities identified during the semester). As soon as you make me aware of your needs, we can work with the Office of Services for Students with Disabilities to help us determine appropriate accommodations. Often some aspects of the course can be modified to facilitate your participation and progress. I will treat any information you provide as private and confidential.

# **Course Website:**

A course schedule is below. The schedule may shift or be amended a bit during the semester, though the due dates for all assignments are set. To centralize access to the various course components, and reflect any changes in the course schedule, the Course Outline (tab on the course CTools homepage) will always be up to date and include links to the course components for the next few classes.

Class Date	Class topic	Assignment Due
Sep 9 W	Course introduction	
Sep 14 M	Theory: efficiency and equity	Sign up LC; readings or videos
Sep 16 W	Empirical overview	Readings or videos
Sep 21 M	Inequality in the US	Readings or videos
Sep 23 W	Externality intro	Homework (HW) 1 due
Sep 28 M	Case Pigouvian tax: Carbon	Readings or videos
Sep 30 W	Case: Auto pollution policies	Readings or videos
Oct 5 M		HW 2 due
Oct 7 W	Auto Policy Brief #1 groupwork	Brief prep (not handed in)
Oct 12 M	Public goods intro	HW 3 due
Oct 14 W	Patents: in graphs	Brief #1 due
<i>Oct</i> 19 M	UM Fall Break No class	
Oct 21 W	Case: patents good for innovation?	Readings or videos
Oct 26 M	Case: access to medicine globally	HW #4 due
Oct 28 W	Quiz, catch up	Quiz #1 (30 min)
Nov 2 M	Randomized Controlled Trials	Readings or videos
Nov 4 W	Asymmetric Information	Brief #2 draft due: topics 1, 2
Nov 9 M	Case: Microfinance	Readings or videos
Nov 11 W	Brief #2: topics 1 and 2	Revised brief #2 due, topics 1 and 2
Nov 16 M	Insurance	HW#5 due
Nov 18 W	Case: National Flood Insurance Plan	Readings or videos
Nov 23 M	Behavioral Economics overview	Brief #2 due topics 3,4
Nov 25 W		Readings or videos
Nov 30 M	Case: BE (TBD)	HW #6 due
Dec 2 W	Brief #2: topics 3 and 4	Revised brief #2 due, topics 3,4
Dec 7 M	Case: BE (TBD)	HW #7 due
Dec 9 W	Quiz	Quiz #2 (30 min)
Dec 14 M	Course Conclusions	
Dec 21 M	FINAL 4-6 pm in classroom	