# Public Policy 6116:

# Microeconomics of Policy Analysis

# Syllabus

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TL;DR

- Sign up for Teams via Canvas with code
    - Do not email me directly about course-related questions—use Teams so everyone can benefit from the answers (or help to answer questions).
    - Exceptions to the email rule are for personal matters or questions unrelated to the course.
- Do the readings ahead of time and take the quizzes (if any). Check Perusall for readings.
- Participation in class discussion (and thus attendance) is mandatory
- Pay careful attention to the modules, and the key points
- Brush up on calculus
- Work together

## Introduction

This course is designed for graduate students in public policy. Students have a wide variety of backgrounds, so the topics will be built "from the ground up." We will develop multiple tools to analyze economic decision-making, including graphical models, mathematical models (using calculus and algebra), and game theory. The goal of this course is to teach economic principles in a way that enables you to apply them to policy-making. In recent years economists have extended the discipline into many areas: policy, politics, psychology, law, anthropology. The primary reason for the success of economic analysis is because the simple tools that we develop in this course are applicable to any type of decision-making.

Some of what you read in the newspaper about economics is uninformed and--at worst--wrong and misleading. Part of the problem is that arguments on both sides of some issues sound compelling. In this course you will learn to use the basic tools of economic analysis to help guide your thinking about economic issues. To that end, we will use formal logic to analyze the issues central to microeconomics. In our class discussions you will be required to express your ideas in a logical and clear way. If you are rusty on your calculus, you'll need to get up to speed early.

Students in this class are expected to abide by the Georgia Tech Honor Code and avoid any instances of academic misconduct. If any violations are discovered, applicable Georgia Tech policies will be strictly followed.

Students who have a disability and anticipate needing accommodations in this course should make arrangements with the Office of Disability Services in order to obtain appropriate documentation. Students should also meet with the instructor outside of class as soon as possible (preferably in the first week of the semester) so that an appropriate course of action can be identified.

# Course Objectives

The overall objective of the course is for you to learn the basic tools of microeconomic analysis. More specifically, you will learn:

1. The basics of consumer theory and producer theory,
2. The essentials of trade and comparative advantage,
3. The efficiency of the market and the inefficiency of intervention,
4. The inefficiency of the market (market failures) and the efficiency of intervention.

By the end of the course you should be able to use the tools of supply and demand and game theory to analyze everyday situations, including those you might read in the newspaper.

# Communication/Responsibilities

My primary means of communication with the class is Canvas announcements. Be sure you read these at your earliest convenience. The primary way for you to ask questions is via the course discussion board. Email is not the best way to reach me, with some exceptions.

See *Communication Protocols* on Canvas for more information.

You are responsible for reading this syllabus, and you are responsible for knowing the deadlines contained in the course outline. If you are uncertain about anything you read here, it is your responsibility to first ask your peers, and second to ask for a clarification via Canvas. You are also responsible for updates that I make to this syllabus in class or by email. Not attending class is not an excuse for not knowing about an assignment or not participating in class discussion. If you are absent for any reason, please get notes and updates from a peer. I will not repeat lectures in office hours.

I will be using Canvas for this class. This is the best way for me to keep you up to date on issues that arise in the class; check it frequently. You may also use Teams to look for study partners or for other class related business. It is in your own best interest to check Canvas since some of the notices may include items like “there was a typo on problem set one…”

Part of class participation is to be helpful and answer questions from your peers on Canvas.

# Requirements

The grading will be broken down as follows:

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| Read the syllabus and related material on Perusall | 5 |
| Class participation and preparation | 10 |
| Assignments/Problem sets | 25 |
| Midterm | 30 |
| Final examination | 30 |

## Class participation

- Do the reading **before** the lecture in which we discuss it. See "Readings" below.
- Read all newspaper articles and be ready to discuss them. We won't discuss all of them. The best way to prepare is to take brief notes on:
  - The facts as presented in the article (assume that they're true as given)
  - The conclusions of the journalist (do **not** assume that the conclusions are true)
  - Do you agree with the journalist? Are there alternative explanations? Should they have been surprised by a certain outcome?
- Prepare the assigned problems (if any). We'll go over these in class and you should treat them very seriously. I may provide solutions, but it would be idiotic to simply come in with my solutions. You should have made a serious attempt at each problem. Only then would you look at the solutions. If you cannot explain the answer, then you should have exhausted all your opportunities to try to figure it out (e.g., office hours, Teams, etc.).
- Participate in the Teams discussions for class. They should be used for discussion of assignments (help each other out!), economic goings-on, questions about lecture, etc. If you're not a "talker," this is your chance to participate.

## Assignments

- Assignments should be turned in as electronic files on Canvas (pdf format only).
- Something like LaTex is nice, but not necessary (PhD students may find it useful to learn it).
- However, scans of **neat, legible**, hand written solutions are acceptable. Many students prefer using a tablet for this purpose.
- You may work in groups, but the assignments must be turned in individually. You may work alone, but I don't recommend it. **Please indicate the names of others with whom you worked significantly**. This policy is designed to encourage you to work together, not to divvy up assignments.
- You may occasionally find yourself in possession of solutions to similar/previous problem set questions. I won't say that you cannot use them (or anything else) as a resource. However, copying answers is plagiarism. **Your work must be your own and proper attribution should be given to resources upon which you relied**. Also, you will kick yourself at exam time if you did not work hard on the problem sets.
- Computer algebra programs (www.wolframalpha.com, Mathematica, Matlab, Maple, etc.) are encouraged for checking your work, graphing (Desmos), simplifying algebra, etc. Wolfram Alpha in particular provides an intuitive interface with "plain English" commands (sort of). Desmos is a very intuitive graphing program.

## Quizzes/Perusall

- There may be quizzes about the textbook reading **due before the class in which the readings will be discussed.**
- Alternatively, I may require reading to be done via Perusall.

## Exams

- I design exam questions to be hard. I expect no one to ever get 100% on any exam. This is purposeful: I want to test what you know. If several people get 100%, then I haven't gotten a good idea of what you know and do not know. Similarly, if no one gets above 40%. Thus, my intent is to use "the full range of points," and then to curve accordingly.
- There is no such thing as rescheduling an exam. Do not miss exams. You are responsible for knowing that you can make it to exams---that you don't have conflicts.

- Calculators. All in-class exams are designed to be easily completed without a calculator. However, I allow non-programmable calculators on exams for the easily panicked. No sharing of calculators is permitted. No phones.
- In class exams are closed note. Take-home exams are open-note, open-resource except where noted.
- For both the midterm and the final exam, I reserve the right to have both an in-class and take-home portion.
- The take-home is generally released the same day as the in-class portion is assigned (by close of business). You will have a minimum of 36 hours to begin the exam (sometimes more). Once you begin, you will have a 3-6 hour window to complete it (depending on the length).

## Readings

Primary readings are mandatory. Textbook readings may be "skimmed," if you have a good background in economics. At a minimum you are expected to be familiar the "key concepts" (defined on Canvas in each module). If you are limited on time, you should focus on the definitions and methodological tools, as opposed to the "fluff." If necessary, I will invoke quizzes.

**Required Textbooks**

- [**Varian**] Intermediate Microeconomics with Calculus: A Modern Approach (any edition). [This will be a useful reference for anyone planning to take PUBP 8211 (PhD Micro).]
- [**ESI**] Economics of Social Issues, 20th edition. Miller, Benjamin, & North. [PURCHASE online or hardcopy] https://www.pearson.com/en-us/subject-catalog/p/economics-of-public-issues-the/P200000005978/9780137525331. This book is not a text, but will be used for applications.

**Optional Textbooks.** I have previously used these texts, so you will see references to them in the modules. I'm keeping the references in case it's useful for anyone.

- McAfee, et al textbook (in files/readings) [This is technically an intro text with calculus. However, some chapters are still a little rough around the edges.]
- [**Emerson**] Intermediate Microeconomics -- Open Textbook, Patrick **Emerson**. [FREE ONLINE] https://open.oregonstate.education/intermediatemicroeconomics/
- [**CORE**] CORE Econ, The Economy 2.0 Microeconomics. [FREE ONLINE] https://core-econ.org/the-economy/

**Outside Readings**

Aside from *Economics of Social Issues*, we will also have outside readings for which you will be responsible (mandatory). Most of these will be newspaper articles that are available electronically through library resources, or online articles. I sometimes provide links as a convenience. If the links do not work, try finding the articles via the library first, and share links with your classmates via Canvas/Teams.

I will also sometimes assign podcasts (usually 30-60 minutes). You should prepare these for class discussion. Either take notes, or use the transcript of the podcast to markup. My experience is that it is hard to actually discuss the podcast if you only listen to it without notes.

**SEE CANVAS COURSE RESOURCES FOR ADDITIONAL INFORMATION/RESOURCES**

# Other Policies and Resources

## Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review Georgia Tech's Honor Code and the student Code of Conduct. Any student suspected of cheating or plagiarism on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

## Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

## Student-Faculty Expectations Agreement

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. The Student-Faculty Expectations articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class

## Campus Resources for Students

- Academic Support: Academic Success and Advising (a unit in the Office of Undergraduate Education & Student Success) provides free support for your courses. Students can attend scheduled supplemental review (PLUS) sessions, stop by Drop-In Tutoring, or schedule a one-on-one appointment through Knack. To explore what options work best for you, please visit us online at success.gatech.edu/tutoring, email us at tutoring@gatech.edu, or come see us at Clough Undergraduate Learning Commons, Suite 283.
- Academic Resources such as the Communications Center, Language Institute, Library, Catalog, Registrar, resources for conducting research, Advocacy and Conflict Resolution resources, and how to manage unexpected situations that may impact your academic performance;
- Student Resources such as Campus Services, Child Care/Family programs, Health & Wellness, Career Services, and the Student Resource Guide; and
- *Professional Development such as the programming from the Career Center and other professional development resources and events"*
- At Georgia Tech, we are concerned about your overall physical, social, and mental well-being. A comprehensive list of wellness related resources has been compiled and maintained by the Office of the Vice President for Student Engagement and Well-being (student-resource-guide (gatech.edu)