

# Introduction to Modern Macroeconomics (ECON 110A)

## Syllabus for Winter 2018

**Instructor:** Prof. Tommaso Porzio - Econ 224 - tporzio@ucsd.edu - OH: Wed 1.30pm to 3.30pm

**TAs:** Mitchel: mvanvure@ucsd.edu; Xu: xuz039@ucsd.edu; Daniel: dleffya@ucsd.edu - OH: TBA

**Lecture:** TuTh 9:30a-10:50a and TuTh 11:00a-12:20a - Warren Lecture Hall - Room 2005

**Class Outline.** This class aims to provide a solid foundation in modern macroeconomics. Macroeconomists study the state of the aggregate economy, as commonly measured by unemployment, and economic growth. In this class we develop simple economic models of the macroeconomy and use them to understand real-world phenomenon, such as the effects of immigration or automation on employment and wages. The main purpose of the course is methodological and will follow the tradition of modern macroeconomics to rely on solid microfoundations based on microeconomic principles. In doing so we will therefore study the interaction of individual agents in the economy (i.e. households, firms, policy-makers, financial institutions, ...) and analyze the aggregate consequences.

**Problem Sets.** I will distribute problem sets on a weekly or bi-weekly basis throughout the course. A due date and time for each problem set is written on the first page. Problem sets are **mandatory** and should be turned in to your TA. Solving the problem sets is of paramount importance in order to succeed in the course (see Grading and Exams below). As usual, working in small groups is encouraged, however I also suggest you to give a serious individual attempt to solve the problem set before discussing it with your classmates. The TAs will read your problem sets to know on which (if any) topic you are having a hard time. However they will not correct them. Problem sets are graded either 100% or 0%. You receive **full grade** (i.e. 100%) on a problem set **if** you **attempt** to solve each question. (E.g. even if you have no idea on how to solve a question, you should explain why you find that question hard, and what confuses you). The TAs will circulate solutions to the problem sets after the due date. If you are unable to turn in a problem set on time, you should notify this to the TA before the due date. You can **self-justify** yourself at most **once** during the course, and still receive full grade.

**Office Hours.** I hold office hours on Wed from 1.30pm to 3.30pm. In order to use more efficiently both your and my time, office hours are **by appointment only**. This is how it works: if you wish to come to my office hours, send me an email *before Tuesday at 10pm*. The email should contain as subject ECON110A\_OH. You should briefly sketch the reason for your visit (e.g. I would like to better understand why an increase in immigration might have no effect on wages). In your email you should also include a preferred time and whether there are some time slots where you can't make it. I will email you on Wednesday morning with a time slot within my OH at which to show up. I might bundle more than one student together if you have similar questions.

**Questions and Competences.** Let's assume you have a question. If this is about something that you did not understand in class, you should first reach out for your classmates, then for your TA, and as a last resort to me. If instead the question is more broadly about macro, or about topics that we have not directly covered in class, then I am the right person to reach out for.

**Teaching Resources.** For the exams, you are responsible to know only the **material that I cover in class**. I usually write on the blackboard, and you are strongly encouraged to take notes. I will provide slides that outline most of the class material. The assigned textbook is not required, but may be a useful additional tool.

**Class Participation.** Class attendance is mandatory. I encourage class participation, and although the class is quite large, I think we could all benefit from your questions. If something is unclear to any of you, most likely I have not been clear enough in explaining it, and thus others might be confused as well. Please raise your hands! and close your laptop as well. I strongly encourage you to take notes using pencil and papers. Open laptops are distracting for you and for me.<sup>1</sup> The same is true for smartphones.

**Grading and Exams.** Your final grade is given by problem sets (10%), two in-class midterms (25% each), and one final exam (40%) during final week. The two midterms will contain questions similar (if not identical) to the ones of the problem sets. **Midterms are meant to be easy** and to test whether you studied the material. The **final exam will be more difficult**, and test whether you deeply understood the material. *Midterms are not mandatory*. If you skip one (or two) midterms - for any reason, no need to provide a justification - your final exam will have accordingly more weight for your final grade (i.e. 65% or 90%). There are no make-up midterms. Since midterms are easier, it is in your interest not to skip them. If you miss the final exam, *and* have a university-approved justification, we can arrange a make up exam in the spring. I will make a different exam in this case, and I cannot assure it will be similar in difficulty level to the regularly scheduled final exam. Both midterms and final exams are closed book and solo work. You cannot bring your calculator.

I use the following guidelines for letter grades: A is "excellent," B is "good," C is "average," D is "passing," and F is "failure." I will also give A+'s and A-'s, B+'s and B-'s, etc for those in between. Midterms and the final exam will be graded by a number score, and I will provide a *rough* guide to what those numbers mean. If no one demonstrates "excellent" mastery of the material than no one gets an A. If everyone demonstrates "excellent" mastery of the material than everyone gets an A.

**I don't tolerate academic misconduct.** Cheating is unfair, to you, to me, and most importantly to your classmates. I have a zero tolerance policy.

### **Tentative Schedule (Midterm Dates are Confirmed).**

- 1/9 - What is modern macroeconomics?
- 1/11, 1/16 How do we measure the aggregate state of the economy?

#### 1. GDP and Unemployment

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<sup>1</sup>There is even research that shows this! See <http://www.sciencedirect.com/science/article/pii/S0360131512002254> and <http://journals.sagepub.com/doi/abs/10.1177/0956797614524581>.

## 2. Inflation and Prices

- 1/18, 1/23, 1/25, 1/30, 2/1, 2/6 - How do we model the aggregate economy?
  1. Theory 1: Competitive equilibrium
  2. Theory 2: Planner and taxes
  3. Theory 3: Money Neutrality
  4. Application 1: Hours worked in Europe and U.S.
  5. Application 2: Automation and immigration
- 2/8- In class midterm.
- 2/13, 2/15 - Facts on Growth
  1. How countries grow?
  2. Development accounting: Why some countries are much richer than others?
  3. Lucas: Why Capital Does Not Flow to the Poor?
  4. East/West Germany: Why Workers Do not Move where they are Paid More?
- 2/20, 2/22, 2/27, 3/1 - Why economies grow?
  1. The Solow Model
  2. The Golden rule
  3. Exogenous efficiency growth
  4. Endogenous technological growth (Romer Model)
- 3/6 - In class midterm.
- 3/8, 3/13, 3/15- Why are people unemployed?
  1. Some facts on unemployment
  2. Frictional and frictionless unemployment