

# Econ 601 – Macroeconomics I- Fall 2022

## Syllabus

Economics 601  
Fall 2022, Second Half  
kalemli@umd.edu

Prof. Sebnem Kalemli-Ozcan

Lectures: MW 12:30-1:15 PM

Office Hours: By appointment (email me to make an appointment; this can be in person or via zoom, can email me anytime)

Discussion section: M 5:00-6:45 TYD 1108

TA: Kanat Isakov, [kisakov@umd.edu](mailto:kisakov@umd.edu)

### Course Logistics and Grading

All lectures and discussion sections will be held in person until further notice. If circumstances require a change to online instruction, lectures and sections will be held synchronously over Zoom at the assigned times, were links will be sent via TA in advance. Questions are welcome in lecture; please raise your hand.

There will be one midterm/final (70%) on the last day of class, and the rest of your grade will come up from the weekly problem sets. You need to bring the problem set to the class the week after it is assigned.

UMD's policies on graduate courses and graduate student rights and responsibilities can be found here: <https://gradschool.umd.edu/faculty-and-staff/course-related-policies>

### Readings

I will distribute lecture notes in advance (TA will email them or post them to ELMS). You have to come to the class prepared after reading them.

Aside from the lecture notes, the book Advanced Macroeconomics by David Romer can be good variation on the lecture notes. Intermediate Macroeconomics by Greg Mankiw will be useful to refresh your basic understanding. You might find Economic Growth by Barro and Sala-i-Martin useful for the growth sections of this course. Lectures on Macroeconomics by Blanchard and Fisher is a good reference and Foundations of International Macroeconomics by Obstfeld and Rogoff is probably a book you should own before you leave UMD.

I will point out particularly important or relevant papers as we go along, but at this point I don't expect you to read them in order to pass this class.

### Requirements

I will teach based on the assumption that you know the material in Intermediate Macroeconomics already as well as the mathematical material in the first 12 chapters of Chiang's Fundamental Methods of Mathematical Economics. You need to be familiar with basic calculus, Lagrangians, dynamic optimization, and manipulations of integrals and summations.

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## **Syllabus**

### **Outline**

#### **I. The Mechanics of Economic Growth**

- a. Production Functions
- b. The Solow Model
- c. Capital Accumulation
- d. Golden Rule Saving
- e. Population Growth
- f. Technical Change
- g. Human Capital

#### **II. Essential Models of Dynamic Optimization**

- a. Infinitely Lived Agents
- b. Dynamic Programming
- c. Lifespan Uncertainty and Insurance
- d. Continuous Time Optimal Consumption
- e. The Ramsey Model
- f. Stochastic Income Shocks
- g. Fixed Technological Growth
- h. The Overlapping Generations Model

#### **III. Open Economy Macroeconomics**

- a. Open Economy Accounting
- b. Optimal Savings and the Interest Rate
- c. Growth in an Open Economy
- d. Capital versus Assets
- e. Non-tradable Human Capital
- f. Optimal Consumption and Growth in an Open Economy

#### **IV. Endogenous Growth Models**

- a. Empirics of Economic Development
- b. Growth and Development Accounting
- c. Growth Rates and Convergence
- d. Interest Rate Differentials
- e. The AK Model
- f. Lucas' Human Capital Model
- g. Endogenous Technology Creation
- h. Endogenous Population Growth