ECON-UA 12 — Intermediate Macroeconomics Professor: Jaroslav Borovička TA: Felipe Camêlo Fall 2022

# ECON-UA 12 — Intermediate Macroeconomics

NYU, Fall 2022 - Class 8766, Section 010

# Syllabus

## 1 Organization

Professor:	Jaroslav Borovička	jaroslav.borovicka@nyu.edu
	office hours 19W 4th Street, office 714	Tue 12:45 – 1:45 pm Thu 11:00 am – noon
Teaching Assistant:	Felipe Camêlo	felipe.camelo@nyu.edu
	office hours	Wed 1:30 – 2:30 pm Fri 2:00 – 3:00 pm
Lecture:	SILV 401	Tue, Thu 2:00 – 3:15 pm
Recitations:	Section 011 GCASL 288 Section 012 194M 306A	Fri 3:30 – 4:45 pm Fri 4:55 – 6:10 pm

Lectures and recitations are fully in-person, without Zoom and without recording, unless otherwise noted. Changes in university rules may alter the arrangements outlined in this syllabus during the course of the semester.

I typically answer emails quickly, almost always within a day. Please start the subject headline of all your emails to me with **ECON-UA 12**. Direct all emails regarding problem sets and recitations directly to the teaching assistant. **Also, before sending any emails, please read the syllabus**. This may save you a lot of time.

## 2 Course objectives

We will use macroeconomic theory and empirical evidence to analyze important aspects of the macroeconomy — long-run growth, business cycles, labor markets, inflation, and fiscal and monetary policies.

Given the focus of the course on theoretical and empirical questions, you will use calculus to study macroeconomic models, and a data processing software (e.g., Excel) to analyze and visualize data. We will heavily rely on publicly available data from various sources, primarily from the Federal Reserve Bank of St. Louis Economic Database (FRED).

Attending both the live lectures and recitations is highly recommended. The purpose of recitations is to review material from lectures and problem sets, primarily using *additional* examples and problems. These problems will not cover new material in most cases but should be helpful in preparation for the exams.

## 3 Prerequisites

The official list of prerequisites is provided with the registration. I want to highlight the following.

- Mathematics for Economists I and II are required. I strongly recommend you refresh the material from those courses — familiarity with calculus will allow you to focus on economics rather than spending time with mathematical derivations.
- Principles courses in microeconomics and macroeconomics are required.
- **Intermediate Microeconomics** is highly recommended, at the very least in parallel with this course. It is generally more natural to take microeconomics prior to macroeconomics.

## 4 Textbook

The main text **Macroeconomics 5e** by **Charles I. Jones** (ISBN 978-0-393-41736-4). We will rely on the book extensively. The fifth edition is more interlinked with the FRED database than previous editions. Using the third or fourth edition of this textbook is possible but it is your responsibility to check the differences between the editions (some updated graphs, added chapters). In case of disagreement, it is the fifth edition that matters.

I will also provide you with additional short readings that will extend the material and provide connections to recent events, complementing the discussion in class.

## 5 Exams and grading

There will be two midterms and a final. All tests consist of a combination of quantitative and graphical exercises, similar to those discussed in class and recitations. The final grade for the course will consist of the following components:

Midterm 1 (Thu, October 6, during class time)	
Midterm 2 (Thu, November 3, during class time)	30 %
Final (Tue, December 13, during class time (last lecture))	
Problem sets	10%

Each of the midterms will primarily focus on the respective third of the course. The final will be cumulative, with somewhat more focus on the last third of the course.

All material provided in the course is examinable, unless explicitly specified otherwise. **No electronic devices** (including phones or calculators) are allowed during the exam.

#### 5.1 Make-up tests and regrading

**There will be no make-up exams**. If you miss a test because of a medical emergency (documented with a doctor's note), I will appropriately reweigh your scores from the remaining exams. The doctor's note must be provided within one week of the exam. In addition, if you know of your medical condition in advance, you must send me an email notification. You have to attend the final exam.

If you think your exam was graded incorrectly, you may ask for a regrade **within one week** after I distribute the exam. In this case, you **must submit a written note** explaining what, in your view, was graded incorrectly. I will then **regrade the whole exam**. This means that your score may be adjusted both upward **as well as downward** as a result.

Importantly, there are no additional discretionary ways how to improve your score.

#### 5.2 Grading scheme

The **grading scheme** is as follows. The exam grades will be curved according to achieve a course grade distribution in line with departmental standards (29% A, 40% B, ...).

#### 6 Problem sets

I put emphasis on continuous learning. I will assign weekly problem sets (except exam weeks, i.e., 12 problem sets in total), each of which will be due on Friday at 2:30 pm, with electronic submission via **Gradescope**. You may submit the problem set up to 24 hours late, in which case you incur a penalty of 50% of your score on that problem set.

Your two worst problem sets (e.g., ones that you do not submit) will not be counted. Since I distribute answer keys one day after the submission deadline, you cannot ask for further extensions, for any reason (in particular, you can use the 'worst problem sets not counted' policy as insurance against situations when it is difficult for you to submit the problem set, like medical or personal reasons). **Groups**: You are allowed to form groups of up to four people to discuss the problem sets, and I encourage you to do so — everybody gets stuck sometimes, and cooperation and discussions with your classmates can help you understand the material much better. However, after the group discussion, you have to put substantial individual effort into the final solution, and **the final solution and the write-up has to be the result of individual work**.

In particular, it is not acceptable to just copy or jointly write down the answers. Such copied answers will earn zero points, regardless of who was copying from whom.

You have to **list all members** of your group in your submitted answers.

Problem sets will be graded by the TA. Therefore, all questions regarding the problem sets should be directed to him.

# 7 Outline of the course

The course closely follows the **Macroeconomics 5e** textbook by Charles I. Jones. I will regularly give out extra readings on contemporary macroeconomic situation and debate that are related to the covered material.

The following structure of the course is tentative.

### 7.1 Preliminaries

Chapters 1–2 – self-study, we will not discuss these elementary section in lectures. I will not explicitly examine these chapters but I will assume that you know and understand them.

### 7.2 Economic growth

- **Overview** (Chapter 3). Some empirical facts on long-run growth and development.
- A model of production (Chapter 4). Can a simple model of production account for differences in GDP across countries?
- **Investment** (Chapter 17). Investment decisions, capital accumulation and the role of the financial market as a source of financing.
- **Solow growth model** (Chapter 5). How capital accumulation contributes to economic development.
- Growth and ideas (Chapter 6). What generates persistent growth over time?

### 7.3 Labor market

• Labor market, wages and unemployment (Chapter 7). Labor supply, labor demand, wages, frictions and unemployment.

### Midterm 1 (October 6) – Chapters 3–7, 17

Chapters are tentative and depend on the material covered until the midterm.

### 7.4 Inflation

• Inflation (Chapter 8). "Inflation is always and everywhere a monetary phenomenon."

### 7.5 Business cycles

- An introduction to business cycle facts (Chapter 9). Comovement of macroeconomic quantities over the business cycle.
- **The Great Recession** (Chapter 10). A preliminary analysis of the causes and effects of the worst downturn of the U.S. economy in the last 70 years. Left for self-study.
- **Consumption** (Chapter 16). Consumer's choice from the macroeconomic perspective.
- **The IS curve** (Chapter 11). The relationship between savings, investment, and the real interest rate.
- **Monetary policy** (Chapter 12). Nominal and real interest rates, sticky prices and inflation.

### Midterm 2 (November 3) – Chapters 8–12, 16

Chapters are tentative and depend on the material covered until the midterm.

- 7.6 Business cycles continued
  - AS/AD framework and stabilization policy (Chapter 13).
  - **The Great Recession and the financial sector** (Chapter 14). How do financial shocks propagate into the real economy.
  - DSGE models (Chapter 15). How does modern business cycle research look like?

### 7.7 Fiscal policy and open economy (selected topics, time-permitting)

- **Fiscal policy** (Chapter 18). Government spending, taxation, budget deficits and government debt management.
- International trade (Chapter 19). Comparative advantage, trade and flows of labor and capital across countries.
- Exchange rates and international finance (Chapter 20). Open economy, exchange rate determination, international financial system.

## Final exam (December 13) – Chapters 3–20

Chapters are tentative and depend on the material covered until the final. Final exam is cumulative, with roughly 1/2 to 2/3 of the exam content covering the last third of the course.