## ECON 3080 Intermediate Macroeconomics

University of Colorado Boulder Department of Economics Spring 2020

Instructor: Ge Song Time: TTH 12:30 PM – 1:45 PM

Email: Ge.Song@Colorado.EDU Place: STAD 140

**Office:** ECON 14 **Office Hours:** TTH 02:00 – 03:00 PM

## Course Pages: https://cuboulder.instructure.com/courses/60215

The course syllabus, handouts, supplementary materials, and homework assignments will be posted on Canvas. Please check the course webpage frequently as I will be updating it with materials and assignments. You are responsible for checking the canvas webpage regularly to avoid missing any assingments or announcements.

Office Hours: TTH 02:00 – 03:00 PM, or by appointment.

Course Description: This is a one-semester theory course on intermediate macroeconomics. With aid of quantitative instruments from a rich set of tool kit, the course aims to push up understandings of macro stylized facts as well as policy discussions to a more rigorous level. For purpose of teaching convenience, the course is dichotomized into classical theories of long-run growth and short-run fluctuation. The long-run part mainly deals with theoretical decipherment of empirical evidences that countries diverge, by income per capita or by other measures of individual well-beings, and cluster into different "clubs"; The short-run part, on the other hand, switches focus on business cycles, digging deeper by employing appropriate neoclassical models that might potentially do a good job in accounting for volatilities of key variables of interest. At very end of the day, the course is ambitious enough to touch upon one computational model, in addition with approaches to map the model to the real world data. Hopefully, this course is going to arouse your interest, and to cement a good foundation for more advanced ECON courses.

Main References: This is a restricted list of various interesting and useful books that will be touched during the course. You need to consult them occasionally.

- N. Gregory Mankiw, *Macroeconomics*, Tenth Edition, Worth Publishers, 2018. (required) (you may use a previous edition just make sure to match up the relevant chapters).
- Robert J. Barro, *Intermediate Macroeconomics*, Cengage Learning, 2017. (recommended)
- Charles I. Jones, *Macroeconomics*, Fourth Edition, W. W. Norton & Company, 2017. (recommended)

**Objectives:** This course is primarily designed for undergraduate students to have a snapshot of big pictures of macroeconomic theories, and a decent grasp of answers to the following questions:

- What are the factors that contribute to long-run economic growth?
- What are short-run business cycles, and what brings about them?
- Why is aggregate consumption less volatile than aggregate investment?
- When does money play a role in the economy, and how?
- How to collect and map macro data to a theoretical model?

• How to make policy implications from theories, and how to be critical and just when commenting on policy discussions?

## Prerequisites:

- ECON 1000 or ECON 2020 or equivalent from another institution.
- ECON 1078 and 1088, or MATH 1300, or MATH 1310, or MATH 1081, or MATH 1080, 1090 and 1100, or APPM 1350, or equivalent from another institution.

### **Grading Policies:**

| Midterm 1             | 20% |
|-----------------------|-----|
| Midterm 2             | 20% |
| Final Exam            | 40% |
| Attendance & Homework | 20% |

#### Letter Grade Distribution:

| >= 93.00      | A  | 73.00 - 76.99 | С  |
|---------------|----|---------------|----|
| 90.00 - 92.99 | A- | 70.00 - 72.99 | C- |
| 87.00 - 89.99 | B+ | 67.00 - 69.99 | D+ |
| 83.00 - 86.99 | В  | 63.00 - 66.99 | D  |
| 80.00 - 82.99 | В- | 60.00 - 62.99 | D- |
| 77.00 - 79.99 | C+ | <=59.99       | F  |

A curve may be applied to the overall course grade to conform to departmental standards. Other than that, I will not grant any request to increase your grade to meet a certain cutoff. You will receive the grade that you earned throughout the course. If you are concerned about your grade(s) you should immediately come talk to me. I will do everything I can to help you be successful in this course.

## **Course Policies:**

#### • Lectures

Lectures Note-taking is very important in this course. It is highly recommended that you attend lectures, since I will not post or distribute my class notes. If you miss some lectures, it is your responsibility to contact a classmate to get the notes corresponding to the missed lecture(s). You are also responsible for any announcement or instructions given in class (this may include instructions for tests).

### • Exams

All exams (midterms and final) will take place in our classroom (ECON 117). Please do not be late for any of those. Being late can be distracting for your classmates and you will have less time to complete the corresponding exam.

I will not give any early or make-up exams. In the case that you have to miss any of the midterms because of a family or medical emergency, and only if you provide documentation to justify that absence, the weight for the corresponding midterm will be added to the final exam. In all other cases, a missed exam will result in a grade of zero for that exam.

The final exam cannot be missed under any circumstances. During all the exams (midterms and final), the use of calculators will NOT be allowed. If I ask for any calculations, these will be easy enough. The only thing you will need for exams will be something to write (pen or pencil). I will provide paper. If you have 3 or more finals on the same day, you can arrange to take the last final at an alternate time. However, you must notify me of this no later than the 10th weeks into the semester (before Mar  $23^{rd}$ , i.e., the Spring Break) and provide proof that it is your 3rd or more exam on that day.

Cheating in any of the exams is unacceptable. Any cheating instances will result in a grade of zero and a report to the Honor Code Council.

#### • Email

If you have any questions about the material, send me an email. Sometimes it will be more effective to discuss those questions in office hours. If that is the case, I will ask you to come to my office. I will try to respond all emails within 24 hours. If you have any administrative issues covered in the syllabus, please check it before asking me. If after checking the syllabus you still have any questions, come directly to my office during office hours. I will not answer administrative questions over the email.

According to FERPA, we are not allowed to discuss grades via email. If you have any questions or concerns about your grade, please come to my office during office hours.

### • Office Hours

At the top of this syllabus you can find when and where my office hours take place. If you cannot make it at any of those times, send me an email and we can set up an appointment outside those hours.

### • Laptops/electronic devices

Laptops or other electronic devices are allowed in class.

## University Policies:

- **DISABILITY POLICY:** I am committed to providing everyone the support and services needed to participate in this course. If you qualify for accommodations because of a disability, please submit to your instructor a letter from Disability Services in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by e-mail at dsinfo@colorado.edu.
- HONOR CODE: Students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. Incidents of academic misconduct will be reported to the Honor Code Council (honor@colorado.edu; 303-725-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from myself and non-academic sanctions (including but not limited to university probation, suspension, or expulsion).

• **RELIGIOUS OBSERVATION POLICY:** Campus policy regarding religious observances requires that faculty make every eort to reasonably and fairly deal with all students who, because of religious obligations, have conicts with scheduled exams, assignments, or required attendance. If you have a conict, please make arrangements with me no later than the rst week of the semester.

- CODE OF BEHAVIOR POLICY: Students and faculty each have responsibility for maintaining an appropriate learning environment. Students who fail to adhere to such behavioral standards may be subject to discipline. Faculty has the professional responsibility to treat all students with understanding, dignity and respect, to guide classroom discussion and to set reasonable limits on the manner in which we express opinions. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with dierences or race, culture, religion, politics, sexual orientation, gender variance and nationalities.
- DISCRIMINATION AND HARASSMENT POLICY: CU Boulders policy on Discrimination and Harassment can be found on the university website. The policy on Sexual Harassment and on Amorous Relationships applies to all students, sta and faculty. Any student, sta or faculty member who believes s/he has been the subject of discrimination or harassment based upon race, color, national origin, sex, age, disability, religion, sexual orientation, or veteran status should contact the Oce of Discrimination and Harassment (ODH) at 303-492-2127 or the Oce of Judicial Aairs at 303-492-5550. Information about the ODH and the campus discrimination and harassment resources can be obtained at http://www.colorado.edu/odh.

# **Tentative Course Outline:**

The weekly coverage might change as it depends on the progress of the class. However, you must keep up with the reading assignments.

| Topics  | Approximate dates                       | Reading Chapters |
|---|---|------------------|
| I. Introduction to Macroeconomics               | Week of Jan $13^{th}$ , Jan $20^{th}$   | Mankiw 1 & 2     |
| II. Classical Theory (the Long Run)             |   |                  |
| A. National Income                              | Week of Jan $20^{th}$ and Jan $27^{th}$ | Mankiw 3         |
| B. Money and Inflation                          | Week of Jan $27^{th}$ and Feb $3^{rd}$  | Mankiw 4 & 5     |
| C. The Open Economy                             | Week of Feb $10^{th}$ and Feb $17^{th}$ | Mankiw 6         |
| Midterm 1 (In Class)                            | Tuesday, Feb $25^{th}$                  |                  |
| III. Growth Theory (the very Long Run)          |   |                  |
| A. Economic Growth I (Solow Model)              | Week of Feb $24^{th}$ and Mar $9^{th}$  | Mankiw 8         |
| B. Economic Growth II (Endogenous Growth Model) | Week of Mar $9^{th}$ and Mar $30^{th}$  | Mankiw 9         |
| Midterm 2 (In Class)                            | Thursday, Apr 2 <sup>nd</sup>           |                  |
| IV. Business Cycle Theory (the Short Run)       |   |                  |
| A. Economic Fluctuations                        | Week of Apr 6 <sup>th</sup>             | Mankiw 10        |
| B. Aggregate Demand I and II                    | Week of Apr $13^{th}$                   | Mankiw 11 & 12   |
| C. Aggregate Supply and the Philips Curve       | Week of Apr $20^{th}$                   | Mankiw 14        |
| V. A Computational Model and Review             | Week of Apr $27^{th}$                   | Matlab Codes     |
| Final Exam (1:30 - 4:00 PM)                     | Saturday, May 2 <sup>nd</sup>           |                  |

# **Important Dates:**

- $\bullet$  Martin Luther King, Jr. Holiday: Jan  $20^{th},$  No Class
- Midterm 1: Tuesday, Feb 25<sup>th</sup>, In Class
- Midterm 2: Thursday, Apr 2<sup>nd</sup>, In Class
- Spring Break: Mar  $23^{rd}$   $27^{th}$
- Last Day of Class: Apr 30<sup>th</sup>
- Reading Day: May  $1^{st}$
- Final Exam: Saturday, May 2<sup>nd</sup>, 1:30 4:00 PM