ECON 7207
MACROECONOMIC THEORY II
FALL 2024

Lectures: T-TR 12:30pm-1:45pm
Location: SIPA 335
Instructor: Berrak Bahadir
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Office Hours: T-TR 10:00-11:30am

COURSE DESCRIPTION

This course has two parts. The first part covers dynamic, stochastic general equilibrium models of macroeconomic behavior and business cycles. In the second part, we will study empirical models that are commonly used in the recent macroeconomics literature.

COURSE OBJECTIVES

This is the third course in macroeconomic theory for students in the PhD program. Dynamic stochastic general equilibrium (DSGE) models have become the standard workhorse models for the analysis of aggregate fluctuations. In the first part of the course, we will focus on the analysis, solution, calibration, and extension of DSGE models. We will start with real business cycle models and cover some extensions of these models, mostly focusing on financial frictions. In the second part, we will study the empirical models that are used in the modern macroeconomics literature.

Modern macroeconomics is a quantitative science. As such, students will be expected to perform quantitative exercises using a computer program, most preferably MATLAB (this is the programming language for which I will offer support). You will also be asked to download Dynare, which is a set of codes used to solve, simulate, and estimate DSGE models.

COURSE WEBSITE

We will use Canvas in this class. I will post important announcements on Canvas, so it is your responsibility to check Canvas before each class. Handouts, problem sets and solutions to the problem sets will be posted on CANVAS.

COURSE MATERIAL

There is no single assigned textbook for the course. I will use a number of different sources which are listed below. As we progress through the course, I will highlight any important readings.

Dirk Krueger, Quantitative Macroeconomics: An Introduction, 2007.
McCandless, George, 2008: The ABCs of RBCs: An Introduction to Dynamic Macroeconomic Models, Harvard University Press.
Wickens, Michael, 2008: Macroeconomic Theory: A Dynamic General Equilibrium Approach, Princeton University Press.

COURSE REQUIREMENTS

Evaluation for the course will be based on two midterms, a final paper, and two problem sets. Each midterm will account for 25 percent of the course grade, while the final paper will count for 30 percent (20 percent for manuscript; 10 percent for presentation). The remaining 20 percent of the course grade will be based on the two problem sets. The due dates for the problem sets will be determined as we progress through the semester. While students may consult with one another in completing the problem sets, it is expected that each student turn in their own assignments.

TENTATIVE EXAM DATES

First Midterm: Thursday, September 21, in class
Second Midterm: Thursday, October 19, in class
Final Paper: Thursday, November 16
Final paper presentation: TBD

COURSE OUTLINE

1. Introduction to Short-run Macroeconomic Analysis

    Suggested Readings:
         Wickens, Chapter 1.
         Krueger, Part 1

2. Real Business Cycle Models
        a. Stochastic neoclassical growth model
        b. The basic real business cycle (RBC) model
        c. Using Dynare to solve DSGE models

    Suggested Readings:
         Krueger, Ch. 3
         Wickens, Ch. 2; Ch. 4

3. Extensions of the Basic Real Business Cycle Model
        a. Investment
        b. Habit formation
        c. Indivisible labor
        d. Money and inflation
            i. Cash in advance
            ii. Money in the utility function

    Suggested Readings:
         McCandless, Ch. 4
         McCandless, Ch. 6, Section 4

4. Financial Frictions and Business Cycles
        a. Credit constraints and cycles
        b. Heterogenous households and borrowing
        c. Housing and business cycles

    Suggested Readings:
         "Credit Cycles" by Kiyotaki and Moore (1997), JPE, 211-247.
         "House Prices, Borrowing Constraints, and Monetary Policy" by Iacoviello (2005), AER, Vol.
95, No 3.

5. Empirical Methods and Applications
    a. Linear Regressions
        Bahadir and Gumus, 2022. House prices, collateral effects and sectoral output dynamics in emerging market economies, Journal of International Money and Finance, Volume 129, 2022.
    b. Vector Autoregressive Models
        Bahadir, B. and Gumus, I. (2022). House prices, collateral effects and sectoral output dynamics in emerging market economies, Journal of International Money and Finance, Volume 129, 2022.
        Mian, A., Sufi, A., and Verner, E. (2017). Household debt and business cycles worldwide. The Quarterly Journal of Economics, 132(4), 1755-1817.
    c. Panel Data Methods
        Mian, A., and Sufi, A. (2014). What explains the 2007–2009 drop in employment?. Econometrica, 82(6), 2197-2223.

CHANGES TO THE SYLLABUS

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

ATTENDANCE POLICY

You are expected to attend all classes. If you are absent due to illness or emergency, please contact me as soon as possible in order to receive instructions about the material you missed.

COURSE GRADE

Percentages
    20 — Problem Sets
    25 — Midterm Exam
    25 — Midterm Exam
    30 — Final Paper

The following rules will be applied to the total points earned in the class to determine your course grade:

UNIVERSITY HONOR CODE & ACADEMIC HONESTY POLICY

As a Florida International University student, you have agreed by the University's academic honest policy, "A Culture of Honesty," and the Student Honor Code. Florida International University is a community dedicated to generating and imparting knowledge through excellent teaching and research, the rigorous and respectful exchange of ideas and community service. All students should respect the right of others to have an equitable opportunity to learn and honestly demonstrate the quality of their learning. Therefore, all students are expected to adhere to a standard of academic conduct, which demonstrates respect for themselves, their fellow students, and the educational mission of the University. All students are deemed by the University to understand that if they are found responsible for academic misconduct, they will be subject to the Academic Misconduct procedures and sanctions, as outlined in the Student Conduct and Honor Code. Academic Misconduct includes: Cheating • The unauthorized use of any materials, information, study aids or assistance from another person on any academic assignment or exercise, unless explicitly authorized by the course Instructor; • Assisting another Student in the unauthorized use of any materials, information, study aids, unless explicitly authorized by the Instructor; and • Having a substitute complete any academic assignment or completing an academic assignment for someone else, either paid or unpaid; and Plagiarism • The deliberate use and appropriation of another's work without any indication of the source and the representation of such work as the Student's own. • Assisting another Student in the deliberate use and appropriation of another's work without any indication of the source and the representation of such work as the student's own. Learn more about the academic integrity policies and procedures as well as student resources that can help you prepare for a successful semester.