NORTHEASTERN UNIVERISTY

ECON 5120 Macroeconomic Theory

CRN 16065 Fall 2025

Basic Information

Instructor: Dr. Jacob Thompson

Email: jac.thompson@northeastern.edu Class Meetings: Monday, 6:00-9:20pm (1800-2120)

Class Location: Ryder Hall 433

Office Hours: Monday, Wednesday, Thursday, 2:50-4:15 pm

Office Location: 353 Holmes Hall

Zoom Office: Office Hours Zoom Link

Course Description

From the course catalog: Examines theories of the short-run determination of output, employment, and prices, and long-run economic growth. Presents alternative macroeconomic models. Also consists of applied case study analysis of the theoretical models presented in class.

This class introduces students to modern macroeconomic theory. The goal of this course is to introduce and demystify contemporary macroeconomic models and research methods. Upon successful completion of this course, students will be able to understand and apply contemporary macroeconomics research. Much like an undergraduate course in macroeconomics, this class first presents models to explain long run economic dynamics and then transitions to models that explain short-run dynamics.

Course Objectives

Upon successful conclusion of this course, students will be able to:

- Simulate Dynamic Equilibrium models of the macro economy
- Present for a general and expert audience research findings for a general audience

Recommended Textbooks

• Advanced Macroeconomics (4th edition) by David Romer, ISBN 978-0-07-351137-5

- Recursive Macroeconomic Theory (4th edition) by Thomas Sargent and Lars Ljungqvist ISBN 9780262038669
- Introduction to Modern Economic Growth by Daron Acemoglu ISBN 0691132925
- Recommended but not required Bayesian Estimation of DSGE Models by Ed Herbst and Frank Schorfheide ISBN 0691161089

AI Policy

Generative AI is rapidly evolving and so too must policies and procedures defining acceptable use of AI. Generative AI may not be used in a way that violates copyright nor in a manner that enables a student to pass off work as their own, nor may any student use it in a manner that enables academic dishonesty as described in Northeastern University's Academic Integrity Policy

Course Outline

Here is a list of likely topics to be covered in this class. Topics may be condensed or dropped due to time constraints

- Models of Production and Exogenous Growth (Solow) in discrete and continuous time
- Ramsey-Cass-Koopmans Model
- Dynamic Optimization
- Models of Economic Fluctuations
- Real Business Cycle Theory
- New Keynesian Economics
- (Possible) Solution, Simulation, and Estimation techniques for modern macroeconomic models

Course Grading

- Problem Sets (30%)
- Discussions (5%)
- Group Project (20%)
- Tests (40%): three non-cumulative exams

Assessment

Grades in this course are awarded according to performance in the above-mentioned assignment areas. Homework problem sets that apply the course material will be assigned regularly. These problem sets must be submitted by hand on the assigned due dates. To facilitate classroom engagement this course will will also be a weekly "Question and Answer" discussion assignment on Canvas. To complete this assignment you must ask a question related to the material covered during that week AND attempt to answer another student's question. This component is designed to facilitate discussion and to assess student learning. Questions will be graded according to their relevance to the covered material and specificity. There will be **three** non-cumulative exams, including two midterm exams and one final exam given during finals week. Makeup exams will not be given for non-excused absences.

There will be a group project where groups of 3-4 students deliver a presentation on a "foundational" macroeconomics paper. Students may choose from a list that will be posted to Canvas or may choose a paper on their own to be approved by the instructor

Classroom Policies

- Homework is considered an extension of lectures.
- Attendance is required.
- No recording of lectures without permission.
- Devices must be silenced; no food in class.

Contacting Me

Office hours are the best time to meet. If unavailable, I will suggest an alternative time. Email is the most effective communication method.

University Policies and Resources

- Academic Integrity (OSCCR guidelines apply). Northeastern University is committed to the principles of intellectual honesty and integrity. The University's Academic Integrity Policy can be found on the website of the Office of Student Conduct and Conflict Resolution (OSCCR).
- Disability Resource Center accommodations available. The University's Disability Access Services works with students and faculty to provide students who qualify under the Americans With Disabilities Act with accommodations that allow them to participate fully

in the activities at the university. Ordinarily, students receiving such accommodations will deliver teacher notification letters at the beginning of the semester. Students have the right to choose whether to disclose their specific disabilities to instructors but must provide a letter to receive accommodations.

- Title IX protections in effect. Title IX of the Education Amendments of 1972 protects individuals from sex or gender-based discrimination, including discrimination based on gender-identity, in educational programs and activities that receive federal funding. Any NU community member who has experienced such discrimination, sexual assault, relationship violence, stalking, coercion, and/or sexual harassment, is encouraged to seek help. Confidential support and guidance can be found through University https://uhcs.northeastern.edu/, https://spirituallife.northeastern.edu/, and the https://open.northeastern.edu/ Note that faculty members are considered "responsible employees" at Northeastern University, meaning they are required to report all allegations of sex or gender-based discrimination to the Title IX Coordinator.
- WeCare, WeCare offers supports for students during times of difficulty or challenge. You can find WeCare at 226 Curry Student center Monday Friday from 8:30-5:00, call at 617-373-7591, or email wecare@northeastern.edu. Mental Health, Writing Center, Peer Tutoring, Snell Library all available.
- In addition to mental health resources available through Northeastern's University Health and Counseling Services, Northeastern has added Find@Northeastern, which is a 24/7 mental health consulting line and can be reached at 1-877-223-9477.
- The Northeastern University Writing Center offers free and friendly tutoring for any level of writer, including help with conceptualizing writing projects, the writing process, and using sources effectively. To make an appointment, or learn more about the Writing Center, visit https://www.northeastern.edu/writingcenter, or email WritingCenter@northeastern.edu. Advance and same-day appointments are available.
- The Peer Tutoring Program offers a wide range of tutoring services via the Knack platform. It offers 1-on-1 and small group tutoring in-person and online for all undergraduate courses offered each semester. For more information, please visit the web link above.
- Snell Library offers a variety of resources for undergraduate research, including subject-specific Research Guides (including economics), help with citation and bibliography, and 24/7 chat support. The library also houses the Digital Scholarship Group, which offers a variety of resources for instructors and students for multimedia projects.
- No make-up exams or late homework except in cases of excused absences as defined by Northeastern University's Attendance Requirements.

Grading Scale

- A ≥93
- A- 90-92.9
- B+ 87-89.9
- B 83–86.9
- B- 80-82.9
- C + 77 79.9
- C = 73-76.9
- C-70-72.9
- D+ 67-69.9
- D 63-66.9
- D- 60-62.9
- F <60