



Economics 714: Advanced Macroeconomic Theory

Meeting Time and Location: Monday/Wednesday 1:00-2:15 at Social Sciences 6203

Instructional Mode: All Face-to-Face

Credit Hours: This 3 credit course has two 75 min lectures. Students are expected to work approximately 6 hours outside class to complete assignments and learn the relevant material.

INSTRUCTOR

Instructor Title and Name: Assistant Professor Enghin Atalay

Instructor Availability:

7426 Sewell Social Science.

Office Hours: Monday 9:00 to 10:00; Tuesday 4:30 to 6:00

Instructor Email: eatalay@ssc.wisc.edu

TEACHING ASSISTANT

Jason Choi

Teaching Assistant Email: jason.choi@wisc.edu

OFFICIAL COURSE DESCRIPTION

This is the final of the four-part sequence of the macroeconomic field.

In this part of the macroeconomic sequence, we will discuss the tools with which macroeconomists model short-run fluctuations; and evaluate the empirical success of these models.

Course Outline (The most important readings are marked with a ★)

1. Weeks 1-2 (March 11 to March 25): Introduction; Time Series Concepts; RBC Basics
 - King, Robert G., and Sergio T. Rebelo. 2002. "Resuscitating real business cycles." *Handbook of macroeconomics*, 927-1007.
 - Uhlig, Harald. 1995. "A toolkit for analyzing nonlinear dynamic stochastic models easily." ★

- Robert, King, Charles Plosser, Sergio Rebelo. 2001. "Production, Growth and Business Cycles: Technical Appendix." *Computational Economics*, 20(1-2): 87-116.
 - DeJong, David, and Chetan, Dave. 2011. "Structural Macroeconometrics." See Chapters 2-4. ★
2. Week 2-3 (March 25 to April 1): The Co-movement puzzle; Kalman Filtering.
- Christiano, Lawrence J., and Terry J. Fitzgerald. 1998. "The business cycle: it's still a puzzle." *Economic Perspectives-Federal Reserve Bank of Chicago*, 22: 56-83. ★
 - Benhabib, Jess, Richard Rogerson, and Randall Wright. 1991. "Homework in macroeconomics: Household production and aggregate fluctuations." *Journal of Political Economy*, 1166-1187. ★
 - Aguiar, Mark, Erik Hurst, and Loukas Karabarbounis. 2013. "Time Use during the Great Recession." *American Economic Review*, 103(5): 1664-96.
 - Canova, Fabio. 2007. *Methods for applied macroeconomic research*. Princeton University Press. Chapter 6. ★
3. Week 3-4 (April 3 to April 8): Variable Factor Utilization; GMM
- Burnside, Craig, and Eichenbaum, Martin. 1996. "Factor-Hoarding and the Propagation of Business-Cycle Shocks." *American Economic Review*, 86(5): 1154-1174. ★
 - Canova, Fabio. 2007. *Methods for applied macroeconomic research*. Princeton University Press. Chapter 5 ★
4. Week 4-5 (April 8 to April 17): Investment with convex adjustment costs. Investment with fixed adjustment costs.
- Lucas, Robert E., and Edward C Prescott. 1971. "Investment under uncertainty." *Econometrica*, 659-681. ★
 - Hayashi, Fumio. 1982. "Tobin's Marginal q and Average q: A Neoclassical Interpretation." *Econometrica*, 50(1): 213-224.
 - Bertola, Giuseppe, and Ricardo J. Caballero. 1990. "Kinked adjustment costs and aggregate dynamics." In *NBER Macroeconomics Annual*, 5: 237-296. ★
 - Cooper, Russell W., and John C. Haltiwanger. "On the Nature of Capital Adjustment Costs." *Review of Economic Studies*, 73(3): 611-633.
5. Week 6-7 (April 22 to April 29): Investment with credit constraints
- Kiyotaki, Nobuhiro and John Moore. 1997. "Credit Cycles." *Journal of Political Economy*, 105(2): 211-248. ★ (Sections 1-2 only)
 - Kocherlakota, Narayana. 2000. "Creating business cycles through credit constraints." *Federal Reserve Bank of Minneapolis Quarterly Review*, 24(3): 2-10.
 - Hubbard, R. Glenn. 1998. "Capital-Market Imperfections and Investment." *Journal of Economic Literature*, 36(1): 193-225.
 - Townsend, Robert. 1979. "Optimal contracts and competitive markets with costly state verification." *Journal of Economic Theory*, 21(2): 265-293.
 - Bernanke, Ben, and Mark Gertler. 1989. "Agency costs, net worth, and business fluctuations." *American Economic Review*. 14-31. ★
 - Carlstrom, Charles T., and Timothy S. Fuerst. 1997. "Agency costs, net worth, and business fluctuations: A Computable General Equilibrium Analysis." *American Economic Review*. 87(5): 893-910.

- Bernanke, Ben S., Mark Gertler, and Simon Gilchrist. 1999. "The financial accelerator in a quantitative business cycle framework." *Handbook of macroeconomics*, 1341-1393.

6. Week 7 (April 29 to May 1): Business Cycle Accounting; Review.

- Chari, Varadarajan V., Patrick J. Kehoe, and Ellen R. McGrattan. 2007. "Business cycle accounting." *Econometrica*, 75(3): 781-836. ★

GRADING

Your grade will be determined by problem sets (40 percent of your grade) and a final exam (60 percent). The problem sets will be roughly at the weekly frequency. You may work and discuss with other classmates, but you should write up your own solutions, separately.

Current empirical research on business cycles is performed on the computer. As a result, the problem sets for this part of the course contain a substantial programming component. I strongly urge you to perform these programming exercises yourself: This programming work will help understand how these models work. Most likely, there will be something related to one of the programming exercises on the final

RULES, RIGHTS & RESPONSIBILITIES

- See the Guide's to [Rules, Rights and Responsibilities](#)

ACADEMIC INTEGRITY

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison's community of scholars in which everyone's academic work and behavior are held to the highest academic integrity standards. Academic misconduct compromises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. This includes but is not limited to failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review. For more information, refer to studentconduct.wiscweb.wisc.edu/academic-integrity/.

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

McBurney Disability Resource Center syllabus statement: "The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including

instructional accommodations as part of a student's educational record, is confidential and protected under FERPA.” <http://mcburney.wisc.edu/facstaffother/faculty/syllabus.php>

DIVERSITY & INCLUSION

Institutional statement on diversity: “Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world.” <https://diversity.wisc.edu/>

Misconduct Statement

Academic Integrity is critical to maintaining fair and knowledge based learning at UW Madison. Academic dishonesty is a serious violation: it undermines the bonds of trust and honesty between members of our academic community, degrades the value of your degree and defrauds those who may eventually depend upon your knowledge and integrity.

Examples of academic misconduct include, but are not limited to: cheating on an examination (copying from another student's paper, referring to materials on the exam other than those explicitly permitted, continuing to work on an exam after the time has expired, turning in an exam for regrading after making changes to the exam), copying the homework of someone else, submitting for credit work done by someone else, stealing examinations or course materials, tampering with the grade records or with another student's work, or knowingly and intentionally assisting another student in any of the above. Students are reminded that online sources, including anonymous or unattributed ones like Wikipedia, still need to be cited like any other source; and copying from any source without attribution is considered plagiarism.

The Dept. of Economics will deal with these offenses harshly following [UWS14 procedures](#):

1. The penalty for misconduct in most cases will be removal from the course and a failing grade,
2. The department will inform the Dean of Students as required and additional sanctions may be applied.
3. The department will keep an internal record of misconduct incidents. This information will be made available to teaching faculty writing recommendation letters and to admission offices of the School of Business and Engineering.

If you think you see incidents of misconduct, you should tell your instructor about them, in which case they will take appropriate action and protect your identity. You could also choose to contact our administrator Tammy Herbst -Koel (therbst@wisc.edu) and your identity will be kept confidential.

For more information, refer to <https://www.students.wisc.edu/doso/academic-integrity/>

Grievance Procedure

The Department of Economics has developed a grievance procedure through which you may register comments or complaints about a course, an instructor, or a teaching assistant. The Department continues to provide a course evaluation each semester in every class. If you wish to make anonymous complaints to an instructor or teaching assistant, the appropriate vehicle is the course evaluation. If you have a disagreement with an instructor or a teaching assistant, we strongly encourage you to try to resolve the dispute with him or her directly. The grievance procedure is designed for situations where neither of these channels is appropriate.

If you wish to file a grievance, you should go to room 7238 Social Science and request a Course Comment Sheet. When completing the comment sheet, you will need to provide a detailed statement that describes what aspects of the course you find unsatisfactory. You will need to sign the sheet and provide your student identification number, your address, and a phone where you can be reached. The Department plans to investigate comments fully and will respond in

writing to complaints.

Your name, address, phone number, and student ID number will not be revealed to the instructor or teaching assistant involved and will be treated as confidential. The Department needs this information, because it may become necessary for a commenting student to have a meeting with the department chair or a nominee to gather additional information. A name and address are necessary for providing a written response.