

## **ECON-6313: Seminar in Macro and Growth Theory**

**Spring 2023**

### **SYLLABUS**

**Lecture:** TR 10:30am - 11:45am, Room 145, Cate Center One

**Instructor:** Hewei Shen

**Email:** hewei.shen@ou.edu

**Office:** Room 334 Cate Center 1

**Office Hours:** 3pm - 4pm on Tuesdays, 4pm - 5pm on Wednesdays, or by appointment. Office hours will be conducted via Zoom. Zoom links are available on Canvas.

**Course Description:** This course introduces the basic concepts and techniques of modern macroeconomic theory. Much of modern macroeconomics employs dynamic stochastic general equilibrium models to interpret macroeconomic phenomena. This approach emphasizes the “microeconomic foundations” of macroeconomic theory. We will focus on modeling individual behavior and examine the link between this behavior and macroeconomic time series such as business cycle, asset prices, unemployment, and interest rates.

The goal of this course is to bring students close to the frontier of modern macroeconomics. Students are assumed to be familiar with basic calculus and matrix algebra. Modern macroeconomics has come to rely on computational techniques to aid in analysis. We will use Matlab, a matrix-based programming language, for model building.

**Expectations:** In this course you will learn to build dynamic stochastic general equilibrium (DSGE) models, solve the models using both linear and nonlinear methods, and interpret the solutions. My expectation is that by the end of the semester you will be able to perform all three tasks with relative ease for even “complicated” models. As with many things in life, learning to do each one of these tasks well takes discipline, dedication and creativity. For each lecture there will be an assigned reading. I expect that you will have carefully read the paper / chapter prior to that lecture. Homework assignments are vital to the learning process. While I do not shun working in groups to complete homework assignments, I encourage

you to struggle with the homework assignments yourself before discussing the problem with others. Late homework will not be accepted.

**Course Outline:** The course materials and homework will be posted on Canvas.

**Useful Texts and Notes:**

Acemoglu, Daron. (2009) *Introduction to Modern Economic Growth*, Princeton University Press

Adda, Jerome and Russel Cooper. (2003) *Dynamic Economics*, MIT Press.

Romer, David (2001) *Advanced Macroeconomic Theory*, McGraw Hill.

Ljungqvist. Lars, and Thomas J. Sargent. (2012) *Recursive Macroeconomic Theory, Third Edition*, MIT Press

Stokey, Nancy, and Robert Lucas with Edward Prescott. (1989) *Recursive Methods in Economic Dynamics*, Harvard Press

Krueger, Dirk. *An Introduction to Macroeconomics with Household Heterogeneity*

Krusell, Per. *Real Macroeconomic Theory*

**Grades** will be determined according to the following scale.

90%-100% A	80%-89% B	68% - 79% C	50% - 67% D	<50% F
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Based upon:

40%: two midterm exams: exam dates will be announced at least one week in advance.

20%: Homework Assignments

40%: Final Exam: 08:00 am - 10:00 am, Wednesday, May 10<sup>th</sup>, 2023.

**Academic Integrity:** Dishonesty of any kind is not tolerated in this course. Dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with academic work of other students. Students who are found dishonest will receive the most severe academic sanction consistent with OU policies. A minimum penalty for any breach of academic

integrity is the grade of “F” for the course. In addition, I will report incidences of academic dishonesty to the Integrity Council, which may in turn administer additional punishment. The University of Oklahoma has information at its website: <https://www.ou.edu/integrity/students>. Be sure to read the contents of this site.

**Reasonable accommodation policy:** The Accessibility and Disability Resource Center is committed to supporting students with disabilities to ensure that they are able to enjoy equal access to all components of their education. This includes your academics, housing, and community events. If you are experiencing a disability, a mental/medical health condition that has a significant impact on one or more life functions, you can receive accommodations to provide equal access. Possible disabilities include, but are not limited to, learning disabilities, AD(H)D, mental health, and chronic health. Additionally, we support students with temporary medical conditions (broken wrist, shoulder surgery, etc.) and pregnancy. To discuss potential accommodations, please contact the ADRC at 730 College Avenue, (ph.) 405.325.3852, or [adrc@ou.edu](mailto:adrc@ou.edu). **Requests for accommodations must be received and authorized by your instructor in written form no less than two weeks in advance of need, in order to allow adequate time to review and make appropriate arrangements. No accommodation should be assumed until authorized by your instructor.**

**Religious observance:** It is the policy of the University to excuse the absences of students that result from religious observances and to reschedule examinations and additional required classwork that may fall on religious holidays, without penalty.

**Adjustments for Pregnancy/Childbirth Related Issues:** Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact your professor or the Accessibility and Disability Resource Center at 405/325-3852 as soon as possible. Also, see the Institutional Equity Office [FAQ on Pregnant and Parenting Students' Rights](#) for answers to commonly asked questions.

**Title IX resources and reporting requirement:** Anyone who has been impacted by gender-based violence, including dating violence, domestic violence, stalking, harassment, and sexual assault, deserves access to resources so that they are supported personally and academically. The University of Oklahoma is committed to offering resources to those impacted, including: speaking with someone confidentially about your options, medical attention, counseling, reporting, academic support, and safety plans. If you would like to speak with someone confidentially, please contact [OU Advocates](#) (available 24/7 at 405-615-0013) or another confidential resource (see [“Can I make an anonymous report?”](#)). You may also choose to report gender-based violence and discrimination through other means, including by contacting the [Institutional Equity Office](#) (ieo@ou.edu, 405-325-3546) or police (911). Because the University of Oklahoma is committed to the safety of you and other students, I, as well as other faculty, Graduate Assistants, and Teaching Assistants, are mandatory reporters. This means that we are obligated to report gender-based violence that has been disclosed to us to the Institutional Equity Office. This includes disclosures that occur in: class discussion, writing assignments, discussion boards, emails and during Student/Office Hours. For more information, please visit the [Institutional Equity Office](#).

**Final Exam Preparation Period:** Pre-finals week will be defined as the seven calendar days before the first day of finals. Faculty may cover new course material throughout this week. For specific provisions of the policy please refer to OU’s [Final Exam Preparation Period policy](#).

**Emergency Protocol:** During an emergency, there are official university [procedures](#) that will maximize your safety.

Severe Weather: If you receive an OU Alert to seek refuge or hear a tornado siren that signals severe weather.

1. Look for severe weather refuge location maps located inside most OU buildings near the entrances
2. Seek refuge inside a building. Do not leave one building to seek shelter in another building that you deem safer. If outside, get into the nearest building.

3. Go to the building's severe weather refuge location. If you do not know where that is, go to the lowest level possible and seek refuge in an innermost room. Avoid outside doors and windows.
4. Get in, Get Down, Cover Up
5. Wait for official notice to resume normal activities.

Additional [Weather Safety Information](#) is available through the Department of Campus Safety.

**Armed Subject/Campus Intruder:** If you receive an OU Alert to shelter-in-place due to an active shooter or armed intruder situation or you hear what you perceive to be gunshots:

1. Avoid: If you believe you can get out of the area WITHOUT encountering the armed individual, move quickly towards the nearest building exit, move away from the building, and call 911. 2. Deny: If you cannot flee, move to an area that can be locked or barricaded, turn off lights, silence devices, spread out, and formulate a plan of attack if the shooter enters the room. 3. Defend: As a last resort fight to defend yourself.

For more information, visit [OU's Emergency Preparedness site](#).

[Shots Fired on Campus Procedure – Video](#)

**Fire Alarm/General Emergency:** If you receive an OU Alert that there is danger inside or near the building, or the fire alarm inside the building activates: 1. LEAVE the building. Do not use the elevators. 2. KNOW at least two building exits 3. ASSIST those that may need help 4. PROCEED to the emergency assembly area 5 ONCE safely outside, NOTIFY first responders of anyone that may still be inside building due to mobility issues. 6. WAIT for official notice before attempting to re-enter the building. [OU Fire Safety on Campus](#)

**Mental Health Support Services:** If you are experiencing any mental health issues that are impacting your academic performance, counseling is available at the University Counseling Center (UCC). The Center is located on the second floor of the Goddard Health Center, at 620 Elm Rm.

201, Norman, OK 73019. To schedule an appointment call (405) 325-2911. For more information, please visit [University Counseling Center](#).