

E322 Intermediate Macroeconomic Theory
Fall 2019
Department of Economics
Indiana University

Section 6310: TR 9:30-10:45 PM

Classroom: LH 023

Instructor: Geeta Garg

Email: gegarg@iu.edu

Office: WY 344

Office Hours: Tuesday, Thursday 11:00-12:00 PM. If you need to meet outside these times, please send me an email at the address provided above.

UGI: Yizhou Wen

Email: wenyizh@iu.edu

UGI Office Hours: Friday 2:30-3:30 pm in WY 119

Prerequisite: This course presumes knowledge of both E201 (Introduction to Macroeconomics) and E202 (Introduction to Macroeconomics) as well as M119 (Survey of Calculus) or M211 (Calculus I). Knowledge of E321 (Intermediate Microeconomics) is also expected. This class is very mathematical and so is the textbook. You need to be comfortable with algebra and calculating derivatives.

Textbook: Macroeconomics, sixth edition, Stephen D. Williamson; ISBN: 978-0-13-447211-9. Both the hard copy and the electronic version are acceptable. Other course material including lecture notes, assigned reading, and assignments will be posted on IU Canvas.

Course Website: Course material and announcements for the class will be posted through IU canvas. Please check it often.

1 Course Structure and Objectives

This is a course in macroeconomic theory at the intermediate level. Macroeconomics is the study of the allocation of scarce resources at both the individual and the aggregate level. It starts by looking at how the incentives and behavior of consumers, firms, governments, and central banks impact aggregate economic activity and prices. We will analyze the influence of government's policy on private equilibrium and welfare. For the purpose of this class and given time constraint, we will mainly focus on real models.

Following are the broad topics that will be covered in this class:

- the measurement of economic activity,
- the stylized facts about business cycle,
- labor-leisure decisions,
- consumption-saving decisions,
- investment decision and real business cycle model,

- government spending, debt, and fiscal policy,
- credit market,
- modern growth theory

The goal of the course is for you (1) to have a general understanding of how the economy works, (2) to learn how to model the behavior of a household, firm, and the government, (3) and use models to determine how the economy might respond to changes in policy and exogenous shocks.

Please note:

You are expected to attend all the lectures, read the lecture material *including the concerned chapter from the textbook*, and take notes as required. Class lectures will cover the material from your textbook including some material that may not be in your textbook. You are responsible for this supplemental material on course examinations so taking notes in class can be very helpful. Participation in class discussions is highly encouraged.

2 Course Outline:

This is a **tentative** course outline. Some of these topics might be expanded or omitted to best match the students' interests and the time taken to finish the chapters may change. Explicit announcements of the changes will be made in class and through IU Canvas if there is any.

1. Math Review - Aug. 27, 29
2. Introduction and Measurement Issues
 - (a) Introduction (Ch. 1) - Sep. 3
 - (b) Measurement (Ch. 2) - Sep. 5, 10
 - (c) Business Cycle Measurement (Ch. 3) - Sep. 12, 17
3. Basic Macroeconomic Models: A One-period Model
 - (a) Consumer and Firm Behavior: Work – Leisure Decision and Profit Behavior (Ch. 4) - Sep. 19, 24

Review Session, Sep. 26, 2019
MIDTERM-I (October 1, 2019 Tuesday)

 - (b) A Closed - Economy One-Period Model (Ch. 5) - Oct. 3, 8, 10
4. Economic Growth
 - (a) Economic Growth: Malthus and Solow Growth Model (Ch.7) - Oct. 15, 17
 - (b) Income Disparity Among Countries and Endogenous Growth Model (Ch. 8) - Oct. 22, 24
5. Extension: Two-Period Model

- (a) A Two-Period Model: The Consumption-Saving Decision (Ch. 9) - Oct. 29, 31

Review Session, Nov. 5, 2019

MIDTERM-II (Nov. 7, 2019 Thursday)

- (b) Credit Market Imperfection (Ch.10) - Nov. 12, 14, 19

- (c) A Real Inter-temporal Model with Investment (Ch.11) - Nov. 21, Dec. 3

Project (Presentation) - Dec. 5, 10

Review Session - Dec. 12, 2019

Final Exam - Dec. 17, 2019 Tuesday

3 Grading Policy

Possible course points are 500. Your course grade will depend on your performance in the following weighted areas.

Homework Assignments and Quizzes	20%	100 points
Midterm Exam 1	20%	125 points
Midterm Exam 2	20%	125 points
Final Exam	25%	125 points
Project (Presentation)	15%	25 points
Total	100%	500 points
Extra Credit	5%	

Grading scale:

A+ (97-100)	B+ (85-87)	C+ (75-77)	D+ (67-69)	F (Below 59)
A (92-96)	B (81-84)	C (72-74)	D (63-66)	
A- (88-91)	B- (78-80)	C- (70-71)	D- (60-62)	

4 Exams and Assignments

The examinations will either be multiple choice, or graphical/numerical problems, or short essay questions, or any combination of these three. There are two in-class midterm exams and a comprehensive final exam. The final exam is cumulative. The *tentative* dates for mid-term exams are the following:

- Midterm exam 1: Tuesday, Oct. 1, 2019
- Midterm exam 2: Thursday, Nov. 7, 2019
- **Final exam: Tuesday, Dec. 17, 2019 at 8 am in Room LH 23**

The final exam date and location will be decided by the department and informed before the end of the semester.

Make up policy for Exams: There are **no alternatives** to taking the **final exam** at the time and date decided by the department. You are responsible to arrange your schedules in a way you can attend all exams at the above mentioned time and date. If you are enrolled in other course that have a conflict with this course, drop all but one of the conflicting courses “now”, unless you can resolve the conflict with your instructor(s) in the other course(s). Again, do not ask if you may have an alternative time for the E322 final – your request will be denied (this is the department policy and I do not have the authority to change the time unilaterally). **DO NOT MISS THE FINAL EXAM.**

If it is necessary to miss a **midterm exam**, please contact me at least **two days in advance** explaining the circumstances that prevent you from taking the exam. It is up to the instructor to decide if the circumstances explained actually constitute a valid excuse for the student to miss the exam (I can ask for supporting documents as a proof). The only exception to this last remark is if the student misses the exam due to **unforeseen illness on the day of the exam**. If this is the case, the student must inform me either before the exam or by the end of that exam week if he/she is too sick. In case of any major illness that require hospitalization, supporting documentation is must.

Make-up midterm exam: The only make-up exam takes place in the second last week before the end of the semester (the week before final exam week). Students missing a mid-term exam with an official excuse must take the make-up exam. The make-up exam covers material of the whole semester and has similar difficulty level as the mid-term exam. The specific date and time of the make-up exam will be decided later.

Homework Assignments and Quizzes: Time permitting, there will be 6-8 homework assignments. You are allowed to drop the lowest score homework without any penalty. The graded assignment will be counted towards 20% or 100 points of your total grade. *Late homework will not graded and will automatically receive 0* . In case any extension for homework submission is needed, you are expected to explain the circumstances and it is up to the instructor to decide if the circumstances explained actually constitute a valid excuse for the student. Homework will be collected at the beginning of the lecture on the due date. Discussion with other students on the assignments is allowed and in fact encouraged. However, *you must submit your own solutions and they must not be a copy of other students*. Assignments are graded on accuracy as well as effort. However, answers that are vague, difficult to read, or incomplete will not receive full credit. There can be pop up quizzes if the attendance during a class is very low.

Project: You are required to make a 20 minute presentation on a topic of your interest. The only requirement is that the topic of presentation must related to macroeconomics and would ideally be related to one of the topics covered in the class. The presentation should include about 10-15 slides stating the research question, introduction, your findings, some evidence in support of your findings/analysis using data, facts, other research, and a conclusion. I'll send a more detailed layout for the presentations later. You can discuss the topic of presentation with me anytime during the semester. My suggestion would be to start early so that you have enough time to prepare.

Extra Credit: I may include **extra credit questions in the homework assignments** in order to allow you an opportunity to improve your grade. However, there is a condition. The

extra credit questions will be graded if and only if you make a serious attempt to solving them. Merely scribbling a few lines in the solution in order to get extra points will be completely ignored. This will allow you to earn a total of 15 additional points (3 percentage points) as extra credits. Additionally, you can earn 10 points (2 percentage points) in class participation. In total, you'll have an opportunity to earn 25 points (5 percentage points) in extra credits during the course of the semester.

UGI Help: My UGI will hold office hours every week. She will guide you through the homework questions and possibly solve some additional problems.

Attendance and Participation: It is your responsibility to *attend all the classes and participate in the class discussions*. I will randomly take attendance during the semester.

Note: *Any questions about the syllabus must be addressed to the instructor within the first week of class.*

5 Other Issues

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 IU policies. A minimum penalty for any breach of academic integrity is the grade of "F" for the course. The University of Indiana has information at its website: <http://registrar.indiana.edu/policies/academic-misconduct.shtml>. Be sure to read the contents of this site.

Important Date: The last day to withdraw from the class and receive an automatic "W" is **Sunday, October 27, 2019**. This is also the last day to get a withdrawal slip signed without a special petition. After this date, you can obtain a late withdrawal from a course only by first receiving special permission from the dean of the college. Such permission is VERY difficult to get. University rules specify that permission for late withdrawals is given only for urgent reasons relating to extended illness or equivalent distress to a student who is passing the course on the date of withdrawal.

University calendar: You can find information about the university calendar (including holidays, and last day for withdrawal) on webpage <http://registrar.indiana.edu/official-calendar/>

Accommodation of Disability: If you desire classroom/testing accommodations for a disability, please contact me, **preferably within the first week of the class**. Present the written supporting memorandum of accommodation from the Office of Disability Services for Students.

<https://studentaffairs.indiana.edu/disability-services-students/request-services/index.shtml>

Requests for accommodations for disability 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.

