



Department of Economics

Fall 2022

ECO 507: Macroeconomic Theory
(SEM, 3 credits)

Class Time: Tue Thu 3:30PM—4:50PM EST

Class Location: Talbert 103

Instructor	Email
Dr. Monica Tran-Xuan	monicaxu@buffalo.edu

Office Location & Hours

Fronczak 425

Tue and Thu 9:30AM—10:30AM EST or by appointments

(The best way to reach me is via email. Email subject: ECO 507 – your name)

Teaching Assistant: Qiong Liu. Email: qliu35@buffalo.edu

Office Hour: Friday 1:00PM—2:00PM

Office Location: Fronczak 411

Course Description

The course is designed to acquaint students with the basic analytical tools and principles of Macroeconomics. Strong emphasis will be placed on the concepts and methodology of economics as a social science. Economic theory deals with aggregate economic problems of employment, inflation, cycles and growth. It emphasizes development of analytical tools applicable in subsequent field courses.

The course builds on the instruments of individual decision making of consumers and firms to study the macroeconomic effects of technological improvement, taxes, government spending and financial frictions. The course also covers the most important facts of economic growth. Students will learn how to test important theoretical results on real-world data and examples.

Learning Outcomes

Upon successful completion of this course, students are expected to

Learning outcomes	Assessment methods
1. Develop an understanding of the foundations of modern macroeconomic models	Problem set, Reading assignment, Exam
2. Subject these various models to data and determine their empirical relevance	Problem set, Reading assignment
3. Analyze modern/past economic issues with these models	Problem set, Reading assignment, Exam

This course's learning outcomes are consistent with the goals of the [Economics M.A. program](#) and the [Economics M.S. programs](#).

Prerequisites

Students are expected to have a basic knowledge on macroeconomic concepts at the introductory level (e.g. definitions, ideas, methods, etc.) and calculus (derivatives, etc.), or equivalents. Basic data management skill will be needed in some of the assignments.

Textbook

The required textbook for this course is

- *Macroeconomics* by Stephen Williamson (6th edition)

This textbook should be available on the UB bookstore. Optional readings include

- *Macroeconomics: A Modern Approach*, by Robert Barro (1st edition), Thomas Southwestern
- *Macroeconomics*, by N. Gregory Mankiw (7th edition), Worth
- *Introduction to Economic Growth*, by Charles Jones (3rd edition), W. W. Norton

Course Requirements

There will be 5 problem sets, one midterm, and one final exam. Students are responsible for materials covered in lectures.

Participation: Students should attend every class and participate in each class actively. Students may ask questions and answer or comment on other students' questions. There will be random participation checks throughout the semester.

Problem sets: All problem sets are submitted online via UB Learns. Late problem sets will receive half credits except for special circumstances with official documents (doctor's notes, etc.). Some problem sets might involve the use of Excel, or other software useful for data analysis of your choosing. Students are highly encouraged to work together on problem sets, but each student must submit individual solutions and acknowledge whom the students work with on the first page. The

solutions can be electronic (using LaTeX and its applications such as Overleaf, Lyx, etc.) or handwritten and scanned.

Exams: All exams are closed books, closed notes, and with a time limit. The midterm covers the first half of the class, while the final covers all course materials. Students are required to submit handwritten answers to exams. There is no make-up exam for the midterm, and the make-up final exam will only be scheduled in advance. If you miss the exams, you are responsible for providing documentation for special circumstances (illness, family emergency, athletic conflicts, etc.) no later than a week after the official exam time. If you miss the midterm and provide sufficient documentation, I will use your final exam grade. Students with final exam conflicts as described in the [university guidelines](#) must inform the instructor no later than September 19. After September 19, there is no way to resolve the conflicts. Exam schedule:

Exam	Date	Time	Location
Midterm	Oct 20	3:30PM - 4:50PM	Talbert 103
Final	Dec 15	3:30PM - 6:30PM	Talbert 103

Grading Policy

The lowest problem set grade will be dropped. The final total score for the course will be determined as follows:

Participation	10%
Problem sets	30%
Midterm	25%
Final	35%

I will follow this grading rubric in determining your final letter grade:

Letter grade	Final total score
A	93-100
A-	87-92
B+	80-86
B	75-79
B-	70-74
C+	65-69
C	60-64
C-	55-59
D	45-54
F	00-44

Students have a responsibility to participate in the course evaluation process. For the “Incomplete” grade, please refer to the [graduate school’s Incomplete Policy](#).

Academic Content

This is the list of topics and relevant reading materials that may be covered in this course. The instructor reserves the right to modify/adjust course materials during the semester.

1. Introduction and Measurement

- Introduction, Chapter 1
- National Accounts, Chapter 2
- Business Cycle, Chapter 3

2. Long-run Macroeconomics and Growth

- Solow Growth Model, Chapter 7
- Growth Convergence, Chapter 8

3. One-period Economy

- Individual Optimization, Chapter 4
- Static Equilibrium, Chapter 5

4. Two-period Economy

- Consumption/Savings Problem, Chapter 9
- Financial Frictions, Chapter 10

5. General Equilibrium

- Model with Production/Investment, Chapter 11

6. Additional topics

- Unemployment, Chapter 6
- International Trade, Chapter 16

Course Website

All relevant course materials, links, assignments, and exams will be posted on [UB Learns](#). Please check the website regularly.

Please do not share course documents, links to lectures, office hours, or other course meetings to others who do not officially register with the course without the instructor's approval. If you receive such requests, please forward it to the instructor.

Class Policies

Students are encouraged to actively participate in class discussions and respect the instructor, the TA, and other students. Any student found disturbing the academic environment in the class would be asked to leave. Reentry into the class will be permitted at the discretion of the instructor.

Academic Integrity

Academic integrity is critical to the learning process. It is your responsibility as a student to complete your work in an honest fashion, upholding the expectations your individual instructors have for you in this regard. The goal is to ensure that you learn the content in your courses in accordance with UB's academic integrity principles, regardless of whether instruction is in-person or remote. Please refer to the [graduate school's academic integrity policy](#) for more details.

Students are expected to have appropriate citation of sources used, acknowledgment of collaboration and help in your work, and no communication with others during exams. Failure to abide by such policies will result in a failing grade of the course.

Thank you for upholding your own personal integrity and ensuring UB's tradition of academic excellence.

Health and Safety Guidelines

While your attendance and participation are essential components of this course, it is critical that you follow [UB's public health guidelines](#).

Accessibility Resources

If you have any disability which requires reasonable accommodations to enable you to participate in this course, please contact the Office of Accessibility Resources in 60 Capen Hall, 716-645-2608 and also the instructor of this course during the first week of class. The office will provide you with information and review appropriate arrangements for reasonable accommodations, which can be found at <http://www.buffalo.edu/studentlife/who-we-are/departments/accessibility.html>

Critical Campus Resources

Sexual Violence

UB is committed to providing a safe learning environment free of all forms of discrimination and sexual harassment, including sexual assault, domestic and dating violence and stalking. If you have experienced gender-based violence (intimate partner violence, attempted or completed sexual assault, harassment, coercion, stalking, etc.), UB has resources to help. This includes academic accommodations, health and counseling services, housing accommodations, helping with legal protective orders, and assistance with reporting the incident to police or other UB officials if you so choose. Please contact UB's Title IX Coordinator at 716-645-2266 for more information. For confidential assistance, you may also contact a Crisis Services Campus Advocate at 716-796-4399.

Mental Health

As a student you may experience a range of issues that can cause barriers to learning or reduce your ability to participate in daily activities. These might include strained relationships, anxiety, high levels of stress, alcohol/drug problems, feeling down, health concerns, or unwanted sexual experiences. Counseling, Health Services, and Health Promotion are here to help with these or other issues you may experience. You can learn more about these programs and services by contacting:

Counseling Services:

120 Richmond Quad (North Campus), 716-645-2720

202 Michael Hall (South Campus), 716-829-5800

Health Services:

Michael Hall (South Campus), 716-829-3316

Health Promotion:

114 Student Union (North Campus), 716-645-2837

Tentative Course Schedule

Week	Topic	Chapter	Assignment Due	Date
1	Intro, Measurement	1,2		
2	Business Cycles, Math Review	3		
3	Math Review, Solow Growth	7,8	Problem set 1	
4	Solow Growth	7,8		
5	Growth Accounting, Consumer Optimization	7,8,4	Problem set 2	
6	Consumer Optimization	4		
7	Firm Optimization	4	Problem set 3	
8	Review & Midterm Exam			Oct 20
9	Static Equilibrium	5		
10	Static Equilibrium	5		
11	Static Equilibrium, Consumption/Savings	5, 9	Problem set 4	
12	Consumption/Savings	9		
13	Consumption/Savings	9	Problem set 5	
14	Production/Investment	11		
15	Production/Investment, Review	11	Problem set 6	
Final	Final Exam			Dec 15