University at Buffalo

Department of Economics

Fall 2021

ECO 507: Macroeconomic Theory

(SEM, 3 credits)

Class Time: Tue Thu 3:55PM—5:10PM EST

Class Location: Talbert 113

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

Office Location & Hours
Fronczak 425
Tue Thu 10:00AM—11:00AM EST

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

Teaching Assistant: Hamin Hong. Email: haminhon@buffalo.edu.

Office Hour: Fri 2PM-3PM EST

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 (https://arts-sciences.buffalo.edu/economics/graduate/masters-degrees/ma-economics.html) and the Economics M.S. programs (https://arts-sciences.buffalo.edu/economics/graduate/masters-degrees/ms-econometric-quantitative-economics.html).

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 2 readings, 6 problem sets, one midterm, and one final exam. Students are responsible for materials covered in lectures.

Readings are designed to help students apply theoretical concepts to real-world questions. Reading assignments are due at the beginning of the class on the due date. Each reading assignment contains one or more academic articles related to topics covered in lectures. Students must read these

articles and write a short reflection essay (around two pages, double spaced) about the readings. Students are free to develop their own ideas and opinions as long as they are related to the assigned readings. Tentative reading assignment schedule:

Reading assignment	**Deadline**
Reading 1	Sep 7
Reading 2	Oct 28

Problem sets are submitted via UB Learns and due at the beginning of the class on the due date. No late assignments are accepted 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. Tentative problem set schedule:

Problem set	**Deadline**
Problem set 1	Sep 16
Problem set 2	Sep 30
Problem set 3	Oct 14
Problem set 4	Nov 11
Problem set 6	Nov 23
Problem set 6	Dec 9

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. If you miss the midterm, I will use your grade in the final exam. Make-up final exams will only be scheduled under documented special circumstances (illness, family emergency, athletic conflicts, etc.). Students with final exam conflicts must follow the university guidelines at https://registrar.buffalo.edu/schedules/finalexams.php. Exam schedule:

Exam	**Date**	**Time**	**Location**
Midterm	Oct 21 (tentative)	3:55PM - 5:10PM	Talbert 113
Final	Dec 16	3:30PM - 6:30PM	Talbert 113

Grading Policy

The final total score for the course will be determined as follows:

Readings	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+	50-54
D	45-49
F	00-44

Students have a responsibility to participate in the course evaluation process. For the "Incomplete" grade, please refer to the grading procedure at http://grad.buffalo.edu/Academics/Policies-Procedures/Grading-Procedures.html.

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 (https://ublearns.buffalo.edu/). 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. There should be no eating or drinking during class times. Masks must be worn in the classroom. 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 (http://grad.buffalo.edu/succeed/current-students/policy-library.a-to-z.html#academic-integrity) 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.

Proper citation is one of the most important aspects of academic writings, and it can be challenging for students who are new to this. UB Library provides useful resources at https://research.lib.buffalo.edu/citingsources/home.

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 available at https://www.buffalo.edu/coronavirus/latest-update.html. Masks must be worn in the classroom. Any student exhibiting COVID-19 symptoms should not come to campus to participate in coursework. If you need to miss assignment deadlines due to illness, you must notify the instructor by email as soon as possible and no later than 24-hours after. At that time, you are also expected to make arrangements to complete missed work. In addition, all students must complete the daily mandatory health check at https://buffalo.edu/health-check.

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	Deadline /Date
1	Intro, Measurement	1		
2	Measurement	2, 3	Reading 1	Sep 7
3	Growth: Solow	7	Problem set 1	Sep 16
4	Growth: Convergence	8		
5	Individual Optimization	4	Problem set 2	Sep 30
6	Static Equilibrium	5		
7	Static Equilibrium	5	Problem set 3	Oct 14
8	**Review & Midterm Exam**			**Oct 21**
9	Consumption/Savings	9	Reading 2	Oct 28
10	Consumption/Savings, Financial Frictions	9,10		
11	Financial Frictions	10	Problem set 4	Nov 11
12	Production/Investment	11		
13	Production/Investment	11	Problem set 5	Nov 23
14	Unemployment	6		
15	International Trade & Review	12	Problem set 6	Dec 9
Final	**Final Exam**			**Dec 16**