

Course Syllabus

EE512 MACROECONOMIC POLICY ANALYSIS

1. Number of credits: 3 credits (3-0-6)

2. Course Description

Building on the tools and methods developed in the core courses, this course analyzes fiscal and monetary policies, and other topical issues. Students will be exposed to theoretical, numerical and empirical methods to answer policy questions. Students will also have the opportunity to practice the presentation skills for policy proposals.

3. Prerequisites: EE312 (Having or already completed EE412 highly recommended)

4. Objective of the Course:

The goal is to familiarize students to the rigorous applications of the theories and methodologies from EE312 (and/or EE412) in analyzing macroeconomic policies. Students will be able to write MATLAB code to understand the implication of macroeconomic models.

5. Evaluations:

Class participation	10	points
Individual assignments	20	points
Group Projects	20	points
Mid-term exam (Take-home)	20	points
Final exam (Take-home)	30	points
Total	<u>100</u>	points

Remarks:

1. Evaluation methods are subject to change.

6. Textbooks:

- Robert J. Barro, *Macroeconomics*, 5th ed., MIT Press, 1997 [RB]
- Lars Ljungquist, & Thomas J. Sargent, *Recursive Macroeconomic Theory*, 3rd ed. (1st or 2nd ed. is also fine), MIT Press, 2012 [LS]
- David Romer, *Advanced Macroeconomics*, 4th ed. (2nd or 3rd ed. is also fine), McGraw-Hill [DR]
- Frederic S. Mishkin, *The Economics of Money, Banking and Financial Markets*, 12th ed. (other recent editions are substitutable), Pearson, 2018 [FM]
- Michael Wickens, *Macroeconomic Theory: A Dynamic General Equilibrium Approach*, 2nd ed. (1st ed. is also fine), Princeton, 2012 [MW]
- Stephen D. Williamson, *Macroeconomics*, 6th ed. (5th ed. is also fine), Pearson [SW]

Remarks:

1. No single textbook is sufficient to cover all the materials that would be covered in this class. The textbook chapters and reading materials are referred to each topic. Students can also access the journal articles referred in class using university network. Handwritten notes and supplement reading will also be posted on *Google Classroom*.

2. There will be assignments that require you to use MATLAB. Please install MATLAB on your computer. You will also need to install Dynare module in MATLAB, which is available free-of-charge at <http://www.dynare.org>. Please refer to the website on how to install and set the directory path so that Dynare is working with MATLAB on your computer.

7. Class Policies

If a student has any questions about the lecture, it is highly encouraged to raise them in class. Please do not hesitate to send an email for questions and/or for an appointment.

Exam materials are cumulative – meaning that in order to perform well in the finals, students must have good understanding of the materials covered in the midterms. Make-up examinations are not permitted unless; (i) in case of illness – you need to provide the faculty with the doctor's medical note; (ii) family emergency – case-by-case basis.

Students are encouraged to work together and exchange ideas outside of class. However, plagiarism and cheating will be treated seriously with disciplinary actions. Thammasat University and our faculty take academic integrity extremely seriously, and there will be academic consequences if you are found possibly guilty of misconducts. Please refer to the university guidelines if you have any questions.

Any changes to the course outline (if any) will be announced in the class or uploaded on Google Classroom.

11. Expected Learning Outcomes:

11.1) Morality and Ethics

Applicability	Expected Learning Outcomes
●	1.1 Students demonstrate integrity.
○	1.2 Students prioritize social and public benefits over personal ones.
●	1.3 Students are punctual and comply with the code of conduct of the institution and society at large.
○	1.4 Students are responsible and accountable to society, the nation, and the subject of economics.
○	1.5 Students realize the cultural and environmental value of the sustainable society.

11.2) Knowledge

Applicability	Expected Learning Outcomes
●	2.1 Students know and understand modern economics principles and theories, and are up to date with new developments.
●	2.2 Students know and understand Thai and global economic structure, and the importance of major international economic events.
●	2.3 Students know and understand instruments of economic analysis.

●	2.4 Students know and understand applied fields in economics, including monetary, public, international, business, natural resource and environmental, industrial, agricultural, cooperative, political, developmental, and entrepreneurial economics as well as agribusiness.
○	2.5 Students are informed about related fields including sociology, business administration, education, law policy, and science.

11.3) Intellectual Development

Applicability	Expected Learning Outcomes
●	3.1 Students have developed individual critical thinking.
●	3.2 Students are sufficiently trained in research skills.
●	3.3 Students demonstrate an ability to analyze and synthesize data, as well as appropriately integrate economics concepts to understand causes of current economic problems in Thailand. Based on analysis and synthesis, students demonstrate an ability to propose policy guidelines to resolve problems.

11.4) Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes
●	4.1 Students are responsible for assigned tasks and work in groups effectively.
●	4.2 Students have problem-solving skills.
○	4.3 Students show leadership skills and team spirit.
●	4.4 Students are always improving themselves.
○	4.5 Students have good interpersonal skills, adapting and working under different conditions.

11.5) Quantitative Analysis, Communication and Information Technology

Applicability	Expected Learning Outcomes
○	5.1 Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.
○	5.2 Students communicate effectively and select appropriate presentation methods.
○	5.3 Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.

12. Lecture / schedule:

Topics	Reading
Part I: Fiscal Policy	
1. Introduction (2 lectures)	
1.1) Government Expenditure, Lump-sum Tax, and The Multiplier	
1.2) Proportional/Distortional Taxes	
1.3) Laffer Curve	
1.4) Household Optimization	<i>DR Ch. 2A,</i>
1.5) Dynamic Analysis	<i>MW Ch. 5-6,</i>
1.6) Consumption Equivalent Variation and Welfare Analysis	<i>Lecture notes</i>
2. Behavioral Aspects in Macroeconomics (2 lectures)	
2.1) Experiments, Measurement, and Treatment Effects	
2.2) Government Debt	
2.3) Ricardian Equivalence Theorem	<i>RB Ch. 14, MW Ch. 5,</i>
2.4) Credit Market Imperfection and Welfare	<i>SW Ch. 9-10</i>
3. Ramsey Optimal Taxation (1 lectures)	
3.1) Household problem	
3.2) Government budget constraint	
3.3) Ramsey planner, First-best and second-best equilibrium	
3.4) Capital income tax	<i>Lecture notes</i>
4. Social Security (1 lectures)	
4.1) Two-period Model	
4.2) Overlapping Generations Settings	<i>SW Ch. 10, DR Ch. 2B</i>

Topics	Reading
4.3) Welfare Analysis Long-run theory of inflation	
5. Applications of Information Economics (1 lecture)	
5.1) Dynamic Public Finance	
5.2) Progressive Tax System	
5.3) Welfare Programs	<i>Lecture note</i>
Part II: Labor Market	
6. Labor Market Frictions (1 lecture)	
6.1) Unemployment	
6.2) McCall Labor Search Model	<i>LS Ch. 6, SW Ch. 6</i>
Part III: Monetary Policy	
7. Money and Interest rate (1 lecture)	
7.1) Role of money	
7.2) Interest rates	
7.3) Term Structures of Interest Rate	<i>FM Ch. 4-6</i>
8. Banking (1 lecture)	
8.1) Bank's Balance Sheets	
8.2) Multipliers	
8.3) Banking Regulations	<i>FM Ch. 8-11</i>
9. Monetary Policy (2 lectures)	
9.1) Business Cycles	
9.2) Money Supply, IS-MP Curves and Aggregate Demand-Aggregate Supply	

Topics	Reading
9.3) Central Banking	
9.3.1) Inflation Targeting	
9.3.2) Optimal Monetary Policy	
9.3.3) Time Inconsistency	
9.3.4) Monetary Policy in Practice and Transmission Mechanism	<i>FM Ch. 13-16, 19-25</i>
9.4) Time-Series Econometrics – Vector Autoregression Model (VAR)	
10. Fiscal Concerns (1 lecture)	
10.1) Cagan Model of Hyperinflation Seigniorage	
10.2) Central bank independence	
10.3) Monetary policy under fiscal authority	<i>Lecture note</i>
11. Crisis (1 lecture)	
11.1) Financial Crisis	
11.2) Game Theoretical Approach: Diamond-Dybvig bank run model	<i>FM Ch. 12</i>
Part IV: Open Economy Macroeconomics	
12. Open Economy Macroeconomics (2 lectures)	
12.1) Exchange rate determination	
12.1.1) Purchasing Power Parity	
12.1.2) Interest Rate Parity	
12.2) Impossible Trilemma	
12.3) Balance of Payments	<i>Lecture notes</i>
12.4) Exchange Rate Crisis	<i>FM Ch. 17-18</i>