

## Course Outline

### EE312 Macroeconomic Theory (Sec.046401)

Semester 1/2024 (August 13 – December 2, 2024)

**Number of Credit:** 4 credits

**Prerequisite:** a) EE211 and EE212 or b) EE213 and EE214

**Course Description:** The model of joint equilibrium in product markets, money markets, and foreign exchange markets (the IS-LM-BP model); changes in equilibrium; product markets and labor markets; the model of aggregate supply and demand in closed and open economies; inflation, unemployment, and the Phillips curve; dynamic AD-AS framework; economic stabilization policies; growth theory, micro-foundation of macroeconomics focusing on real business cycle model, new classical model, and new Keynesian model; applications of Macroeconomic theory to analyze economic situations.

### Course Objectives:

To provide students with an understanding of macroeconomic theory and its analytical approach to economic system, as well as an ability to apply macroeconomic theory to economic problems and policies.

### **Class Time and Logistic**

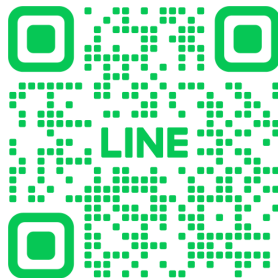
**Class day:** Wednesday & Friday  
**Class time:** 9.00 – 11.00 hrs.  
**Venue:** Room 201, Faculty of Economics  
**Teaching Materials Platform:**

<https://classroom.google.com/c/NjUwNjlxODcwMzcx?cjc=lycybd6>

### **Instructor:**

**Name:** Asst. Prof. Dr. Sicha Thubdimphun  
**Office Hours:** Wednesday 13.00 – 14.00 (Rm#469)  
**Email:** [sicha@econ.tu.ac.th](mailto:sicha@econ.tu.ac.th)

**Line Official :** (Important news announcement only. If you want to contact the instructor, please send an email.)



## Expected Learning Outcomes

### 1. Morality and Ethics **EE312**

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students demonstrate integrity.	Quizzes & Group HW / Exams
○	2. Students prioritize social and public benefits over personal ones.	
●	3. Students are punctual and comply with the code of conduct of the institution and society at large.	Observed class attendance / Quizzes & Group HW / Exams
○	4. Students are responsible and accountable to society, the nation, and the subject of economics.	
○	5. Students realize the cultural and environmental value of a sustainable society.	

### 2. Knowledge

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students know and understand modern economics principles and theories, and are up to date with new developments.	In-class participations / Quizzes & Group HW / Exams
●	2. Students know and understand Thai and global economic structure and the importance of major international economic events.	In-class participations / Quizzes & Group HW / Exams
●	3. Students know and understand the instruments of economic analysis.	In-class participations / Quizzes & Group HW / Exams
●	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.	In-class participations / Quizzes & Group HW / Exams
○	5. Students are informed about related fields including sociology, business administration, education, law policy, and science.	

### 3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students have developed individual critical thinking.	In-class participations / Quizzes & Group HW / Exams
●	2. Students are sufficiently trained in research skills.	In-class participations / Quizzes & Group HW / Exams
●	3. Students demonstrate an ability to analyze and synthesize data, as well as appropriately integrate economics concepts to understand the causes of current economic problems in Thailand. Based on analysis and synthesis, students demonstrate an ability to propose policy guidelines to resolve problems.	In-class participations / Quizzes & Group HW / Exams

### 4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students are responsible for assigned tasks and work in groups effectively.	In-class participations / Quizzes & Group HW / Exams
●	2. Students have problem-solving skills.	In-class participations / Quizzes & Group HW / Exams
○	3. Students show leadership skills and team spirit.	
●	4. Students are always improving themselves.	In-class participations / Quizzes & Group HW / Exams
○	5. Students have good interpersonal skills, adapt, and work under different conditions.	

### 5. Quantitative Analysis, communication, and information technology

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

Remark: ● Primary expected outcome ○ Secondary expected

**Main Text:**

- Mankiw Gregory “Macroeconomics. Pearson Education, 2016 (M.)
- Froyen Richard. Macroeconomics: Theories and Policies. 10th edition. Pearson Education Limited, 2013. (F.)
- Williamson Stephen D. Williamson. Macroeconomics. 5th edition. Pearson Education Limited, 2018. (W.)

**Suggested Readings:**

Supplement readings will be posted on the *Google Classroom*.

**Assessments:**

• Quizzes	20	points
• Mid-term exam	40	points
• Final exam	40	points
Total	<u>100</u>	points

Note: Evaluation methods and weights are subject to change.

Grading is separated from the other section.

**Video Recording Policy**

Make-up classes may be recorded for the convenience and review of students who cannot attend in person. However, regular classes will not be recorded. If you cannot participate in a make-up class, please inform the instructor in advance so arrangements can be made for the recording.

Recorded classes are for personal use only and may not be shared or distributed.

**Grading Criteria:**

I used a mixed procedure to determine the letter grade using the criteria-based and the distribution-based methods. When the criteria-based grading can be directly applied, I follow the general guidelines of the university described below.

A = 4.0 (85-100)	B+ = 3.5 (75-84)
B = 3.0 (70-74)	C + = 2.5 (65-69)
C = 2.0 (60-64)	D+ = 1.5 (50-59)
D = 1.0 (40-49)	F = 0 (0-39)

## Tentative Class Schedule:

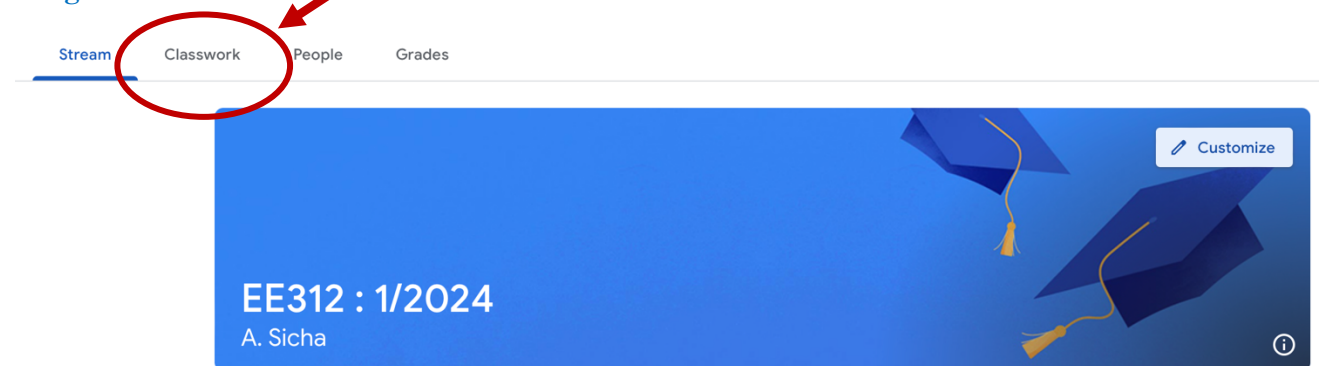
Session	Topics	Details	Materials
1	Class Overview & Intro to Business cycles	<ul style="list-style-type: none"> <li>- Class logistics</li> <li>- What do we study in this class? Roadmaps</li> <li>- Intro to business cycles framework</li> <li>- Framework for Long-run macroeconomy and Trend determination</li> </ul>	<i>W. Ch. 1 / Ch. 2</i> <i>W. Ch. 3</i> <i>M. Ch. 10</i>
2	Long-run Macroeconomy	<ul style="list-style-type: none"> <li>- Production technology &amp; MP</li> <li>- Labor demand curve and its determinants.</li> <li>- Labor supply curve and its determinants</li> <li>- Labor market outcome &amp; Long-run equilibrium</li> <li>- Drivers for Long-term equilibrium &amp; Trends</li> <li>- Linkage to Growth theory</li> </ul>	<i>F. Ch. 3 - 4</i> <i>M. Ch 3</i>
3	AD-AS framework of economics fluctuations 1	<ul style="list-style-type: none"> <li>- Big picture of business cycles fluctuations</li> <li>- Building blocks of core AD-AS model</li> <li>- <i>IS-LM model &amp; Derivation of AD curve (Self-study)</i></li> <li>- Views on Aggregate supply relation</li> <li>- Incorporating institutional features to Labor market framework</li> <li>- Derivation of expectation-augmented AS curve &amp; its determinants</li> </ul>	<i>F. Ch 5 – 8</i>
4	AD-AS framework of economics fluctuations 2	<ul style="list-style-type: none"> <li>- Equilibrium representation: Graphical diagrams under multi-market macroeconomy</li> <li>- Shocks propagating mechanism in the closed-economy 1: IS shocks &amp; LM shocks</li> </ul>	<i>M. Ch 11 – Ch 14</i>
5	AD-AS framework of economics fluctuations 3	<ul style="list-style-type: none"> <li>- Shocks propagating mechanism in the closed-economy 2: AS shocks</li> <li>- Types of shocks and Self-correcting mechanism under the Medium-run adjustment process</li> </ul>	
6	Theory of Inflation 1	<ul style="list-style-type: none"> <li>- Long-run behavior of inflation</li> <li>- Cyclical behavior of inflation and Traditional Phillips Relation</li> <li>- Expectation-augmented Phillips relation</li> </ul>	<i>M. Ch 5 &amp; M. Ch 14</i>
7	Theory of Inflation 2	<ul style="list-style-type: none"> <li>- Short-run and Long-run Phillips curve</li> <li>- Rational expectation and policy neutrality</li> </ul>	
8	Dynamic Model of Economic Fluctuations 1	<ul style="list-style-type: none"> <li>- What's wrong with the traditional AD-AS framework?</li> <li>- Ingredients of modern dynamic AD-AS framework</li> <li>- modern AD curve (IS + Monetary policy rule)</li> <li>- modern AS curve (Output gap-based Phillips curve)</li> </ul>	<i>M. Ch 15</i>
9	Dynamic Model of Economic Fluctuations 2	<ul style="list-style-type: none"> <li>- Model solution, equilibrium and Analysis</li> <li>- Dynamic response to shocks</li> <li>- Policy implications</li> </ul>	
10	Exchange Rate model 1	<ul style="list-style-type: none"> <li>- Basic Concepts of international economy, Forex and Forex market</li> <li>- D&amp;S framework for Exchange rate determination</li> </ul>	<i>F. Ch. 14</i>
11	Exchange Rate model 2	<ul style="list-style-type: none"> <li>- Applications and impact analysis</li> <li>- Forex market intervention</li> <li>- Domestic implication of FOREX intervention and Financial Sterilization</li> </ul>	<i>– Ch. 15</i>

Session	Topics	Details	Materials
12	Open- economy macro-1	- Basic concepts and Model Structure - Balance of Payment equilibrium and BP curve - BP curves under Mundell-Flemming environment and notion of Mundell-Flemming Equilibrium - Disequilibrium adjustment mechanism under Mundell-Flemming environment	
13	Open-economy macro-2	- Shocks-propagation mechanism in the open-economy	
14	Open-economy macro-3	- Exchange rate policy: Effect of devaluation or revaluation under fixed exchange rate system - Fiscal and monetary policy under different choices of exchange rate system - Applications: AFC & Impossible Trinity / GFC and QEs (if time permits) - Midterm Exam Q&A	
<b>Midterm Exam: Wednesday, October 2, 2024 , 15.00-17.30</b>			
15	Static GE model 1: One-period HH Optimizing principle	- Micro-founded macroeconomics - Household optimizing theory: Labor supply curve and Consumption demand curve	<i>W. Ch 4</i>
16	Static GE model 2: One-period Optimizing principle	- Firm optimizing theory: Labor demand curve and Output supplied curve	
17	Static GE model 3: Equilibrium representation	- Notion of micro-founded General Equilibrium macroeconomy - Equilibrium representation with D&S diagram ** - Equilibrium representation with Edgeworth Box diagram	<i>W. Ch 5</i>
18	Static GE model 4: Analysis and Application	- Shocks in Static GE model and Application	
19	Consumption-Saving & Credit market Equilibrium 1	- Basic Intertemporal choice model - Behavioral Implications: Effect of Change in income	
20	Consumption-Saving & Credit market Equilibrium 2	- Behavioral Implications: Effect of Change in real interest rate - Government and Notion of Credit market equilibrium	<i>W. Ch 9</i>
21	Consumption-Saving & Credit market Equilibrium 3	- Credit market equilibrium and Application	
22	Real-intertemporal model 1: Two-period HH optimizing principle	- Household optimizing theory: Labor supply curve and Consumption demand curve	
23	Real-intertemporal model 2: Two-period Firm optimizing principle	- Firm optimizing theory: Labor demand curve and Investment demand curve	<i>W. Ch 11</i>
24	Real-intertemporal model 3: Equilibrium	- Optimizing AD-AS curve: derivation - Slope of optimizing AD-AS curve - Equilibrium representation	
25	Real-intertemporal model 4: Analysis	- Shocks and Equilibrium Business cycles fluctuations	

Session	Topics	Details	Materials
26	Real-intertemporal model 5: Analysis	- Shocks and Equilibrium Business cycles fluctuations (contd.)	
27	Growth Theory 1	- Stylized facts & Basic Structure of Solow growth model	<i>W. Ch 7 / Ch. 8</i>
28	Growth Theory 2	- Solution method of Solow Growth model - Steady state and Transition path	
29	Growth Theory 3	- Equilibrium Analysis and Some applications - Changes in Steady State Equilibrium	
30	Growth Theory 4	- Limitations of Solow growth model - Buffer sessions - Final Exam Q&A	
<b><i>Final Exam: Wednesday, December 11, 2024, 09.00-12.00</i></b>			

## Examples of Class Materials Available in the Google Classroom





### Google Classroom



### Example a Display in the Google Classroom from Past Semester

## Recent Announcement ⋮




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 Tentative Final Exam Cover Page	Posted May 9, 2023
 Summary Clip by A. Kittichai	Posted May 4, 2023
 Midterm Exam Cover Page	Edited Mar 2, 2023
 New Zoom Class (room number and pass...	Posted Apr 3, 2023

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## Course Outline ⋮


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 Course Outline	Edited Jan 9, 2023
 15% Homework and Quiz Score : 7% =...  1	Edited Jan 26, 2023

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## Past Assignment - Self Study ⋮





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 Past Assignment for Self-study	Posted Jan 26, 2023
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## Score Announcement



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 Midterm Exam Score Distribution	Posted Mar 31, 2023
 Midterm Exam Score	Edited Mar 31, 2023
 Quiz Score = 8%	Posted Jan 31, 2023
 Homework Score = 7%	Edited Jan 28, 2023

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## Solution to (paper) Quizzes



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 The Solution to Quiz 23	Posted May 5, 2023
 The Solution to Quiz 22	Posted May 3, 2023
 The Solution to Quiz 21	Posted Apr 28, 2023
 The Solution to Quiz 20	Posted Apr 24, 2023

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## Homework



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 Homework 10 : Due 11 May	Posted May 6, 2022
 Homework 9: Due 4 May	Posted Apr 29, 2022
 Homework 8 : Due 27 Apr	Posted Apr 22, 2022
 Homework 7 : Due 20 Apr	Edited Apr 8, 2022

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## Topic 1. Overview and Topic 2. Introduction to ...



Summary Note : Chapter 2

Posted Jan 12, 2022



Ch1 and Ch2 - Lecture Presentation

Posted Jan 11, 2022

## Topic 3. The Core AD-AS Framework



Chapter 3. Lecture Presentation

Edited Feb 2, 2022



Chapter 3. Summary Note - self practice :...

Posted Feb 2, 2022

## Topic 4. Inflation and business cycles



Chapter 4. Lecture Presentation

Posted Feb 2, 2022



Chapter 4. Summary Note

Posted Feb 2, 2022



Topic 4 : supplement - The Economist

Posted Feb 4, 2022

## Topic 5. Foreign Exchange Market and Topic 6....



A Summary Note : [Ch3-Ch6]

Posted Feb 25, 2022



A summary note : Ch5 & Ch6

Posted Feb 25, 2022



Chapter 5 and Chapter 6. Lecture Presen...

Posted Feb 11, 2022

## Topic 7. A Closed-Economy One Period Macro... ⋮

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Chapter 7. Static General Equilibrium Mo...

Posted Mar 7, 2022

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Chapter 7. Summary Note: Part 1.

Posted Mar 7, 2022

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Chapter 7. Summary Note : Part 2

Posted Mar 7, 2022

## Topic 8. Two-Period Model : the consumption-... ⋮

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Chapter 8. Lecture Presentation

Posted Mar 7, 2022

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Chapter 8. Summary Note

Posted Mar 7, 2022

## Topic 9. Intertemporal Model With Investment ⋮

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Chapter 9 : Summary Note Part 2

Posted Apr 1, 2022

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Chapter 9 : Summary Note Part 1

Posted Apr 1, 2022

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Lecture Presentation : Ch 9. Real Intertem...

Posted Apr 1, 2022

## Topic 10. Growth Theory ⋮

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Lecture Presentation CH.10

Posted Apr 26, 2022

## Definitions

- A lecture Presentation is a PowerPoint presentation used in the class. It will be uploaded to the GG classroom before the date of each class. A student should prepare it before attending the class.
- A class note is the lecture presentation with the lecturer's writing in the class. It will be uploaded to the GG classroom within 7 days after the class.
- Quiz and Homework Scores will be uploaded in a shared GG sheet. The score for each homework/quiz will be announced within 7 days after the deadline of each homework or after the date of the quiz.

To find the Solutions for assignments:

The solution can be found on either (1) GG classroom (2) [your@st.econ.tu.ac.th](mailto:your@st.econ.tu.ac.th)

### EE312 HW10 Solow growth : Due 10 May 2023

Please be careful when you give me your student ID. If you give me a wrong student ID, your homework will not be graded.

demostudent1@st.econ.tu.ac.th [Switch account](#)

\* Indicates required question

Email \*

Record demostudent1@st.econ.tu.ac.th as the email to be included with my response

Student ID [\*\*\* If you give a wrong answer for this question, your homework will not be graded\*\*\*] \*

Short answer text

Check  
the box

After you click “submit”, this page will appear



and a confirmation email with a copy of your homework will be sent to your@st.econ.tu.ac.th mailbox.



In the email, it will appear a copy of your response. This email can be used as evidence of your successful submission of homework.

In some cases, I may send the solution to [your@st.econ.tu.ac.th](mailto:your@st.econ.tu.ac.th).



## Other Policies:

**Any changes** to the course outline (if any) **will be announced in the on-site class, the Zoom Class, Google Classroom, or Line Official.** It is the responsibility of the students to obtain any information announced in the class. Ignorance of such information due to the absence of class is not a valid defense. If a student has any questions about the lecture, please do not hesitate to consult the lecturer during office hours. The lecturer would be pleased to assist. Please make an appointment in advance via email. Please allow enough time (at least 2 working days) for the lecturer to confirm the appointment. I will be available for you only if you confirm such an appointment by emailing back.

Attendance is highly encouraged

Proper manner and courtesy are expected

A student may contact me by sending an email.

On the night before a test/an exam, the cut-off for any question is 4.00 pm. via email, I can provide only short answers. If you prefer a long answer, please come to visit me by making an appointment.