

#### **COURSE SYLLABUS**

# 1. COURSE TITLE

Microeconomics 微观经济学

#### 2. COURSE CODE

**ECON2103** 

## 3. PRE-REQUISITE

Nil

#### 4. **CO-REQUISITE**

Nil

#### 5. NO. OF UNITS

3

## 6. CONTACT HOURS

42

## 7. MEDIUM OF INSTRUCTION (MOI)

English

#### 8. OFFERING UNIT

Financial Mathematics Programme, Faculty of Science and Technology

# 9. SYLLABUS PREPARED & REVIEWED BY

Prepared by: Dr Tianhao Zhi Reviewed by: Dr Sherry Zhou

# 10. AIMS & OBJECTIVES

This course aims to introduce concepts & principles of microeconomics for financial mathematics students from elementary to intermediate level. The students should moreover appreciate the relevance of the course materials to real life, and learn to apply them in analyzing economic problems commonly encountered by individuals and firms. The major topics covered are: the market forces of demand and supply, and the associated concept of elasticity; the key role of price in the resource allocation; the efficiency of, and some possible



problems with, the market mechanism; the various cost measures for firms; the different forms of market competition, and the impact on social welfare; and finally, the basic role of government in the economy.

# 11. COURSE CONTENT

- Supply & Demand and Elasticity
- Consumer Behaviour & Derivation of a Demand Curve
- Producer Behaviour & Derivation of a Supply Curve
- Market Structure I: Monopoly and Monopolistic Competition
- Market Structure II: Oligopoly and Cartel
- Introduction to Game Theory
- Introduction to Investment Theory
- Information, Market Failure, and the Role of Government

# 12. <u>COURSE INTENDED LEARNING OUTCOMES (CILOS) WITH MATCHING TO PILOS</u>

## **Programme Intended Learning Outcomes (PILOs)**

Programme Title: Bachelor of Science (Honours) in Financial Mathematics			
PILO	Upon successful completion of the Programme, students should be		
	able to:		
PILO 1	Apply the basic principles of microeconomics to clearly		
	explain the phenomena and problems in financial markets;		
PILO 2	Interpret quantitative models for microeconomic forecasting and policy		
	analysis;		
PILO 3	Employ theories and tools of microeconomics for the construction of the		
PILO 3	financial product, asset pricing and risk management;		
PILO 4	Use mathematical and financial software to perform computation of		
	microeconomic data analysis;		
PILO 5	Conduct independent research in microeconomics and exploring		
	business opportunities in financial markets;		
PILO 6	Develop the capacity to work as part of a team.		



# **CILOs-PILOs Mapping Matrix**

Course Code & Title: ECON2103 Microeconomics			
CILO	Upon successful completion of the course, students should be able to:	PILO(s) to be addressed	
CILO 1	Explain basic concepts related to microeconomics	PILO 1	
CILO 2	Analyse financial institutions and financial instruments and how they work in a financial market	PILOs 1,3	
CILO 3	Apply microeconomic principles to analyze real-world phenomena	PILOs 3,5	

# 13. TEACHING & LEARNING ACTIVITIES (TLAS)

CILO No.	TLAs			
CILO 1	<ul> <li>Lectures and Tutorials: Three hours lecture each week on course materials. Tutorials of one-hour duration each week will provide further opportunities to understand the materials through activities such as work-along practice questions, group discussions, self-test multiple-choice questions, ideas sharing, etc.</li> <li>Concept Maps: A series of concept maps will be designed by the course lecturer to visually unify different concepts into a coherent structure. The concept maps will illustrate the interrelationships embedded in economics, and enhance students' holistic understanding of economics.</li> <li>Assignments and Quizzes: Quizzes will be conducted to measure students understanding of the theories and concepts of</li> </ul>			
CILO 2	<ul> <li>Lectures and Tutorials: Lectures will strengthen students' understanding of the basic concepts, including their synthesis and their uses in the real world, and tutorials will focus on small group learning activities allowing deeper understanding of the core concepts.</li> <li>Assignments and Quizzes: Assignments and quizzes are designed to measure students understanding of the basic concepts and theories.</li> </ul>			



CILO No.	TLAS		
	• Lectures and Tutorials: Three hours of lecture each week and		
	weekly tutorial assignments are given, designed to give students		
	the opportunity to work through the concepts and to apply them		
	to various situations.		
CH O 2	• Case Studies: Local and region economic examples and		
CILO 3	real-world cases will be used in lectures and tutorials to teach		
	students how to put theory into practice.		
	• Assignments and In-class Practice: Assignments and in-class		
	practice are designed to measure students understanding of the		
	theories and how monetary policy works.		

# 14. ASSESSMENT METHODS (AMS)

Assessment Methods	Weighting	CILO(s) to be addressed	Description of Assessment Tasks
In-class Practices Assignments	20% 20%	CILOs 1-3	Students' ability to identify the relevant concepts and use them to answer questions as well as their ability to apply financial concepts and theories to explain and solve financial and economic problems.
Case Studies	20%	CILO 3	Students' understanding of the knowledge learned and their ability to apply them correctly in different contexts.
Final Exam	<mark>40%</mark>	CILOs 1-3	Final Examination is designed to see how far students have achieved the intended leaning outcomes of the course, especially in the knowledge domain. It involves essay questions on real-world cases, and each question assesses students' ability to identify a set of relevant concepts to



Assessment	Weighting	CILO(s) to	Description of Assessment
Methods		be addressed	Tasks
			real-world case and use them to analyze the case.

#### 15. TEXTBOOKS / RECOMMENDED READINGS

#### **TEXTBOOK:**

· Robert Pindyck and Daniel Rubinfeld, Microeconomics, Pearson; 9th Edition

#### **RECOMMEND READINGS:**

- 1. Mankiw, N. Gregory. (2014). Principles of Economics. (7th edition). Cengage Learning.
- 2. Arthur O'Sullivan, Steven Sheffrin and Stephen Perez (2011). Microeconomics: Principles, Applications and Tool (7th ed.). Prentice Hall.
- 3. Daniel Hamermesh. (2011). Economics is Everywhere (4th ed.). Worth Publisher.
- 4. Dirk Mateer and Lee Coppock. (2013). Principles of Microeconomics. W.W. North & Company.
- 5. Hall, Robert E. and Lieberman, Marc. (2012). Microeconomics: Principles and Applications (6th ed.). Cengage Learning.
- 6. Karl E. Case, Ray C Fair and Sharon Oster (2013). Principles of Microeconomics (11th ed.). Prentice Hall.
- 7. Krugman, Paul and Wells, Robin. (2012). Economics (3rd ed.). Worth Publishers.
- 8. Mankiw, N. Gregory. (2014). Study Guide for Mankiw's Principles of Economics (7th ed.). Cengage Learning.
- Robert Frank and Ben Bernanke. (2012). Principles of Microeconomics (5th ed.). McGraw-Hill/Irwin.
- 10. The Economist (2014). Numbers Guide: The Essentials of Business Numeracy (6th ed.)
  The Economist.
- 11. Varian, H. R. (2014). Intermediate Microeconomics with Calculus: A Modern Approach (9<sup>th</sup> ed.). W.W. Norton & Company.

#### **OTHER REFERENCES:**

 Various newspapers, magazines, journal articles and web addresses will be referenced, e.g. Wall Street Journal http://asia.wsj.com/home-page, New York Times www.nytimes.com, and Economist www.economist.com

Revised on: <2023-06-20>