

Academic Year	2023-2024	Semester	2
Course Coordinator	Yan Jubo, Jonathan Yeo		
Course Code	HE2001		
Course Title	Microeconomics II		
Pre-requisites	HE1001 Microeconomics I		
No of AUs	3		
Contact Hours	39 hours (3 hours per week; 2 hours lecture and 1 hour tutorial)		
Proposal Date	8/11/2021		

Course Aims

Principals of Microeconomics has introduced basic concepts in market and discussed how markets work in general. The aim of this course is to deepen the understanding of behaviors in the market by further examining the decision process of economic agents and the implied welfare consequences.

In the first half of the course, we focus on how individuals make their decisions in the market by discussing two broad topics. The first is the analysis of price and income changes in the market. This discussion builds on what have already been covered in Principals of Microeconomics. The second topic is individual decision-making regarding time, risk, and uncertainty where we will also examine how the asset market works.

In the second half of the course, we focus on analysing the welfare effects of outcomes in markets and society. To this end, students will learn different measures of welfare and criteria for efficiency, and how perfectly competitive markets help achieve socially optimal outcomes. Subsequently, we will discuss the problems related to making choices for society and how these may be reconciled.

Intended Learning Outcomes (ILO)

Upon the successful completion of the course, you should be able to:

- (1) Use microeconomics concepts and theories to describe individual and social choice under different situations and explain welfare concepts.
- (2) Apply fundamental microeconomic models to analyse decision-making by individuals/government and the impacts on social welfare under different contexts.
- (3) Communicate economic reasoning, in speech and writing to explain and evaluate the different processes behind individual decisions, social decisions and how they relate to social welfare.

Course Content

Lecture 1: Revealed Preference: Definition of revealed preference. Recovering preference using revealed preference. The weak axiom of revealed preference (WARP). The strong axiom of revealed preference (SARP). Checking SARP

Lecture 2: Slutsky Equation: Decomposition of price change. Substitution effect. Income effect. The law of demand.

Lecture 3: Income and Budget Constraint: Gross and net demand. Budget constraint and endowment. Labor supply. Comparative statics

Lecture 4: Intertemporal Choice: Budget constraint. Preferences. Comparative statics. Inflation.

Lecture 5: Asset Market. Arbitrage and present value. Assets with consumption returns. Market bubble.

Lecture 6: Uncertainty. Contingent consumption. Expected utility. Risk aversion. Stock market

Lecture 7: Risky Assets: Mean variance trade-off. Equilibrium concept. Risk aversion. Stock market

Lecture 8: Welfare Measures: Consumer surplus; Quasi-linear utility and willingness to pay; Equivalent variation; Compensating variation. Producer surplus.

Lecture 9: Simple analyses of Social Welfare: Aggregating welfare for consumers and producers. Deadweight welfare loss. Application to taxes.

Lecture 10: Perfect Competition and Welfare: The Social Planner's Problem. Pareto Dominance, Pareto Efficiency. Edgeworth Box analysis. First and Second Fundamental Welfare theorem.

Lecture 11: Social Choice and Social Welfare: Social decision mechanisms. Desirable properties of SDMs. Arrow's impossibility theorem. Aggregating ordinal vs cardinal utility. Social welfare functions. Pareto efficiency and Social Welfare maximization. Fair allocations.

Lecture 12: Utilitarianism: Utilitarianism and Pareto Efficiency under Quasi Linear utility with transfers.

Assessment (includes both continuous and summative assessment)

Component	ILO Tested	Related Programme LO or Graduate Attributes	Weighting	Team/Individual	Assessment criteria/rubrics
1. Continuous Assessment	1,2,3	Competence	20%	Individual	Appendix 1 and Answer Key
2. Bi-semester Test	1,2,3	Competence, Communication	70%	Individual	Appendix 2 and Answer Key
3. Classroom Participation	1,2,3	Competence, Communication	10%	Individual	Appendix 3 and Answer Key
Total			100%		

Continuous Assessments (CA):

For each main topic, there will be a short online quiz. Quizzes involve multiple choice questions testing the basic understanding of key concepts and theories. For example, students will be asked about a key concept or solve a problem using a suitable method. Quizzes are optional, but students are encouraged to complete them to test their understanding of the course material. Marks for the CA will be calculated based on the 2 highest scores in each half of the course. ($4 \times 5\%$ each).

Bisemester Tests (BT):

There will be two BEs, one in week 7 and another in week 13, each given 35% weight. BEs involve composite questions testing the applicative and rigorous understanding of key concepts and theories. For example, students will be asked to apply key concepts or analyze a problem using a suitable theory.

Formative feedback

You will receive formative feedback to your continual assessments through the return of marked work and in-class review and discussion of solutions. You will also receive summative group feedback on the bi-semester tests upon the conclusion of the module.

Learning and Teaching approach

Approach	How does this approach support you in achieving the learning outcomes?
Lectures	Students will be introduced to a variety of economic decision problems involving individual and social welfare via the lectures. They will be taught the respective fundamental microeconomic approaches and ways of thinking about these problems. The lecture slides provide an outline of the core material — understandable enough on their own — but with more detailed exposition on them during the lectures. This intermediate course will allow students to continue the learning process through revision of notes, readings of recommended or self-sourced material, and attempting seminar assignments.
Tutorials	Tutorials will provide opportunities for detailed discussion of assignments on current topics, concepts and frameworks from the

	<p>previous lecture. Students are required to contribute their answers and to engage in solving problems. The tutorials are purposed to check and reinforce a high level of understanding and reinforce it. Students will be evaluated on their ability to identify and justify relevance of economic concepts central to the chosen context, and to orally communicate this rigorously with the aid of written communication (e.g. working a problem on the board) if required. Tutorials will also serve as a platform for participants to nurture academic community engagement via co-learning.</p>
Assessments	<p>Assessments will test the attainment of learning objectives in multiple ways that together ensure a comprehensive and balanced education in the fundamentals of economic decision making.</p> <p>Classroom participation in terms of offering and discussing solutions tests the ability to orally communicate analytical insight.</p> <p>Continuous assessments test analytical knowledge and skills. Formative feedback will be given for CAs.</p> <p>The bi-semester tests check conceptual understanding and technical skills of key concepts, the ability to connect theory and practice, as well as competence in rigorously deriving and communicating relevant economic insight.</p>

Reading and References

Textbook:
Intermediate Microeconomics: A Modern Approach, 9th Edition by H.R. Varian.
W.W.Norton & Company.

Course Policies and Student Responsibilities

(1) General

You are expected to complete all assigned pre-class readings and activities, attend all seminar classes punctually and take all scheduled assignments and tests by due dates. You are expected to take responsibility to follow up with course notes, assignments and course related announcements for seminar sessions they have missed. You are expected to participate in all seminar discussions and activities. Please discuss alternative arrangements with the course instructor at least 2 weeks in advance if you might be unable to attend any assessment.

(2) Absenteeism

Absence from class without a valid reason will affect your overall course grade. Valid reasons include falling sick supported by a medical certificate and participation in NTU's approved activities supported by an excuse letter from the relevant bodies.

Any request for changes to individual presentation slots or continual assessment timings should be justified by exceptional reasons and made at least 2 weeks in advance. Absence due to medical reasons must be certified.

(3) Contact

The seminars are designed for student-teacher interaction and queries are best shared during those times, as tutors will personally be leading all the seminars to give you the most consistent and closest attention. If for any special reason or requirement, I am happy to meet you for further discussions after the lecture or seminar, or in appointments arranged in-person or by email (jonathanyeo@ntu.edu.sg).

Academic Integrity

Good academic work depends on honesty and ethical behaviour. The quality of your work as a student relies on adhering to the principles of academic integrity and to the NTU Honour Code, a set of values shared by the whole university community. Truth, Trust and Justice are at the core of NTU's shared values.

As a student, it is important that you recognize your responsibilities in understanding and applying the principles of academic integrity in all the work you do at NTU. Not knowing what is involved in maintaining academic integrity does not excuse academic dishonesty. You need to actively equip yourself with strategies to avoid all forms of academic dishonesty, including plagiarism, academic fraud, collusion and cheating. If you are uncertain of the definitions of any of these terms, you should go to the [academic integrity](#) website for more information. Consult your instructor(s) if you need any clarification about the requirements of academic integrity in the course.

Course Instructors

Instructor	Office Location	Phone	Email
Asst Prof Yan Jubo	SHHK-04-68	65132249	yanjubo@ntu.edu.sg
Asst Prof Jonathan Yeo	SHHK-04-63	67904496	jonathanyeo@ntu.edu.sg
Zhang Xiaojie			XIAOJIE001@e.ntu.edu.sg

Planned Weekly Schedule

Week	Topic	Course ILO	Readings/ Activities
1	Revealed Preference	1,2,3	Varian Ch7
2	Slutsky Equation	1,2,3	Varian Ch8
3	Income and Budget Constraint	1,2,3	Varian Ch9
4	Intertemporal Choice, Asset Market	1,2,3	Varian Ch10, Ch 11
5	Uncertainty	1,2,3	Varian Ch12
6	Risky Assets	1,2,3	Varian Ch13
7		1,2,3	Bi-semester 1
	Recess Week		
8	Welfare Measures	1,2,3	Varian Ch14
9	Simple analyses of Social Welfare	1,2,3	Varian Ch14, 16
10	Perfect Competition and Welfare	1,2,3	Varian Ch32
11	Social Choice and Social Welfare	1,2,3	Varian Ch34
12	Utilitarianism	1,2,3	-
13		1,2,3	Bi-semester 2

Appendix 1: Assessment Criteria/Rubrics for Continual Assessment.

	Developing	Functional-Proficient	Advanced
Analyse decision making and/or outcomes	Superficial and narrow analysis of problems, weak understanding of mechanisms through which decisions operate and/or outcomes arise.	Good and varied analysis of problems, good understanding of mechanisms through which decisions operate and/or outcomes arise.	Insightful and comprehensive analysis of problems, strong understanding of mechanisms through which decisions operate and/or outcomes arise.
Propose suitable solutions	Weak, superficial justification for proposed solutions.	Good and varied justification for proposed solutions.	Strong and comprehensive justification for proposed solutions.
Academic rigor and scholastic excellence	Draws weakly on course content.	Draws on relevant course content.	Excellent use of relevant course content.

Appendix 2: Assessment Criteria/Rubrics for Bi-Semester Test

	Developing	Functional-Proficient	Advanced
Identify and justify relevance of economic concepts central to the context	Ambiguous identification and weak understanding of the economic concepts relevant to the context	Compatible identification and good understanding of the economic concepts relevant to the context.	Distinct identification and In-depth understanding of the economic concepts relevant to the context
Analyse decision making and/or outcomes	Superficial and narrow analysis of problems, weak understanding of mechanisms through which decisions operate and/or outcomes arise.	Good and varied analysis of problems, good understanding of mechanisms through which decisions operate and/or outcomes arise.	Insightful and comprehensive analysis of problems, strong understanding of mechanisms through which decisions operate and/or outcomes arise.
Propose suitable solutions	Weak, superficial justification for proposed solutions.	Good and varied justification for proposed solutions.	Strong and comprehensive justification for proposed solutions.
Academic rigor and scholastic excellence	Draws weakly on course content.	Draws on relevant course content.	Excellent use of relevant course content.
Written communication	Weak communication that is unclear or ambiguous, with poor use of graphical and mathematical tools, organized in an unsystematic fashion	Good understandable communication aided by graphical and mathematical tools, organized in a logical flow.	Clear, concise, and precise communication aided by effective graphical and mathematical tools, organized systematically in a logical flow.

Appendix 3: Assessment Criteria/Rubrics for Classroom Participation

	Developing	Functional-Proficient	Advanced
Identify and justify relevance of economic concepts central to the context	Ambiguous identification and weak understanding of the economic concepts relevant to the context	Compatible identification and good understanding of the economic concepts relevant to the context.	Distinct identification and in-depth understanding of the economic concepts relevant to the context
Academic rigor and scholastic excellence	Draws weakly on course content.	Draws on relevant course content.	Draws on relevant course content, with additional insights from external sources and examples.
Oral communication	Weak oral communication that is unclear or ambiguous, with little use of technological presentation tools, organized in an unsystematic fashion.	Good understandable oral communication aided by technological presentation tools, organized in a logical flow.	Clear, confident, concise, and precise oral communication aided by effective technological presentation tools, organized systematically in a logical flow.