

Dr. Chelsea C. Lin
Office: Humanities Bldg. D411, ext. 5540
OH: Wed. 4-6 pm
Email: clin@mail.ndhu.edu.tw

Fall 2010

Advanced Microeconomic Theory I Syllabus

This course is designed for the first-year master students in economics. In this course, we will cover the basic topics of microeconomics including consumer theory, producer theory and partial equilibrium markets. We may venture into the theory of uncertainty and game if time allows.

Textbook: The required textbook for this course will be J&M. However, the following textbooks have relative strength, therefore I will draw my lectures from the following to varying degrees.

- **Jehle, G.A. and P.J. Reny, Advanced Microeconomic Theory, Addison-Wesley, 2001.
- *Luenberger, D.G., Microeconomic Theory, McGraw-Hill, 1995.
- *Varian, H.R., Microeconomic Analysis, W. W. Norton & Company, 1992.
- Mas-Collel, A., Whinston, M.D. and J.R. Green, Microeconomic Theory, Oxford University Press, 1995.
- Kreps, D.M., A Course in Microeconomic Theory, Princeton University Press, 1990.

Exams and Grades: Students are evaluated by the performance in two midterm exams and a final exam. The first midterm is scheduled on Oct. 27 (30%), the second midterm is scheduled on Dec. 08 (35%) and the final exam is scheduled on Jan. 12 (35%).

IMPORTANT NOTES

- Cheaters will automatically fail this course. Talking during exams and/or leaving the exam room without permission are also considered cheating.
- Missing exams will be severely frowned upon - you will need a substantial, truly dramatic reason, such as a severe injury or the death of an immediate family member. Official documents will have to be provided. There will be NO MAKEUP EXAMS. Once the permission is granted, the weight on your missing exam will be attributed to the other two exams.

TENTATIVE SCHEDULE

(09/15) Lecture 0: Overview

(09/22) The Mid-Autumn Festival, Holiday

(09/29) Lecture 1: Mathematical Review (Chapter A1 pp407)

- Logic Elements, Sets, Function

(10/06) Lecture 2: Mathematical Review II

- Definite and Semidefinite Matrices, Tests for Definite Matrices, Optimization

(10/13) Lecture 3: Consumer Theory I

- Reference, Utility, The Consumer's Problem

(10/20) Lecture 4: Consumer Theory II

- The Indirect Utility Function, The Expenditure Function, Relationships between Marshallian and Hicksian, The Slutsky Equation, Elasticity, Aggregation in Consumer Demand

(10/27) Midterm Exam 1

(11/03) Lecture 4: Consumer Theory II

- The Indirect Utility Function, The Expenditure Function, Relationships between Marshallian and Hicksian, The Slutsky Equation, Elasticity, Aggregation in Consumer Demand

(11/10) Lecture 5: Topics in Consumer Theory

- Duality, Integrability, Revealed Preference

(11/17) Lecture 5: Topics in Consumer Theory

- Duality, Integrability, Revealed Preference

(11/24) Lecture 6: Theory of the Firm

- Technology of Production, Production Function, Returns to Scale, Cost, The Competitive Firm, Duality in Production

(12/01) Lecture 6: Theory of the Firm

Lecture 7: Some Production Functions and Cost Functions

- Technology of Production, Production Function, Returns to Scale, Cost, The Competitive Firm, Duality in Production, Some Production Functions and Cost Functions

(12/08) Midterm Exam 2

(12/15) Lecture 8A: Partial Equilibrium

- Perfect Competition, Monopoly, Oligopoly, Monopolistic Competition

(12/22) Lecture 8B: Partial Equilibrium

- Welfare

(12/29) Lecture 9: Uncertainty

- Preferences, Von Neumann-Morgenstern Utility, Risk Aversion, Certainty Equivalence

(01/05) Lecture 9: Uncertainty

- Preferences, Von Neumann-Morgenstern Utility, Risk Aversion, Certainty Equivalence

(01/12) Final Exam

COURSE WEBSITE

The course website is at Dong Hwa e-Learning <http://134.208.7.42/>. The website will contain this syllabus (and any updates), announcements, handouts, homeworks and answer keys. You are **REQUESTED TO DOWNLOAD** the class materials by yourself or you can PURCHASE them from the copy center in the Humanities Bldg. Make sure you have the latest materials with you before you attend the class.