

## EC4101 (L2): Microeconomics Analysis III

SEMESTER 1, 2012

### Instructor:

KO Chiu Yu, tel: 6516-5178, office: AS2-04-23, email: ecscyk@nus.edu.sg

### Time and Location:

AS7-0102 on Tuesday: 13.00-15.00 (Lecture); 15.00-16.00 (Tutorial)

### Office Hours:

By appointment; a weekly 2-hour session may also be agreed on majority vote

### Textbook:

Microeconomic Theory: Basic Principles and Extensions, Snyder & Nicholson, 11th (Int'l) edition, 2012

### Supplementary readings:

Advanced Microeconomic Theory, Jehle/Reny, 3rd edition, 2011

A Primer in Game Theory (or Game Theory for Applied Economists), Robert Gibbons, 1992

### Outline:

We begin with the theory of choice – ask how consumers make decisions from some basic assumptions on preferences. Briefly we also study the theory of production and costs. Then we turn to competitive markets, strategic interactions and game theory. We will emphasize 1) the development of analytical tools and the understanding of how the theories are constructed and 2) the workings and failures of markets.

### Grading:

Weekly assignments (presentation in groups 10%), a midterm exam (30%), and a final exam (60%).

Mid-term exam is in-class and closed-book. Final is comprehensive and closed-book.

Both exams are the same as in **EC4101 (L1)** (taught by Prof. Parimal Bag).

### Exams:

Midterm: 18.00-21.00 on October 2 at **LT 9**; Final: 09.00 on November 28

### Tentative Schedule:

Topic 1: Consumer theory (6-7 hours)

Preferences and utility (chapter 3); Utility maximization and choice (chapter 4);

Income and substitution effect (chapter 5); Demand relationships among goods (chapter 6)

Topic 2: Production theory (3 hours)

Production function (chapter 9); Cost function (chapter 10); Profit maximization (Chapter 11)

Topic 3: General equilibrium and welfare (5-6 hours):

Chapter 13; Selected parts of chapter 5 of Jehle & Reny [e.g., Contingent plans; Core and equilibria]

Midterm

Topic 4: Uncertainty (2 hours)

Chapter 7

Topic 5: Externalities and public goods (2 hours)

Selected parts of chapter 19

Topic 6: Game theory (4 hours)

Strategic and extensive form games of complete information; Games of incomplete information;

Repeated games and the folk theorem; Examples and applications – chapter 8 and additional handouts

Topic 7: Information economics (4 hours)

Adverse selection; Signaling; Moral Hazard – chapter 18 and additional handouts