

INTRODUCTORY MICROECONOMICS (EC101)

Course duration: 54 hours lecture and class time (Over three weeks)

LSE Teaching Department: Department of Economics

Lead Faculty (session one): Prof Ronny Razin

Lead Faculty (session three): Dr Pasquale Schiraldi and Dr John Morrow

Pre-requisites: Working knowledge of mathematics (i.e. elementary calculus)

Course Aim:

This course seeks to introduce the student to microeconomic analysis as a way of understanding the world. Lectures for the course follow, approximately, the sequence of chapters in Robert H. Frank, 2014, *Microeconomics and Behavior* (9th ed., McGraw-Hill). This text illustrates microeconomics at work using numerous applications, problems, and examples.

Students might also wish to consult Hal R. Varian, 2014, *Intermediate Microeconomics* (9th ed., Norton). This text takes a relatively more formal approach, with yet additional technical material collected in chapter appendices. The treatment is analytic and might appeal especially to those with strong mathematics.

A large part of learning microeconomics comprises discovering when abstract models are useful and when they are not. The daily classes are thus devoted to discussing problems that highlight these aspects of microeconomic theory. You should, before class, attempt all problem sets. Most of their value is generated before seeing someone else go through them.

Problem sets serve a dual purpose. First, they provide a model for what you will see on examinations. Second, some exercises augment what is covered in lectures and readings, by raising new issues or introducing new concepts. Those parts of the problem sets are mostly intended to add to the materials you have learnt, not just test how well you have already learnt them. Microeconomics is in the main learnt, not by passive reading or listening, but by active doing. The exercises seek to achieve exactly this.

In the sequence of material to cover, corresponding chapters from the text are listed below.

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Course Outline:

References to the Frank text are indicated with **RHF**; to the Varian, with **HRV**.

Week 1

1:1 Introduction to Microeconomic Analysis

Course overview. Scarcity. Alternative allocation mechanisms (markets versus planning). Role of prices. Demand, supply, and market equilibrium. Specific markets. Method of microeconomics. Positive and normative analysis. **RHF** Chs. 1-2. **HRV** Ch. 1.

1:2 Consumer Theory I

Laws of preference. Cardinal versus ordinal utility. Budget constraints. Consumer's optimum. Interior and corner solutions. Complements and substitutes. **RHF** Ch. 3. **HRV** Chs

1.3 Consumer Theory II

Comparative statics. Income expansion paths. Engel curves and income elasticity of demand. Price expansion paths and individual's demand curves. Income and substitution effects (Hicks and Slutsky decompositions). Giffen goods. Aggregation of individual demand curves to generate market demand. Demand price elasticity. Consumer surplus. **RHF** Ch. 4. **HRV** Chs. 6, 8-9, 14-15.

1.4 Theory of Production and Costs

What is a firm? Goals of firm. Opportunity cost. Theory of production and types of production functions. Properties of production function underlying theory of competitive supply. Theory of costs in short-and long-run. Fixed, variable, and marginal costs. Marginal costs and marginal product. **RHF** Chs. 9-10. **HRV** Ch. 18

Week 2

2:1 Theory of Supply: Firm and Industry under Perfect Competition

Optimum of competitive firm. Short-and long-run shutdown conditions. Short-run supply of firm. Industry supply in the short-run; the input price effect. Long-run supply of the firm and the industry. Consumer and producer surplus. Applications to rent control and sales tax. **RHF** Ch. 11. **HRV** Chs. 19-23.

2.2 Monopoly

Total, average and marginal revenue under simple monopoly. Price elasticity and marginal revenue. Optimum of simple monopolist. Simple monopoly vs. competitive equilibrium. Welfare effects of monopoly. Perfect (or first-degree) price discrimination and two-part tariffs. Third degree price discrimination and market segmentation. Natural monopoly. **RHF** Ch. 12. **HRV** Chs. 24-25.

Week 2- Part II

2.3 Other Market Structures

Monopolistic/imperfect competition. Strategic interactions. Cartels and Duopoly (Cournot and Bertrand). **RHF** Ch. 13 (pp. 455-486), Ch. 13A (pp. 492-502). **HRV** Ch. 27.

2.4 Labor Market

Labor demand: (1) competitive firms vs monopolist (2) SR vs. LR (3) firm demand vs. industry demand. Labor supply: optimal leisure/income choice. Unemployment and Minimum wages. **RHF** Ch. 14 (pp. 513– 27, 531-536). **HRV** Ch. 26.

Week 3

3:1 Economics of Time

The rate of interest as a price. Intertemporal consumption optimum without production (pure exchange) and with production (investment). Separation Theorem. Investment decisions and net present value. Valuation of annuity paid in perpetuity (forestry). Real and money rates of interest. **RHF** Ch. 5 (pp. 168-177), Ch. 15 (pp. 561– 573) **HRV** Ch. 10.

3:2 General Equilibrium I

Contract curve, offer curve, and pure exchange equilibrium in the Edgeworth Box. First Theorem of Welfare Economics. General equilibria under competition, simple monopoly, and perfectly discriminating monopoly. Exchange and production in a one-factor economy. **RHF** Ch. 16. **HRV** Chs. 30-31.

3.3 General Equilibrium II

Opening to international trade. Equity and efficiency: Second Theorem of Welfare Economics. Failure of assumptions underlying First Welfare Theorem: Market disequilibrium, monopoly, and externalities. **RHF** Ch. 16. **HRV** Chs. 31-32.

3.4 Market Failure and Government Intervention

Market Failures: Public goods and the free rider problem. Externalities. The Coase Theorem. Imperfect Competition. Asymmetric Information (Moral Hazard and Adverse Selection). Optimal Contracts: Incentives vs Risk **RHF** Ch. 17, Ch. 18 (653{663), Ch. 6 (pp. 198{205) **HRV** Chs. 33, 35-36.

Credit Transfer: If you are hoping to earn credit by taking this course, please ensure that you confirm it is eligible for credit transfer well in advance of the start date. Please discuss this directly with your home institution or Study Abroad Advisor.

As a guide, our LSE Summer School courses are typically eligible for three credits within the US system and 7.5 ECTS in Europe. Different institutions and countries can, and will, vary. You will receive a digital transcript and a printed certificate following your successful completion of the course in order to make arrangements for transfer of credit.

If you have any queries, please direct them to summer.school@lse.ac.uk