**Microeconomics II. (KGIB3)**

**ELTECON-BA**

***Department:*** ELTE Social Sciences faculty, department of Economics (ELTEcon) Departmental administration: Lágymányos Northern Block 3.59)

***Instructor:*** Daniel Horn (horn@econ.core.hu), Lágymányos Northern Block 3.51

***Number of credits:*** 6

***Type of course***: mandatory

***Weekly classes:*** 0+4 (lecture+seminar)

***Prerequisites:*** Microeconomic I. (KGIB1), Probability theory and statistics (KGIA4), Mathematics for economists (KGIA3)

***Readings:***

* Book: Jack Hirshleifer, Amihai Glazer, David Hirshleifer (2005): Price theory and applications. 7th edition, Cambridge University press, chapters 1–8, 12. and 13. (henceforth Hirshleifer)
* Task book: Berde Éva (ed.) (2009) Mikroökonómiai és piacelméleti feladatgyűjtemény. Budapest: TOKK
* Recommended reading and task books:
	+ Hal R. Varian: Intermediate Microeconomics (1999). W. W. Norton & Company; 5th edition
	+ Theodore Bergstrom, Hal R. Varian (2010) Workouts in Intermediate Microeconomics, W. W. Norton & Company; 8th ediction
	+ Berde Éva, Petró Katalin: Mikroökonómia példatár. Budapest: Aula (1995)

***Course content:***

**1. week:**

**1. class:** *Introduction*

Recapping microeconomic I. Introduction and placing micro II in the big picture.

**2. class:** **:** *Demand for factor services and distribution of income IV.*

Conjunction and monopolies on the factor market. Welfare analysis and case study (agricultural buyout). Functional income distribution. Orthodox approach: capital, land and labor (similarities and differences). Rates of return to capital, interest rate and endowment. (Hirshleifer ch. 13.)

**2. week:**

**1. class:** *General equilibrium I.*

General equilibrium in a pure exchange economy. Essence of the general equilibrium approach and tools for analysis. Introduction of the Edgeworth box. Mutually beneficial transactions and the contract curve. Budget constraints and conditions of the competitive equilibrium. (Hirshleifer ch. 14. except 14.6)

**2. class:** *General equilibrium II.*

Compatitive equilibrium and competitive mechanisms. Problem of the existence and uniqueness of the equilibrium. Stocks and the net demand and supply. Model of exchange economy with production. Notion and mathematical representation of the production frontier. The “Robinson Crusoe economy”. Optimal consumption and production in a one person economy. Separating the consumption and production decisions. (Hirshleifer ch. 14. except 14.6)

**3. week**:

**1. class:** *General equilibrium III.*

Equilibrium with more goods and more actors. Division of labor in competitive equilibrium. Benefits of competition and welfare analysis. Problem of the existence and uniqueness of the equilibrium in a multiple-good, multiple-actor economy. (Hirshleifer ch. 14. except 14.6)

**2. class:** *General equilibrium IV.*

Imperfect markets. Transaction costs, costs of exchange. Tpyes of transction costs and consequences. Welfare analysis. Microeconomic understanding of money. Money as the tool of exchange. Money as value preserver. Application: auction theory. (Hirshleifer ch. 14. except 14.6)

**4. week**:

**1. class:** *Economics of time* *I.*

Consumption today and tomorrow. Definition of the composite good using time. Present value, future value and intertemporal budget constraint, Intertemporal consumption with pure exchange with two and mode time points. Notion of the intertemporal utility function. Intertemporal optimum. Microeconomic analysis of lending and borrowing with perfect and imperfect markets. Application: taxing consumption, income or savings. (Hirshleifer ch. 15.)

**2. class:** *Economics of time* *II.*

Intertemporal decision with production and supply. Microeconomic analysis of savings and investments. General equilibrium with intertemporal decision. Investment decisions and project analysis. Separation theorem of production and consumption decisions. Rules based on present value. Rules based on rates of return. Real interest, nominal interest rate and inflation. Problem of more interest rates and choosing the discount rate. About investment, savings and interest rates. Application. social security and pensions. (Hirshleifer ch. 15.)

**5. week**:

**1. class:** *Economics of risk and information I.*

Decision with uncertainty. Dealing with uncertainty. Notions of expected gain and expected utility. Microeconomic model of insurance. Insurance markets. (Hirshleifer ch. 11.)

**2. class:** *Economics of risk and information II.*

Value of information. Problems of models, different approaches. Information asymmetry and models for it. Adverse selection and market for lemons. (Hirshleifer ch. 11.)

**6. week**:

**1. class: :** *Economics of risk and information III.*

Actions against adverse selection: role of signals. Signals with prices and other services. Gaining information: peer pressure and information chain. Keeping information: copyright, patents, proprietary rights. Welfare analysis and applications. (drugs, software, copyrights) (Hirshleifer ch. 11.)

**2. class:** *Human capital management*

Microeconomic foundations of human capital management. Principal agent problem. Actions against information asymmetry: performance wages and signals. generalization: designing mechanisms. Applications: auctions. (Hirshleifer chs. 13. and 14.6)

**7. week:**

**1. class: :** *Market theory and marketing* *I.*

Market segmentation and different pricing possibilities. Pice discrimination. Welfare analysis. (Hirshleifer ch. 8.4)

**2. class:** *Market theory and marketing* *II.*

Cartels: Welfare analysis, competition policy. Case study. Network externalities: network effects, notion of “lock-in”, welfare effects, information technology. (Hirshleifer ch. 8.5-8.6)

**8. week**:

**1. class:** *Market theory and marketing III.*

Product quality and differentiation. Notion of product quality and modeling possibilities. Product quality with perfect equilibrium and monopoly. Link between prices and quality. Link between innovation and quality. (Hirshleifer ch. 9.)

**2. class:** *Market theory and marketing IV.*

Product quality and differentiation (cont.). Models of product differentiation. Product differentiation with pure monopoly. (Hirshleifer ch. 9.)

**9. week:**

**1. class:** *Market theory and marketing V.*

Models of monopolistic competition: representative consumption and location models. Applications: effects of advertisements, welfare analysis, case studies. (Hirshleifer ch. 9.)

**2. class:** *Market theory and marketing VI.*

Strategic action. Repeating notions within game theory through applications: conflict and strategic interaction, actors, simultaneous and sequential decisions, pure and mixed strategies, payments, normal and extensive form games, best-response function, notions of equilibrium and how to find them. Applications: prisoners dilemma, problem of the commons, market games, market offence and deterrence. (Hirshleifer ch. 10.)

**10. week**:

**1. class:** *Market theory and marketing VII.*

**Oligopolies and duopolies. Quantity and quality competition. Cournot and Bertrand models for homogeneous product.** (Hirshleifer ch. 10.)

**2. class:** *Market theory and marketing VIII.*

**Quantity and quality competition for differential products. Gaming under oligopolies. Welfare analysis, reference to competition policy. Applications, case studies.** (Hirshleifer ch. 10.)

**11. week:**

**1. class:** *Political economy I.*

Welfare economics. Different goals for political economy. Effectiveness and equality. Equlibrium analysis for different political ideologies. Tradeoff between effectiveness and equality. Decentralized resource allocation through prices: “invisible hand” and the competitive equilibrium. (Hirshleifer ch. 16.)

**2. class:** *Political economy II.*

Market failures. Market power and externalities. Property rights and the Coase theorem. Tragedy of the commons. (Hirshleifer ch. 16.)

**12. week**:

**1. class:** *Political economy III.*

Notion of public goods. Effective levels of allocating public goods. Free.-riding. Rent seeking and welfare effects. (Hirshleifer ch. 16.)

**2. class:** *Political economy IV.*

Politics with the economist’s eye. Political competition and government failures. Interest groups, alternative interests, and economics of corruption. (Hirshleifer ch. 17.)

**13. week**:

**1. class:** *Political economy V.*

Voting as means of enforcing interest, and means of accountability. The Condorcet paradox. The Median-voter theory. Conflict and cooperation. Sympathy and antipathy in the utility function. Game theoretical approach. Applications: public procurement, national security, ransom. (Hirshleifer ch. 17.)

**2. class:** *Summing up.*