Microeconomics–2

Lecturer: Alla A. Friedman
Class teacher: Alla A. Friedman

Course description

Microeconomics-2 is a two-semester course for third year students divided into two parts. The first part covers all topics of the syllabus and the second part is devoted to supporting lectures. In the course of Microeconomics-3 students are expected to deepen their understanding of basic concepts, add further tools of analysis and develop their skills in applying theory to economic problems. The course pays special attention to problems of uncertainty, inter-temporal choice, general equilibrium and efficiency, asymmetric information and public choice.

The assessment of the students will be by the University of London (UL) examinations at the end of the sixth semester. During the sixth semester students are specially prepared to the University of London examination in the course of supporting classes.

Intermediate Microeconomics is a core discipline under world standards. It forms the basis of further economic studies in applied disciplines such as: courses in industrial organisation, public finance, labour economics, international economics, corporate finance, development economics, etc. The course is taught in English. The students are also studying for Russian degree in Economics, and knowing Russian terminology through reading in Russian is also required.

Prerequisites

Students are supposed to be competent in basic economic analysis up to the level of the Introductory Microeconomics and in calculus taught in the first year of studies. Students are also expected to be familiar with constrained maximisation/minimisation problems studied in the course of Mathematics for Economists during the second year of study.

The course itself provides a basis (and so serve as a prerequisite) for such courses as Industrial Economics, Public Sector Economics, International Trade, Labour Economics.

Teaching objectives

The objectives of the course are:

- to expand the students' knowledge in the field of microeconomics and to make them ready to analyze real economic situations;

- to provide students with the knowledge of basic microeconomic models' assumptions, internal logic and predictions, grounding the explanations on intuitive, graphical and analytical approaches;

- to develop the students' ability to apply the knowledge acquired to the analysis of specific economic cases, recognising the proper framework of analysis and constructing the adequate economic models within this framework.

By the end of the course students are expected to have necessary skills for writing essays and reading economic literature.

Assessment

Control takes the following forms:

- written home assignments (10);
- essay (2000 words);
- midterm exam in the middle of fall semester (120 min.),
- mock exam (180 min) in the University of London examination format in the middle of the spring semester;
- written exam (120 min) at the end of the fall semester,
- University of London exam by the end of the spring semester (180 min).

Grade determination

The Fall semester will be determined from the following activities:

- home assignments (15%);
- Fall semester midterm exam (20%);
- essay (5%);
- fall exam (60%).

Course grade is determined by

- University of London exam grade (50%)
- Fall term grade (35%),
- Mock exam grade (15%).

Main reading

1. Microeconomics. Study Guide. University of London, 2003. http://www.londonexternal.ac.uk/current_students/programme_resources/lse/index.shtml

2. Katz M.L. and Rosen M.S., Microeconomics, Homewood, Irwin, 3rd edition, Irwin/McGraw-Hill, 1998 is available in Russian translation. [KR] http://catalogs.mhhe.com/mhhe/viewProductDetails.do?isbn=0256171769 http://www.wwnorton.com/college/titles/econ/hal7/ (is available in Russian translation: Хэл Р.Вэриан. Микроэкономика. Промежуточный уровень. Современный подход. Пер. с англ. 4-ого изд. — М.: "ЮНИТИ", 1997.)

3. Pindyck R.S. and Rubinfeld D.L., Microeconomics. 2nd edition, New York, Macmillan, 1992. [PR] (is available in Russian translation: Р.С.Пиндайк и Д.Л.Рубинфельд, Микроэкономика. Пер. с англ. 3–ого изд. – М.: "Дело", 2000.)

4. Eaton B. C., Eaton D.F., Allen D.W., Microeconomics, 6th edition, Toronto: Prentice Hall/Pearson, 2005. (EE&A)

5. Laidler D., S. Estrin, Introduction to Microeconomics, London:Pearson, 1995, fifth edition. (L&E)

Additional reading

1. Hirshleifer Y. And Glazer A., Price Theory and Applications, 5th edition, London, Prentice-Hall International, 1992.

2. Varian H.R., Intermediate Microeconomics. A modern approach. 7th edition. W.W. Norton and Company, 2006. [V]

3. Nicholson W., Microeconomic Theory. Basic principles and extensions. 7th edition, Dryden Press, 1997.

4. Gravelle H. and Rees R., Microeconomics. 2nd edition, Longman, 1992.

5. F.A. Cowell Microeconomics: Principles and Analysis, Oxford University Press 2005. Учебник доступен по адресу: http://darp.lse.ac.uk/Frankweb/courses/EC202 (раздел Lecture notes)

Articles

On consumer theory:

1. Chipman J. and J. Moore, Compensating variation, consumer's surplus and welfare, American Economic Review, 70, 933–948, 1980.

2. Deaton A., and J.Muellbauer, Economics and Consumer Behavior, Cambridge University Press, 1980.

3. Hausman J., Exact consumer surplus and deadweight loss, American Economic Review, 71, 662–676, 1981.

4. M.Richter, Revealed preference theory, Econometrica, 34, 635–645, 1966.

5. Vives X., Small income effects: A Marshallian theory of consumer surplus and downward sloping demand. Review of Economic Studies, 54, 87–103, 1987.

On the theory of firm:

1. A.Alchian, H.Demsetz (1972), "Production, Information costs and economic organization", American Economic Review, 62, 777–795

2. G.Calvo and S.Wellisz (1978), Supervision, Loss of Control, and the Optimal Size of the Firm, Journal of Political Economy, 86, 943–952.

3. R.H. Coase, The nature of the firm, стр. 37–57 в S. Estrin, A. Marin, Essential Readings in Economics, 1995.

Choice under uncertainty:

1. Machina M., Choice under uncertainty: problems solved and unsolved. The Journal of Perspectives, 1, 121–154, 1987.

2. Pratt J., Risk aversion in the small and in the large, Econometrica, 32, 122–136, 1964.

3. Rothschild M., J.Stiglitz, Increasing risk I: A definition, Journal of Economic Theory, 2, 225–243, 1970.

Market structures:

1. Adams W. and J.Yellen, Commodity Bundling and the Burden of Monopoly, Quarterly Journal of Economics, Vol.90, 1976.

2. Baron D., R. Myerson, Regulating a Monopolist with Unknown Costs, Econometrica, 50, pp.911–930, 1983.

3. A.Bergson (1973), "On monopoly welfare losses", American Economic Review, 63, 853–870.

4. K.Cowling, D.Mueller (1978), "The Social costs of monopoly power", Economic Journal, 88, 724–748

5. Encaoua D. and A. Jacquemin, Degree of Monopoly, Indices of Concentration and Threat of Entry, International Economic Review, 21, 1980.
6. Green E. and R. Porter, Non–cooperative Collusion under Imperfect Price Information, Econometrica 52, 1984.
7. Harberger, Monopoly and resource allocation, стр. 77–91 S. Estrin, A. Marin, Essential Readings in Economics, 1995.
8. Lambson V., Self–Enforcing Collusion in Large Dynamic Markets, Journal of Economic Theory, 34, 1984
9. Lerner, The concept of monopoly and the measurement of monopoly power, стр.55–77 S. Estrin, A. Marin, Essential Readings in Economics, 1995.
10. Katz.M, The welfare effects of third degree price discrimination in intermediate goods markets, American Economic Review, 77, pp. 154–167, 1987.
11. Kreps D., J. Scheinkman, Quantity Precommitment and Bertrand Competition Yield Cournot Outcomes, Bell Journal of Economics, 14, pp.326–337, 1983.
12. Rotemberg J. and G. Saloner, Collusive Price Leadership, Journal of Industrial Economics, 1990
13. Spence, M. "Product differentiation and welfare", American Economic Review, 66, pp. 407–414, 1976.
14. J. Vickers. Strategic Competition among the few–some recent development in the economics of Industry, стр. 91–129 S. Estrin, A. Marin, Essential Readings in Economics, 1995.

Market failures:

1. Akerlof G., The market for lemons: Quality uncertainty and the market mechanism, Quarterly Journal of Economics, 89, 488–500, 1970.
2. Coase R., The problem of social cost, Journal of Law and Economics, 3, 1–44, 1960.
3. Spence, M. "Job Market Signaling", Quarterly Journal of Economics, 87, pp. 355–374, 1973.
4. Rothschild, M. and Stiglitz, J. E. "Equilibrium in competitive insurance markets; An essay on the economics of imperfect information." Quarterly Journal of Economics, 1976. Vol.90.Nov., pp.629–649.

Internet resources and databases

- University of London Exam papers and Examiners reports for the last three years:
  `http://www.londonexternal.ac.uk/current_students/programme_resources/lse/index.shtml`

- Current course materials are post at the ICEF information system:
  `http://mief.hse.ru`

- Teaching materials for the LSE course Microeconomics EC202:
  `http://darp.lse.ac.uk/Frankweb/courses/EC202/default.htm`

- Students' resources to accompany Pindyck R.S. and Rubinfeld D.L., Microeconomics. 7th edition, Pearson Higher Education, 2009:
  `http://wps.prenhall.com/bp_pindyck_micro_7/`

- Students' resources to accompany Eaton B. C., Eaton D.F., Allen D.W., Microeconomics, 7th edition, 2009: `http://wps.prenhall.com/ca_ph_eaton_microecon_6/`

Course outline

Individual choice under certainty and uncertainty

1. Consumer Behaviour Under Certainty

Assumptions underlying indifference curves. Budget constraints (including cases of kinked budget constraints). Composite commodity. Optimal choice (interior and corner solutions). Utility maximisation and expenditure minimisation problems. Marshallian and Hicksian (compensated) demand functions. Slutsky equation for the case of in-kined income. Sign of wealth effect. Application: The individual's supply of labour. Comparison of overtime premium with an increase in the basic wage rate. Measuring changes in consumer welfare. Compensating variation, equivalent variation and consumer surplus: definitions and graphical representation. Relationships between the three measures for different types of commodities (normal and inferior goods). Change in the cost of living and price indexes: Laspeyres and Paasche.

(KR Chs.2–5; V Chs.2–9,14; EE&A Chs.2–4; PR Chs.3,4; L&E Chs.2–5)

2. Choice Under Uncertainty

Contingent commodities model. States of nature, concept of contingent commodities, budget constraint with contingent commodities (slope and position). Probability of a given state of the world, expected value and fair odds line. Attitude to risk and preferences over contingent commodities. Certainty line and marginal rate of substitution along the certainty line. Graphical representation of the model. Example: optimal bet in a flipping-coin game (case of fair and unfair game). Application of the model: demand for insurance (fair and unfair insurance).

Expected utility model: additional assumptions that allow to get utility function linear in probabilities (von Neumann-Morgenstern expected utility function). Attitude to risk and shape of the Bernoully utility function. Application 1: optimal portfolio problem in terms of maximisation of expected utility of investor. Necessary condition for diversification. Application 2: reinterpretation of insurance problem in terms of expected utility. Application 3: cost of additional information.

(KR. Ch.6; EE&A. Ch.17; PR. Ch.5; L&E Ch.8)

3. The Firm

Objectives of the firm: principal-agent problem (contradiction between the objectives of owners and managers). Possible solutions: internal mechanisms (corporate governance scheme, performance-based compensation scheme), external mechanisms (discipline from capital suppliers, market for corporate control, highlly competitive product market). Review: cost functions, cost curves and relationship between different cost curves.

(KR Chs. 7–9; EE&A Chs. 6–7; PR Chs. 6, 7; L&E Chs. 10–12, 24)

Partial equilibrium

4. Competition and Monopoly

Perfect competition when firms have identical costs: constant cost, increasing cost and decreasing cost industries. Perfect competition when firms have different costs. Benefits of exchange in a competitive market and the effects of government policies: total surplus and deadweight losses.

Inefficiency of pure monopoly: dead weight losses and losses from rent seeking activity. Different types of monopoly power and regulatory responses: government franchise monopoly, resource-based monopoly, patent monopoly, natural monopoly and monopoly by good management. Average cost pricing, rate of return regulation. Efficient regulatory solutions: regulation based on information about marginal cost and demand (per unit subsidy) and regulation, based on information about market demand only (subsidy, equal to consumer surplus).

Welfare implications of perfect price discrimination, multi-part pricing and market segmentation. Welfare implications of market segmentation in case of linear demand functions.

(EE&A Chs. 8–10; 14, PR Chs. 8–11; KR Chs. 10–11, 23–24; L&E Chs. 13–16)

5. Strategic Behavior and Oligopoly

Refinement of Nash equilibrium: concept of sub-game perfect Nash equilibrium (extensive form of the game and backward induction). Prisoners' dilemma in Cournot Model and Bertrand Model. Possible solution of Prisoners' dilemma in infinitely repeated games with Nash reversion strategies, Credible punishment. The Stackelberg Model: first mover advantage.

Entry, market structure and Strategic Entry Deterrence. Credible threat, strategic pre-commitment and monopoly by good management.

Product differentiation. Chamberlin models (small-number case and large-number case). Problem of optimality of the product variety in monopolistically competitive industry. Address models: Hotelling location model and the idea of the circle city model.

(EE&A Chs. 15–16; PR Chs. 12–13; KR Ch. 14–16; L&E Chs. 17–19)

6. Factor Markets

Relationship between firm's and aggregate demand for factor of production. The elasticity of demand for product and elasticity of demand for a factor. Short-run and long-run elasticity of demand for a factor. Absence of Giffen factor. Elasticity of demand for a factor and elasticity of supply of other factors. The supply of factors and equilibrium in a competitive factor market: economic rent, transfer earnings and quasi-rent. Monopsony and monopoly in factor markets.

(EE&A Ch. 11; PR Ch. 14; KR Chs. 10–11, 14; L&E Chs. 21–25)

7. Saving, Investment and Allocation over Time

Intertemporal consumption and production: current and future consumption, rate of time preference.

Investment decisions and the present value rule. Separation theorem.

Renewable and non-renewable resources: equilibrium extraction paths.

Determinants of interest rate: default risk, risk variability; nondiversifiable (systematic) and diversifiable (nonsystematic) risk.

(EE&A Ch. 5; PR Ch. 15; KR Ch. 5; L&E Chs. 6–7)

General equilibrium, efficiency and market failures

8. General Equilibrium and Welfare Economics

Competitive general equilibrium. Pareto efficient allocation of resources: efficiency in consumption, efficiency in production, efficiency in product mix (analytical derivation and graphical representation of conditions). Pareto efficiency and competitive general equilibrium. First fundamental theorem of welfare economics. Proof based on the first order conditions. Second fundamental theorem of welfare economics. Market failure and theory of second-best.

General equilibrium under uncertainty: Arrow Debreu equilibrium in a model with contingent commodities.

Equity and distribution: utility possibility curve, social welfare function (additive function and maximin criterion). Redistributionist principle and productivity principle.

(EE&A Chs.12–13; PR Ch.16; KR Ch.12; L&E Chs.27–32)

9. 1.Asymmetric Information: Basic Ideas

Classification of the models: situation with hidden characteristics and situation of hidden action.

Adverse selection problem. Examples: market for lemons, labour market with workers of different productivity, insurance market with buyers characterised by different risk of accident. Possible responses of informed side of the market: market signaling (brand reputation, guarantees, acquiring education). Possible responses of uninformed side of the market: screening via designing self selective menu of contracts, group insurance plan, government intervention in form of setting quality standards, compulsory insurance, mandatory disclosure of certain facts.

Moral hazard problem. Examples: insurance market, principal-agent problem in labour market (shirking model). Possible responses: co-insurance and deductibles, residual claimants schemes.

(EE&A Ch. 20; PR Ch. 17; KR Ch. 17; L&E Chs. 8, 26)

10. Externalities and Public Goods

Externalities: positive and negative. Inefficient allocation of resources in presence of positive and negative externalities. Regulatory solutions: direct control, assignment of property rights, marketable pollution permits, bargaining (Coase theorem), internalization, Pigouvian taxes/subsidies. Comparison of the solutions. Problems with bargaining: free-rider and hold-out problems.

Public goods, non-rival and non-excludable goods. Efficiency condition in presence of public goods (Samuelson equation). Equilibrium with non-cooperative financing of public good: free-rider problem. Possible solution: personalised Lindahl prices.

(EE&A Ch. 18; PR Ch. 18; K&R Ch. 18; L&E Ch. 31)

11. Government and Public Choice

Preferences, voting and decisions. Unanimity rule. Majority voting rule, voting paradox. Single-peaked preferences and median voter theorem. Laffer curve and analysis of income distribution policies. Special interest group politics: rent seeking.

(L&E Chs. 33–35)

Distribution of hours

#	Topic	Total hours	Contact hours		Self study
			Lectures	Seminars	
Individual choice under certainty and uncertainty					
1.	Individual Behaviour Under Certainty	26	6	4	16
2.	Choice Under Uncertainty	26	6	4	16
3.	The Firm	22	4	2	16
Partial equilibrium					
4.	Competition and Monopoly	24	4	4	16
5.	Strategic Behavior and Oligopoly	27	6	5	16
6.	Factor Markets	22	4	2	16
7.	Saving, Investment and Allocation over Time	20	2	2	16
General equilibrium, efficiency and market failures					
8.	General Equilibrium and Welfare Economics	26	6	4	16
9.	Asymmetric Information: Basic Ideas	31	6	5	20
10.	Externalities and Public Goods	24	4	2	18
11.	Government and Public Choice	22	4	2	16
	Total:	270	52	36	182