The International College of Economics and Finance
Syllabus for Microeconomics, year 3, 2017-2018

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-2 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.

Intermediate Microeconomics is a core discipline under world standards. It forms the basis of further economic studies in applied disciplines such as: industrial organisation, public sector economics, 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.

Course 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 optimisation studied in the course of Mathematics for Economists during the second year.

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

Course 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.

Forms of control and grades determination

Control takes the following forms:

⇒ written home assignments;

⇒ essay;

⇒ mid-term test in the middle of Fall semester,

⇒ mid-term test (in the University of London examination format) in the middle of the Spring semester;

⇒ written exam at the end of the Fall semester,

⇒ written exam by the end of the Spring semester,

⇒ University of London exam by the end of the Spring semester.

The Fall semester grade will be determined by the following activities:

⇒ Home assignments (35%);
⇒ Fall semester midterm test (15%);
⇒ written exam at the end of the Fall semester (50%).

Course grade is determined by

⇒ Spring term exam grade (50%) [University of London exam grade for the students studying the course for both Internal and International degrees; Internal exam for the students studying the course for Internal degree only]
⇒ Fall semester grade (25%),
⇒ Essay (5%);
⇒ Spring mid-term test grade (20%).

Literature

Main Reading

1. Microeconomics. Subject Guide. University of London, 2016. (available online via VLE system https://my.londoninternational.ac.uk)

2. Nicholson, W. and C. Snyder Intermediate Microeconomics and its Application. (Cengage Learning, 2015) 12th edition [ISBN 9781133189039]. (Henceforth: N&S) *Since many students are working with the 11th edition we also provide references to the 11th edition.)*

Supplementary Reading

Textbooks

Besanko, D. and R. Braeutigam Microeconomics. (John Wiley & Sons, 2014) 5th edition, international student version [ISBN 9781118716380].

Morgan W, Katz M.L. and Rosen H.S., Microeconomics, Boston, Irwin/McGraw-Hill, 2009.
Perloff, J.M. Microeconomics: theory and applications with calculus. Pearson, Prentice Hall, 2011.
Pindyck R.S. and Rubinfeld D.L., Microeconomics. 7th edition, Pearson Higher Education, 2009. (available in Russian translation: Р.С.Пиндайк и Д.Л.Рубинфельд, Микроэкономика. Пер. с англ. 3-ого изд. - М.: “Дело”, 2000.)

Varian H.R., Intermediate Microeconomics. A modern approach. 8th edition. W.W. Norton and Company, 2011 (available in Russian translation: Хэл Р.Вэриан. Микроэкономика. Промежуточный уровень. Современный подход. Пер. с англ. 4-ого изд. - М.: “ЮНИТИ”, 1997.)

More advanced texts

Gravelle H. and Rees R., Microeconomics. 3rd edition, Financial Time Press, 2004.

F.A.Cowell Microeconomics: Principles and Analysis, Oxford University Press 2005. http://darp.lse.ac.uk/Frankweb/courses/EC202 (available in Russian translation: Фрэнк Коуэлл. Микроэкономика. Принципы и анализ. Пер. с англ. М.: “Дело”, 2011.)

Books and papers:

On consumer theory

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

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

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

A.Alchian, H.Demsetz, Production, Information costs and economic organization, American Economic Review, 62, 777-795, 1972.

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

R.H. Coase, The nature of the firm, pp. 37-57 in S. Estrin, A. Marin, Essential Readings in Economics, 1995.

Choice under uncertainty

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

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

Market structures

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

Averch H., L.Johnson, Behaviour of the firm under regulatory constraint, *American Economic Review*, Vol.52, N5, pp.1052-1069, 1962.

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

Harberger, Monopoly and resource allocation, pp. 77-91 in S. Estrin, A.Marin, Essential Readings in Economics, 1995.

Loeb M., W.Magat, A decentralized method for utility regulation, *Journal of Law and Economics*, Vol.22, N2, pp.399-404, 1979.

Market failures

Akerlof G., The market for lemons: Quality uncertainty and the market mechanism, Quarterly Journal of Economics, 89, 488-500, 1970.

Coase R., The problem of social cost, Journal of Law and Economics, 3, 1-44, 1960.

Spence, M. -Job Market Signaling-, Quarterly Journal of Economics, 87, pp. 355-374, 1973.

Shapiro, C. and Stiglitz, J. (1984), "Equilibrium unemployment as a worker discipline device," American Economic Review, June 1984

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. pp.629-649.

Seminal papers (bonus)

Hayek, F. (1945). The Use of Knowledge in Society. *The American Economic Review, 35*(4), 519-530.
Nash, John (1950) "Equilibrium points in n-person games" *Proceedings of the National Academy of Sciences* 36(1):48-49.
Samuelson, P. (1954). The Pure Theory of Public Expenditure. *The Review of Economics and Statistics, 36*(4), 387-389.

Internet resources

University of London Exam papers and Examiners reports, subject quide, video tutorials and other UOL materials are posted at VLE system http://my.londoninternational.ac.uk

Current course materials are posted at the ICEF information system http://icef-info.hse.ru/

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

Students' resources to accompany Perloff, J.M. Microeconomics: theory and applications with calculus. Pearson, Prentice Hall, 2011. http://wps.aw.com/aw_perloff_microcalc_2/

Course outline

Part I. Individual choice under certainty and uncertainty

1. Consumer Behaviour Under Certainty

Assumptions underlying preferences and utility. Indifference curves. Budget constraints (including cases of kinked budget constraints). Composite commodity. Optimal choice (interior and corner solutions). Utility maximisation problem. Marshallian and Hicksian (compensated) demand functions. The individual's supply of labour. Measuring changes in consumer's welfare. Compensating variation, equivalent variation and consumer surplus: definitions and graphical representation. Slutsky equation. Sign of wealth effect.

(N&S 12th and 11th edition Chs.2-3,Appendix to ch. 13).

2. Intertemporal Choice

Intertemporal budget constraint. Intertemporal preferences. Saving and borrowing. Comparative statics. Discounting. Present value concept and its application to investment choice.

(N&S 12th edition: Chs. 14.1, 14.2, 14.5, Appendix 14A: A14-3, A14-4)

(N&S 11th edition: Chapter 14: Sections `Time Periods and the Flow of Economic Transactions,' `Individual Savings: The Supply of Loans,' and `Present Discounted Value,' and from Appendix 14A: sections `Present Discounted Value' and `Discounting Payment Streams')

3. Choice Under Uncertainty

Expected utility model (von Neumann-Morgenstern expected utility function). Certainty Equivalent. Attitude to risk and shape of the Bernoully utility function. Measure of Risk Aversion. Applications (optimal portfolio problem, demand for insurance, value of additional information).

(N&S 12th edition: chs. 4.1, 4.2 and 4.3, Perloff secton 16.2)

(N&S 11th edition: Chapter 4: Section `Probability and Expected Value' Chapter 4: Section `Risk Aversion' ,Chapter 4: Section `Methods for Reducing Risk and Uncertainty')

Part II Production and Competition

4. Production, costs and profit Maximisation

Production function, Marginal and average product, Short run versus long run, cost functions, returns to scale, cost curves, their properties and relationship between different cost curves. Profit Maximisation

(N&S 12th edition Chs. 6 and 7, Sections 8.1 and 8.2, and Sections 13.1 and 13.2.)

(N&S 11th edition: Chs 6,7; Ch. 8: Sections `The Nature of Firms,' `Profit Maximization'; Chapter 13: Sections `Marginal Productivity Theory of Input Demand,' `Responses to Changes in Input Prices')

5. Competition

Supply Decision by price taking firms, the industry supply curve, entry and exist of firms, Benefits of exchange in a competitive market and the effects of government policies: total surplus and deadweight losses.

(N&S 12th editon: Chs. 8.5 and 9)

(N&S 11th edition: Ch.8: Section `Supply Decisions of a Price-Taking Firm' and Ch. 9)

Part III. General equilibrium

6. General Equilibrium and Welfare Economics

Competitive general equilibrium. Edgeworth Box. Equilbrium in exchange economy. Pareto efficient allocation of resources: efficiency in consumption, efficiency in production, efficiency in product mix. 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.

(N&S 12th edition: Chs. 10.1-10.7 and Perloff Ch. 10)

(N&S 11th edition: Ch. 10: Section `A Perfectly Competitive Price System' through to section `The Edgeworth Box Diagram for Exchange' (pp.345–65 and Perloff Ch. 10)

Part IV. Imperfect competition and efficiency

7. Monopoly

Profit Maximisation for monopolies. Inefficiency of pure monopoly: dead weight losses and losses from rent seeking activity. Regulatory responses to monopoly

Welfare implications of perfect price discrimination, multi-part pricing and market segmentation. Natural Monopoly.

(N&S 12th edition: Chs.8.3, 8.4 and 11 and Perloff 12.4, 12.5)
(N&S 11th edition: Ch. 8: Sections `Marginal Revenue' and `Marginal Revenue Curve,' Ch. 11 and Perloff 12.4, 12.5)

8. Strategic Behaviour and Oligopoly

Static games. Solution concepts: dominant strategies equilibrium, Nash equilibrium (pure and mixed strategies). Dynamic games. Backward induction and Subgame perfect Nash equilibrium. Folk Theorem.

Cournot model. Bertrand model. Product differentiation. Collusion. The Stackelberg model: first mover advantage.

Repeated games. Collusion: credible punishment. Market structure and collusion.

(N&S 12th edition: Ch. 5 for Game Theory and 12.1-12.5 for oligopoly)

(N&S 11th edition: Ch. 5 for Game Theory and Ch.12: Section `Overview: Pricing of Homogeneous Goods' through to section `Entry and Exit.)

Part V. Market failure and efficiency

9. Asymmetric Information: Basic Ideas

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

Adverse selection problem. Example: market for lemons. monopolist selling to different types Insurance. Possible responses: Deductible, market signalling (brand reputation, guarantees, acquiring education). Pooling Equilibria. Separating Equilibria

(N&S 12th edition: Ch. 15.3 to 15.5)

(N&S 11th edition: Ch. 15: Section `AS'(Adverse Selection) through to section `Signaling')

Moral hazard problem. Example: principal-agent problem in labour market (shirking model). Possible responses: performance-based compensation. Incentive compatibility and risk sharing.

(N&S 12th edition: Chs. 15.1, 15.2 and applications 15.1 to 15.3)

(N&S 11th edition: Ch: 15: Section `Principal-Agent Model' and `Moral Hazard: Manager's Private Information about Effort')

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. Commons Problem
(N&S 12th edition: Chs. 5.7, 16.1 to 16.6)

(N&S 11th editioin: Chs. 16: Section `Defining Externalities' through to section `Public Goods and Market Failure' (pp.566–87) and 5: Section `Continuous Actions')

Essay requirements

Each student is expected to write an essay in Microeconomics. This should be done as a group assignment. The groups are assigned by the lecturers.

Essay should be on one of the topics considered in the course. The group has to produce a case study that illustrates the model/models we looked at. This case study can not be copied from the books/papers.

The idea is to take the model (approach) presented in the course and illustrate how it can be applied. One of the examples is presented in chapter 6 of Morgan, Katz and Rosen's textbook, where tax evasion problem is analysed in the framework of contingent commodities model. All sources used have to be cited in the essay; otherwise it would be treated as a plagiarism.

The group is expected to write a short essay (about 1000 words), prepare a 5-10 minutes presentation and answer questions. Every member of the team (unless he/she officially refuses from participation and gets 0 for the essay) is expected to demonstrate his/her involvement in the project.

You may use additional materials as necessary but all these materials should be mentioned in references and handed in together with the essay.

Distribution of hours by topics and types of work

№	Topic	Total	Lectures	Classes	Selfstudy
	Part I. Individual choice under certainty and uncertainty				
1.	Individual Behaviour Under Certainty	32	7	5	20
2.	Intertemporal choice	15	3	2	10
3.	Choice Under Uncertainty	31	6	5	20
	Part II. Production and Competition				
4.	Production, costs and profis maximizaiton	22	4	3	15
5.	Competition	17	3	2	12
	Part III General Equilibrium				
6.	General Equilibrium and Welfare Economics	35	6	4	25
	Part VI. Imperfect Competition and Efficiency				
7.	Monopoly	21	4	2	15
8.	Strategic Behaviour and Oligopoly	38	8	5	25
	Part V Market failure and Efficiency				
9	Asymmetric Information: Basic Ideas	37	7	5	25
10.	Externalities and Public goods	22	4	3	15
	Total:	**270**	**52**	**36**	**182**