



Brest State Technical University

Брестский государственный технический
университет

Department of Management, Economics and
Finances

Economics

Instructor:

Natallia Chetyrbock (lectures)

Assistant Professor, Degree of a candidate of science in economic

Head of the Department of Management, Economics and Finances

Anna Kramarenko (practical classes),

Master of Economic sciences

Senior Lecturer, Department of Management, Economics and Finance

Course description:

Economics is one of the basic courses in economic background. This course focuses on the basic concepts, categories, methods, laws and models in Economics in order to create fundamentals of economic way of thinking, to teach how to use this knowledge for the solution of the problems of different kind and to develop self-reading skills. The course combines conceptual approach and wide use of analytical and graphical models which provides a complete view of economic interdependences and laws.

Course of economics include 2 parts:

1. Microeconomics.
2. Macroeconomics.

Microeconomics. The application of economic reasoning to the decisions of consumers and producers. Topics include opportunity cost, resource allocation, the price system, the organization of industry, market failures, distribution of income, public sector economics.

Macroeconomics. The contents of the Macroeconomics course cover the basic objectives of macroeconomics, and an understanding about basic macroeconomic indicators – gross national product, gross domestic product, and national income. Topics under discussion in this course include aggregate demand and supply, Keynesian and classic views on aggregate amounts.

Course Objectives

By the end of the semester, you should be able to understand:

1. Explain the economic behavior of households and individual firms
2. Apply the principles of supply and demand to determine prices and identify the factors that affect supply and demand
3. Consumer theory: How households make decisions in the face of scarcity and how these decisions vary in response to changes in the economic environment.
4. Firm theory: How firms make decisions in the face of scarcity and how these decisions vary in response to changes in the economic environment.
5. The organization of markets: Describe and distinguish between various forms of market structures. How perfectly competitive, monopolistic, monopolistically competitive, and oligopolistic markets are organized and the outcomes of these markets.
6. Questions and problems analyzed by macroeconomists; the measurements and models used; the concepts of macroeconomic analysis; the key data of macroeconomics: gross domestic product, the consumer price index, the unemployment rate.

Course Duration

Total – 42 hours:

Lectures – 16 hours

Practical classes – 24 hours

Students independent work – 2 hours

Syllabus

Lecture 1

Module 1

Economics as a science.

The subject of economics. Methodology. Economic models.

After studying this module, you should be able to answer the following questions:

1. What is economics about?
2. How should we study economics? What is the character of methodology of economics?
3. What specific problems and limitations might we encounter in studying economics?
4. What is meant by an economic theory and how economic theories are developed by building and testing economic models?
5. What is the difference between microeconomics and macroeconomics?

Module 2

Basic concepts of Economics.

Basic concepts of economics. The central economic problem is about scarcity and choice. Factors of production. Choice and opportunity cost.

After studying this module, you should be able to answer the following questions:

1. What is the central economic problem faced by all individuals and societies?
2. What are the three fundamental questions of economics?
3. Why is it essential for people to make economic decisions?
4. What is meant by 'opportunity cost'?

Lecture 2

Module 3

Demand and supply.

Demand and supply. Factors of demand. Supply and its factors. Demand curve and supply curve. Shortage or surplus. Demand and supply curve shifts. Individual and market demand. Income effect and substitution effect. Market equilibrium. Changes in the market equilibrium.

After studying this module, you should be able to answer the following questions:

1. What determines the amount that consumers buy of a product?
2. What determines how much producers supply of a product?
3. How are market prices determined and when they are likely to rise or fall?
4. How do markets respond to changes in demand or supply?

Lecture 3

Module 4

Elasticity of demand and supply.

Elasticity of demand. Price elasticity of demand. Income elasticity of demand. Cross-price elasticity of demand. Price elasticity of supply.

After studying this module, you should be able to answer the following questions:

1. What is the definition of elasticity?
2. What is the meaning and importance of:
 - a. price elasticity of demand?
 - b. income elasticity of demand?
 - c. price elasticity of supply?
3. What factors influence the size of these various elasticities?
4. How the cross-price elasticity of demand measures the responsiveness of demand for one good to changes in the price of another good

Lecture 4

Module 5

The Rational Consumer.

The utility of a consumer. Total utility and marginal utility. The principle of diminishing marginal utility. The optimal consumption bundle. Income and substitution effects.

After studying this module, you must to know:

1. How consumers choose to spend their income on goods and services.
2. Why consumers make choices by maximizing utility, a measure of satisfaction from consumption?
3. Why the principle of diminishing marginal utility applies to the consumption of most goods and services?
4. How to use marginal analysis to find the optimal consumption bundle.
5. What income and substitution effects are?

Lecture 5

Module 6

Behind the Supply Curve: Inputs and Costs.

The Theory of Production. Inputs and Output. Production function. A marginal product. There are diminishing returns to an input. Types of costs. A fixed input. A variable input. The total product curve. Operating revenue and profit. Principle of profit maximization

After studying this module, you must to know:

1. The importance of the firm's production function, the relationship between quantity of inputs and quantity of output.
2. Why production is often subject to diminishing returns to inputs.
3. The various types of costs a firm faces and how they generate the firm's marginal and average cost curves.
4. Why a firm's costs may differ in the short run versus the long run.
5. How the firm's technology of production can generate increasing returns to scale.

Lecture 6,7

Module 7

Types of Market Structure.

Market Structures. Perfect Competition. Monopoly. Monopolistic competition. Oligopoly.

After studying this module, you must to know:

1. What a perfectly competitive market is and the characteristics of a perfectly competitive industry.
2. How a price-taking producer determines its profit-maximizing quantity of output.
3. The significance of monopoly, where a single monopolist is the only producer of a good.
4. How a monopolist determines its profit-maximizing output and price.
5. The difference between monopoly and perfect competition, and the effects of that difference on society's welfare.
6. The meaning of monopolistic competition.
7. Why oligopolies and monopolistically competitive firms differentiate their products.
8. The meaning of oligopoly, and why it occurs.

Lecture 8

Module 8

The Science and Data of Macroeconomics.

Questions and problems analyzed by macroeconomists; the measurements and models used; the concepts of macroeconomic analysis; the key data of macroeconomics: gross domestic product, the consumer price index, the unemployment rate. Total production of goods and services; factors of production; the division of national income; the supply and demand for goods and services; equilibrium in the market for goods and services

After studying this module, you must to know:

1. Explain the difference between macroeconomics and microeconomics. How are these two fields related?
2. Why do economists build models?
3. What is a market-clearing model? When is it appropriate to assume that markets clear?
4. List the two things that GDP measures. How can GDP measure two things at once?
5. What does the consumer price index measure?

Teaching and learning methods

The course is organized as a combination of lectures, practical tasks (problem solving), individual work of student.

Week Number	Topics	Lecture (In-class hours)	Practice (In-class hours)
1.	Economics as a science	1	-
1.	Basic concepts of Economics	1	2
2.	Demand and supply	2	2
3.	Elasticity of demand and supply	2	4
4.	The Rational Consumer	2	4
5.	Behind the Supply Curve: Inputs and Costs	2	4
6.	Types of Market Structure (Market Structures. Perfect Competition. Monopoly.)	2	2

7.	Types of Market Structure (Monopolistic competition. Oligopoly.)	2	2
8.	The Science and Data of Macroeconomics.	2	4
Total hours		16	24

Grading Weight

Quizzes (Midterm in Practice class hours) 30%

Attendance/participation 20%

Final exam (Test) 50%

Total 100%

Basic Grading Scale

- ≥ 90%: 9

- ≥ 80%: 8,7

- ≥ 60%: 5,6

- ≥ 50%: 4

- < 50%: 1-3

List of literature

Part 1. Microeconomics

1. Pindyck R., Rubinfeld D., Microeconomics: International Edition. – 8 Ed.: Pearson Higher Ed USA, 2012
2. Krugman P., Wells R. Microeconomics. – 2 ed.: Palgrave, 2008
3. Begg, David K.H. Economics. – 4Rev.ed. London: The McGraw-Hill Companies, 1994.
4. Nicholson W. Microeconomic theory: Basic principles and extensions. 6th ed. Fort Worth, Tex., 1995.

Part 1. Macroeconomics

1. Mankiw, G. N. (2007). Macroeconomics, 6th edition. New York: Worth Publishers.