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Manual “Economic Theory” is addressed to college and university undergraduates majored in economics and management. It covers main aspects of economics starting from rational behavior of consumer, firm efficiency and ending with macroeconomic well-being, economic growth as well as foreign trade and foreign exchange policies.

Manual contains a comprehensive content, bibliography and recommended reading list at the end of each topic. Readers will find syllabus, learning program and assessment criteria.

Every single topic is supported with lecture and seminar questions and relevant vocabulary. Students will find examples of solved problems and cases. The manual presents plenty of learning material for individual and independent studying. For the purpose of convenience, the majority of tasks involve usage of Internet recourses, such as web sites of International Monetary Fund, Federal Reserve Bank, Central banks, Organization of Petroleum Exporting Countries, Ministry of Finance of Ukraine, National Statistical Office.

The manual ends with the description of evaluation criteria, test samples, examination problems and questions accompanied by variants of achievement test.

This manual could be recommended for students, young economists and everyone who is willing to develop or bring up to date their knowledge and skills in foundations of economics.

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Introduction

This manual is a guide to the basics of economic theory for bachelors specializing in international economic relations. The main purpose of the manual is to give general overview of economics as a science and course, to raise awareness in the most problematic issues of the economic theory at microeconomic, macroeconomic and international levels.

Manual “Economic Theory” contains plenty of tasks, problems and case studies, which all together are devoted to train cognitive, logical, analytical and communicative skills as well as to shape and develop economic mindset. All the tasks have been adapted to the curriculum of bachelors majored in international economic relations.

Aims and objectives of the course:

- gain knowledges in economic theory as a science;
- obtain skills of analysis of market economy;
- get the ability to discover patterns of economic development.

The **subject** of the course “Economic Theory” are economic categories, laws and concepts according to which economic system is functioning.

After the studying this course students **should be able to do** the following:

- use gained knowledge in solving problematic economic issues;
- make scientifically-based argumentation of various economic phenomenon;
- evaluate and measure firm’s profitability;
- analyze social and economic outcomes of governmental decisions.
- After the studying this course students **should know** the following:
- main categories of the course;
- methodology of economic science;
- patterns of modern trade and monetary relationships;
- features of recourse markets functioning;
- methods and tools of state regulation of the economy;
- basics of international economic relations.

This course is aimed at developing following **competencies:**

- ability to classify and prioritize society's economic needs;
- ability to define effective level of output;
- ability to discover main features and functions of markets;
- ability to predict outcomes of monopolism in economic systems;
- ability to disclose mechanisms of recourse markers, namely: labor, capital, land and real estate;
- ability to detect types of and sources of income in the economy and classify taxes;
- ability to define factors of macroeconomic growth and development;
- ability to evaluate effects of unemployment and inflation in the economy;
- ability to find main patterns of money market, financial and ban) king systems;
- ability to formulate foreign trade and foreign exchange policies.

This course is a good foundation for further studying of Macroeconomics, Microeconomics, Business Economics and International Economics.

Course descriprion

1	Identificator	3.7
2	Type of the course	**normative**
3	Prerequisites	Must have passed “Introduction to profession”
4	Trimester	1
5	Credits ECTS	4,00
6	Classes with lecturer	60 hours
7	Final control	two-hour written examination
8	Teaching methods	Lectures, practical.
9	At the end of the course and having completed the essential reading and activities students should be able to:	- use gained knowledge in solving problematic economic issues; - make scientifically-based argumentation of various economic phenomenon; - evaluate and measure firm’s profitability; - analyze social and economic outcomes of governmental decisions.
10	Course outline	Subject and functions of economics. The Infinity of needs and scarcity of resources. The choice and opportunity cost. Production and its effectiveness. Economic systems. Circulation of economic activity. Economics of household and enterprise. Economic behavior of consumers. Supply and demand and their interaction. Production costs and profit. Entrepreneurship and Enterprise. Competition. Types of market structures. Types of markets. Income and its distribution. Market Infrastructure. Money and banks. The role of government in a market economy. The national economy. Results of national production. Aggregate demand and aggregate supply. Macroeconomic equilibrium. Employment and unemployment. Inflation. International Economics International market and trade policies. Open economy.

11	Essential reading	1. Appleyard, Dennis R. International Economics/ Dennis R. Appleyard, Alfred J. Field. – New York: McGraw-Hill, 2001. – 752 c. 2. Babiy L. Economics: Coursebook/ L. Babiy. – K.: KROK University, 2006. – 90 c. 3. Mankiw, N.G. Economics / Mankiw, N.G., Taylor, M.P. - S.l. : South Western, 2008. – 830 p. 4. Кальченко С. В. Політична економія : навч. посіб. для студ. вищ. навч. закл. / С. В. Кальченко, І. О. Щебликіна, Д. Г. Легеза. – Сімф. : ДІАЙПІ, 2012. – 317 с. 5. Радіонова І. Ф. Макроекономічний аналіз національної економіки: навч. посіб. / І. Ф. Радіонова, В. І. Усик ; Держ. ВНЗ "Київ. нац. екон. ун-т ім. Вадима Гетьмана". – Кам'янець-Подільський : Аксіома, 2015. – 302 с. 6. Офіційний сайт Державної служби статистики України [Електронний ресурс]. – Режим доступу: http://www.ukrstat.gov.ua/
	Language	English

Course outline

Chapter 1. Basic concepts of Economics

Topic 1. Subject and functions of economics. The Infinity of needs and scarcity of resources

The definition of economics and the features of economic perspectives. The role of economic theory in economics. The distinction between microeconomics and macroeconomics, positive and normative economics. The categories of scarce recourses and the nature of the economizing problem.

Topic 2. The choice and opportunity cost. Production and its effectiveness

The notion of scarcity and choice, purposeful behavior, production possibilities analysis, increasing opportunity costs and economic growth. Capital and consumer goods. Land, Labor, Capital and Entrepreneurial ability as main factors of production.

Topic 3. Economic systems. Circulation of economic activity

The difference between a market system and a command system. The main characteristics of the market system. Decision of the market system what to produce, how to produce it and who obtains it. Adjustment of the market system to changes and promotion of progress. The mechanics of the circular flow model. The concept of invisible hand, money votes.

Chapter 2. Economics of household and enterprise.

Topic 4. Economic behavior of consumers

Total utility, marginal utility and the law of diminishing marginal utility. Rational choice and utility-maximizing rule. Budget lines, indifference curves and utility maximization.

Topic 5. Supply and demand and their interaction

Definition of demand and supply, factors affecting demand and supply, determination of market equilibrium. Normal and inferior goods, elastic and inelastic goods, cross-elasticity. Changes in demand and supply that affect equilibrium prices and quantities. Government-set prices and their influence on product surplus and deficit formation. Price ceiling and floor.

Topic 6. Production costs and profit

Economic costs include explicit and implicit costs, relationship of the law of diminishing returns and firm's short-run production costs. The distinction between fixed and variable costs and among total, average and marginal costs. The link between a firm's size and its average costs in the long run. Normal and economic profit.

Topic 7. Entrepreneurship and Enterprise

The essence of entrepreneurship, functions of enterprises. Types of companies. Legal types of companies. The role of management and marketing in business activity.

Topic 8. Competition. Types of market structures

Definition and types of competition. The names and main characteristics of the four basic market models. The conditions required for purely competitive markets. The characteristics of pure monopoly and its economic effects. Pricing of the monopolist on different markets. Features of monopolistic competition and oligopoly. The incentives and obstacles to collusion among oligopolists. The potential positive and negative effects of advertising.

Topic 9. Types of markets. Income and its distribution

The demand for recourse and significance of recourse pricing. Wage determination and labor market, trade unions. Rent, interest and profit. Time value of money, nominal and real interest rate. Description of income inequality and its sources. The Lorenz curve and Gini ratio. Equality versus efficiency. Poverty rate and noncash transfers.

Topic 10. Market Infrastructure

The notion and purposes of market infrastructure. Elements of market infrastructure. Main functions and mechanisms of activity of currency, commodity and stock exchanges, banks, insurance companies, investments funds, employment office.

Topic 11. Money and banks. The role of government in a market economy

Functions of money and components of money supply. The structure of banking system. Creation of money though the loans. Determination id equilibrium interest rate. The goals and tools of monetary policy. The purpose, tools and limitations of fiscal policy. The role of built-in stabilizers in modernization of business cycles. State budget and fiscal policy, financing of budget deficit. Size, composition and consequences of public debt.

Chapter 3. The national economy.

Topic 12. Results of national production

Definition and measurement of gross domestic product (GDP). The relationship among GDP, net domestic product, national income, personal income and disposable income. The nature and functions of GDP price index (deflator). The difference between nominal and real GDP. Some limitations on GDP measure.

Topic 13. Aggregate demand and aggregate supply. Macroeconomic equilibrium

Definition of Aggregated demand (AD) and Aggregated supply (AS) and the factors that cause them to change. How AD and AS determine economy's equilibrium price level and level of real GDP. How AD-AS model explains demand-pull inflation, cost-push inflation and recession.

Topic 14. Employment and unemployment

Definition of full employment, types of unemployment: structural, frictional and cyclical. The natural unemployment rate. Measurement of unemployment, economic costs of unemployment. GDP gap and Okun's law.

Topic 15. Inflation

The meaning and measurement of inflation. Consumer price index (CPI) and the structure of market basket, inflation rate. Types of inflation: demand-pull, cost-push inflation, deflation, redistribution effects of inflation.

Chapter 4. International Economics

Topic 16. International market and trade policies

The graphical model of comparative advantage, specialization and gains from trade. How difference between world and domestic prices prompt exports and imports. Economic effects of tariffs and quotas, arguments for and against protectionism.

Topic 17. Open economy

Definition and indicators of open and closed economy. The notion of balance of payment and its analysis. Balance on current account, trade deficit and surplus. Capital and financial account, currency intervention, official reserves. Types of exchange rates, notion and determinants of exchange rates.

Working program of the couse, plans of lectures and seminars (practicals), tasks for independent work

1. Thematic plan of the course

Average training time by chapters and topics for the students
of speciality 6.030503 “International Economics”, 1st year,
full-time education

Chapters and topics	Quantity of hours					
	Full-time students					
	Sum	including				
		Lec	Pr	Lab	Indiv	Indep
Chapter 1. Basic concepts of Economics	**14**	**4**	**4**	**-**	**-**	**6**
Topic 1. Subject and functions of economics. The Infinity of needs and scarcity of resources	4	1	1	-	-	2
Topic 2. The choice and opportunity cost. Production and its effectiveness	5	1	2	-	-	2
Topic 3. Economic systems. Circulation of economic activity	5	2	1	-	-	2
Chapter 2. Economics of household and enterprise	**41**	**12**	**13**	**-**	**-**	**16**
Topic 4. Economic behavior of consumers	6	2	2	-	-	2
Topic 5. Supply and demand and their interaction	6	2	2	-	-	2
Topic 6. Production costs and profit	4	1	1	-	-	2
Topic 7. Entrepreneurship and Enterprise	4	1	1	-	-	2
Topic 8. Competition. Types of market structures	6	2	2	-	-	2
Topic 9. Types of markets. Income and its distribution	5	1	2	-	-	2
Topic 10. Market Infrastructure	4	1	1	-	-	2
Topic 11. Money and banks. The role of government in a market economy	6	2	2	-	-	2
Chapter 3. The national economy	**21**	**8**	**5**	**-**	**-**	**8**
Topic 12. Results of national production	5	2	1	-	-	2
Topic 13. Aggregate demand and aggregate supply. Macroeconomic equilibrium	5	2	1	-	-	2
Topic 14. Employment and unemployment	5	2	1	-	-	2
Topic 15. Inflation	6	2	2	-	-	2

Chapter 4. International Economics	**14**	**4**	**2**	-	-	**8**
Topic 16. International market and trade policies	7	2	1	-	-	4
Topic 17. Open economy	7	2	1	-	-	4
Sub-Total	**90**	**28**	**24**	-	-	**38**
Examination	30			-	-	
Total	**120**	**28**	**24**	-	-	**38**

2. Plans of lectures and seminars (practicals), tasks for independent work

Lectures are commonly used in studying the course "Economic theory". They offer an overview of a subject as well as deliver detailed information on a subject for students who need to fill in the background. The purpose of lectures is to provide with a valuable resource. They can synthesize the views of several researchers and textbooks or provide new and unpublished information. Making the most use of lectures require following main steps, namely: preparing for lectures; listening in lectures; taking notes; following up lectures.

The educational role of seminars is to provide an opportunity to discuss interesting and/or difficult aspects of the course. This is founded on the assumption that it is only by actively trying to use knowledge that have been acquired from lecturers and textbooks it is possible to obtain an adequate understanding of the subject.

Main purposes of seminars may include following: providing an opportunity to explore a topic in depth; surveying and critically evaluating different viewpoints; developing a wide range of communication and study skills; building confidence; easing communication between students and tutor.

Well-designed independent activities allow students to consolidate, deepen, or apply their understanding of key concepts or strategies. Independent activities can be used to reinforce the directed learning that takes place during lectures and seminars. Independent learning activities aimed at uncovering potential sources of economic information; ability to learn how to access them, skills in collecting, examining and selecting suitable resources, compiling evaluating, interpreting, analyzing, and synthesizing the information; establishing and preparation an appropriate format and presentation the results of independent work.

Chapter 1. **Basic concepts of Economics**

Topic 1. Subject and functions of economics. The Infinity of needs and scarcity of resources

Goal: definition of the economy in the system of social sciences.

Objectives: to define economics, determine the specific features of economic theory as a science, to describe basic needs, to formulate reasons for limited resources and infinity of needs and wants.

Expected results (competences): to know the essence of economic phenomena and processes; own methods of scientific knowledge of economic processes; analyze economic phenomena and processes.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. Economics of as a sphere of human activity.
2. Positive and normative economics. The concept of macro- and microeconomics.
3. The essence and the main types of needs.
4. Goods and their types.
5. Production resources and their scarcity.

Plan of practical (seminar) classes:

1. The development of ideas about the subject of economics.
2. Methodology of Economic Research.
3. Features of positive and normative economics.
4. Macro- and microeconomics and their essence.
5. Production resources and their limitations.
6. Productivity and its calculation.

Vocabulary:

Economics – *the study of how society manages its scarce resources*

Efficiency *– the property of society getting the most it can from it scarce resources*

Equality *– the property of distributing economic prosperity uniformly among the members of society*

Scarcity – *the limited nature of society's resource*

Positive statements *– claims that attempt to describe the world as it is*

Normative statements *– claims that attempt to prescribe how the world should be*

Microeconomics *– the study of how households and firms make decisions and how they interact in markets*

Macroeconomics *– the study of economy-wide phenomena, including inflation, unemployment and economic growth*

Guidance for task-solving:

This table shows the number of Novels Emma buys at various incomes and prices. For any given level of income, the data on price and quantity demanded can be graphed to produce Emma's demand curve for novels.

	Income		
Price	**$ 20, 000**	**$ 30, 000**	**$ 40, 000**
$ 10	2 novels	5 novels	8 novels
9	6	9	12
8	10	13	16
7	14	17	20
6	18	21	24
5	22	25	28
	Demand curve, D3	Demand curve, D1	Demand curve, D2

Because the price and the quantity demanded are negatively related, the demand curve slopes downward. The slope of a line is the ratio of the vertical distance covered to the horizontal distance covered as we move along the line.

Slope = $\Delta y/\Delta x$,

Slope = first *y*-coordinate − second *y*-coordinate / first *x*-coordinate − second *x*-coordinate = 6-8 / 21-13 = -2/8 = -1/4

Problems, tasks, cases for practical classes:

1. Classify each of the following statements as positive and norma-

tive. Explain. a) Society faces short-run trade-off between inflation and unemployment; b) A reduction in the rate of money growth will reduce the rate of inflation; c) The National bank of Ukraine should reduce the rate of money growth; d) Society ought to require welfare recipients to look for jobs; d) Lower tax rates encourage more work and more savings.

2. Classify the following topics as relating to microeconomics or macroeconomics. a) a family's decision about how much income to save; b) the effect of government regulations on auto emission; c) the impact of higher national saving on economic growth; d) a firm's decision about how many workers to hire; e) the relationship between the inflation and rate and changes in the quantity of money.

Tasks for independent work of students

Questions for individual work

1. Should an economic model describe reality exactly? Why do economists make assumptions?

2. Why do economists sometimes offer conflicting advice to policymakers?

Problematic questions:

1. If you were president, would you be more interested in your economic advisers' positive views or their normative views? Why?

Description of problems, tasks and cases	Recommended time (hours)
Obligatory tasks for full-time students:	
Questions for individual work: 1. What are two subfields into which economics is divided. Explain what each subfield studies. 2. Name a way that your family interacts in the factor market and a way that it interacts in the product market.	1
Problematic questions: 1. Name one economic interaction that isn't covered by the simplified circular-flow diagram. 2. Why is productivity important?	1
Additional tasks:	
1. In what ways is your standard of living different from that of your parents or grandparents when they were your age? Why have these changes occurred?	

Recommended Literature: [1, 2, 7, 8, 10, 14, 16, 19, 24, 36, 50]

Topic 2. The choice and opportunity cost. Production and its effectiveness

Goal: exploring the essence of productive capacity of society as a means of satisfaction of social needs.

Objectives: clarify the essence of the problem of scarcity of resources; explain the need to find alternative options for their management.

Expected results (competences): find out the nature of the production possibility curve; determine the opportunity cost of production; characterize the main factors of production.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. The problem of choice. The concept of opportunity cost.
2. Production frontier and its properties.
3. The essence and structure of production. Factors of production.

Plan of practical (seminar) classes:

1. The problem of choice and the concept of opportunity cost.
2. Production frontier and its properties.
3. Factors of production and their values.
4. Efficiency of production and methods of its measuring.

Vocabulary:

Opportunity cost – *whatever must be given up to obtain some item*

Rational people *– people who systematically and purposefully do the best they can to achieve their objectives*

Marginal changes *– small incremental adjustments to a plan of action*

Incentive *– something that induces a person to act*

Production possibility frontier *– a graph that shows the combinations of output that the economy can possibly produce given the available factors of production and the available production technology*

Problems, tasks, cases for practical classes:

1. You win $100 in a basketball pool. You have a choice between spending the money now or putting it away for a year in a bank account that pays 5% interest. What is the opportunity cost of spending the $100 now?

2. You are trying to decide whether to take a vacation. Most of the

costs of the vacation (airfare, hotel and forgone wages) are measured in dollars, but the benefits of the vacation are psychological. How can you compare the benefits to the costs?

Tasks for independent work of students

Questions for individual work

1. What is the opportunity cost of seeing a movie?
2. What does the "invisible hand" of the marketplace do?

Problematic questions:

1. Why should policymakers think about incentives?

Description of problems, tasks and cases	Recommended time (hours)
Obligatory tasks for full-time students:	
Questions for individual work: 1. Use a production possibilities frontier to describe the idea of "efficiency". 2. Why is entrepreneurial ability considered a category of economic resource, distinct from labor?	1
Problematic questions: What are economic resources? What categories do economists use to classify them? Why are resources also called factors of production? Why are they called inputs?	1
Additional tasks:	
Draw and explain a production possibilities frontier for an economy that produces milk and cookies. What happens to this frontier if decease kills half of the economy's cows?	

Recommended Literature: [1, 2, 7, 8, 10, 14, 16, 19, 24, 36, 50]

Topic 3. Economic systems. Circulation of economic activity

Goal: acquaintance with the essence, characteristics and evolution of economic systems.

Objectives: to clarify the mechanism of the economic system in the market and transitional economies.

Expected results (competences): determine the structural elements of the economic system; distinguish the main types of economic systems; characterize the modern national models of market economy.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. Main economic issues.
2. Ownership and their evolution.
3. The economic system: the nature, characteristic features.
4 .Types of economic systems. The nature and models of economic circulation.

Plan of practical (seminar) classes:

1. The three main economic issues.
2. Types of economic systems.
3. The nature and models of economic circulation.

Vocabulary:

Market – *a group of buyers and sellers of a particular good or service*

Competitive market *– a market in which there are many buyers and sellers so that each has a negligible impact on the market price*

Market economy *– an economy that allocates resources through the decentralized decisions of many firms and households as they interact in markets for goods and services*

Market failure *– a situation in which a market left on its own fails to allocate resources efficiently*

Property rights *– the ability of an individual to own and exercise control over scarce resources*

Problems, tasks, cases for practical classes:

In the 1990s thousands of "dot-com" companies emerged with great fanfare to take advantage of the Internet and new information technologies. A few, like Yahoo, eBay, and Amazon, have generally thrived and prospered, but many others struggled and eventually failed. Explain these varied outcomes in terms of how the market system answers the question "What goods and services will be produced?"

Tasks for independent work of students

Questions for individual work

1. Contrast how a market system and a command economy try to cope with economic scarcity.
2. Distinguish between the resource market and the product market

in the circular flow model. In what way are businesses and households both sellers and buyers in this model? What are the flows in the circular flow model?

Problematic questions:

1. How does self-interest help achieve society's economic goals? Why is there such a wide variety of desired goods and services in a market system?

2. In what way are entrepreneurs and businesses at the helm of the economy but commanded by consumers?

Description of problems, tasks and cases	**Recommended time (hours)**
Obligatory tasks for full-time students:	
Questions for individual work: In market economies, firms rarely worry about the availability of inputs to produce their products, whereas in command economies input availability is a constant concern. Why the difference?	1
Problematic questions: What explains why millions of economic resources tend to get arranged logically and productively rather than haphazardly and unproductively?	1
Additional tasks:	
Evaluate and explain the following statements: a) The market system is a profit-and-loss system. b) Competition is the disciplinarian of the market economy.	

Recommended Literature: [1, 2, 7, 8, 10, 14, 16, 19, 24, 36, 50]

Chapter 2. **Economics of household and enterprise**

Topic 4. Economic behavior of consumers

Goal: research the way of economic behavior of consumer in terms of derived utility.

Objectives: clarify the meaning of utility; explain the need the graphical representation of indifferent curve and budget constraint.

Expected results (competences): figure out the differences between total and marginal utility; determine the state of equilibrium for consumer; characterize the law of diminishing marginal utility.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. The utility of goods and services.
2. The law of diminishing marginal utility.
3. Indifference curves and budget constraints.

Plan of practical (seminar) classes:

1. The utility of goods and services.
2. The law of diminishing marginal utility.
3. Indifference curves and budget constraints.
4. Equilibrium of consumer.

Vocabulary:

Budget constraint – *the limit on the consumption bundles that a consumer can afford*

Indifference curve – a curve that shows *consumption bundles that give the consumer the same level of satisfaction*

Marginal rate of substitution *– the rate at which a consumer is willing to trade one good for another*

Perfect substitutes – *two goods with straight-line indifference curves*

Perfect complements – *two goods with right-angle indifference curves*

Normal good – *a good for which an increase in income raises the quantity demanded*

Inferior good – *a good for which an increase in income decreases the quantity demanded*

Giffen good – *a good for which an increase in the price raises the quantity demanded*

Problems, tasks, cases for practical classes:

1. A consumer has income of $3000. Wine costs $3 per glass, and cheese costs $6 per pound. Draw the consumer's budget constraint. What is the slope of this budget constraint?

2. Jim buys only milk and cookies. a) In year 1, Jim earns $100, milk costs $2 per quart, and cookies cost $4 per dozen. Draw Jim's budget constraint. b) Now suppose that all prices increase by 10% in year 2 and that Jim's salary increased by 10% as well. Draw Jim's new budget constraint. How would Jim's optimal combination of milk and cookies in year 2 compare to his optimal combination in year 1?

Tasks for independent work of students

Questions for individual work

1. Five consumers have the following marginal utility of apples and pears:

	Marginal utility of apples	**Marginal utility of pears**
Jerry	12	6
George	6	6
Elaine	6	3
Kramer	3	6
Newman	12	3

The price of an apple is $2, and the price of a pear is $1. Which, if any, of these consumers are optimizing over their choice of fruit? For those who are not, how should they change their spending?

Problematic questions:

1. Explain how an increase in the wage can potentially decrease the amount that a person wants to work?

Description of problems, tasks and cases	Recommended time (hours)
Obligatory tasks for full-time students:	
Questions for individual work: 1. The price of cheese rises from $6 to $10 per pound, while the price of wine remains $3 per glass. For a consumer with a constant income of $3000, show what happens to consumption of wine and cheese. Decompose the changes into income and substitution effects.	1
Problematic questions: 1. Mario consumes only cheese and crackers. a) Could cheese and crackers both be inferior goods for Mario? Explain. b) Suppose that cheese is a normal good for Mario while crackers are inferior good. If the price of cheese falls, what happens to Mario's consumption of crackers? What happens to his consumption of cheese? Explain.	1
Additional tasks:	
1. Compare the following two pairs of goods: Coke and Pepsi; Skis and ski bindings. a) In which case are the two goods complements? In which case are they substitutes? b) In which case do you expect the indifference curves to be fairly straight? In which case do you expect the indifference curves to be very bowed? c) In which case will the consumer respond more to a change in the relative price of the two goods?	

Recommended Literature: [1, 2, 7, 8, 10, 14, 16, 19, 24, 33]

Topic 5. Supply and demand and their interaction

Goal: shaping and mastering in the theoretical foundations of the market economy and categories of market relations.

Objectives: familiarize with definitions of categories of demand, supply, market prices and market equilibrium; to structure factors affecting supply and demand.

Expected results (competences): to determine the effects of surplus and shortages; explain the pricing mechanism of market equilibrium; calculate the elasticities of supply and demand on price, income and cross elasticity.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. Demand. Demand function and its graphical representation. The law of demand.
2. Non-price factors (determinants) of demand. Price elasticity of demand.
3. Supply. Supply function and its graphical representation. Law of Supply.
4. Non-price factors (determinants) of supply. Price elasticity of supply.
5. Price of market balance and its graphical representation.

Plan of practical (seminar) classes:

1. Demand and law of demand. Demand function. Non-price determinants of demand.
2. Supply and the law of supply. Supply function. Non-price determinants of supply.
3. Price of market equilibrium and its value. The influence of the state on the prices.
4. Elasticity of demand and supply, methods of calculation.
5. Relationship between elasticity of demand and income of the seller.

Vocabulary:

Law of demand – *the claim that, other things equal, the quantity demanded of a good falls when the price of the good rises*

Demand curve *– a graph of the relationship between the price of a good and the quantity demanded*

Normal good *– a good for which, other things equal, an increase in income leads to increase in demand*

Inferior good *– a good for which other things equal, an increase in income leads to decrease in demand*

Substitutes *– two goods for which an increase in the price of one leads to an increase in the demand for the other*

Complements *– two goods for which an increase in the price of one leads to a decrease in the demand for the other*

Law of supply *– the claim that, other things equal, the quantity supplied of a good rises when the price of the good rises*

Supply curve *– a graph of the relationship between the price of a good and the quantity supplied*

Equilibrium *– a situation in which the market price has reached the level at which quantity supplied equals quantity demanded*

Surplus *– a situation in which quantity supplied is greater than quantity demanded*

Shortage *– a situation in which quantity demanded is greater than quantity supplied*

Elasticity *– a measure of the responsiveness of quantity demanded or quantity supplied to one of its determinants*

Guidance for task-solving:

Computing the price elasticity of demand

Price elasticity of demand = Percentage change in quantity demanded/percentage change in price

Price elasticity of demand = 20 percent / 10 percent = 2

Midpoint method for calculating the price elasticity of demand

$$PED = \frac{(Q_2-Q_1) / [(Q_2+Q_1)/2]}{(P_2-P_1) / [(P_2+P_1)/2]}$$

For example, suppose that an increase in the price of milk from $2.85 to $3.15 a gallon raises the amount that dairy farmers produce from 9,000 to 11,000 gallons per month. Using the midpoint method, we calculate the percentage change in price as:

Percentage change in price = (3.15-2.85)/3.00 × 100 = 10 percent

Similarly, we calculate the percentage change in quantity supplied as:

Percentage change in quantity supplied = (11,000 – 9,000)/10,000 × × 100 = 20 percent

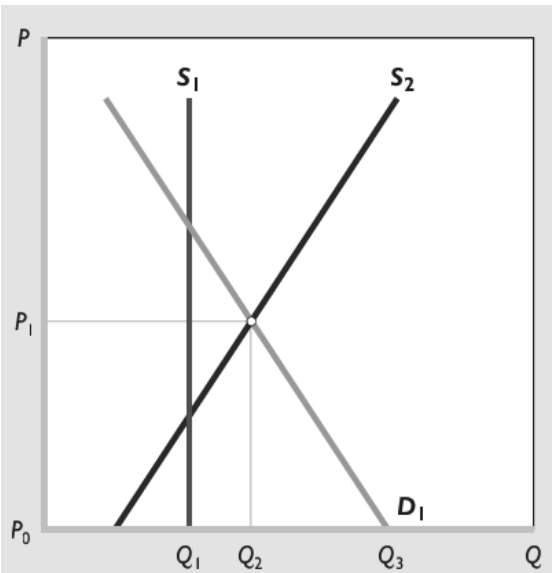
In this case, Price elasticity of supply = 20 percent / 10 percent = 2

Problems, tasks, cases for practical classes:

A Legal Market Might Eliminate the Present Shortage of Human Organs for Transplant. But There Are Many Serious Objections to "Turning Human Body Parts into Commodities" for Purchase and Sale. It has become increasingly commonplace in medicine to transplant kidneys, lungs, livers, eye corneas, pancreases, and hearts from deceased individuals to those whose organs have failed or are failing. But surgeons and many of their patients face a growing problem: There are shortages of donated organs available for transplant.

Not everyone who needs a transplant can get one. In 2007 there were

97,000 Americans on the waiting list for transplants. Indeed, an inadequate supply of donated organs causes an estimated 6000 deaths in the United States each year. Why Shortages? Seldom do we hear of shortages of desired goods in market economies. What is different about organs for transplant? One difference is that no legal market exists for human organs. To understand this situation, observe the demand curve D 1 and supply curve S 1 in the accompanying figure. The downward slope of the demand curve tells us that if there were a market for human organs, the quantity of organs demanded would be greater at lower prices than at higher prices. Vertical supply curve S 1 represents the fixed quantity of human organs now donated via consent before death. Because the price of these donated organs is in effect zero, quantity demanded Q 3 exceeds quantity supplied Q 1. The shortage of Q 3 – Q 1 is rationed through a waiting list of those in medical need of transplants. Many people die while still on the waiting list.



Use of a Market. A market for human organs would increase the incentive to donate organs. Such a market might work like this: An individual might specify in a legal document that he or she is willing to sell one or more usable human organs upon death or near-death. The person could specify where the money from the sale would go, for example, to

family, a church, an educational institution, or a charity. Firms would then emerge to purchase organs and resell them where needed for profit. Under such a system, the supply curve of usable organs would take on the normal upward slope of typical supply curves. The higher the expected price of an organ, the greater the number of people who would be willing to have their organs sold at death. Suppose that the supply curve is S2 Sin the figure. At the equilibrium price P1,the number of organs made available for transplant (Q2) would equal the number purchased for transplant (also Q2). In this generalized case, the shortage of organs would be eliminated and, of particular importance, the number of organs available for transplanting would rise from Q1to Q2. This means more lives would be saved and enhanced than under the present donor system. **Objections.** In view of this positive outcome, why is there no such market for human organs? Critics of market-based solutions have two main objections. The first is a moral objection: Critics feel that turning human organs into commodities commercializes human beings and diminishes the special nature of human life. They say there is something unseemly about selling and buying body organs as if they were bushels of wheat or ounces of gold. (There is, however, a market for blood!) Moreover, critics note that the market would ration the available organs (as represented by Q2 in the figure) to people who either can afford them (at P1) or have health insurance for transplants. The poor and uninsured would be left out. Second, a health-cost objection suggests that a market for body organs would greatly increase the cost of healthcare. Rather than obtaining freely donated (although "too few") body organs, patients or their insurance companies would have to pay market prices for them, further increasing the cost of medical care. Rebuttal Supporters of market-based solutions to organ shortages point out that the laws against selling organs are simply driving the market underground. Worldwide, an estimated $1 billion-per-year illegal market in human organs has emerged. As in other illegal markets, the unscrupulous tend to thrive. This fact is dramatized by the accompanying photo, in which four Pakistani villagers show off their scars after they each sold a kidney to payoff debt. Supporters say that legalization of the market for human organs would increase organ supply from legal sources, drive down the price of organs, and reduce the abuses such as those now taking place in illegal markets.

Tasks for independent work of students

Questions for individual work

What effect will each of the following have on the supply of auto tires? a) A technological advance in the methods of producing tires. b) A decline in the number of firms in the tire industry. c) An increase in the prices of rubber used in the production of tires. d) The expectation that the equilibrium price of auto tires will be lower in the future than currently. e) A decline in the price of the large tires used for semi-trucks and earth-hauling rigs (with no change in the price of auto tires). f) The levying of a per-unit tax on each auto tire sold. g) The granting of a 50-cent-per-unit subsidy for each auto tire produced.

Problematic questions:

What effect will each of the following have on the demand for small automobiles such as the Mini Cooper and Smart car? a) Small automobiles become more fashionable. b) The price of large automobiles rises (with the price of small autos remaining the same). c) Income declines and small autos are an inferior good. d) Consumers anticipate that the price of small autos will greatly come down in the near future. e) The price of gasoline substantially drops.

Description of problems, tasks and cases	Recommended time (hours)
Obligatory tasks for full-time students:	
Questions for individual work: In 2001 an outbreak of foot-and-mouth disease in Europe led to the burning of millions of cattle carcasses. What impact do you think this had on the supply of cattle hides, hide prices, the supply of leather goods, and the price of leather goods?	1
Problematic questions: What do economists mean when they say that "price floors and ceilings stifle the rationing function of prices and distort resource allocation"?	1
Additional tasks:	
How will each of the following changes in demand and/or supply affect equilibrium price and equilibrium quantity in a competitive market; that is, do price and quantity rise, fall, or remain unchanged, or are the answers indeterminate because they depend on the magnitudes of the shifts? Use supply and demand diagrams to verify your answers. a) Supply decreases and demand is constant. b) Demand decreases and supply is constant. c) Supply increases and demand is constant. d) Demand increases and supply increases. e) Demand increases and supply is constant. f) Supply increases and demand decreases. g) Demand increases and supply decreases. h) Demand decreases and supply decreases.	

Recommended Literature: [1, 2, 7, 8, 10, 14, 16, 19, 24, 30]

Topic 6. Production costs and profit

Goal: development of skills of profit and loss analysis.

Objectives: disclose the notion of fixed and variable costs; discover the mechanism of diminishing factor productivity.

Expected results (competences): classify different types of revenue; determine the optimal volume of production; characterize the main types of costs.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. The essence and types of costs.
2. Total Revenue. Marginal revenue.
3. Profit and its species. The optimal output of the firm.
4. The law of diminishing factor productivity.

Plan of practical (seminar) classes:

1. Types of costs and methods of calculation.
2. Profit and its species.
3. The optimal output of the firm.
4. The law of diminishing factor productivity.

Vocabulary:

Total revenue – *the amount a firm receives for the sale of its output*

Total costs *– the market value of the inputs a firm uses in production*

Profit – *total revenue minus total costs*

Explicit costs – *input costs that require an outlay of money by the firm*

Implicit costs – *input costs that do not require an outlay of money by the firm*

Economic profit *– total revenue minus total costs, including both explicit and implicit costs*

Accounting profit *– total revenue minus total explicit cost*

Fixed costs – *costs that do not vary with the quantity of output produced*

Variable costs – *costs that vary with the quantity of output produced*

Guidance for task-solving:

Term	Definition	Description
Total cost	The market value of all inputs that a firm uses in production	TC=FC+VC
Average fixed costs	Fixed costs divided by the quantity of output	AFC=FC/Q
Average variable costs	Variable costs divided by the quantity of output	AVC=VC/Q
Average total costs	Total costs divided by the quantity of output	ATC=TC/Q
Marginal cost	The increase in total cost that arises from an extra unit of production	MC=ΔTC/ΔQ

The various measures of costs: Coffee Shop

Q	TC	FC	VC	AFC	AVC	ATC	MC
0	$ 3.00	$ 3.00	$ 0.00	-	-	-	-
1	3.30	$ 3.00	0.30	$ 3.00	$ 0.30	$ 3.30	$ 0.30
2	3.80	$ 3.00	0.80	1.50	0.40	1.90	0.50
3	4.50	$ 3.00	1.50	1.00	0.50	1.50	0.70
4	5.40	$ 3.00	2.40	0.75	0.60	1.35	0.90
5	6.50	$ 3.00	3.50	0.60	0.70	1.30	1.10
6	7.80	$ 3.00	4.80	0.50	0.80	1.30	1.30

Problems, tasks, cases for practical classes:

Henry Ford and the very generous $5-a-day wage

Henry Ford was an industrial visionary. As founder of Ford Motor Company, he was responsible for introducing modern techniques of production. Rather than building cars with small teams of skilled craftsmen, Ford built cars on assembly lines in which unskilled workers were taught to perform the same simple tasks over and over again. The output of this assembly process was the Model T Ford, one of the most famous early automobiles.

In 1914, Ford introduced another innovation: the $5 workday. This might not seem like much today, but back then $5 was about twice the going wage. It was also far above the wage that balanced supply and demand. When the new $5-a-day-wage was announced, long lines of job seekers formed outside the Ford factories. The number of workers willing to work at this wage far exceeded the number of workers Ford needed.

Ford's high-wage policy had many of the effects predicted by efficiency-wage theory. Turnover fell, absenteeism fell, and productivity

rose. Workers were so much efficient that Ford's production costs were lower despite higher wages. Thus, paying a wage above the equilibrium level was profitable for the firm. A historian of the early Ford Motor Company wrote, "Ford and his associates freely declared on many occasions that the high-wage policy turned out to be good business. By this they meant that it had improved the discipline of the workers, given them a more loyal interest in the institution, and raised their personal efficiency". Henry Ford himself called the $5-a-day-wage "one of the finest cost-cutting moves we ever made".

Why did it take Henry Ford to introduce this efficiency wage? Why were other firms not already taking advantage of this seemingly profitable business strategy? According to some analysts, Ford's decision was closely linked to his use of the assembly line. Workers organized in an assembly line are highly interdependent. If one worker is absent or works slowly, other workers are less able to complete their own tasks. Thus, while assembly lines made production more efficient, they also raised the importance of low worker turnover, high worker effort, and high worker quality. As a result, paying efficiency wages may have been a better strategy for the Ford Motor Company than for other businesses at that time.

Questions: Give four explanations for why firms might find it profitable to pay wages above the level that balances quantity of labor supplied and quantity of labor demanded.

Tasks for independent work of students

Questions for individual work

1. List several fixed and variable costs associated with owning and operating an automobile. Suppose you are considering whether to drive your car or fly 1000 miles to Florida for spring break. Which costs–fixed, variable, or both–would you take into account in making your decision? Would any implicit costs be relevant? Explain.

Problematic questions:

1. Why can the distinction between fixed costs and variable costs be made in the short run? Classify the following as fixed or variable costs: advertising expenditures, fuel, interest on company-issued bonds, shipping charges, payments for raw materials, real estate taxes, executive salaries, insurance premiums, wage payments, depreciation and obsolescence charges, sales taxes, and rental payments on leased office machinery. "There are no fixed costs in the long run; all costs are variable." Explain.

Description of problems, tasks and cases	Recommended time (hours)
Obligatory tasks for full-time students:	
Questions for individual work: Distinguish between explicit and implicit costs, giving examples of each. What are some explicit and implicit costs of attending college? Why does the economist classify normal profit as a cost? Is economic profit a cost of production?	1
Problematic questions: Which of the following are short-run and which are long run adjustments? a) Wendy's builds a new restaurant. b) Harley-Davidson Corporation hires 200 more production workers. c) A farmer increases the amount of fertilizer used on his corn crop. d) An Alcoa aluminum plant adds a third shift of workers.	1
Additional tasks:	
Gomez runs a small pottery firm. He hires one helper at $12,000 per year, pays annual rent of $5000 for his shop, and spends $20,000 per year on materials. He has $40,000 of his own funds invested in equipment (pottery wheels, kilns, and so forth) that could earn him $4000 per year if alternatively invested. He has been offered $15,000 per year to work as a potter for a competitor. He estimates his entrepreneurial talents are worth $3000 per year. Total annual revenue from pottery sales is $72,000. Calculate the accounting profit and the economic profit for Gomez's pottery firm.	

Recommended Literature: [1, 4, 6, 9, 11, 15, 18, 21, 23, 26, 29]

Topic 7. Entrepreneurship and Enterprise

Goal: exploring the purpose and functions of a firm in a market economy.

Objectives: clarify legal types of companies; explain the of marketing and management in a company.

Expected results (competences): understand the crucial of business activity for economic development; define organizational and legal types of companies; characterize marketing strategies for profitable activity.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. Contents of business activity.

2. Description and functions of the company. Types of enterprises.
3. The organizational forms of enterprises.
4. Management and marketing in business.

Plan of practical (seminar) classes:

1. Essence and functions of the company.
2. Types of enterprises.
3. Legal forms of enterprises.
4. Management and marketing in business.

Vocabulary:

Average total costs – *total costs divided by the quantity of output*

Marginal cost *– the increase in total cost that arises from an extra unit of production*

Efficient scale *– the quantity of output that minimizes average total costs*

Economies of scale *– the property whereby long-run average total costs falls as the quantity of output increases*

Diseconomies of scale – *the property whereby long-run average total costs raises as the quantity of output increases*

Constant return to scale – *the property whereby long-run average total costs stays the same as the quantity of output changes*

Problems, tasks, cases for practical classes:

Computerized Inventory Tracking Has Greatly Accelerated How Quickly Companies Can Respond to Unexpected Changes in Demand

Before computers made it possible to track inventory changes in real time, firms could only react to unexpected shifts in demand very slowly. This was true because before computers, tracking inventory was a painful, slow process that basically involved having to hire people to physically count the items held in inventory–one at a time. Since this process was both costly and annoying, firms typically counted their inventories only a few times per year. An unfortunate side effect of counting inventory so infrequently was that unexpected shifts in demand could cause large changes in inventory levels before anyone could find out about them. To see why this is true, consider a firm that counts its inventory just twice per year, for example, once in January and once in July. If the demand for its product suddenly falls in February and then remains low, the decline in demand will not be discovered until the July inventory count is taken.

Only then will a high inventory level inform the firm's management that the demand for its product must have unexpectedly declined.

The long delay between when the shift in demand happens and when it is discovered means that the firm will very likely feel pressed to sharply reduce its production of new output since the fastest way to reduce its high inventory level will be to sharply reduce its output rate (so that new sales will exceed the reduced output rate). Following this policy, however, implies not only a large cut in output but also a substantial increase in unemployment since fewer workers will be needed to produce less output. As a result, infrequent inventory counting leads to strong fluctuations in output and employment because by the time an unexpected change in demand is discovered, it will have had plenty of time to cause a large change in inventory levels that will very likely be rectified by a large change in production levels. By contrast, many economists believe that economic fluctuations may have become much less severe during the last 20 years because of the introduction of computerized inventory tracking systems that allow companies to track their inventory levels in real time. These systems keep continuous track of inventory levels by means of technologies like bar codes and laser scanners. This allows firms to tell almost immediately if demand has changed unexpectedly. As a result, the firms that have adopted these systems can make much more subtle changes to output and employment because they can discover the unexpected changes in demand before those unexpected changes have caused large shifts in inventory levels.

While it is not possible to "prove" that inventory management systems have led to smaller business cycle fluctuations, the behavior of the U.S. economy over the past 30 years is suggestive. The last severe recession happened in 1981–1982. Up to that point, recessions appeared to happen in the United States every five or so years and were often quite punishing, with high levels of unemployment and significant declines in output. But computerized inventory management systems began to be widely adopted during the 1980s and since that time the U.S. economy has only experienced two mild recessions, one in 1991–1992 and another in 2000–2001. Since these recessions were not only mild but about 10 years apart, some economists have taken this behavior as evidence that from now on recessions will be less frequent and less severe due to the recent improvements in inventory management. Opinions vary, however,

as to how much credit computerized inventory management should be given for the apparent reduction in the frequency and severity of the business cycle. Indeed, several other explanations have been put forward to explain why things seem to have improved. One hypothesis is that we may have just been lucky in recent years in that there have simply not been that many significant demand shocks.

Another explanation is that governments may have learned from past mistakes and shifted to better economic policies. Taking the various competing explanations into account, it is safe to say that while no economist would give all the credit for the more moderate business cycle fluctuations of the past 25 years to computerized inventory management systems, nearly all would give at least some of the credit to these systems and the fact that they allow firms to rapidly react to unexpected changes in demand.

Tasks for independent work of students

Questions for individual work

What are the three major legal forms of business organization? Which form is the most prevalent in terms of numbers? Why do you think that is so? Which form is dominant in terms of total sales? What major advantages of this form of business organization gave rise to its dominance?

Problematic questions:

Distinguish between a plant, a firm, and an industry. Contrast a vertically integrated firm, a horizontally integrated firm, and a conglomerate. Cite an example of a horizontally integrated firm from which you have recently made a purchase.

Description of problems, tasks and cases	**Recommended time (hours)**
1	2
Obligatory tasks for full-time students:	
Questions for individual work: Use a search engine to find the current listings on the New York Times bestsellers lists. Choose one hardbound book of fiction and one hardbound book of nonfiction from the top-five lists. Next, find the price, including shipping to your address, of your two books at both Amazon, www.amazon.com, and Barnes and Noble, www.barnesandnoble.com. Is one company less expensive? Identify the non-price competition that might lead you to order from one company rather than the other.	1

1	2
Problematic questions: Use the Google search engine at www.google.com to locate the home page of a company of your choice. Find and review the company's income statement in its annual report and classify the nonrevenue items as either fixed or variable costs. Are all costs clearly identifiable as either fixed or variable? What item would be considered accounting profit? Would economic profit be higher or lower than this accounting profit?	1
Additional tasks:	
Find the Forbes 2000 list of the world's largest firms at www.forbes.com/lists. From the top 10 list, select three firms from three different industries and discuss the likely sources of the economies of scale that underlie their large size.	

Topic 8. Competition. Types of market structures

Goal: research the features of different types of market structures.

Objectives: clarify the importance of competition in the market economy; explain the behavior of companies on different markets.

Expected results (competences): find out the importance of competition and limitations of monopoly; determine the pricing models of monopolists, oligopolists, monopolistic competitors and pure competitors.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. Market competition and methods of competition.
2. Types of market structures.
3. Protection of competition.

Plan of practical (seminar) classes:

1. Market competition.
2. Methods of competition.
3. Types of market structures.
4. Protection of Competition.

Vocabulary:

Competitive market – *a market with many buyers and sellers trading identical products so that each buyers and seller is a price taker*

Monopoly *– a firm that is the sole seller of a product without close substitutes*

Natural monopoly *– a monopoly that arises because a single firm can supply a good or service to an entire market at a smaller cost than could two or more firms*

Price discrimination *– the business practice of selling the same good at different prices to different customers*

Oligopoly *– a market structure in which only a few sellers offer similar or identical products*

Monopolistic competition *– a market structure in which many firms sell products that are similar but not identical*

Cartel *– a group of firms acting in unison*

Problems, tasks, cases for practical classes:

OPEC and the world oil market

Much of the world's oil is produced by a few countries, mostly in the Middle East. These countries together make up an oligopoly. The countries that produce most of the world's oil have formed a cartel, called the Organization of Petroleum Exporting Countries (OPEC). As originally formed in 1960, OPEC included Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. By 1973, eight other nations had joined: Qatar, Indonesia, Libya, the United Arab Emirates, Algeria, Nigeria, Ecuador, and Gabon. These countries control about three fourth of the world's oil reserves. Like any cartel, OPEC tries to raise the price of its product through a coordinated reduction in quantity produced. OPEC tries to set production levels for each of the member countries.

The problem that OPEC faces is that the countries would like to maintain a high price of oil. But each member of the cartel is tempted to increase its production to get a larger share of the total profit. OPEC members frequently agree to reduce production but then cheat on their agreements.

OPEC was most successful at maintaining cooperation and high prices in the period from 1973 to 1985. The price of crude oil rose from $3 a barrel in 1972 to $11 in 1974 and then to $35 in 1981. But in the mid-1980s, member countries began arguing about production levels, and OPEC became ineffective at maintaining cooperation. By 1986 the price of crude oil had fallen back to $13 a barrel.

In recent years, the members of OPEC have continued to meet regularly, but the cartel has been less successful at reaching and enforcing agreements. Although the price of oil rose significantly in 2007 and 2008, the primary cause was increased demand in the world oil market, in part from booming Chinese economy, rather than restricted supply. While the lack of cooperation among OPEC nations has reduced the profits of the oil-producing nations below what they might have been, it has benefited consumers around the world.

Tasks for independent work of students

Questions for individual work

Briefly state the basic characteristics of pure competition, pure monopoly, monopolistic competition, and oligopoly. Under which of these market classifications does each of the following most accurately fit? (a) a supermarket in your hometown; (b) the steel industry; (c) a Kansas wheat farm; (d) the commercial bank in which you or your family has an account; (e) the automobile industry. In each case justify your classification.

Problematic questions:

How does a generic drug differ from its brand-name, previously patented equivalent? Explain why the price of a brand-name drug typically declines when an equivalent generic drug becomes available? Explain how that drop in price affects allocative efficiency.

Description of problems, tasks and cases	**Recommended time (hours)**
1	2
Obligatory tasks for full-time students:	
Questions for individual work: Discuss the major barriers to entry into an industry. Explain how each barrier can foster either monopoly or oligopoly. Which barriers, if any, do you feel give rise to monopoly that is socially justifiable?	1
Problematic questions: How does monopolistic competition differ from pure competition in its basic characteristics? From pure monopoly? Explain fully what product differentiation may involve. Explain how the entry of firms into its industry affects the demand curve facing a monopolistic competitor and how that, in turn, affects its economic profit.	1

1	2
Additional tasks:	
Advertising Age, at www.adage.com, compiles statistics on the market shares of some familiar products. Click on Data Center and then on Top Line Data. Download the Fact Pack for the latest year. Select the top-5, top-7, or top-10 lists for five separate non-media products. In general, do the very top sellers in your lists advertise more or less than the sellers toward the bottom of the lists? Are there exceptions? Do you think the top-10 lists would get turned upside down if the pattern of advertising were turned upside down? Why or why not?	

Recommended Literature: [1, 2, 7, 8, 10, 14, 16, 19, 24, 31]

Topic 9. Types of markets. Income and its distribution

Goal: investigate distribution of income on different markets.

Objectives: define different types of income in the market economy.

Expected results (competences): define sources of income in the market economy; determine propensity to consumption and saving; characterize the model of income distribution in the society.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. Types of markets. Features of the interaction of demand, supply and pricing in different markets.
2. Description and types of income in a market economy.
3. Consumption, savings and investments.

Plan of practical (seminar) classes:

1. Types of markets.
2. Pricing in different markets.
3. Income in market economy.
4. Consumption, savings and investments.

Vocabulary:

Poverty rate *– the percentage of the population whose family income falls below an absolute level called the poverty line*

Poverty line *– an absolute level of income set by the government for each family size below which a family is deemed to be in poverty*

Nominal interest rate – *the interest rate as usually reported without a correction for the effects of inflation*

Real interest rate *– the interest rate corrected for the effects of inflation*

Present value *– the amount of money today that would be needed using prevailing interest rates, to produce a given future amount of money*

Future value *– the amount of money in the future that an amount of money today will yield, given prevailing interest rates*

Price ceiling *– a legal maximum on the price at which a good can be sold*

Price floor *– a legal minimum on the price at which a good can be sold*

Problems, tasks, cases for practical classes:

The Microsoft case

The most important and controversial antitrust case in recent years has been the U.S. government's suit against the Microsoft Corporation, filed in 1998. Certainly, the case did not lack drama. It pitted one of the world's richest men (Bill Gates) against one of the world's most powerful regulatory agencies (the U.S. Justice Department). Testifying for the government was a prominent economist (MIT professor Franklin Fisher). Testifying for Microsoft was an equally prominent economist (MIT professor Richard Schmalensee). At stake was the future of one of the world's most valuable companies (Microsoft) in one of the economy's fastest-growing industries (computer software).

A central issue in the Microsoft case involved tying – in particular, whether Microsoft should be allowed to integrate its Internet browser into its Windows operating system. The government claimed that Microsoft was bundling these two products together to expand its market power in computer operating systems into the unrelated market of Internet browsers. Allowing Microsoft to incorporate such products into its operating system, the government argued, would deter other software companies from entering the market and offering new products.

Microsoft responded by pointing out that putting new features into old products is a natural part of technological progress. Cars today include CD players and air conditioners, which were once sold separately, and cameras come with built-in flashes. The same is true with operating systems. Over time Microsoft has added many features to Windows that

were previously stand-alone products. This has made computers more reliable and easier to use because consumers can be confident that the pieces work together. The integration of Internet technology, Microsoft argued, was the natural next step.

One point of disagreement concerned the extent of Microsoft's market power. Nothing that more than 80 percent of new personal computers use a Microsoft operating system, the government argued that the company had substantial monopoly power, which it was trying to expand. Microsoft replied that the software market is always changing and that Microsoft's Windows was constantly being challenged by competitors, such as the Apple Mac and Linux operating systems. It also argued that the low price it charged for Windows – about $50, or only 3% of the price of a typical computer – was evidence that its market power was severely limited.

Like many large antitrust suits, the Microsoft case became a legal morass. In November 1999, after a long trial, Judge Penfield Jackson ruled that Microsoft had great monopoly power and that it had illegally abused that power. In June 2000, after hearings on possible remedies, he ordered that Microsoft be broken up into two companies – one that sold the operating system and one that sold applications software. A year later, an appeals court overturned Jackson's breakup order and handed the case to a new judge. In September 2001, the Justice Department announced that it no longer sought a breakup of the company and wanted to settle the case quickly.

A settlement was finally reached in November 2002. Microsoft accepted some restrictions on its business practices, and the government accepted that a browser would remain part of the Windows operating system. But the settlement did not end Microsoft's antitrust troubles. In recent years, the company has contented with several private antitrust suits, as well as suits brought by the European Union alleging a variety of anticompetitive behaviors.

Questions: What kind of agreement is illegal for business to make? Why are the antitrust laws controversial?

Do you agree? Or disagree? Explain your reasoning. "There need be no trade-off between equality and efficiency. An efficient economy that yields an income distribution that many regard as unfair may cause those with meager incomes to become discouraged and stop trying. So effi-

ciency may be undermined. A fairer distribution of rewards may generate a higher average productive effort on the part of the population, thereby enhancing efficiency. If people think they are playing a fair economic game and this belief causes them to try harder, an economy with an equitable income distribution may be efficient as well.

Tasks for independent work of students

Questions for individual work

How does the Gini ratio relate to the Lorenz curve? Why can't the Gini ratio exceed 1? What is implied about the direction of income inequality if the Gini ratio declines from 0.42 to 0.35? How would one show that change of inequality in the Lorenz diagram?

Problematic questions:

Assume that Al, Beth, Carol, David, and Ed receive incomes of $500, $250, $125, $75, and $50, respectively. Construct and interpret a Lorenz curve for this five-person economy. What percentage of total income is received by the richest quintile and by the poorest quintile?

Description of problems, tasks and cases	Recommended time (hours)
Obligatory tasks for full-time students:	
Questions for individual work: Why is there a trade-off between the amount of consumption that people can enjoy today and the amount of consumption that they can enjoy in the future? Why can't people enjoy more of both? How does saving relate to investment and thus to economic growth? What role do banks and other financial institutions play in aiding the growth process?	1
Problematic questions: Construct a game-theory matrix involving two firms and their decisions on high versus low advertising budgets and the effects of each on profits. Show a circumstance in which both firms select high advertising budgets even though both would be more profitable with low advertising budgets. Why won't they unilaterally cut their advertising budgets?	1
Additional tasks:	
Briefly discuss the major causes of income inequality. With respect to income inequality, is there any difference between inheriting property and inheriting a High IQ? Explain.	

Recommended Literature: [1, 2, 7, 9, 12, 15, 18, 19, 24, 32]

Topic 10. Market Infrastructure

Goal: give general understanding of market infrastructure and its elements.

Objectives: clarify the purpose of market infrastructure; explain the main functions and mechanism of activity of different elements.

Expected results (competences): describe the purpose and functions of banks, insurance companies and investment funds in the market economy; determine the importance of market infrastructure.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. The essence and purpose of market infrastructure.
2. Elements of market infrastructure.
3. Main functions and mechanisms of activity of banks, insurance companies, investment funds, employment services and others.

Plan of practical (seminar) classes:

1. Elements of market infrastructure.
2. Basic functions and mechanisms of activity of banks, insurance companies, investment funds, employment services and others.

Vocabulary:

Central bank *– an institution designed to oversee the banking system and regulate the quantity of money in the economy*

Reserve requirements *– regulations on minimum amount of reserves that banks must hold against deposits*

Unemployment insurance *– a government program that partially protects workers' incomes when they become unemployed*

Mutual fund *– an institution that sells shares to the public and uses the proceeds to buy a portfolio of stocks and bonds*

Problems, tasks, cases for practical classes:

The Federal Reserve Board web-site www.federalreserve.gov/BIOS, provides detailed biographies of the seven members of the Board of Governors. What is the composition of the Board with regard to age, gender, education, previous employment, and ethnic back-ground? Which Board members are near the ends of their terms?

Tasks for independent work of students

Questions for individual work

What are the major categories of firms that make up the U.S. financial services industry? Did the bank and thrift share of the financial services market rise, fall, or stay the same between 1980 and2007? Are there more or fewer banks today than a decade ago? Why are the lines between the categories of financial firms becoming more blurred than in the past?

Problematic questions:

Visit the Publications page of the Federal Reserve Bank of Atlanta, www.frbatlanta.org/publica/pubs_index.cfm. Scroll down the page and click on the link that reads Dollars and Cents: Fundamental Facts about U.S. Money. Use the information you find to answer the following questions: What are the denominations of Federal Reserve Notes now being printed? What was the largest-denomination Federal Reserve Note ever printed and circulated, and when was it last printed? What are some tips for spotting counterfeit currency? When was the last silver dollar minted? What have been the largest and smallest U.S. coin denominations since the Coinage Act of 1792?

Description of problems, tasks and cases	**Recommended time (hours)**
1	2
Obligatory tasks for full-time students:	
Questions for individual work: Go to www.epa.gov and select Climate Change. What are the major greenhouse gases? How much greenhouse gas does the United States emit per person? What is the trend of emissions on a per-person basis? What is the trend of emissions per dollar of GDP in the United States? Use your own analysis to explain how total emissions can rise even though emissions per dollar of GDP Substantially decline. Which of the two is more relevant for climate change?	1
Problematic questions: We presented evidence earlier that per capita consumption of water, energy, and solid objects like plastics and metals has been constant or falling in recent decades. The consumption of fossil fuels, however, is of special concern because of worries about global warming caused by the emission into the atmosphere of carbon dioxide and other so-called greenhouse gasses. Go to the Energy Information Agency's Environment	

1	2
page, www.eia.doe.gov/environment.html. Scan the International Emissions Data links and click on the one that says Per Capita Emissions in order to open up an Excel spreadsheet that contains per capita carbon dioxide emissions for almost all countries for each of the previous 20 years or so. Have per capita carbon dioxide emissions in the United States, Japan, and France grown, stayed about the same, or fallen over the past couple of decades? Does it surprise you to learn that over this time period France has moved to generate more than 80 percent of its electricity from nuclear power, which emits no carbon dioxide? What about emissions in China, Indonesia, and India? Why have emissions risen so much (in percentage terms) in these countries? (Hint: They are not as poor as they used to be.) If current trends in these countries continue, should we be worried? And could defining property rights over the atmosphere solve the problem?	1
Additional tasks:	
Corporations often distribute profits to their shareholders in the form of dividends, which are simple checks mail out to shareholders. Suppose that you have the chance to buy a share in a fashion company called Rogue Designs for $35 and that the company will pay dividends of $2 per year on that share every year. What is the annual percentage rate of return? Next, suppose that you and other investors could get a 12 percent per year rate of return by owning the stocks of other very similar fashion companies. If investors care only about rates of return, what should happen to the share price of Rogue Designs? (Hint: This is an arbitrage situation.)	

Recommended Literature: [1, 2, 7, 8, 10, 14, 16, 18, 22, 31, 33]

Topic 11. Money and banks. The role of government in a market economy

Goal: get insights into origin and functions of money in modern economy.

Objectives: clarify the notion of money supply and maim money aggregates; explain the functions of banks in money creation, control of money supply and demand.

Expected results (competences): reveal functions of money and factors of money velocity; define main types of banking systems and the role of the Central banks; give economic explanation of Fisher equation.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. Functions and types of money. Money supply.
2. Fisher Equation. Monetary aggregates.
3. Structure of the banking system and the basic operations of commercial banks.
4. Positive and negative externalities.
5. Public goods.

Plan of practical (seminar) classes:

1. Functions and types of money.
2. Money supply and monetary aggregates.
3. Fisher Equation
4. Positive and negative externalities. Public good.

Vocabulary:

Currency *– the paper bills and coins in the hands of the public*

Fiat money *– money without intrinsic value that is used as money because of the government decree*

Money *– the set of assets in an economy that people regularly use to buy goods and services from other people*

Money supply *– the quantity of money available in the economy*

Monetary policy *– the setting of the money supply by policymakers in the central bank*

Reserves *– deposits that banks have received but have not loaned out*

Problems, tasks, cases for practical classes:

Where is all the currency?

One puzzle about the money stock of the U.S. economy concerns the amount of currency. In 2007, there was $759 billion of currency outstanding. To put this number in perspective, we can divide it by 232 million, the number of adults (age 16 and older) in the United States. This calculation implies that the average adult holds about $3272 of currency. Most people are surprised to learn that our economy has so much currency because they carry far less than this in their wallets.

Who is holding all this currency? No one knows for sure, but there are two plausible explanations.

The first explanation is that much of the currency is held abroad. In foreign countries without a stable monetary system, people often prefer U.S. dollars used overseas as a medium of exchange, unit of account, and store of value.

The second explanation is that much of the currency is held by drug dealers, tax evaders, and other criminals. For most people in the U.S. economy, currency is not a particularly good way to hold wealth. Not only can currency be lost or stolen, but it also does not earn interest, whereas a bank deposit does. Thus, most people hold only small amounts of currency. By contrast, criminals may avoid putting their wealth in banks because a bank deposit gives police a paper trial with which to trace their illegal activities. For criminals, currency may be the best store of value available.

Question. List and describe the tree functions of money.

The history of U.S. Government debt

How indebted is the U.S. government? The answer to this question varies substantially over time. Figures show that government debt expressed as percentage of U.S. GDP has fluctuated from zero in 1836 to 107 percent of GDP in 1945. In recent years, government debt has been between 30 and 40 percent of GDP.

The behavior of the debt-GDP ratio is one gouge of what's happening with the government's finances. Because GDP is a rough measure of the government's tax base, a declining debt-GDP ratio indicates that the government indebtedness is shrinking relative to its ability to raise tax revenue. This suggests that the government is, in some sense, living within its means. By contrast, a rising debt-GDP ratio means that the government indebtedness is increasing relative to its ability to raise tax revenue. It is often interpreted as meaning that fiscal policy – government spending and taxes – cannot be sustained forever at current levels.

Throughout history, the primary cause of fluctuations in government debt is war. When wars occur, government spending on national defense rises substantially to pay for soldiers and military equipment. Taxes sometimes rise as well but typically by much less than the increase in spending. The result is a budget deficit and increasing government debt. When the war is over, government spending declines and the debt-GDP ratio starts declining as well.

There are two reasons to believe that debt financing of war is an appropriate policy. First, it allows the government to keep tax rates smooth over time. Without debt financing, tax rates would have to rise sharply during wars, and this would cause a substantial decline in economic efficiency. Second, debt financing of wars shifts part of the cost of war to future generations, who will have to pay off the government debt. This is arguably a fair distribution of the burden, for future generations get some of the benefit when one generation fights a war to defend the nation against foreign aggressors.

One large increase in government debt that cannot be explained by war is the increase that occurred beginning around 1980. When President Ronald Reagan took office in 1981, he was committed to smaller government and lower taxes. Yet he found cutting government spending to be more difficult politically than cutting taxes. The result was the beginning of a period of large budget deficits that continued not only through Reagan's time in office but also for many years thereafter. As a result, government debt rose from 26 percent of GDP in 1980 to 50 percent of GDP in 1993.

It is known that budget deficits reduce national saving, investment and long-run economic growth, and this is precisely why the rise in government debt during the 1980s troubled many economists and policymakers. When Bill Clinton moved into the Oval office in 1993, deficit reduction was his first major goal. Similarly, when the Republicans took control of Congress in 1995, deficit reduction was high on their legislative agenda. Both of these efforts substantially reduced the size of the government budget deficit, and it eventually turned into a surplus. As a result, by the late 1990s, the debt-GDP ratio was declining.

The debt-GDP ratio started rising again during the first few years of the George W. Bush presidency, as the budget surplus turned into a budget deficit. There were three reasons for this change. First, President Bush signed into law several major tax cuts, which he had promised during the 2000 presidential campaign. Second, in 2001, the economy experienced a recession (a reduction in economic activity), which automatically decreased tax revenue and increased government spending. Third, the war on terrorism following the September 11 attacks and then the war in Iraq led to increase in government spending.

Tasks for independent work of students

Questions for individual work

1. What distinguishes money from other assets in the economy? What is commodity money? What is fiat money? Which kind do we use?

2. Who is responsible for setting monetary policy in the United States and in Ukraine?

Problematic questions:

1. If the Fed wants to increase the money supply with open-market operations, what does it do?

2. What is the discount rate? What happens to the money supply when the Fed raises the discount rate?

Description of problems, tasks and cases	Recommended time (hours)
Obligatory tasks for full-time students:	
Questions for individual work: What are reserve requirements? What happens to the money supply when the Fed raises requirements?	1
Problematic questions: Why don't banks hold 100 percent reserves? How is the amount of reserves bank hold related to the amount of money the banking system creates?	1
Additional tasks:	
Go the website of the Federal Reserve Bank of St. Lois (http://www.stloisfed.org) to find some information about the Fed. Find a map of the Federal reserve districts.	

Recommended Literature: [1, 2, 7, 8, 10, 14, 16, 19, 24, 33]

Chapter 3. **The national economy**

Topic 12. Results of national production

Goal: research of basic macroeconomic indicators in terms of results of national economic activity.

Objectives: structure main economic indicators; explain the unevenness of income distribution.

Expected results (competences): give explanation about differences in nominal and real indicators; define practical application of Lorenz curve and Gini coefficient; compare indicators among different countries.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. The essence and purpose of macroeconomic indicators.
2. Methods for calculating macroeconomic indicators.
3. Unevenness of income distribution. Lorenz curve.
4. The use of macroeconomic indicators in international comparisons.

Plan of practical (seminar) classes:

1. Main macroeconomic indicators.
2. Methods for calculating macroeconomic indicators.
3. Unevenness of income distribution. Lorenz curve.
4. The use of macroeconomic indicators.

Vocabulary:

Macroeconomics – *is the study of the determination of economic aggregates such as total output, total employment, the price level and the rate of economic growth.*

Gross Domestic Product *– is the total value of all goods and services produced within the country in a given period of time.*

Real GDP *– the production of goods and services valued at constant prices*

Consumption expenditure *– the expenditure of households on consumption of goods and services.*

Investment spending *– the purchase of new capital goods (tools, instruments, machines, buildings and other constructions) by firms.*

Government expenditure *– the expenditure of all levels of government for goods and services.*

Net exports *– spending on domestically produced goods by foreigners (export) minus spending on foreign goods by domestic residents (imports)*

Guidance for task-solving:

Prices and Quantities				
Year	**Price of Hot Dogs**	**Quantity of Hot Dogs**	**Price of Hamburgers**	**Quantity Hamburgers**
2008	$1	100	$2	50
2009	$2	150	$3	100
2010	$3	200	$4	150
Calculating Nominal GDP				
2008	($1 per hot dog×100 hot dogs)+($2 per hamburger×50 hamburgers)=$200			
2009	($2 per hot dog×150 hot dogs)+($3 per hamburger×100 hamburgers)=$600			
2010	($3 per hot dog × 200 hot dogs) + ($4 per hamburger × 150 hamburgers)= $1200			
Calculating Real GDP (base year 2008)				
2008	($1 per hot dog×100 hot dogs)+($2 per hamburger×50 hamburgers)=$200			
2009	($1 per hot dog×150 hot dogs)+($2 per hamburger×100 hamburgers)=$350			
2010	($1 per hot dog×200 hot dogs)+($2 per hamburger×150 hamburgers)=$500			
Calculating the GDP Deflator				
2008	($200/$200) ×100=100			
2009	($600/$350) ×100=171			
2010	($1200/$500) ×100=240			

$$GDP deflator = \frac{No\min al GDP}{\mathrm{Re} al GDP} \times 100 \quad (1)$$

Inflation rate in year 2 = (GDP deflator in year 2 – GDP deflator in year 1/ GDP deflator in year 1) × 100 (2)

Problems, tasks, cases for practical classes:

One day, Barry the Barber Inc., collects $400 for haircuts. Over this day his equipment depreciates in value by $50. Of the remaining $350 Barry sends $30 to the government in sales taxes, taken home $220 in wages, and retains $100 in his business to add new equipment in the future. From $220 that Barry takes home, he pays $70 in income taxes. Based on this information, compute Barry's contribution to the following measures of income. a) gross domestic product; b) net national product; c) national income; d) personal income; e) disposable personal income.

Tasks for independent work of students

Questions for individual work

Below are some data from the land of milk and honey:

Year	Price of milk	Quantity of milk	Price of honey	Quantity of honey
2008	$1	100 quarts	$2	50 quarts
2009	$1	200	$2	100
2010	$2	200	$4	100

a) compute nominal GDP, real GDP, and the GDP deflator for each year, using 2008 as the base year; b) compute the percentage change in nominal GDP, real GDP, and the GDP deflator in 2009 and 2010 from the preceding year. For each year, identify the variable that does not change. Explain in words why your answer makes sense; c) Did economic well-being raise more in 2009 or 2010? Explain.

Problematic questions:

A farmer grows wheat, which he sells to a miller for $100. The miller turns the wheat into flour, which he sells to a baker for $150. The baker turns the wheat into bread, which he sells to consumer for $180. Consumer eats the bread. a) What is GDP in this economy? Explain; b) Value added is defined as the value of a producer's output minus the value of the intermediate goods that the producer buys to make the output. Assuming there are no intermediate goods beyond those described above, calculate the value added of each of the three producers. c) What is the total value added of the three producers in this economy? How does it compare to the economy's GDP? Does this example suggest another way of calculating GDP?

Description of problems, tasks and cases	Recommended time (hours)
Obligatory tasks for full-time students:	
Questions for individual work: Which of the following are included in this year's GDP? Explain your answer in each case. a) Interest on an AT&T corporate bond. b) Social Security payments received by a retired factory worker. c) The unpaid services of a family member in painting the family home. d) The income of a dentist. e) The money received by Smith when she sells her economics textbook to a book buyer. f) The monthly allowance a college student receives from home. g) Rent received on a two-bedroom apartment. h) The money received by Josh when he resells his current-year-model Honda automobile to Kim. i) The publication of a college textbook. j) A 2-hour decrease in the length of the workweek. k) The purchase of an AT&T corporate bond. l) A $2 billion increase in business inventories. m) The purchase of 100 shares of GM common stock. n) The purchase of an insurance policy.	1
Problematic questions: Why do economists include only final goods and services in measuring GDP for a particular year? Why don't they include the value of the stocks and bonds bought and sold? Why don't they include the value of the used furniture bought and sold?	1
Additional tasks:	
What is the difference between gross private domestic investment and net private domestic investment? If you were to determine net domestic product (NDP) through the expenditures approach, which of these two measures of investment spending would be appropriate? Explain.	

Recommended Literature: [1, 4, 7, 8, 13, 14, 16, 19, 25, 30, 33]

Topic 13. Aggregate demand and aggregate supply. Macroeconomic equilibrium

Goal: exploring the essence of aggregate demand and supply as generalized macroeconomic indicators.

Objectives: clarify main determinants of AD and AS; explain the idea of macroeconomic equilibrium.

Expected results (competences): find out components of aggregate

demand; present graphic illustration of AD and AS curves; characterize the main outcomes of macroeconomic inequlibrium.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. Aggregate demand and its graphic representation. The components of aggregate demand.
2. Aggregate supply and its graphical representation.
3. Determinants of aggregate demand and aggregate supply.
4. Contents of macroeconomic equilibrium. Causes and consequences of its violation.

Plan of practical (seminar) classes:

1. Aggregate demand and its graphic representation.
2. Aggregate supply and its components.
3. Determinants of aggregate demand and aggregate supply.
4. The propensity to consumption and savings.

Vocabulary:

Recession – *a period of declining real incomes and rising unemployment*

Depression *– a severe recession*

Stagflation – *a period of falling output and rising prices*

Natural rate of output – *the production of goods and services that an economy achieves in the long run when unemployment is at its normal rate*

Model of aggregate demand and aggregate supply – *the model that most economists use to explain short-run fluctuations in economic activity around its long-run trend*

Aggregate-demand curve *– a curve that shows the quantity of goods and services that households, firms, the government and customers abroad want to buy at each level of price*

Aggregate-supply curve *– a curve that shows the quantity of goods and services that firms choose to produce and sell at each price level*

Problems, tasks, cases for practical classes:

What effects would each of the following have on aggregate demand or aggregate supply? In each case use a diagram to show the expected ef-

fects on the equilibrium price level and the level of real output. Assume all other things remain constant. a) A widespread fear of depression on the part of consumers. b) A $2 increase in the excise tax on a pack of cigarettes. c) A reduction in interest rates at each price level. d) A major increase in Federal spending for health care. e) The expectation of rapid inflation. f) The complete disintegration of OPEC, causing oil prices to fall by one-half. g) A 10 percent reduction in personal income tax rates. h) A sizable increase in labor productivity (with no change in nominal wages). i) A 12 percent increase in nominal wages (with no change in productivity). j) Depreciation in the international value of the dollar.

Tasks for independent work of students

Questions for individual work

Why is the aggregate demand curve downsloping? Specify how your explanation differs from the explanation for the downsloping demand curve for a single product. What role does the multiplier play in shifts of the aggregate demand curve?

Problematic questions:

Suppose that a hypothetical economy has the following relationship between its real output and the input quantities necessary for producing that output:

Input Quantity	Real GDP
150.0	400$
112.5	300
75.0	200

a) What is productivity in this economy? b) What is the per-unit cost of production if the price of each input unit is $2? c) Assume that the input price increases from $2 to $3 with no accompanying change in productivity. What is the new per-unit cost of production? In what direction would the $1 increase in input price push the economy's aggregate supply curve? What effect would this shift of aggregate supply have on the price level and the level of real output? d) Suppose that the increase in input price does not occur but, instead, that productivity increases by 100 percent. What would be the new per-unit cost of production? What effect would this change in per-unit production cost have on the economy's aggregate supply curve? What effect would this shift of aggregate supply have on the price level and the level of real output?

Description of problems, tasks and cases	Recommended time (hours)
Obligatory tasks for full-time students:	
Questions for individual work: Explain: "Unemployment can be caused by a decrease of aggregate demand or a decrease of aggregate supply." In each case, specify the price-level outcomes.	1
Problematic questions: In early 2001 investment spending sharply declined in the United States. In the 2 months following the September 11, 2001, attacks on the United States, consumption also declined. Use AD-AS analysis to show the two impacts on real GDP.	1
Additional tasks:	
Go to the OPEC Web site, www.opec.org, and find the current "OPEC basket price" of oil. By clicking on that amount, you will find the annual prices of oil for the past 5 years. By what percentage is the current price higher or lower than 5 years ago? Next, go to the Bureau of Economic Analysis Web site, www.bea.gov, and use the interactive feature to find U.S. real GDP for the past years. By what percentage is real GDP higher or lower than it was 5 years ago? What if, anything, can you conclude about the relationship between the price of oil and the level of real GDP in the United States?	

Recommended Literature: [1, 3, 5, 9, 12, 15, 17, 21, 23, 31, 32]

Topic 14. Employment and unemployment

Goal: exploring the essence of unemployment in terms of destructive effects on social and economic spheres.

Objectives: define the natural, frictional and structural types of unemployment; explain mail strategies for stimulation of employment.

Expected results (competences): calculate the level of employment and unemployment in the economy; determine social and economic effects of unemployment; define the main factors that boost employment.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. Employment and unemployment in a market economy.
2. Types of unemployment. Unemployment.
3. Social and economic consequences of unemployment. Okun's Law.

4. National Strategy for employment.

Plan of practical (seminar) classes:

1. Types of unemployment.
2. Calculation of unemployment.
3. The consequences of unemployment. Okun's Law.
4. National Strategy for employment.

Vocabulary:

Labor force – *the total number of workers, including both the employed and the unemployed*

Unemployment rate *– the percentage of the labor force that is unemployed*

Labor-force participation rate *– the percentage of the adult population that in the labor force*

Natural rate of unemployment – *the normal rate of unemployment around which the unemployment rate fluctuates*

Cyclical unemployment *– the deviation of unemployment from its natural rate*

Frictional unemployment *– unemployment that results because it takes time for workers to search for the jobs that best suit their tastes and skills*

Structural unemployment *– unemployment that results because the number of jobs available in some labor markets is insufficient to provide a job for everyone who wants one*

Problems, tasks, cases for practical classes:

Labor-force participation of men and women in the U.S. Economy

Women's role in American society has changed dramatically over the past century. Social commentators have pointed to many causes for this change. In part, it is attributable to new technologies, such as the washing machines, clothes dryer, refrigerator, freezer, and dishwasher, which have reduced the amount of time required to complete routine household tasks. In part, it is attributable to improved birth control, which has reduced the number of children born to the typical family. This change in women's role is also partly attributable to changing political and social attitudes, which in turn may have been facilitated by the

advances in technology and birth control. Together these developments have had a profound impact on society in general and on economy in particular.

Nowhere is that impact more obvious than in data on labor-force participation. Just after World War II, men and women had very different roles in society. Only 33% of women were working or looking for work, in contrast to 87% of men. Over the past several decades, the difference between the participation rates of man and women has gradually diminished, as growing numbers of women have entered the labor force, in contrast to 73% of men. As measured by labor-force participation, men and women are now are playing a more equal role in the economy.

The increase in women's labor-force participation is easy to understand, but the fall in men's may seem puzzling. There are several reasons for this decline. First, young men now stay in school together than their fathers and grandfathers did. Second, older men now retire earlier and live longer. Third, with more women employed, more fathers now stay at home to raise their children. Full-time students, retirees, and stay-at home dads are all counted as being out of the labor force.

Guidance for task-solving:

Labor force = Number of employed + Number of Unemployed (1)
Unemployment rate = (Number of Unemployed/ Labor force) × 100 (2)
Labor-force participation rate = (Labor force/Adult population) × 100 (3)

Tasks for independent work of students

Questions for individual work

What factors make it difficult to determine the unemployment rate? Why is it difficult to distinguish between frictional, structural, and cyclical unemployment? Why is unemployment an economic problem? What are the consequences of a negative GDP gap? What are the noneconomic effects of unemployment?

Problematic questions:

Use the following data to calculate (a) the size of the labor force and (b) the official unemployment rate: total population, 500; population under 16 years of age or institutionalized, 120; not in labor force, 150; unemployed, 23; part-time workers looking for full-time jobs, 10.

Description of problems, tasks and cases	Recommended time (hours)
Obligatory tasks for full-time students:	
Questions for individual work: Between 2004 and 2007, total U.S. employment increased by 6.8 million workers, but the number of unemployed workers declined by only 1.1 million. How are these numbers consistent with each other? Why might one expect a reduction in the number of people counted as unemployed to be smaller than the increase in the number of people employed?	1
Problematic questions: Since Ukraine has an unemployment compensation program that provides income for those out of work, why should we worry about unemployment?	1
Additional tasks:	
Assume that in a particular year the natural rate of unemployment is 5 percent and the actual rate of unemployment is 9 percent. Use Okun's law to determine the size of the GDP gap in percentage-point terms. If the potential GDP is $500 billion in that year, how much output is being forgone because of cyclical unemployment?	

Recommended Literature: [1, 2, 5, 7, 11, 14, 16, 19, 22, 31, 33]

Topic 15. Inflation

Goal: exploring maim reasons for inflation and it outcomes for economic development.

Objectives: define types, level and rate of inflation; explain the consequences of inflation for social and economic spheres.

Expected results (competences): find out causes and effects of inflation; determine fiscal and monetary tools that restrict inflation.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. The essence of inflation. The level and rate of inflation.
2. Types of inflation.
3. Social and economic effects of inflation.

Plan of practical (seminar) classes:

1. The essence and types of inflation.

2. Social and economic effects of inflation.
3. Anti-inflationary policy.

Vocabulary:

Consumer Price Index (CPI) – *a measure of the overall cost of the goods and services bought by a typical consumer*

Inflation rate *– the percentage change in the price index from the preceding period*

Producer Price Index (PPI) *– a measure of a cost of basket of goods and services bought by firms*

Indexation *– the automatic correction by law or contract of a national currency amount for the effect of inflation*

Nominal interest rate *– the interest rate as usually reported without a correction for the effects of inflation*

Real interest rate *– the interest rate corrected for the effects of inflation*

Guidance for task-solving:

Calculating the Consumer Price Index and the Inflation rate		
Step 1. Survey Consumers to Determine a Fixed Basket of Goods		
Basket = 4 hot dogs and 2 hamburgers		
Step 2. Find the Price of Each Good in Each Year		
Year	**Price of Hot Dogs**	**Price of Hamburgers**
2008	$1	$2
2009	2	3
2010	3	4
Step 3. Compute the Cost of the Basket of Goods in Each Year		
2008	($1 per hot dog × 4 hot dogs) + ($2 per hamburger × 2 hamburgers) = $8 per basket	
2009	($2 per hot dog × 4 hot dogs) + ($3 per hamburger × 2 hamburgers) = $14 per basket	
2010	($3 per hot dog × 4 hot dogs) + ($4 per hamburger × 2 hamburgers) = $20 per basket	
Step 4. Choose One Year as a Base Year (2008) and Compute the Consumer Price Index in Each Year		
2008	($8 / $8) × 100 = 100	
2009	($14 / $8) × 100 = 175	
2010	($20 / $8) × 100 = 250	

Step 5. Use the Consumer Price Index to Compute the Inflation Rate from Previous Years	
2009	(175 - 100) / 100 × 100 = 75%
2010	(250 - 175) / 175 × 100 = 43%

Consumer Price Index = (Price of basket of goods and services in current year/Price of basket in base year) × 100 ***(1)***

Inflation rate in year 2 = (CPI in year 2 – CPI in year 1/ CPI in year 1) × 100 ***(2)***

Problems, tasks, cases for practical classes:

Although earthquakes can wreak havoc on a society, they have the beneficial by-product of providing much useful data for seismologists. These data can shed light on alternative theories and, thereby, help society predict and deal with future threats. Similarly, hyperinflations offer monetary economists a natural experiment they can use to study the effects of money on the economy.

Hyperinflations are interesting in part because the changes in the money supply and price level are so large. Indeed, hyperinflation is generally defined as inflation that exceeds 50 percent per month. This means that price level increases more than a hundredfold over the course of a year.

The data on hyperinflation show a clear link between the quantity of money and the price level. Data from four classic hyperinflations that occurred during the 1920s in Austria, Hungary, Germany, and Poland. Figures shows the quantity of money in the economy and the index of the price level. The slope of the money line represents the rate at which the quantity of money was growing, and the slope of the price line represents the inflation rate. The steeper the lines the higher the rates of money growth or inflation.

Notice that in each graph the quantity of money and the price level are almost parallel. In each instance, grow in the quantity of money is moderate at first and so is inflation. But over time, the quantity of money in the economy starts growing faster and faster. At about the same time, inflation also takes off. Then when the quantity of money stabilizes, the price level stabilizes as well. These episodes illustrate well one of Ten Principles of Economics: prices rise when the government prints too much money.

Tasks for independent work of students

Questions for individual work

Suppose that this year's money supply is $500 billion, nominal GDP is $10 trillion, and real GDP is $5 trillion. a) What is the price level? What is the velocity of money? b) Suppose that velocity of money is constant and the economy's output of goods and services rises by 5 percent each year. What will happen to nominal GDP and the price level next year if the Fed keeps the money supply constant? c) What money supply should the Fed set next year if it wants to keep the price level stable? d) What money supply should the Fed set next year if it wants inflation of 10 percent?

Problematic questions:

It is often suggested that the Central Bank try to achieve zero inflation. If we assume that velocity is constant, does this zero-inflation goal require that the rate of money growth equal zero? If yes, explain why? If no, explain what the rate of money growth should equal.

Description of problems, tasks and cases	**Recommended time (hours)**
Obligatory tasks for full-time students:	
Questions for individual work: Explain how hyperinflation might lead to a severe decline in total output.	1
Problematic questions: Distinguish between demand-pull inflation and cost-push inflation. Which of the two types is most likely to be associated with a negative GDP gap? Which with a positive GDP gap, in which actual GDP exceeds potential GDP?	1
Additional tasks:	
Recall that money serves three functions in the economy. What are those functions? How does inflation affect the ability of money to serve each of these functions?	

Recommended Literature: [1, 2, 7, 8, 10, 14, 16, 19, 24, 28, 30]

Chapter 4. **International Economics**

Topic 16. International market and trade policies

Goal: research the essence of main theories and prerequisites to international trade.

Objectives: define main gains from international trade; explain the need of protection of international trade.

Expected results (competences): characterize theories of international trade; find out main principles of the World trade Organization; determine economic effects of free trade and protection.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. Economic basis for trade
2. Comparative advantages: terms of trade and gains from trade.
3. Trade barriers and cases for protection

Plan of practical (seminar) classes:

1. Gains from trade and specialization
2. Social and economic effects of protectionism in trade.
3. Goals, objectives and principles of the World Trade Organization.

Vocabulary:

World price – *the price of a good that prevails in the world market for that good*

Tariff – *a tax on goods produced abroad and sold domestically*

Exports *– goods and services that are produced domestically and sold abroad*

Imports *– goods and services that are produced abroad and sold domestically*

Net exports, Trade balance *– the value of nation's exports minus the value of its imports*

Trade surplus *– an excess of exports over imports*

Trade deficit *– an excess of imports over exports*

Balanced trade *– a situation in which exports equal imports*

Problems, tasks, cases for practical classes:

To the right are hypothetical production possibilities tables for New Zealand and Spain. Each country can produce apples and plums. Plot the production possibilities data for each of the two countries separately. Referring to your graphs, answer the following: a) What is each country's cost ratio of producing plums and apples. b) Which nation should specialize in which product?

New Zealand's Production Possibilities Table
(Millions of Bushels)

Production Alternatives				
Product	**A**	**B**	**C**	**D**
Apples	0	20	40	60
Plums	15	10	5	0

Spain's Production Possibilities Table
(Millions of Bushels)

Production Alternatives				
Product	**R**	**S**	**T**	**U**
Apples	0	20	40	60
Plums	60	40	20	0

c) Show the trading possibilities lines for each nation if the actual terms of trade are 1 plum for 2 apples. (Plot these lines on your graph.)

d) Suppose the optimum product mixes before specialization and trade were alternative B in New Zealand and alternative S in Spain. What would be the gains from specialization and trade?

Guidance for task-solving:

Net exports = Value of country's export – Value of country's import (1)

Net Capital Outflow = Purchase of foreign assets by domestic residents – Purchase of domestic assets by foreigners (2)

Net exports = Net Capital Outflow (3)

Tasks for independent work of students

Questions for individual work

"The potentially valid arguments for tariff protection are also the most easily abused." What are those arguments? Why are they susceptible to abuse? Evaluate the use of artificial trade barriers, such as tariffs and import quotas, as a means of achieving and maintaining full employment.

Problematic questions:

In 2005, manufacturing workers in the United States earned an average wage of $23.65 per hour. That same year, manufacturing workers in Mexico earned an average wage of $2.63 per hour. How can U.S. manufacturers possibly compete? Why isn't all manufacturing done in Mexico and other low-wage countries?

Description of problems, tasks and cases	Recommended time (hours)
Obligatory tasks for full-time students:	
Questions for individual work: Evaluate the following statements: a) Protective tariffs reduce both the imports and the exports of the nation that levies tariffs. b) The extensive application of protective tariffs destroys the ability of the international market system to allocate resources efficiently. c) Unemployment in some industries can often be reduced through tariff protection, but by the same token inefficiency typically increases. d) Foreign firms that "dump" their products onto the U.S. market are in effect providing bargains to the country's citizens. e) In view of the rapidity with which technological advance is dispersed around the world, free trade will inevitably yield structural maladjustments, unemployment, and balance-of-payments problems for industrially advanced nations. f) Free trade can improve the composition and efficiency of domestic output. Competition from Volkswagen, Toyota, and Honda forced Detroit to make a compact car, and foreign imports of bottled water forced American firms to offer that product. g) In the long run, foreign trade is neutral with respect to total employment.	2
Problematic questions: What is the WTO and how does it relate to international trade? How many nations belong to the WTO? (Update the number given at www.wto.org). What did the Uruguay Round (1994) of WTO trade negotiations accomplish? What is the name of the current WTO round of trade negotiations?	2

Additional tasks:
Go to the Web site of the World Trade Organization www.wto.org to retrieve the latest news from the WTO. List and summarize three recent news items relating to the WTO.

Recommended Literature: [1, 2, 7, 8, 10, 14, 16, 19, 24, 30, 32]

Topic 17. Open economy

Goal: exploring the notion and difference between open and closed economy.

Objectives: clarify the essence of trade barriers; explain the need of Balance of payment.

Expected results (competences): find out the nature of exchange rates; determine main trade barriers; characterize the purpose of Balance of payment.

Interdisciplinary links: for the successful study of the topic knowledge of the subject "Introduction to the profession" is required.

Plan of lecture:

1. Essence and structure of the Balance of payment.
2. Notion and types of exchange rates.
3. Trade barriers and cases for protection

Plan of practical (seminar) classes:

1. Methods of balancing the Balance of Payment
2. Determinants of exchange rates.
3. Causes and consequences of high trade deficit

Vocabulary:

Closed economy *– an economy that does not interact with other economies in the world*

Open economy *– an economy that interacts freely with other economies around the world*

Net capital outflow *– the purchase of foreign assets by domestic residents minus the purchase of domestic assets by foreigners*

Nominal exchange rate *– the rate at which a person can trade the currency of one country for the currency of another*

Appreciation (depreciation) *– an increase (decrease) in the value*

of a currency as measured by the amount of foreign currency it can buy

Real exchange rate – the rate at which a person can trade the goods and services of one country for the goods and services of another

***Purchasing-power parity** – a theory of exchange rates whereby a unit of any given currency should be able to buy the same quantity of goods in all countries*

Problems, tasks, cases for practical classes:

Indicate whether each of the following creates a demand for or a supply of European euros in foreign exchange markets: a) A U.S. airline firm purchases several Airbus planes assembled in France. b) A German automobile firm decides to build an assembly plant in South Carolina. c) A U.S. college student decides to spend a year studying at the Sorbonne in Paris. d) An Italian manufacturer ships machinery from one Italian port to another on a Liberian freighter. e) The U.S. economy grows faster than the French economy. f) A U.S. government bond held by a Spanish citizen matures, and the loan amount is paid back to that person. g) It is widely believed that the euro will depreciate in the near future.

Guidance for task-solving:

Real exchange rate = (Nominal exchange rate × Domestic price) / Foreign price (1)

Tasks for independent work of students

Questions for individual work

Alpha's balance-of-payments data for 2008 are shown below. All figures are in billions of dollars. What are the (a) balance on goods, (b) balance on goods and services, (c) balance on current account, and (d) balance on capital and financial account? Suppose Alpha needed to deposit $10 billion of official reserves into the capital and financial account to balance it against the current account. Does Alpha have a balance-of-payments deficit or surplus? Explain.

Goods exports	$+40
Goods imports	-30
Service exports	+15
Service imports	-10
Net investment income	-5
Net transfers	+10

Balance on capital account	0
Foreign purchases of Alpha assets	+20
Alpha purchases of assets abroad	-40

Problematic questions:

Explain why you agree or disagree with the following statements: a) A country that grows faster than its major trading partners can expect the international value of its currency to depreciate. b) A nation whose interest rate is rising more rapidly than interest rates in other nations can expect the international value of its currency to appreciate. c) A country's currency will appreciate if its inflation rate is less than that of the rest of the world.

Description of problems, tasks and cases	**Recommended time (hours)**
Obligatory tasks for full-time students:	
Questions for individual work: Suppose that a country follows a managed-float policy but that its exchange rate is currently floating freely. In addition, suppose that it currently has a massive current account deficit. Does it also have a balance of payments deficit? If it decides to engage in a currency manipulation in order to reduce the size of its current account deficit, will it buy or sell its own currency? As it does so, what will happen to its official reserves of foreign currencies? Will they get larger or smaller? And, finally, will the country have a balance of payments deficit while it is manipulating the exchange rate?	2
Problematic questions: What have been the major causes of the large U.S. trade deficits since 1999? What are the major benefits and costs associated with trade deficits? Explain: "A trade deficit means that a nation is receiving more goods and services from abroad than it is sending abroad." How can that be called "unfavorable"?	2
Additional tasks:	
The Federal Reserve Board of Governors provides exchange rates for various currencies for the last decade at www.federalreserve.gov/releases (Under the heading Exchange Rates and International Data, notice the subheading Foreign Exchange Rates. Click on the Annual link. You will links to find annual releases of exchange rate information. Use the most current and previous ones to answer the following question.) Has the dollar appreciated, depreciated, or remained constant relative to the Canadian dollar, the European euro, the Japanese yen, the Swedish krona, and the Swiss franc since 2000?	

Recommended Literature: [1, 2, 7, 8, 10, 14, 16, 19, 24, 32, 33]

Recommended topics of reports

1. The market system and circular flows.
2. The notion and practical usage of elasticity.
3. Government-set prices: price sealing and price floor.
4. Law of Diminishing marginal utility and utility maximization.
5. Explicit and implicit costs and their influence on economic profit.
6. Pure competition and efficiency of market.
7. Pure monopoly: barriers to entry and price discrimination.
8. Monopolistically competitive industries: number of sellers, product differentiation and advertising.
9. Oligopoly: mergers, collusions and cartels.
10. Public goods, private goods and externalities.
11. Saving, investments and choosing between present and future consumption.
12. Banks and other financial institutions.
13. Gross domestic product: income and expenditure approaches to measurement.
14. Ingredients of economic growth: supply factors, demand factors and efficiency factor.
15. The business cycle: phases, causation and cyclical impact on durables and nondurables.
16. Economic and noneconomic costs of unemployment.
17. Types of unemployment and its measurement.
18. Meaning and measurement of inflation.
19. Effects of demand-pull, cost-push inflation of real output.
20. Fiscal policy, budget deficit and government debt.
21. Tools of monetary policy: open market operations, the reserve ratio and the discount rate.
22. The balance of payment: current account and capital and financial account.
23. Arguments for and against trade protectionism.

Recommended topics of research work

1. The economic perspective: scarcity and choice, marginal analysis and purposeful behavior.
2. The concept of total and marginal utility and its practical application.
3. The relationship of marginal-cost curve to the average total-cost and average variable total-cost curve.
4. The long-run average-total-cost curve: unlimited number of plant sizes.
5. Short-run profit maximization for a purely competitive firm
6. The P=MC rule and the competitive firm's short-run supply curve.
7. Long-run equilibrium: a competitive firm and market.
8. Profit Maximization by a pure monopolist.
9. A monopolistically competitive firm: short-run and long-run.
10. Labor supply and labor demand in a purely competitive labor market and a single competitive firm.
11. The equilibrium price level and equilibrium real GDP.
12. The demand for money, the supply for money and the equilibrium interest rate.
13. Monetary policy and equilibrium GDP.
14. The AD-AS theory of the price level, real output, and stabilization policy.
15. Trading possibility lines and the gains from trade.
16. The market for foreign currency.
17. Benefits of fixed and flexible exchange rates.

Means for current and final knowledge control

1. Current and final control

University uses point-rating system of measuring academic achievements. Control of academic achievements includes current and final control.

The purpose of current control is a systematic check-up of student's knowledge during practical classes according to the criteria based on formative assessment. Formative assessment it's an approach in assessment aimed at evaluating various aspects of learning process of students, i.e. during classes, individual and independent work of students, work in groups and testing. Students are supposed to prepare reports, presentations, discuss cases and answer problematic questions, conduct calculations using various economic formula and equations, give definitions to different categories, answer open and closed tests with single or multiple choice.

Different assessment techniques are not only more reliable and give better understanding of student's performance, but are called to motivate for education and transfer major part of responsibility for good learning outcomes from lecturers and curators to students.

Final written examination contributes only 30% of all points to the final grade for this course. Examination tasks can vary but as a usual include 2 theoretical tasks and 2 practical problems.

Achievement test it is a sort of control, which might be used on demand by university administration to check both the level of remaining skills and knowledges and efficiency of learning techniques and lecturer's mastership.

2. Knowledge control tasks

Tests

1. The statement that the desire of customers to buy goods is a reflection of their supply, and wish the sellers sell the goods – demand is:

2. The main factor that affects both the demand and supply are:

3. Under the influence of supply and demand equilibrium price is formed in:

4. The law of demand reflects:

5. The non-price factors of demand do not include:

6. Identify which processes on the commodity market would shift the supply curve to the right (i.e. increase it):

7. The law of supply reflects:

8. The non-price factors of supply do not include:

9. When the interest rate for the credit increases, investment activity of the enterprise:

10. With favorable tax policy investment activity of the enterprise:

11. Determine for which market structure the most typical is the production of similar products by all manufacturers:

12. Specify how do we call the situation on the market when the buyer of a certain product is only one firm:

13. Determine which of the market price of goods is interest rate:

14. Check the correspondence between products and names of prices at which they sold on their respective markets:

15. Specify the factors that do not cause the change of money supply:

16. Determine which of the following types of money are part of the monetary aggregate M0:

17. Determine what situation will not affect the change in purchasing power capacity of Ukrainian hryvnia:

18. Specify what the money is in the modern sense:

19. Specify the correct definition of gross national product:

20. Determine macroeconomic indicators which are credited the income of a citizen of Ukraine who officially works in Italy:

21. Determine what better indicator be used to compare the welfare in different countries:

22. Determine which is the level of natural unemployment if structural unemployment is 2%, cyclical – 4%, frictional – 3%:

23. Determine which will lead to demand inflation:

3. Problems, tasks and cases for knowledge control

1. Market Basket of a family includes the following products:

Name of good	Quantity of good per month	Prices, UAH		
		September	October	November
Bread	20 kg	3,0	3,6	4,0
Sugar	6 kg	2,6	2,8	3,2
Oil	2 l	6,0	7,5	9,0
Meat	10 kg	20,0	25,0	30,0
Cereals	6 kg	3,5	3,5	4,0
Potatoes	30 kg	1,8	1,9	2,0

Determine the value of the consumer basket in September, October and November. Calculate monthly inflation rate and the overall rate of inflation.

2. Determine how many jobs will not be provided by qualified marketers if the wage rates are set it the level of 40 USD. Market demand for labor of marketers represented by the equation LD = 340 – 4W, and supply – by the equation LS = 6W – 160, where L – number of employees, W – wage rate.

3. Determine the amount of economic profit of the enterprise, which received 560 thousand UAH of income per year. Costs of external resources amounted to 365 thousand UAH, taxes and mandatory payments – 5 thousand UAH, implicit costs – 100 thousand UAH.

4. The consumer buys cucumbers at a price of 2 USD per kg and tomatoes at a price of 4 USD per kg. His income is 16 USD. The value of the total utility of different quantity of cucumbers and tomatoes for consumers are in the table.

Cucumbers		Tomatoes	
Q, kg	TU, utils	Q, kg	TU, utils
1	20	1	40
2	38	2	60
3	52	3	70
4	62	4	75
5	67	5	75

How many kilos of cucumbers and tomatoes rational consumer will buy?

5. The company manufactures and sells cups at a price of 10 USD. Variable costs per unit of output make 3.6 UAH, fixed costs account for 975,000 USD. Sales volume is 250,000 units. There is an offer to sell an additional 20,000 cups at a price of 5.25 USD. Execution of orders associated only with an increase in variable costs. Fixed costs do not change. Should the company accept the offer?

6. Consumers will spend 240 USD for the purchase of peaches and grapes. Based on the fact that the price of peaches is 15 USD per kg and the price of grapes is 10 USD per kg, build a budget line. Using data from tables describing consumer indifference curve, build indifference curve. Define the consumer point of equilibrium.

Combination	Peaches	Grapes
А	16	6
Б	12	8
В	8	12
Г	4	24

7. Table presents data on labor and employment:

	2003, thousand	2008, thousand
Labor force	84 880	95 450
Employed	80 790	87 520

Calculate the number of unemployed and the unemployment rate in 2003 and 2008. How to explain the simultaneous increase in employment and unemployment?

8. According to the table, calculat2e real GDP by years, real GDP per capita and rate of growth of nominal and real GDP.

Years	Population, million people	Nominal GDP, billion. UAH	CPI,%
2001	50	80 000	140
2002	52	90 000	130
2003	54	94 000	120
2004	53	102 000	110
2005	51	107 000	105

9. Calculate the rate of national income (ND) for the following data:

indirect taxes of the state on business make up 675 units, depreciation – 3225 units and gross domestic product (GDP) 1400 units.

10. Calculate the amount of money needed for the exchange on the following information: the nominal value of the gross domestic product (GDP) is 1.8675 million units, the velocity of money – 3.25.

4. Tasks for final written examination

Theoretical questions for examination:

1. The development of ideas about the subject of economics.
2. Methodology of Economic Research.
3. Features of positive and normative economics.
4. Macro- and microeconomics and their essence.
5. Types of needs and their essence.
6. Goods and their types.
7. Production resources and their limitations.
8. Productivity and its calculation.
9. The problem of choice and the concept of opportunity cost.
10. Production frontier and its properties.
11. Factors of production and their values.
12. Efficiency of production and methods of its measuring.
13. The three main economic issues.
14. Types of economic systems.
15. The nature and models of economic circulation.
16. The utility of goods and services.
17. The law of diminishing marginal utility.
18. Indifference curves and budget constraints.
19. Demand and law of demand. Demand function. Non-price determinants of demand.
20. Supply and the law of supply. Supply function. Non-price determinants of supply.
21. Price of market equilibrium and its value. The influence of the state on the price.
22. Elasticity of demand and supply, methods of calculation.
23. Relationship between elasticity of demand and income of the seller.
24. Types of costs and methods of calculation.
25. Profit and its species.
26. The law of diminishing factor productivity.
27. Essence and functions of the company.

28. Types of enterprises.
29. Market competition. Methods of competition.
30. Types of market structures. Protection of Competition.
31. Basic functions and mechanisms of activity of banks, insurance companies, investment funds, employment services and others.
32. Functions and types of money.
33. Money supply and monetary aggregates. Fisher Equation.
34. Positive and negative externalities. Public good.
35. Main macroeconomic indicators.
36. Methods for calculating macroeconomic indicators.
37. Unevenness of income distribution. Lorenz curve.
38. Aggregate demand and its graphic representation.
39. Aggregate supply and its components.
40. The propensity to consumption and savings.
41. Types of unemployment. Calculation of unemployment.
42. The consequences of unemployment. Okun's Law.
43. National Strategy for employment.
44. The essence and types of inflation. The level and rate of inflation.
45. Social and economic effects of inflation. Anti-inflationary policy.

Tasks (sample tasks) for examination:

1. Ace reporter Lois Lane has discovered that the following production possibilities are on the country of Metropolis' PPF:

	A	**B**	**C**	**D**	**E**
Good 1	0	20	40	60	80
Good 2	100	75	50	25	0

a) Graph Metropolis' PPF;

b) Calculate Metropolis' marginal rate of transformation.

2. Using the data below, calculate marginal and average productivi) ty. Graph the total product curve, marginal product and average product curves. Explain why marginal product curve at the beginning rises then decreases and finally is under the horizontal exe. Explain how the Law of Diminishing Marginal Product works.

The quantity of employed (people)	**Total product**	**Marginal product**	**Average product**
0	0		
1	10		

2	25		
3	37		
4	47		
5	55		
6	60		
7	63		
8	63		
9	62		

3. Ace reporter Clark Kent discovered the following data on Metropolis' Tea Market:

Price	Quantity Demanded	Quantity Supplied	Surplus or deficit
$2	1000	200	
$4	800	600	
$6	700	700	
$8	300	900	

a) calculate the surplus or deficit of tea on the Metropolis' Tea Market.

b) What is the equilibrium price and quantity of tea? Why? Explain.

c) Graph Metropolis' tea market, plotting at least 8 points on your graph. Show the surplus and deficit of tea on the Metropolis' Tea Market.

4. The following data is given for calculation the GNP using the income and expenditure approaches and national income using three methods: net investments – 20$, wage – 28$, corporate profit – 30 $, non-corporate profit – 15$, export – 33$, import – 13$, rent – 10$, interest rate – 22$, consumption expenditures – 55$, indirect taxes on business – 20$, government expenditures – 30$, depreciation – 25$.

5. Nominal GNP equals $23400, real GNP equals $22700. Calculate the GNP deflator and make the conclusion about the obtained result.

6. The company produces 65 units of product (Q) and sells them at a price (P) $3. It bought 5 machines (k) at price (i) $10. It also hired 8 workers (L) with the wage (w) per hour $7. It rents 2 acres of land (l) with the land rent (R) $ 30. The norm of normal profit equals 10%. Verify if the company receives economic profit. Explain the obtained result.

7. Assume that fixed costs equal $100. Variable costs are given in the table. Fill the entire table. Graph the total fixed costs, total variable costs and total costs curves. On the other diagram graph AFC, AVC and MC

curve explain their interrelation. Why the total costs curve does not intersect the total fixed costs and total variable costs curves?

Q	TFC	TVC	TC	AFC	AVC	MC
0		0				
1		90				
2		170				
3		240				
4		300				
5		370				
6		450				
7		540				
8		650				

8. Calculate the inflation rate if the market value of market basket in 2011 equals $700, the market value of market basket in 2012 equals $708 and the market value of market basket in 2013 equals $718. Give the explanation about the obtained results.

9. It is known that deciding the question of "how to produce", entrepreneur calculates total costs that possible when using a particular technology. What technology is advisable to use if he can produce 50 units of goods and sale each unit at a price of 5 USD.

Inputs	Technology I		Technology II	
	Quantity of Inputs	Price of Inputs	Quantity of Inputs	Price of Inputs
«Land»	2	10	3	10
«Labor»	18	5	4	5
«Capital»	2	6	10	6
«Entrepreneurship»	1	4	5	4

10. The US dollar costs 1.35 euro. The same dollar can be sold for 25.5 Ukrainian hryvnia. What is the exchange rate of the euro against the Ukrainian hryvnia?

5. List of recommended references

Main list

1. Кальченко С. В. Політична економія: навч. посіб. для студ. вищ. навч. закл. / С. В. Кальченко, І. О. Щебликіна, Д. Г. Легеза. – Сімф. : ДІАЙПІ, 2012. – 317 с.

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Evaluation criteria

Evaluation of the learning achievements of students is performed on the basis of University scale (0-100, taking into account miscellaneous tasks – 120 grades), national scale and ECTS-system using University's directives and normative documents.

1. Formative assessment

1.1. For full-time education

Activities	Grading/Points	Remarks
Performance during seminars	20	Solving problems, discussion of cases
Testing	10	Answer for open and closed questions with single or multiple choice
Miscellaneous tasks	20	Maximum 5 grades for each task
Mid-term control	20	Include problems, questions and definition of categories
Examination	30	Include 4 variable tasks
Total	**100**	

Maximal grade for miscellaneous tasks – 20 points.

2. Assessment criteria

1. Performance during seminars include:

1) Making notes of all problems, which are solved during seminars, answering lecture's questions, written and oral expression of opinion concerning topical issues of economic theory;

2) Active participation in discussion of questions and other student's questions, expression of personal opinions, observations and remarks.

2.Testing

Overall testing includes 2 tests held during seminars. Each test includes 10 questions. Correct answer gives student 0.5 points. Maximum possible score for testing – 10 points.

Written answers should be logical, straightforward, contain full and correct description or explanation of problem.

3. Miscellaneous tasks are an important part of studying process. They include preparation of PowerPoint presentation, defense individual written projects in groups.

4. Final examination contain various tasks including definition of main economic terms (5 points maximum), description theoretical background of the problem (5 points maximum), skillful solving problems and making calculations (20 points maximum).

3. Final grade

University scale	National scale
90 and more	Excellent
89–70	Good
69–50	Satisfactory
49–1	Unsatisfactory

Achievement test

Variant 1

1. Why is there so much advertising in monopolistic competition and oligopoly? How does such advertising help consumers and promote efficiency? Why might it be excessive at times?

2. Suppose the total demandfor wheat and the total supplyof wheat per month in the Kansas City grain market are as shown in the accompanying table.

Thousands of Bushels Demanded	Price per Bushel, $	Thousands of Bushels Supplied	Surplus (+) or Sortage (-)
85	3.40	72	
80	3.70	73	
75	4.00	75	
70	4.30	77	
65	4.60	79	
60	4.90	81	

a) What is the equilibrium price? What is the equilibrium quantity? Fill in the surplus-shortage column and use it to explain why your answers are correct.

b) Graph the demand for wheat and the supplyof wheat. Be sure to label the axes of your graph correctly. Label equilibrium price P and equilibrium quantity Q.

c) Why will $3.40 not be the equilibrium price in this market? Why not $4.90? “Surpluses drive prices up; short-ages drive them down.” Do you agree?

3. Suppose that the money supply and the nominal GDP for a hypothetical economy are $96 billion and $336 billion, respectively. What is the velocity of money? How will households and businesses react if the central bank reduces the money supply by $20 billion? By how much will nominal GDP have to fall to restore equilibrium, according to the monetarist perspective?

Variant 2

1. How does monopolistic competition differ from pure competition in its basic characteristics? From pure monopoly? Explain fully what product differentiation may involve. Explain how the entry of firms into its industry affects the demand curve facing a monopolistic competitor and how that, in turn, affects its economic profit.

2. Use the following data to calculate (a) the size of the labor force and (b) the official unemployment rate: if total population, 500; population under 16 years of age or institutionalized, 120; not in labor force, 150; unemployed, 23; part-time workers looking for full-time jobs, 10.

3. If the CPI was 110 last year and is 121 this year, what is this year's rate of inflation? What is the "rule of 70"? How long would it take for the price level to double if inflation persisted at (a) 2, (b) 5, and (c)10 percent per year?

Variant 3

1. Discuss the major barriers to entry into an industry. Explain how each barrier can foster either monopoly or oligopoly. Which barriers, if any, do you feel give rise to monopoly that is socially justifiable?

2. Assume that in a particular year the natural rate of unemployment is 5 percent and the actual rate of unemployment is 9 percent. Use Okun's law to determine the size of the GDP gap in percentage-point terms. If the potential GDP is $500 billion in that year, how much output is being forgone because of cyclical unemployment?

3. Suppose that the interest rate is 4 percent. What is the future value of $100 four years from now? How much of the future value is total interest? By how much would total interest be greater at a 6 percent interest rate than at a 4 percent interest rate?

KROK University

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Hanna Olasiuk

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Manual

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