#### MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE . WEST UKRAINIAN NATIONAL UNIVERSITY

CONFIRMED:

Director of Bohdan Havrylyshyn Education and Research Institute

International Relations ATION

Iryna IVASHCHUK

CONFIRMED:

Director of the educational and

scientific institute of new

Sviatoslav PY FEL

CONFIRMED:

Acting Vice-rector for

Academic Affairs and Research

edicational rechnologies

2023

# **WORK PROGRAM**

on discipline

# "Microeconomics"

Degree of higher education: Bachelor

Branch of knowledge: 29 International Relations Specialty: 292 International Economic Relations

Educational and professional program: "International Economic Relations"

**Department of Economics and Economic Theory** 

Form of study	Course	Semes -ter	Lectures (hours)	Practical classes (hours)	Individual student's work (hours)	Training, complex practical individual task (hours)	Self- studies of students (hours)	Total (hours)	Exam (sem.)
Full-time	1	1	30	30	4	8	78	150	1
Part-time	1	2	8	4	-	-	138	150	2

Ternopil - WUNU 2023

The work program is based on education and professional bachelor program of the branch of knowledge 29 International Relations, specialty 292 International Economic Relations, educational and professional program "International Economic Relations" confirmed by the Academic Council of West Ukrainian National University (Protocol No 10 on 23.06.2023).

The work program was formed by: Ph.D., Associate Professor

Iryna CHYRAK

The work program was confirmed at the meeting of the Department of Economics and Economic Theory, protocol No 1 on 29.08.2023.

Chief of the Department of Economics and Economic Theory, Professor

Viktor KOZIUK

Reviewed and approved by group providing specialty 292 International Economic Relations, protocol No 1 on 31.08. 2023.

Chief of the group providing specialty 292 International Economic Relations, Professor

Roman ZVARYCH

Guarantor of the educational and professional program "International Economic Relations", Associate Professor

Oleksandra BRATKO

# STRUCTURE OF THE WORK PROGRAM OF THE COURSE "MICROECONOMICS"

# 1. Description of the course "Microeconomics"

Discipline – "Microeconomics"	Branch of knowledge, direction of training / specialty	Description of discipline
Number of credits	Branches of knowledge:	Discipline status:
ECTS - 5	29 International Relations	mandatory
		Language of study: English
Number of test	<b>Specialty:</b> 292 International Economic	Year of study:
modules – 4	Relations	Full-time – 1
		Part-time – 1
	Educational and professional	
	program:	Semester:
	"International Economic Relations"	Full-time – 1
		Part-time – 2
Number of content	Educational and qualification level –	Lectures:
modules –2	bachelor	Full-time – 30 hours
		Part-time – 8 hours
		Seminars:
		Full-time – 30 hours
Total quantity of		Part-time – 4 hours
Total quantity of		Self-study work:
hours – 150		Full-time study –
		78 hours
		Training and complex practical individual task – 8 hours
		Part-time study – 138 hours.
		Individual work: Full-time form of study – 4 hours

Weekly hours –10	Type of result control –
Including classroom	exam
hours – 4	

# 2. Purpose and tasks of the course "Microeconomics"

#### 2.1. Purpose of the course

The purpose of the course "Microeconomics" is the formation of students' knowledge and forming the behavior and decision-making by individual economic micro agents in order to achieve the goal for the available limited resources, which may alternatively apply.

The program of the course is focused on deep learning of the theory of functional analysis, the main appointment of which is to analyze the functional relationships between key economic variables. This enables one to predict the chain of causality in the economy, determining in advance the expected results of decisions made.

#### 2.2. Tasks of discipline study

Tasks of the course are to equip the student a clear idea that success of any business depends not only on the availability of starting capital and entrepreneurial talent, but also on knowledge of the economic laws of micro systems in different market situations and their ability to be applied effectively. Mastering the course should develop students' skills in practical use of microeconomic analysis in decision-making. Acquired knowledge should become a part of general culture of specialist.

The course refers to the general economic fundamental sciences that form the professional outlook of future economists.

# 2.3. The name and description of competences the formation of which provides the study of discipline:

CK 4: ability to justify the peculiarities of the implementation of international economic relations forms at mega, macro, meso and micro levels

# 2.4. Prerequisites for studying the discipline:

The prerequisite for studying the course "Microeconomics" is basic knowledge of natural and social disciplines on the basis of secondary education.

# 2.5. Results of study:

ΠΡΗ 11: to justify one's own opinion regarding specific conditions of implementation of international economic relations forms on mega, macro, meso and micro levels.

#### 3. CONTENT OF THE COURSE "MICROECONOMICS"

# Theme 1. The Subject and Methods of Microeconomics

Microeconomics as a part of theoretical economics. Multidimensionality of theoretical analysis of economic systems. The problem of limited resources and the necessity of choice. Alternativeness purposes of limited resources and rational behavior of actors in market relations. Macro-and microeconomics as the most important part of modern theoretical economics, as a methodological, terminological, instrumental basis of specific economic disciplines.

Subject, conceptual framework and methodology of microeconomics. The subject of the course. Subjects and objects of economic relations at the micro level. Individual. Household. Firm. Government. The methodology of microeconomics.

Normative and positive microeconomics. Goals, objectives and content of the discipline. Goals and Objectives of discipline. Block diagram of semantic discipline. Relationship with other disciplines.

Literature: 1, 2, 3, 5, 7, 9, 12, 14, 17.

# Content module 1. The Theory of Consumer Behavior

## Theme 2. The Basic Theory of Consumer Behavior. Marginal Utility of Product

Utility in economic theory and the problem of it's measurement. The concept of "needs", "types of needs." Economic goods, their classification. The concept "utility", its features. Total and marginal utility. Utility function as the relationship between the number of consumed products and the level of utility, which consumer achieves.

The law of diminishing marginal utility of product. The process of consumption and dynamics of changes in total and marginal utility. The first Hossen's law. The law of diminishing utility of product, its graphical representation.

Optimization of consumption in conditions of plurality of consumable products. The impact of budget restraints and the price of goods on consumer behavior. The essence of rational choice of the consumer.

Consumer's equilibrium. The concept of "consumer's equilibrium". The model of product consumption. The second law of Hossen. The consumer's equilibrium achievement.

Literature: 1, 2, 7, 7, 12, 17, 19, 20.

# Theme 3. The Ordinal Theory of Consumer Behavior

Consumer choice from the ordinal position. The system of consumer advantages and its basic elements.

Indifference curves and their properties. Features analysis of the utility function from ordinal position. Indifference curves as special tools of microeconomic analysis.

The falling nature and inability to cross indifference curves for other similar conditions. Indifference map.

Budget constraints and opportunities for consumers. Budget line: equations and graphical construction. The concept of the slope of the budget line. Impact of changes of consumer income and the provisions of the budget line on the process of consumption.

Consumers optimum as a model of rational consumer choice. Two approaches to optimize consumer choice, its marginal interpretation. Alignment weighted marginal utility and consumer equilibrium. Different cases of reaching the equilibrium, "angular" and "internal" balance. Economic, algebraic, graphical interpretation of the consumer's equilibrium.

Literature: 3, 4, 7, 9, 11, 13, 17, 18.

#### Theme 4. The Analysis of Consumer Behaviour

Consumer's reaction on income changes. The line "income-consumption", its economic essence. Slope of line as description of consumer relation to blessings. Concept of the "normal" and "poor" goods. Engel curves.

Reaction of consumer on changes in commodity prices. A line of consumption price, its economical essence. Construction of individual demand line.

Effect of substitution and effect of income. Price changes on a "normal" and inferior commodity and their consequences. Compensated change of price. Using of curves of indifference curves for the analysis of consequences of payment the complete money compensation with increase of commodity price. Paradox of Giffen.

Effects of substitution and income as a basis for constructing the function of individual demand for the good in ordinal utility theory.

Literature: 2, 4, 5, 6, 9, 12, 13, 14, 19.

# Theme 5: Demand, Supply and Elasticity

The need and demand, their relationship. Individual and market demand.

Demand: analytical, tabular and graphical forms. The law of demand. The effect of "crowd", effect "snob", effect "Veblen". Price and non-price factors.

Supply, its nature and ways of expression. The concept of the volume of supply. The law of supply. Analysis of changes in supply and volume of given product under the influence of major non-price determinat.

The market equilibrium and its parameters. The function of equilibrium prices as a manifestation of the ability of forces to synchronize specific decision on the sale. Analysis of the situation of simultaneous changes in supply and demand.

The concept of elasticity. Price elasticity of demand as a dimension of consumer sensitivity to price changes. Income elasticity and cross elasticity of demand. The essence of cross-elasticity of demand, methods of it's calculation. Quantitative parameters of elasticity for interchangeable and complementary goods.

Practical use of the concept of cross elasticity of demand in the justification of pricing sellers (producers) of mutual connected goods.

The elasticity of supply. Methods of calculating the degree of price elasticity of demand. Factors affecting the elasticity of supply.

Literature: 4, 5, 7, 9, 13, 14, 15, 16, 19.

# Content module 2. The Production Theory Theme 6: The Microeconomic Model of Firm

Firm as market subject and production market system. The simplest scheme of market oriented production system (input, processing, output). Firm as purchasing system, as producer, as a seller.

Firm as a center of decision-making. The main kinds of the enterprise choice: the production ¬ what to produce? how to produce? for whom to produce? Time factors and periods in functioning an optimal and equilibrium state enterprises.

Most important features of the firm as a micro model. Production factors, their grouping and variation. Concepts and parameters of production functions. Production costs. Profit of the enterprise. Concept of profit. Total, average and marginal profit.

Literature: 3, 5, 6, 7, 11, 12. 16, 17, 18, 20.

## Theme 7. Variation of production factors and producers optimum

Part variation of production factors. Production function with one variable factor, the phenomenon of "fading" of production function. The rule of diminishing returns (productivity) variable factor of production. Total, average and marginal product, their relationship and graphical display.

Isoquant variation of production factors. Production function with two variable factors. Curve the same product - isoquant. Map of isoquant. Properties of isoquant. Marginal norm of technical substitution of resources. Reasons for positive and negative effects of scale.

The producers optimum. Choose a combination of production factors on the criterion of minimizing costs or maximizing output. Line the same cost - izocost. Izocost equation. Producer equilibrium: graphical, algebraic, economic interpretation.

The trajectory of expanding the production of the company in the short- and long-term periods. The optimal way of development in the short-run and long-run periods.

Literature: 4, 6, 7, 9, 12, 15, 17, 18, 19.

# Theme 8. Cost and Profit of the Enterprise

Concept and types of cost. The economic and accounting approaches to costing. Alternative cost. Explicit and implicit, internal and external costs. "Normal profit" as one of missed opportunities of cost components. Fixed and variable costs.

Production costs in the short-term period. The typical character of the dynamics of constant, variable and total costs. Features of the dynamics of secondary and marginal costs in the short-term period. Law of the inevitable increase of marginal costs.

Costs in the long-term period. Terms of minimizing costs. Terms of maximizing production, according to prices of resources and total costs. Curves of long-term costs, its types. The concept of minimum efficient size of enterprise.

Income and profit in microeconomics. Gross, average and marginal income, methods of their determination. Profit as the outcome of the enterprise. Accounting and economic profit.

Literature: 6, 7, 9, 11, 12, 13, 14, 19.

#### Content module 3.

## The Commodity Markets and Markets of Production Factors Theory

## Theme 9. The Market of Perfect Competition

Models of market. Matrix of market forms: perfect competition, monopoly, monopolistic competition and oligopoly. Comparative characteristics of market models.

Market model of a perfect competition and its characteristics. Characteristic features and conditions of perfect competition: openness, mobility of resources, transparency, product homogeneity, and others.

Income and its correlation with the line of demand for the firm. Market demand and demand for the firm in conditions of perfect competition. Graphic exploration of demand, of gross, average and marginal income of the enterprise in conditions of perfect competition.

Enterprise equilibrium and industry in the short-term period. Maximal-minimal aims of company in the short-term period. Conditions of profit maximization of competitive enterprise: the algebraic interpretation.

Market of perfect competition in the long run. Curve of market supply in the long run. Long-term equilibrium of enterprise, branch, market and mechanism of its support.

The efficiency of market perfect competition.

Literature: 4, 7, 8, 9, 12, 13, 17, 18, 19.

# Theme 10. The Monopolistic Market

The model of "pure" monopoly and its characteristics. The concept of "single seller", "market (monopoly) power" in the narrow and broad sense. Varieties of monopoly. Diagnosis of monopoly power. Monopoly of action.

Monopoly market in the short and long run. Curve of demand monopoly. Influence the behavior of a monopolist price elasticity of demand. Monopoly supply and features of its formation. Monopoly price. Price differentiation and discrimination.

Equilibrium of enterprise-monopolist in the long run. Peculiarities of the functioning of real monopolized markets. Analysis of the behavior of real monopolies. The economic consequences of monopolized industry. Comparative evaluation of competitive and monopoly markets. The need for state regulation of monopolies, antitrust policy.

Literature: 2, 3, 5, 7, 9, 11, 14, 16, 17.

# Theme 11. The Market of Monopolistic Competition

Common and distinctive features of monopolistic competition compared with perfect competition and pure monopoly. The number of commodity and product differentiation. Conditions of entry to the industry. Non-price competition.

Elasticity of demand for monopolistic competition. Profability and losses of enterprises in the short term.

Non-price competition. Nature and prerequisites for the development of non-price competition. Enhancing product differentiation: positive consequences and threats. Advertising products. The impact of advertising on sales volume and costs.

The effectiveness of monopolistic competition. The consequences of non-price competition of consumers: range of consumer choice and the loss of free time. Positive and negative aspects of advertising propaganda of goods. Excess production capacity and its implications for producers and society as a whole.

Literature: 1, 5, 7, 9, 10, 12, 14, 16, 18, 19.

## Theme 12. The Oligopoly

The main features of oligopoly. Oligopoly as a natural and the most common structure in the global market environment. Homogeneity or product differentiation. Barriers to entry into the industry. Asymmetry of oligopoly market power.

Theoretical models of oligopoly. Oligopolistic interdependence. Market leaders and outsiders. Summary of duopoly models for Shtakelberg. Duopoly models by Curno and Bertran. Modeling the behavior of oligopoly for functions of their reaction to market changes. Game theory in modeling oligopoly.

Features of oligopolistic market organization. Oligopolistic pricing. Key features of oligopoly pricing. Basic models of oligopolistic pricing. Broken curve of demand, the behavior of competitors, prices for foods of the enterprise.

Pricing on the principe "costs plus ..." The role of non-price competition.

The effectiveness of oligopoly. Public rating of oligopolistic market. Effectiveness of oligopoly compared to other market structure. The economic consequences of oligopoly. Features of state regulation in conditions of oligopoly.

Literature: 2, 3, 7, 10, 13, 14.

# Theme 13. The Entry into the Market

General characteristics of market input. Functions of market resources in the economy. Consumption of production factors by producer: aims and restrictions. Demand for resources, its original character. The volume of demand on resources, factors that determine its value.

Elasticity of demand on economic resources. Factors of elasticity. Supply and demand on labor in the market of perfect competition. Equilibrium in the labor market, its options. Labor market in conditions of monopsony. Characteristic features of monopsony labor market: supply and demand. The employment rate and wages in conditions of monopsony.

The role of trade unions. Control of trade unions over labor supply and wages.

Capital as a productive resource of long run using. Forms of long-term capital markets. The factor of time in the assessment of capital. Investment decision in the company. Curves of demand and supply on capital goods. The optimal level of investment for the company and its change under interest rate fluctuations.

Marginal efficiency of investment, interest rate and the optimal amount of capital. Nominal and real interest rate.

Market of land. Peculiarities of the land as a factor of production. Demand and supply of land and factors affecting them. Rent. Price of land.

Literature: 1, 4, 5, 7, 14, 15, 18.

#### Content module 4.

The General Market Equilibrium and Effective Functioning of Institutional Market

### Theme 14. The General Market Equilibrium and the Economy of Welfare

The concept of market equilibrium and its analysis. Partial and general equilibrium. The need to determine the market system as a whole, research interaction and interdependence of its parts. Analysis of the total equilibrium, its stages. The effect of feedback. The system of equations of equilibrium by Walras. Walras Law.

Equilibrium for exchange. The need for and benefits of market exchange. Comparison of marginal substitution rules for pairs of goods exchanged. Diagram Edgeworth. The effectiveness of the exchange. Curve of contracts. Pareto-efficient allocation. Production frontier and efficiency issue. Curve of features consumers. Efficiency in competitive markets the product.

General equilibrium and welfare economics. Aggregate efficiency of competitive markets. The reasons for the limited ability of market regulation: the presence of market power, opacity markets and incomplete or asymmetric information, the impact of external factors, the existence of significant social benefits non-market activity of market and nonmarket mechanisms of regulation and so on. Optimum and kvazioptimum of market system. The theory of general equilibrium and policy in welfare economics. Criteria for assessment of welfare.

Literature: 2, 3, 5, 6, 7, 11, 19.

# Theme 15. The Institutional Aspects of the Market Economy

The economic role of government in a market economy. The necessity and limits of state intervention in economic processes in market conditions. The functions of the state. Positive (descriptive) analysis of government behavior. Application of the theory of public choice in the behavior of government.

Non-market (external) effects. The concept of external effects and their economic content. Public and private costs (benefits). Corrective taxes and subsidies. The theorem of Couse-Stinhler. Pollution. The state's role in solving environmental problems.

Public goods. Public choice. The concept of public goods. The demand for public goods and their effective volume. Providing a public goods: markets and states ability.

Literature: 3, 4, 9, 11, 14, 15, 20.

# 4. The structure of test credit on course "Microeconomics"

Full-time study

Hours								
Course themes	Lectures	Practical classes	Individual work	Training, complex practical individual task	Self- studies of students	Control measures		
Theme 1. Subject and	2	2			4	Surveys,		
Method of Microeconomics			_			testing		
Content module 1. The Theory of Consumer Behavior								
Theme 2. The Basic Theory						Surveys,		
of Consumer's Behavior.	2	2	_		4	testing,		
Marginal Utility of Product						tasks		
Theme 3. Ordinal Theory						Testing,		
of Consumer's Behavior	2	2	_	2	4	tasks		
Theme 4. The Analysis of						Surveys,		
Consumer's Behavior	2	2	1		4	testing		
Theme 5. Supply, Demand,						Surveys,		
Elasticity	2	2	_		4	tasks		
Liasticity	Conte	nt module 2	Production T	   hearv		tasks		
Theme 6. The	Conte	in module 2	litouuction	licory				
Microeconomic Model of	2	2	_		6	Surveys,		
the Enterprise	_	_				testing		
Theme 7. Variation Factors								
of Production and	2	2	1	2	6	Testing,		
Producers' Optimum	2	2	1			tasks		
Theme 8. Cost and Profit of						Surveys,		
the Enterprise	2	2	_		6	tasks		
•	lule 3 Comi	L nodity Marl	kets and Facto	rs of Product	ion Theory	tasks		
Theme 9. The Market of			1	15 01 1 100000		Testing,		
Perfect Competition	2	2	_		6	tasks		
Theme 10. The Monopoly			_			Surveys,		
Market	2	2			6	tasks		
Theme 11. The Market of						Surveys,		
Monopolistic competition	2	2	_	2	6	tasks		
Theme 12. The Oligopoly						Testing,		
Theme 12. The Ongopoly	2	2	_		6	tasks		
Theme 13. The Entry into					6			
the Market	2	2	_			Surveys		
Content module 4. (	Leneral Faui	lihrium and	   Effective Fu	l actioning of Ir	l estitutional M	arket		
Theme 14. General Market	scherar Equi	and all	Miccaye Ful	lenoming of H		Surveys,		
Equilibrium and Economy	2	2	1		5	testing,		
of Welfare	2		1		3	tasks		
Theme 15. The Institutional			_	2		Surveys,		
Aspects of Market	2	2	_		5	testing		
Economy Economy		<u> </u>			]	testing		
TOTAL	30	30	4	8	78			
IUIAL	30	30	4	ð	10			

# **Part-time study**

	Hours					
Course themes	Lectures	Practical classes	Individual work	Training, complex practical individual task	Self- studies of students	
Theme 1. Subject and Method of Microeconomics	1	-	_		6	
	ent module 1. '	The Theory of (	Consumer Beha	vior		
Theme 2. The Basic Theory of Consumer's Behavior. Marginal Utility of Product		•	-		10	
Theme 3. Ordinal Theory of Consumer's Behavior	2	1	_	_	10	
Theme 4. The Analysis of Consumer's Behavior			_		10	
Theme 5. Supply, Demand, Elasticity			_		10	
	Content mo	dule 2. Produc	tion Theory			
Theme 6. The Microeconomic Model of the Enterprise		1	_	_	10	
Theme 7. Variation Factors of Production and Producers' Optimum	2		_		10	
Theme 8. Cost and Profit of the Enterprise			_		10	
Content module	3. Commodit	y Markets and	Factors of Proc	luction Theory		
Theme 9. The Market of Perfect Competition			_		8	
Theme 10. The Monopoly Market	2	1	_	_	10	
Theme 11. The Market of Monopolistic competition	_		_		8	
Theme 12. The Oligopoly Theme 13. The Entry into the Market			_		8	
Content module 4. Gene	eral Equilibriu	ım and Effectiv	e Functioning o	of Institutional M	larket	
Theme 14. General Market Equilibrium and Economy of Welfare	1	1	-	_	10	
Theme 15. The Institutional Aspects of Market Economy			_		10	
TOTAL	8	4	-	-	138	

# 5. Topics of practical lessons

#### Practical lesson No 1

## Theme: Subject and Methods of Microeconomics

**Purpose:** knowledge about Microeconomics as a part of theoretical economics, subjects and objects of economic relations at the micro level, goals, objectives and content of the discipline "Microeconomics"

# **Discussion questions:**

- 1. Microeconomics as a part of theoretical economics.
- 2. Subjects and objects of economic relations at the micro level. Normative and positive microeconomics.
  - 3. Goals, objectives and content of the discipline "Microeconomics".

Literature: 1, 2, 3, 5, 7, 9, 11, 14, 17, 19, 21.

#### Practical lesson No 2

# Theme: The Basic Theory of Consumer Behavior. Marginal Utility of Product

**Purpose:** providing students with thorough knowledge of utility in economic theory and the problem of it measurement, the law of diminishing marginal utility of product, equilibrium of the consumers and it achievement.

# **Discussion questions:**

- 1. Utility in economic theory and the problem of it measurement.
- 2. The law of diminishing marginal utility of product.
- 3. Equilibrium of the consumers. An achievement of consumer equilibrium.

Literature: 1, 2, 7, 7, 12, 13, 17, 18, 22.

#### Practical lesson No 3

# Theme: The Ordinal Theory of Consumer's Behavior

**Purpose:** formation of knowledge about consumer's choice from ordinal position, indifference curves as special tools of microeconomic analysis, marginal norm of goods replacement, the nature and methods of it calculation, budget constraints and opportunities for consumers, equations and graphical construction of budget line, and also about consumers' optimum as a model of rational consumer choice.

# **Discussion questions:**

- 1. Consumer choice from ordinal position.
- 2. Indifference curves as special tools of microeconomic analysis.
- 3. Marginal norm of goods replacement: the nature and methods of calculation.
- 4. Budget constraints and opportunities for consumers. Budget line: equations and graphical construction.
  - 5. Consumers' optimum as a model of rational consumer choice.

Literature: 3, 4, 7, 9, 11, 14, 15, 18, 19.

#### Practical lesson No 4

#### Theme: The Analysis of Consumer's Behavior

**Purpose:** providing students with knowledge of consumer reaction on income changes, effects of substitution and income as a basis for constructing the function of individual demand for the good in ordinal utility theory.

## **Discussion questions:**

- 1. Consumer reaction on income changes.
- 2. Effect of substitution and effect of income.
- 3. Effects of substitution and income as a basis for constructing the function of individual demand for the good in ordinal utility theory.

Literature: 2, 4, 5, 6, 9, 10, 12, 14, 15, 19, 20.

# Practical lesson No 5 Theme: Demand, Supply and Elasticity

**Purpose:** formation of students' knowledge system about human needs and demand, supply, price and non-price determinants effecting it, state regulation of the commodity market, elasticity of demand and supply and mechanisms of its calculation.

# **Discussion questions:**

- 1. Demand and factors affecting it.
- 2. Supply and factors affecting it.
- 3. The market equilibrium and it achievement. State regulation of the market.
- 4. Elasticity of demand and supply and mechanisms of its calculation.

Literature: 4, 5, 7, 9, 13, 14, 16, 19, 20, 22.

#### Practical lesson No 6

# **Theme: The Microeconomic Model of Enterprise**

**Purpose:** providing students with thorough knowledge of the enterprise as a subject of market relations, as economic organization and as a center of decision-making, the most important features of the enterprise as a micro model.

# **Discussion questions:**

- 1. Enterprise as a subject of market relations, as economic organization, as the most important kind of macro system.
- 2. Enterprise as a center of decision-making. Time factors and periods in functioning an optimal and equilibrium state enterprises.
  - 3. Most important features of the enterprise as a micro model.

Literature: 3, 5, 6, 7, 11, 12, 13, 14, 16, 19.

#### Practical lesson No 7

# Theme: Variation of Production Factors and Producer's Optimum

**Purpose:** formation of students' knowledge about production function with one and two variable factors, about total, average and marginal product, their relationship,

the producers optimum and students' skills to choose a combination of production factors on the criterion of minimizing costs or maximizing output.

### **Discussion questions:**

- 1. Production function with one variable factor.
- 2. Production function with two variable factors.
- 3. The producers optimum.

Literature: 4, 6, 7, 9, 12, 15, 17, 19, 20, 22.

#### Practical lesson No 8

# **Theme: Cost and Profit of the Enterprise**

**Purpose:** providing students with thorough knowledge of concept, types, approaches to cost determination, difference of cost in the short-term and long-term periods and skills of students to account income and profit of the enterprise.

# **Discussion questions:**

- 1. Cost: the essence, types and concepts.
- 2. Cost of the enterprise in the short-term period.
- 3. Cost of the firm in the long-term period.
- 4. Income and profit in microeconomics. Accounting and economic profit.

Literature: 6, 7, 9, 11, 12, 13, 14, 17, 18, 20.

#### Practical lesson No 9

## **Theme: The Market of Perfect Competition**

**Purpose:** formation of students' knowledge about the market models, features of market structures, the perfect competition market model and its characteristics, enterprise equilibrium and industry in the short and long-term period and the efficiency of market perfect competition.

# **Discussion questions:**

- 1. Models of market. Features of market structures.
- 2. The model of the market of perfect competition and its characteristics.
- 3. Enterprise equilibrium and industry in the short and in the long-term periods.
- 4. The efficiency of market perfect competition.

Literature: 4, 7, 8, 9, 12, 13, 14, 18, 19.

# Practical lesson No 10

# **Theme: Monopolistic Market**

**Purpose:** providing students with thorough knowledge of the model of "pure" monopoly and its types and characteristics, about monopoly market in the short and long-term periods, need for state regulation of monopolies, antitrust policy.

# **Discussion questions:**

- 1. The model of "pure" monopoly: the essence and types.
- 2. Monopoly market in the short-term and long-term periods.
- 3. Peculiarities of the functioning of real monopolized markets. Comparative evaluation of competitive and monopoly markets.

4. The need for state regulation of monopolies, antitrust policy.

Literature: 2, 3, 5, 7, 9, 12, 15, 17, 19, 21.

#### Practical lesson No 11

#### Theme: The Market of Monopolistic Competition

**Purpose:** formation of students' knowledge system about the market of monopolistic competition, it means about signs and spread of monopolistic competition, behavior model of enterprise-monopoly competitor and about non-price competition.

# **Discussion questions:**

- 1. Signs and spread of monopolistic competition.
- 2. Behavior model of enterprise-monopoly competitor.
- 3. Non-price competition.

Literature: 1, 5, 7, 9, 10, 14, 16, 17, 18.

# Practical lesson No 12 Theme: The Oligopoly

**Purpose:** knowledge of oligopoly as a natural and the most common structure in the global market environment and it main features, theoretical models of oligopoly, oligopolistic pricing, about cartels, oligopoly, based on a secret conspiracy, pricing in these conditions, interference by the conspiracy, leadership in prices, and also about the effectiveness of oligopoly, features of state regulation in conditions of oligopoly.

## **Discussion questions:**

- 1. The oligopoly: the essence and the main features.
- **2.** Theoretical models of oligopoly. Oligopolistic interdependence and evolution of action market participant.
  - 3. Features of oligopolistic market organization. Oligopolistic pricing.
- **4.** Oligopoly, based on a secret conspiracy, pricing in these conditions, interference by the conspiracy. Leadership in prices.
- **5.** The effectiveness of oligopoly. Features of state regulation in conditions of oligopoly.

Literature: 2, 3, 7, 10, 13, 14, 15, 19.

## Practical lesson No 13

# Theme: The Entry into the Market

**Purpose:** formation of students' knowledge system about general characteristics of entry into the market, peculiarities of the labor market functioning, the role of trade unions at the market, about capital as a productive resource of long run using, investment decision in the company, nominal and real interest rate, and also about the market of land and it peculiarities.

# **Discussion questions:**

- 1. Entry into the market: general characteristics and functions of market of resources in the economy.
  - 2. Peculiarities of the labor market functioning.
  - 3. The role of trade unions at the market.

- 4. Capital as a productive resource of long run using. Forms of long-term capital markets.
  - 5. Investment decision in the company.
  - 6. Nominal and real interest rate.
  - 7. Market of land. Peculiarities of the land as a factor of production.

Literature: 1, 4, 5, 7, 14, 15, 18.

#### Practical lesson No 14

# Theme: The General Market Equilibrium and the Economy of Welfare

**Purpose:** providing students with thorough knowledge of the concept of market equilibrium and its analysis, partial and general equilibrium, general equilibrium and the economy of welfare, aggregate efficiency of competitive markets.

# **Discussion questions:**

- 1. The concept of market equilibrium and its analysis. Partial and general equilibrium.
  - 2. Equilibrium for exchange. The need for and benefits of market exchange.
- 3. General equilibrium and the economy of welfare. Aggregate efficiency of competitive markets.

Literature: 2, 3, 5, 6, 7, 11, 14, 17, 19.

#### Practical lesson No 15

# **Theme: The Institutional Aspects of Market Economy**

**Purpose:** forming the students' knowledge of the essence of institutional environment of market economy and transaction costs, understanding of the external cost and peculiarities of public goods, knowledge of the social choice theory and its role in market economy.

# **Discussion questions:**

- 1. The institutional environment of market economy. Transaction costs
- 2. External effects. The Coase's theorem.
- 3. Peculiarities of public goods and conditions of its use
- 4. The social choice theory and its role in market economy

Literature: 2, 4, 5, 6, 7, 11, 12, 18, 20.

### 6. Training, complex practical individual task

## Training on course "Microeconomics"

Training course on discipline "Microeconomics" is held on the last two lectures to show students the theoretical material referenced to reality and to develop their skills in the practical application of acquired knowledge in Microeconomics.

- 1. The introductory part is conducted in order to familiarize students with the topic of the training class.
- 2. The organizational part consists in creating a working mood in the student team, defining the rules for training. It is possible to have information and digital material in the form of tables, document forms.
- 3. Practical part by performing tasks in groups of 3-5 students on certain problematic issues of the training topic.
- 4. Summing up. The results of the completed tasks are discussed in groups, the exchange of opinions on the issues that were brought to the training sessions.

**Theoretical part.** The proposed training covers situational tasks that highlight the practical use of market safety analysis regarding the state of competition (level of monopolization) and the analysis of supply and demand in the goods market. The general purpose of the analysis is to predict the possible impact on the development of a specific product market and to take it into account when making appropriate management decisions.

**The practical part.** Analysis of the level of market monopolization (situational task).

Market research takes place through the study and forecasting of the market situation, which is formed by certain factors and expressed in specific indicators. The object of attention is the study of the conjuncture of a specific product market (collection, analysis and processing of information about the state of the product market, analysis and identification of features and trends of its development, forecasting of the main parameters and development of possible alternatives for decision-making).

When performing an analysis based on empirical real data, the Herfindel-Hirschman index is calculated and an analytical report is prepared.

# Complex practical individual task

Completing the complex practical individual task is one of the most important stages of studying the course "Microeconomics" and a mandatory structural element of credit from this course.

The purpose of complex practical individual task is to deepen and consolidate theoretical knowledge by conducting an independent study of the behavior of consumers and producers on the market, which requires the skillful use of relevant microeconomic models. In the process of performing the complex practical individual task student must demonstrate knowledge of the mechanism of economic decision-making by individual economic entities, be able to analyze models of interaction between consumers and

producers, and also correctly formulate conclusions based on the obtained research results.

#### Variants of complex practical individual tasks:

- 1. Analysis of the relationship between consumer behavior and quality of life in a market economy.
- 2. Budget constraint: the essence, factors, assessment of the characteristics of the impact on consumer choice.
- 3. Subsidies as a mechanism of state support of the producer in market conditions (on the example of the enterprise).
- 4. Analysis of the impact of taxes on the efficiency of the firm (on the example of the enterprise).
  - 5. Analysis of production efficiency indicators (on the example of the enterprise).
  - 6. Analysis of the company's profit and the main factors that affect it.
- 7. Oligopolistic market and features of its functioning in Ukraine (or any other country).
- 8. Competitive market and features of its functioning in Ukraine (or any other country).
- 9. The market of monopolistic competition and features of its functioning in Ukraine (or any other country).
- 10. Monopoly market and features of its functioning in Ukraine (or any other country).
- 11. Natural monopoly and features of its regulation (on the example of the enterprise).
- 12. Pricing in conditions of monopolistic competition (on the example of the enterprise).
- 13. Pricing in a monopoly and price discrimination (on the example of the enterprise).
  - 14. Pricing in an oligopoly (on the example of the enterprise).
  - 15. Pricing in a competitive environment (on the example of the enterprise).
- 16. Consequences of state regulation of pricing for a competitive enterprise, industry.
  - 17. Analysis of antitrust policy (international comparisons).
- 18. Restraint of monopoly power: antitrust policy (for example, enterprise, industry).
- 19. Analysis of the state and trends of the market of milk and dairy products (national or regional aspect).
- 20. Analysis of the state and trends of the meat and meat products market (national or regional aspect).
- 21. Analysis of the state and trends of the market of bread and bakery products (national or regional aspect).
- 22. Analysis of the state and trends of the oil and oil products market (national or regional aspect).

- 23. Analysis of the state and trends of the tobacco market (national or regional aspect).
- 24. Analysis of the state and trends of the alcohol market (national or regional aspect).
- 25. Analysis of the state and trends of the real estate market (national or regional aspect).
- 26. Analysis of the state and trends of the computer and software market (national or regional aspect).
- 27. Analysis of the state and trends of the drug market (national or regional aspect).
- 28. Analysis of the state and trends of the gold market (national or regional aspect).
  - 29. Analysis of the state and trends of the gas market (national or regional aspect).
  - 30. Analysis of the state and trends of the car market (national or regional aspect).
- 31. Analysis of the state and trends of the tourist services market (national or regional aspect).
- 32. Analysis of the state and trends of the insurance services market (national or regional aspect).
- 33. Analysis of the state and trends of the banking services market (national or regional aspect).
- 34. Analysis of the state and trends in the market of consulting services (national or regional aspect).
- 35. Analysis of the state and trends of the press market (national or regional aspect).
- 36. Analysis of the state and trends of the advertising services market (national or regional aspect).
  - 37. Interest rate and its impact on the peculiarities of the investment process.
  - 38. Microeconomic analysis of pricing in the resource market: features and trends.
- 39. The labor market and the peculiarities of wage formation in conditions of perfect competition in the labor market.
- 40. Antitrust regulation of the economy in Ukraine (or any other country) as a basis for ensuring a competitive environment.

# 7.Self-study work

Student's self-study work is an activity that students perform independently under the methodical guidance and control of a lecturer without his direct participation.

Self-study work is aimed at students' deeper study of important issues of the course curriculum.

During the study of the academic discipline, the following types of self-study work are used:

\* preparation of additional questions for each topic of the course;

- preparation of mandatory questions for practical classes;
- ❖ work with additional literature.

Mandatory requirements for independent work:

- the optimal amount of disclosure of an additional question is 2-3 pages. At the initiative of the student, additional questions can be presented at a practical session or a round table in the form of a presentation;
- formulation of conclusions that should contribute to the expansion of students' knowledge and skills in the discipline.

# List of topics and questions for students' self-study work:

- 1. The role of Microeconomics in the system of economic sciences.
- 2. The methodology of the research of Microeconomics.
- 3. The evolution of economic though on development of Microeconomic as a science.
- 4. The contribution of Ukrainian economists to the development of microeconomic analysis.
  - 5. Normative and positive microeconomics.
  - 6. Problems of consumer's utility measurement.
- 7. The system of consumer preferences and its main elements: the ability to rank alternatives; transitivity of benefits; insatiability of benefits; interchangeability of goods.
- 8. Comparative peculiarities of cardinal and ordinal theories of consumer's behavior.
  - 9. An achievement of consumer's equilibrium: conditions and factors affecting it.
- 10. The process of consumption and dynamics of changes in total and marginal utility.
- 11. Optimization of consumption in conditions of plurality of consumable products.
- 12. Impact on real consumer purchasing power of changes in prices and nominal income.
  - 13. Consumer's optimum as a model of rational consumer choice.
- 14. The effects of substitution and income: their influence on consumer's behavior.
- 15. The law of demand and its explanation of the basic concepts of the consumer behavior theory.
- 16. Analysis of changes in supply and volume of products under the influence of major non-price determinants.
- 17. Relationship between elasticity of demand and changes in aggregate proceeds to the price change of product.
- 18. Social effects that complicate the connection between individual and market demand: the "imitation" effect, the "snob" effect, the "Veblen" effect.
- 19. Evaluation of the effect of price and non-price determinants of demand in the diagnosis of real situations in commodity markets.
  - 20. Most important features of the enterprise as a micro model.

- 21. The trajectory of expanding the production of the company in the short-term and long-term periods.
- 22. The concept of minimum efficient size of enterprise and structure of the industry.
- 23. Protection of the national producer from foreign competition: introduction of quotas and customs tariffs on imported goods.
  - 24. Motivation of enterprise behavior.
  - 25. Monopoly market in the short-term and long-term periods.
  - 26. Analysis of the behavior of real monopolies.
  - 27. The need for state regulation of monopoly.
- 28. Oligopoly as a natural and the most common structure in the global market environment.
  - 29. The efficiency of oligopoly compared to other market structures.
  - 30. Game theory in oligopoly modeling.
  - 31. Price differentiation and discrimination.
  - 32. Elasticity of demand for economic resources.
  - 33. The role of trade unions. Control of trade unions over labor supply and wages.
  - 34. Supply and demand on labor in the market of perfect competition.
- 35. Marginal efficiency of investment, interest rate and the optimal amount of capital.
- 36. The discounting process: a technique for determining the future value of a present amount of income.
  - 37. The system of general equilibrium equations according to Walras.
  - 38. The welfare economy: peculiarities and condition for it creation.
  - 39. The economic role of government in a market economy.
  - 40. Reasons for the limited capacity of market regulation

# 8. Assessment tools and methods for demonstrating the results of study

In the process of study the discipline "Microeconomics" the following methods of evaluation of students' work are used:

- standard tests;
- current poll;
- modular testing and poll;
- scoring unit testing and interviews;
- evaluation of performance of integrated practical individual task;
- presentations of results of students' researches;
- rector control work;
- final exam;
- other.

# 9. Criteria, forms of ongoing and final control

The final score (on a 100-point scale) the discipline "Microeconomics" is defined as a weighted average, depending on the proportion of each component of test credit.

Credit module 1	Credit module 2 (rector control test)	Credit module 3 (integrated practical individual task)	Credit module 4 (exam)
20 %	20 %	20 %	40 %
1. Interview during the lesson (topics 1-8) – 5 points per topic, maximum 40 points 2. Written work = 60 points	1. Interview during the lesson (topics 9-15) – 5 points per topic, maximum 35 points 2. Written work = 65 points	<ol> <li>Writing and defending the integrated practical individual task = 60 points.</li> <li>Performing tasks during training = 40 points</li> </ol>	1. Tests (25 tests for 2 points per test) – maximum 50 points 2. Task 1 – maximum 25 points 3. Task 2 – maximim 25 points

# **Scale of marking:**

For scale of WUNU	For national scale	For ESCT scale
90 – 100	Excellent	A (excellent)
85 - 89	Well	<b>B</b> (very well)
75 – 84		C (well)
65 –74	Satisfactory	<b>D</b> (satisfactory)
60 - 64		E (adequately)
		<b>FX</b> (unsatisfactory with possibility of
35 - 59		repeated passing)
	Unsatisfactory	F (unsatisfactory without possibility of
1 - 34		repeated passing)

# 10. The list of visual materials and guidance

No	Name	Theme number
1.	Basic information technology software: MS Office,	1-15
	telecommunications software (Opera, Google Chrome, Firefox)	
2.	View Sonic PJ 7223 projector	1-15

#### RECOMMENDED LITERATURE

- 1. Ahuja, H. (2019). Principles of Microeconomics: A New-Look Textbook of Microeconomic Theory, Schand, 379 p.
  - 2. Besanko, D., Brauetigam, R. (2020). Microeconomics. 6th edition. Wiley,864 p.
  - 3. Blokdyk, G. (2019). Microeconomics A Complete Guide. 5STARCooks, 298 p.
- 4. Campbell R. McConnell, Stanley L. Brue (2019). Economics Paperback. McGraw-Hill Education; 21st edition, 984 p.
  - 5. Chyrak, I. (2018). Microeconomics: textbook. Ternopil, TNEU, 223 p.
- 6. Chyrak, I. (2022). Methodical instructions and tasks on course "Microeconomics". Ternopil: WUNU, 82 p.
- 7. Chyrak, I. (2022). Methodical recommendations and tests on course "Microeconomics". Ternopil: WUNU, 46 p.
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- 9. Coppock, L., Mateer, D. (2019). Principles of Microeconomics Second Edition, W. W. Norton & Company; Second edition, 688 p.
  - 10. Cornelius, Ch. (2019). Principles of Microeconomics. KHP Content, 250 p.
- 11. Dodge, E. (2019). 5 Steps to a 5: AP Microeconomics 2020 Elite Student Edition. McGraw-Hill Education, 511 p.
- 12. Garg, S. (2019). Introductory Micro Economics for Class 12, Dhanpat Rai Publications; Ninth edition, 680 p.
- 13. Goodwin, N, Harris, J. (2019). Microeconomics in Context 4th Edition, Kindle Edition, Routledge; 4th edition, 646 p.
- 14. Goolsbee, A., Levitt, S., Syverson, Ch. (2019). Microeconomics. Third Edition. Worth Publishers, 768 p.
- 15. Kreps, D. (2019). Microeconomics for Managers, 2nd Edition. Princeton University Press. Retrieved from https://www.perlego.com/book/773393/microeconomics-for-managers-2nd-edition-pdf (Original work published 2019).
- 16. Martin J. Osborne and Ariel Rubinstein (2020). Models in Microeconomic Theory. Open Book Publishers, 364 p.
  - 17. Maschler, M. (2020). Game Theory, 2nd Edition. 1050 p.
  - 18. Migdad, A. (2019). Microeconomics 3rd Ed. Theory and Applications, 251 p.
- 19. Musgrave, F., Kacapyr, E., Redelsheimer, J. (2021). AP Microeconomics/Macroeconomics with 4 Practice Tests, Seventh Edition. Barrons Educational Series, 440 p.
  - 20. Patrick, E. (2019). Intermediate Microeconomics, Oregon University, 432 p.
- 21. Sukhdev, P. (2020). Corporation 2020: Transforming Business for Tomorrow's World Kindle Edition. Island Press, 294 p.
- 22. Vohra, R. (2020). Prices and Quantities. Fundamentals of Microeconomics. University of Pennsylvania, 220 p.