

**Educational Establishment  
«The Grodno State Agrarian University»**

APPROVED BY

Rector of Educational  
Establishment  
«The Grodno State Agrarian  
University»

\_\_\_\_\_  
V.K.Pestis

«07» 06.2019 г.

Registration № 87-14/уч.

MICROECONOMIC ANALYSIS AND POLICY

1-25 80 01 «Economics»

2019 г.

The curriculum is based on:

Типовой учебный план по специальности 1-258001 «Экономика», утвержден первым заместителем министра образования Республики Беларусь И.А. Старовойтовой от 21.03.2019 г., рег. № Е 25-2-001/пр-тип

Prepared by:

Candidate of Historical Sciences, Associate Professor Hanchar A.I.

Reviewers:

Platonenko E.I. – head of the department of finance and accounting “Yanka Kupala State University of Grodno”, candidate of economic sciences, associate professor.

Wysokomornyi V.I. – associate Professor of the Department of agriculture of "Grodno state agrarian University", candidate of agricultural Sciences, associate Professor;

Examined and approved for the publishing in the meeting of the department of economic theory, the report № 1 from 02.09.2019.

It is approved and recommended to the statement by methodical council of Educational Establishment «Grodno State Agrarian University» from 07.06.2019, the report № 7.

## EXPLANATORY NOTE

### 1.1 The urgency the course of study.

Progressive development of the national economy involves improving the efficiency of economic entities, which is possible only in the conditions of their optimal economic decisions. The discipline "Microeconomic analysis and Policy" is aimed at solving these problems, because it studies the patterns of economic behavior of market participants, as well as the conditions that determine this behavior in relation to business practice. Knowledge of this discipline will allow a better understanding of the most important functional relationships between economic variables and successfully solve practical problems in a changing environment.

The discipline "Microeconomic analysis and Politics" is directly based on "Microeconomics", which is the basis for its study. It is also associated with such disciplines as "Higher mathematics", "foreign Economic activity", "enterprise Economics", "Marketing".

"Microeconomic analysis and policy" is the basis for further study of the discipline "Macroeconomic analysis and policy".

### 1.2 The Purpose and objectives of the discipline.

The purpose of the discipline – the further development of economic thinking of undergraduates in the field of microanalysis, the development of skills of analysis of specific microeconomic phenomena, the formation of the ability to apply theoretical knowledge in the process of making management decisions.

Objectives of the study of the discipline:

- develop skills of economic information analysis;
- to form a knowledge system that will analyze the patterns of functioning and interaction of market structures in the real economy;
- develop the ability to creatively apply theoretical knowledge in the practice of management;
- to form an idea of the basic principles, trends, economic boundaries of state regulation of the most important microeconomic processes;

As a result of studying the discipline the student must know:

- modern approaches to the study of microeconomic phenomena;
- methods and principles of analysis of real market structures;
- models of behavior of firms in different industry markets;
- the main problems arising from changes in market conditions and the consequences of their changes;
- features of the organization and functioning of market structures in the Republic of Belarus;
- directions, mechanism and instruments of state microeconomic regulation in developed countries and the Republic of Belarus.

know:

- analyze the structure and characteristics of specific markets;

- correctly assess the changes occurring in market structures and their economic consequences;
  - study and predict the impact of economic agents on the market situation;
  - to analyze the processes taking place in the market structures of the Republic of Belarus and abroad;
  - to summarize the experience of developed countries in the field of regulation of microeconomic processes and use this knowledge to develop practical recommendations for improving their state regulation;
  - use the acquired knowledge to make optimal market decisions.
- have skills:
- search, synthesis and analysis of economic information in the field of organization and functioning of market structures;
  - analysis of the specific situation in the market and search for optimal solutions in terms of economic choice;
  - use of economic analysis tools to study specific markets in the country;
  - evaluating the effectiveness of state regulation of microeconomics and identifying specific ways to improve it;
  - independent and creative use of the acquired knowledge in the practice of a specialist.

### **1.3 Requirements for the level of development of the content of the discipline.**

The study of the discipline "Microeconomic analysis and policy" will contribute to the formation of the following academic competencies:

- AC-1. Be able to apply basic scientific and theoretical knowledge to solve theoretical and practical problems;
- AC-2. Be proficient in system and comparative analysis;
- AC-3. Possess research skills;
- AC-6. Have an interdisciplinary approach to problem solving;
- AC-7. Have skills related to the use of technical devices, information management and computer work;
- AC-9. Be able to learn, improve their skills throughout life.

The specialist should:

- SLC-1. Have the qualities of citizenship;
- SLC-2. Be capable of social interaction;
- SLC-3. Have the ability to interpersonal communications.

A specialist should be able to:

- CPC-1. To analyze the behavior of economic entities in the conditions of different types of economic structures, to study and develop the market strategy of the organization, to assess the consequences of the state microeconomic policy;
- AC-4. To use fundamental economic knowledge in professional activity.

### **1.4 Structure of the content of the discipline.**

The content of the discipline is presented in the form of topics that are characterized by relatively independent enlarged didactic units of teaching content. The content of the topics is based on the previously acquired competence of students in the study of disciplines "Economic theory", "Microeconomics", "macroeconomics", "history of Belarus", "Sociology", "Philosophy" and other disciplines.

### **1.5 teaching Methods (technologies).**

The main methods (technology) training that meets the learning objectives of discipline are: elements of problem-based learning (problem statement, variable statement, partially-search method) implemented in the lectures; elements of teaching and research activities, implementation of creative approaches during the practical work; design technology used in the design of specific projects implemented during practical work.

### **1.6 Organization of independent work of students.**

In the study of discipline the following forms of independent work: independent work is controlled (CEB) for the study of history of economic doctrines during the practical training under the supervision of a teacher in accordance with the schedule; guided independent work, including the implementation of individual tasks with the consultation of the teacher; preparation of papers on individual topics, including the use of patent materials.

### **1.7 Diagnosis competence of the student.**

The criteria approved by the Ministry of education of the Republic of Belarus are used to assess the educational achievements of undergraduates.

Evaluation of intermediate educational achievements of undergraduates is carried out in accordance with the chosen Department scale of assessments.

To assess the achievements of undergraduates, the following diagnostic tools are used (competencies are checked):

- speech of the undergraduate at the conference on the prepared abstract (AC-1, AC-3, AC-4, SLC-1, SLC-2, PC-9);
- conducting ongoing control surveys on selected topics (PC-1, PC-8);
- protection of individual tasks performed in practical classes (AC-3, SLC-1, PC-1, PC-4-PC-8);
- protection of individual tasks performed within the framework of controlled independent work (AC-1, AC-3, AC-5, SLC-1, PC-1, PC-4-PC-8);
- passing the exam on the discipline (AC-1, AC-4, PC-3, PC-9).

In accordance with the curricula for postgraduate specialty 1-25 80 01 "Economics", specialization "Agricultural Economics and economic policy" (app. 21.03.2019 G., reg. No. e 25-2-001/PR-type.) full-time students at studying of discipline allocated 102 hours, one classroom for full – time 50 hours (26 h lectures, 24 h seminars), part – time- 12 hours (6 hours lectures, 6 hours seminars). Form of current control-exam.

# **THE CONTENTS OF EDUCATIONAL MATERIAL**

## **Module I.**

### **Theme 1. The market, its basic structures and determinants.**

Market and industry: concept, boundaries, classifiers.

Market structures and their basic determinants: the level of concentration of production, economic characteristics of products, barriers to entry and exit from the market, information security, vertical integration and diversification of the company, the conditions that determine consumer demand.

Concentration level and factors determining it. Indicators of industry concentration: Herfindahl-Hirschman indices, entropy, Gini and others.

Market power and its indicators. The coefficients (indexes) Bane, Lerner Tobin. Empirical studies of the relationship between concentration and monopoly power.

Firm as a subject of the market. The problem of choosing a goal by the firm. Profit maximization hypothesis. Alternative goals of the firm.

### **Theme 2. Costs and profits of the firm.**

Costs and their minimization. The trajectory of expansion of production and conditional demand for resources. The concept of identified cost minimization. Short-term costs. Long-term costs. Relationship between short-term and long-term cost curves. Comparative statics. Properties of costs in the long term.

Sunk costs. Transaction costs and their structure.

Alternative approaches to determining economic profit. Determination of Economic profit. Calculation of economic profit. Profit derived from cost reduction.

### **Theme 3. Monopoly.**

Choosing a monopolist that maximizes profits. First and second order conditions for profit maximization. Proposal and costs of the monopolist. A monopolist with multiple plants.

Economic consequences of the implementation of monopoly power. Net welfare losses. Measurement of net losses in practice. X-inefficiency monopoly. Opportunity costs of monopolization.

Features of the market with a natural monopoly. The economic nature of natural monopoly. Price regulation of natural monopoly. Non-price methods of natural monopoly regulation.

### **Theme 4. Monopolistic competition.**

General background and classification of models. Model of Chamberlin for the big net firms. Model prerequisites and two demand curves for a monopolistically competitive firm. The equilibrium of the firm in the long term.

The problem of efficiency of the industry with monopolistic competition in the Chamberlin model.

The traditional model of monopolistic competition.

Normative analysis of monopolistic competition. The choice of society between the production volume and variety under conditions of monopolistic competition.

### **Theme 5. Oligopoly and strategic behavior.**

Oligopoly as a market structure. Nekupirovanny oligopoly. Interaction in the conditions of quantitative oligopoly. Cournot Model. The Cournot equilibrium for  $n$  firms. Cournot model and comparative static.

Oligopoly models based on the establishment of the yen. Bertrand's paradox and ways to solve it. Pricing under capacity constraints.

Strategic behavior and game theory. Nash equilibrium. Games with sequential selection: commitment and backward induction. Repetitive play hard and compensatory strategy.

Criteria the use of models for "analysis of industrial markets.

### **Theme 6. Oligopoly: cooperative model.**

Agreements between firms in oligopoly: varieties and institutional forms.

Cartel as a form of agreement. The economic model of cartel: joint profit maximization. Negotiating models of cartel agreements. Factors that ensure the stability of the cartel. Methods of preventing breach of agreement.

Alternative ways of coordination in oligopolistic markets. Heuristic pricing as a coordination tool. Focal points and tacit coordination. Order flows, inventories and coordination in oligopolistic industries.

Coordination in oligopolies: contributing and limiting factors.

## **Module II.**

### **Theme 7. Industry leaders: a market with a dominant firm.**

The dominant firm and its strategic competitive advantages.

Price leadership dominant firm (model of Forhaimer). The model of "suicidal" behavior of the dominant firm and the strategy of limiting pricing.

Limitation of static models. Dynamic pricing model in a market with a dominant firm. Consequences of the dominant firm.

Quasi-competitive markets and their characteristics.

### **Theme 8. Pricing strategies of the company.**

Price discrimination: conditions and types. Perfect non-discrimination (discrimination of the first degree). Capova discrimination of the second degree. Block rate. Capova discrimination of the third degree and segment-ation market. Inter-temporal price discrimination. Coase's paradox and ways to solve it.

The practice of price discrimination: related sales, nonlinear pricing, variable pricing, seasonal pricing.

Peak load pricing. Peak load pricing for the case of full capacity utilization during the period of maximum demand.

Cost – plus pricing.

Transfer price. Transfer pricing models.

### **Theme 9. Product differentiation and advertising.**

Nature, economic content and indicators of product differentiation.

Types of product differentiation. Horizontal differentiation, vertical differentiation and the approach of the selected characteristics. Product positioning. Theory of optimal level of product diversity and market structure.

Product differentiation and market power.

Advertising as a factor of product differentiation. Market structure and advertising costs. Impact and effectiveness of advertising.

### **Theme 10. The vertical interaction of firms.**

Vertical market relations and their features. Vertical control and its shapes.

Vertical integration: typology and motivation. The problem of dual marginalization (double monopoly profit) and its solution. Vertical integration and strengthening of market power.

Vertical restraints and forms. Vertical contracts: incentives and tools. Franchising as a special type of vertical contract.

Diversification: types, motives and modern trends.

### **Theme 11. Barriers to entry and exit of firms to the market and market dynamics.**

Barriers entry-exit firms PA market and their species. Classification of markets by the level of D. Bane's entry barriers.

Non-strategic entry / exit barriers and their types.

Strategic barriers of entry and exit of firms to the market and their types. Barriers associated with price types of strategies. The main non-price strategies for creating barriers.

Mergers, acquisitions of firms and their forms. Motives and benefits of the merger. The practice of acquisitions and mergers. Consequences of mergers. Indicators of entry and exit of firms to the market.

### **Theme 12. Technological change, innovation and market structure.**

Innovation as an economic process. The nature of innovation and its stages. Types of innovation.

Market structure and innovation. Innovation in a competitive market. Determining the optimal number of innovative firms.

Патентная система and its role in stimulating innovation. Analysis of patent protection from the point of view of social welfare. Alternative protection against imitation and alternative incentives for R & d. Remuneration system and contract (procurement) mechanism.

Diffusion of innovation and its external effect. The problem of innovators and imitators. Technological strategies of enterprises.

### **Theme 13. Government regulation of markets.**

The need for state regulation of markets. Public policy objectives. The main directions of interaction between the state and markets: industrial policy, competition policy, policy of regulation of natural monopolies, innovation policy.

Industrial policy and its types, structure. The main directions of industrial policy.

Competitive policy of the state and its theoretical justification. Structure and directions of competition policy. Policy of regulation of monopolistic activity: goals, orientation, mechanism of implementation. Government policy and concentration. Antitrust policy and price discrimination. State and regulation of mergers and acquisitions. Control policy on vertical restrictions.

Natural monopolies and state policy. De-monopolization from the industry with a natural monopoly.

Innovation policy and its directions. Policy of growing innovative businesses.

### MAP OF THE COURSE

Number of section, theme, lessons	The name of section, employment theme; the list of studied questions	Hours in total	The quantity of classroom hours				Quantity of the hours allocated on CIW of students (including the hours allocated for a term paper)	Material provision of employment (evident, methodical benefits, etc.)	Literature	The form of the control of knowledge
			lectures	Practical (seminar) lessons	Laboratory lessons	Controllable independent work of the student				
	MODULE I.	38	12	12	-	--	14			
1	Economic theory: the nature and method.	6	2	2		-	2	Computer presentation, methodical instructions of department (comprehensive plans of seminar employment).	1-8	Interview, testing
2	Costs and profits of the firm.	8	2	2		-	4	Computer presentation, methodical instructions of department.	2–12	Interview, testing
3	Monopoly.	6	2	2		-	2	Computer presentation, methodical instructions of department.	7–9, 16-21	Interview, testing
4	Monopolistic competition.	6	2	2		-	2	Computer presentation,	1–3	Interview, testing

								methodical instructions of department.		
5	<b>Oligopoly and strategic behavior.</b>	6	2	2		-	2	Computer presentation, methodical instructions of department.	1–8, 14-18	Interview, testing
6	<b>Oligopoly: cooperative model.</b>	6	2	2		-	2	Computer presentation, methodical instructions of department.	11–19	Interview, testing
	<b>MODULE II.</b>	44	14	12			18			
7	<b>Industry leaders: a market with a dominant firm.</b>	8	2	2		-	4	Computer presentation, methodical instructions of department.	3–4	Interview, testing
8	<b>Pricing strategies of the company.</b>	6	2	2		-	2	Computer presentation, methodical instructions of department.	4–5, 14-19	Interview, testing
9	<b>Product differentiation and advertising.</b>	6	2	2		-	2	Computer presentation, methodical instructions of department.	2–6	Interview, testing
10	<b>The vertical interaction of firms.</b>	4	2	2		-	4	Computer presentation, methodical instructions of department.	4–5, 15-17	Interview, testing
11	<b>Barriers to entry and exit of</b>	6	2	2		-	2	Computer presentation,	1–8	Interview, testing

	<b>firms to the market and market dynamics.</b>							methodical instructions of department.		
<b>12</b>	<b>Technological change, innovation and market structure.</b>	6	2	2		-	2	Computer presentation, methodical instructions of department.	1–17	Interview, testing
<b>13</b>	<b>Government regulation of markets.</b>	6	2	-		-	4	Computer presentation, methodical instructions of department.	6–21	Interview, testing
	Preparation for examination	<b>36</b>					<b>36</b>			
	<b>Total</b>	<b>102</b>	<b>26</b>	<b>24</b>		<b>-</b>	<b>52</b>			

## INFORMATION PART

### *Legislative and regulatory acts:*

1. Конституция Республики Беларусь 1994 года (с изменениями и дополнениями, принятыми на республиканских референдумах 24 ноября 1996 года и 17 октября 2004 года). — 3-е изд., стер. — Минск: Национальный центр правовой информации Республики Беларусь, 2008. — 64 с.
2. Гражданский кодекс Республики Беларусь: [принят Палатой представителей 28 окт. 1998 г.: одобрен Советом Республики 19 нояб. 1998 г.]: с изменениями и дополнениями по сост. на 1 сент. 2008 г. — 6-е изд., с изм. и доп. — Минск: Национальный центр правовой информации Республики Беларусь, 2008. — 653 с.
3. Национальная стратегия устойчивого социально-экономического развития Республики Беларусь на период до 2030 г. / Одобрена на заседании Президиума Совета министров Республики Беларусь от 2 мая 2017 г., № 10.

### *Basic literature:*

1. Джейли, Д.А. Микроэкономика: продвинутый уровень: учеб. / Д.А. Джейли, Ф.Д. Рени; пер. с англ. под ред. В.П. Бусыгина, М.И. Левина, Е.В. Покатович. — М.: Изд. дом ВШЭ, 2011. — 736 с.
2. Маховикова, Г.А. Микроэкономика. Продвинутый курс / Г. А. Маховикова, С. В. Переверзева. — М.: Юрайт, 2015. — 321 с.
3. Микроэкономика: практический подход: учеб. / [А. Г. Грязнова и др.]; под редакцией А. Г. Грязновой, А. Ю. Юданова. — М.: Кнорус, 2014. — 680 с.
4. Микроэкономика: учеб. / [А.В. Бондарь и др.]. — Минск: БГЭУ, 2015. — 429 с.
5. Розанова, Н.М. Микроэкономика фирмы: учеб. пособие / Н.М. Розанова, И.В. Зороастрова. — Москва: Интернет-Университет Информационных технологий; БИНОМ. Лаборатория знаний, 2007. — 383 с.
6. Розанова, Н.М. Экономика отраслевых рынков: учеб. пособие / Н. М. Розанова. — М.: Юрайт, 2012. — 906 с.
7. Рой, Л.В. Анализ отраслевых рынков: учеб. / Л.В. Рой, В.П. Третьяк. — М.: ИНФРА-М, 2009. — 442 с.
8. Тарасевич, Л.С. Микроэкономика: учеб. / Л. С. Тарасевич, П. И. Гребенников, А. И. Леусский. — М.: Юрайт, 2015. — 542 с.
9. Чеканский, А.Н. Микроэкономика. Промежуточный уровень. Учебник / А.Н. Чеканский, Н.М. Фролова. — М.: ИНФРА-М, 2016. — 685 с.
10. Черемных, Ю.Н. Микроэкономика: продвинутый уровень: учеб. / Ю. Н. Черемных. — М.: Инфра-М, 2015. — 842 с.

### *Additional literature:*

11. Деньгов, В.В. Микроэкономика в 2 т. Т. 1. Теория потребительского поведения: учебник для бакалавриата и магистратуры / В.В. Деньгов. — М.: Юрайт, 2019. — 410 с.

12. Деньгов, В.В. Микроэкономика в 2 т. Т. 2. Рынки факторов производства. Равновесие: учебник для бакалавриата и магистратуры / В.В. Деньгов. – М.: Юрайт, 2019. – 446 с.
13. Шаховская, Л.С. Микроэкономика: кейсы, деловые игры, тесты / Л.С. Шаховская; под ред. проф. Е.Г. Попковой. – М.: Кнорус, 2018. – 290 с.
14. Балакина, Т.П. Микроэкономика: промежуточный уровень. Сборник задач с решениями и ответами / Т.П. Балакина, Е.А. Левина, Е.В. Покатович, Е.В. Попова. — М.: Изд. дом ВШЭ, 2013. — 504 с.
15. Бусыгин, В.П. Сборник задач по курсу микроэкономики продвинутого уровня / В.П. Бусыгин, Е.В. Покатович, А.А. Фридман. — М.: Изд. дом ВШЭ, 2008. — 388 с.
16. Вэриан, Х.Р. Микроэкономика. Промежуточный уровень. Современный подход: учеб. / Х.Р. Вэриан / Пер. с англ. под ред. Н. Л. Фроловой. – М.: ЮНИТИ, 1997. – 767 с.
17. Киреев, А.П. Микроэкономика для продвинутых. Задачи и решения: учеб. пособие / А. П. Киреев, П. А. Киреев. — М.: Инфра-М, 2013. — 159 с.
18. Левина, Е.А. Микроэкономика: задачи и решения / Е.А. Левина, Е.В. Покатович. — М.: Изд. дом ВШЭ, 2010. — 496 с.
19. Микроэкономика: промежуточный уровень: сборник задач с решениями и ответами: / Т. П. Балакина [и др.]. — М.: Изд. дом ВШЭ, 2013. — 502 с.
20. Пахомова, Н. В. Экономика отраслевых рынков и политика государства: Учеб. / Н.В. Пахомова, К.К. Рихтер. — М.: ЗАО «Издательство «Экономика», 2009. — 815 с.
21. Чеканский, А.Н. Управленческая экономика: практика применения: учеб. пособие / А. Н. Чеканский, В. А. Коцоева, С. Е. Варюхин. — М.: Дело, 2015. — 168 с.
22. Шай, О. Организация отраслевых рынков / О. Шай; Пер с англ. под ред. М. Левина. — М.: Изд. дом ВШЭ, 2011. — 504 с.

**THE REPORT OF THE COORDINATION OF THE CURRICULUM ON  
STUDIED THE COURSE OF STUDY WITH OTHER THE COURSES OF  
STUDY OF THE SPECIALITY**

The course of study name from which the coordination is required	The department name.	Offers on changes in the curriculum maintenance on a studied subject matter.	The decision accepted by the department which has developed the curriculum (with instructions of date and report number)

ADDITIONS AND CHANGES FOR THE CURRICULUM  
ON THE STUDIED SUBJECT MATTER

for 2020/2021 academic year

№	Additions and changes	Basis

The curriculum is reviewed and approved at the meeting of the department the department of economic theory (the report № from / /2020)

The Head of the Department of Economic Theory  
Candidate of Historical Sciences,  
Associate Professor \_\_\_\_\_

Hanchar A.I.

Approved by  
The Dean of the Economic Faculty  
Candidate of Economic Sciences,  
Associate Professor \_\_\_\_\_

Gribov A.V.