Educational institution «Belarus State Economic University»

**APPROVED BY** 

Rector of Educational Institution «Belarus State Economic University»

A.V. Egorov «28» 06 2024 Registration No 6184-24

# SPATIAL ECONOMICS AND GOVERNANCE OF REGIONAL SYSTEMS

The curriculum of the Educational Institution of the higher education in the academic discipline for the major 7-06-0311-01 «Economics» The curriculum is based on the educational standard for advanced higher education OSVO 7-06-0311-01-2023 and curriculum in the major 7-06-0311-01 « Economics» (profiling «State regulation of national and regional economy»).

# **COMPILERS:**

V.S. Fateyev, Head of the Department of National Economy and Public Administration of the Belarusian State Economic University, Doctor of Economic Sciences.

A.N. Tochko, Assistant Professor of the Department of National Economy and Public Administration of the Belarusian State Economic University, Master of Science.

## **REVIEWERS:**

I.N. Rusak, Chief Advisor to the Department of Economic Analysis of the Department of Domestic Policy of the Belarusian Institute for Strategic Studies, PhD in Economics, Associate Professor.

A.S. Mishchenko, Associate Professor of the Department of Organization and Management of the Educational Institution «Belarus State Economics University», Associate Professor, Ph.D. in Economics.

# **RECOMMENDED FOR APPROVAL BY:**

Department of National Economy and Public Administration of Educational Institution «Belarus State Economics University» (protocol № 11 from 20.05.2024).

Methodological commission on majors «National Economics», «Public administration», «Public Administration and Economics», «Economics » (profiling «State regulation of national and regional economy») of Educational Institution «Belarus State Economics University» (protocol  $N_{0}$  9 from 30.05.2024).

Scientific and methodological council of Educational Institution «Belarus State Economics University» (protocol No  $\mathcal{P}$  from  $\mathcal{ZI.O6.2024}$ ).

#### EXPLANATORY NOTE

The curriculum in the academic discipline «Spatial economics and governance of regional systems» is aimed at developing in future specialists a wide range of competencies in the main areas of their professional activities in the field of regional economics and politics of the Republic of Belarus. In the context of increasing numerous risks and threats, increasing uncertainty of economic development, the requirements for the quality of management decisions, which must be largely reasoned and scientifically substantiated, increase significantly. The above determines the relevance of training specialists who master the theoretical foundations and methodological tools for managing regional systems.

The purpose of teaching the academic discipline «Spatial economics and governance of regional systems» is to prepare masters with: in-depth knowledge of the theory and practice of regional economics and management, the essence and features of regulating the socio-economic development of the region, practical skills in using modern methods and techniques of regional analysis, strategic planning of regional and urban development, stimulation and implementation of other functions of regulation of regional development and management of regional systems.

Achieving this goal involves solving the following **tasks**:

• theoretically study the processes of formation and development of regional and local economic systems, master the conceptual and terminological apparatus used by the modern scientific direction and academic discipline « Spatial economics and governance of regional systems »;

• reveal the essence and content of theories and concepts of the location of economic activity, spatial organization of the economy, as well as regional growth and development;

• master the methodological foundations of the functioning of the regional economy, gain knowledge about the content, forms and methods of state management of regional development, the implementation of socio-economic policy by regional and local authorities of various countries;

• master practical skills in using modern methods and tools for analyzing and regulating regional processes, relationships and proportions, forecasting, programming and stimulating the socio-economic development of regional systems.

As a result of studying the academic discipline « Spatial economics and governance of regional systems », the following **specialized competence** is formed:

SK-8 Apply modern methods and tools for analyzing and regulating regional processes, relationships and proportions, forecasting, programming and stimulating the socio-economic development of regions and cities.

As a result of studying the academic discipline, the student must: *know:* 

categorical apparatus of discipline;

principles, functions, objects, subjects, methods and tools

regulation of regional development and implementation of state management at various levels;

foreign and domestic experience in regulating regional development at various levels.

# be able to:

carry out an independent search for information resources on current problems of regional economics and management using modern information and communication technologies;

analyze and identify features of regional development;

using the acquired theoretical knowledge and practical skills, participate in the discussion of controversial issues, skillfully present the results of master's work in speeches at seminars, scientific conferences, round tables;

use modern spatial analysis programs and applied econometric packages.

have:

skill to independently, creatively and critically comprehend the problems of modern theory and practice of regional economics;

skill to assess specific situations and make management decisions at various levels of regional policy implementation;

skill to assess current problems of regional economics and management;

skill to create econometric models, as well as evaluate their parameters to explain the behavior of the phenomena under study;

skill to put forward and test hypotheses about the properties of regional socioeconomic indicators and the forms of their connection;

skill to evaluate and use the results of econometric analysis to make informed economic decisions and prepare recommendations.

As part of the educational process in this academic discipline, the student must acquire not only theoretical and practical knowledge, skills and abilities in the specialty, but also develop his value-personal, spiritual potential, develop the qualities of a patriot and citizen, ready for active participation in economic, industrial, socio-cultural and public life of the country.

The academic discipline «Spatial economics and governance of regional systems» belongs to the module «Economic development regulation» of the educational institution component and is one of the important disciplines that forms the professional competence of specialists in the field of economics and management (in general and in individual areas), state regulation of national and regional economy.

«Spatial economics and governance of regional systems» is a comprehensive academic discipline based on the knowledge gained from studying the following disciplines: «Economic Theory», «Macroeconomics», «National Economy of Belarus», «Regional Economics and Management», «Regional Economics», etc. Mastering the discipline « Spatial economics and governance of regional systems» is especially important for studying the disciplines «Macroeconomic Analysis and Policy», «Spatial Data Analysis», «Spatial Statistics and Analysis of Economic Systems», «State innovation policy», etc.

Form of education: full-time.

In accordance with the university curriculum in the specialty

7-06-0311-01 «Economics» full-time higher education for the study of the academic discipline «Spatial economics and governance of regional systems» is assigned to:

Total amount of Academic load -90, Classroom hours -42, of which lectures -20, laboratories -10; seminars -12 hours.

Year and Semester Distribution:

1 semester – lectures – 20, laboratories – 10; seminars – 12 hours;

Student's independent work – 48 hours.

Labor intensity -3 c.

Interim certification form – offset.

## CONTENT OF TRAINING MATERIAL

# Topic 1. Subject and specificity of spatial economics and management of regional systems

Subject area of regional economics. The place of regional economics in the system of economic sciences. Region as a socio-economic system.

Methodological aspects of regional management. Typology of regional policy by goals, by implementation mechanism, by means used, by addressee. Main stages of regional policy. Methods and forms of implementation of regional policy.

# Topic 2. Methodology of regional economics and management of regional systems

Correlation of the concepts «method» and «methodology». Scientific approaches to research in the field of regional economics and management (spatial, historical, genetic, etc.). General scientific and special methods in regional studies. Effectiveness of regional policy. Administrative and economic methods.

#### **Topic 3. The concept of regional systems**

A systematic approach to the study of regional economic systems. Factors in the development of regional economic systems. Methods for diagnosing regional economic systems. Abstract model of the regional economy in the form of a closed system, factor models.

## **Topic 4. Theories of regional growth and development**

Classical theories of activity placement. Theories of space organization. Modern models of regional growth and development.

## Topic 5. Spatial economics: concept, essence, features of analysis

Theoretical and methodological foundations of spatial economics. Spatial econometric analysis in regional studies. Geovisualization.

Analysis of interregional connections. Indicators of structural changes.

## **Topic 6. Regional competitiveness and investment attractiveness**

Competition between regions and cities. Assessing the competitiveness of regions. Approaches to quantitative assessment and methods for measuring the investment climate of regions. Main types of investment potential and investment risk of the region. Ways to improve the investment climate in the region and strategies for attracting investments into it.

# Topic 7. Diagnostics of socio-economic development of regions of the Republic of Belarus

Methods of diagnosis and analysis. Monitoring regional situations and regional problems. Diagnostics of the natural resource and labor potential of the region. Regional territorial marketing. Diagnostics of economic development of regions of Belarus.

## **Topic 8. Fundamentals of regional economic policy**

Regional policy at the supranational and national level. Regional policy of the European Union. Regional policy in unitary and federal states. Features and contradictions of the state regional economic policy of Russia in the 1990s and 2000s. and at the present stage).

# Topic 9. Mechanisms to promote the development of special territories

State policy of supporting problem regions in the Republic of Belarus.

Free economic zones (FEZ), goals, objectives and principles of their formation, features of their functioning. Special economic zones (territories of advanced socioeconomic development, industrial parks, clusters, science cities, etc.).

# Topic 10. Institutional research in regional economics

The concept of regional institutions. Regional economic model. The impact of internal and external crises in the economy on individual regions. The problem of the emergence of regional inequality and territorial inertia. Institutional barriers.

System of local government and self-government: features of functioning.

# CONTENT OF EDUCATIONAL MATERIAL EDUCATIONAL AND METHODOLOGICAL MAP OF ACADEMIC DISCIPLINE «SPATIAL ECONOMICS AND GOVERNANCE OF REGIONAL SYSTEMS » Full-time form of receiving advanced higher education

			Amo	ount of A	cademi	c load			
Section number,	Title of section, topic	suo	shops	nars	ttories	ho	unt of urs W	Literature	Knowledge control form
topic		Lections	Workshops	Seminars	Laboratories	Lections	W (S)		
1	2	3	4	5	6	7	8	9	10
		<b>1</b> s	emester	•					
Topic 1	Subject and features of spatial economics and management of regional dynamics	1						[1, 7, 10- 12,14,19]	
	Seminar (Subject and features of spatial economics and management of regional dynamics)			1				[1, 7, 10- 12,14,19]	express survey, discussion
Topic 2	Methodology of regional economics and management of regional systems	1				2		[7, 9-12, 14, 17]	
	Laboratory (Methodology of regional economics and management of regional systems)				4			[7, 9-12, 14, 17]	laboratory test report
Topic 3	The concept of regional systems	1						[3-12, 14, 16]	
	Seminar (The concept of regional systems)			1				[3-8, 10-12, 13, 16]	abstracts, tests on topics $1-3$
Topic 4	Theories of regional growth and development	1						[7-13, 21, 22]	
	Seminar (Theories of regional growth and development)			1			2	[7, 8, 10-13, 21, 22]	presentations, discussion
Topic 5	Spatial economics: concept, essence,	1				2		[1, 7, 10-12,	

	Amount of Academic load								
					Amount of		unt of		
Section	Title of section, topic		sd	S	ies	ho	urs		Knowledge control
number,		VIS at un time to the second s		[W	Literature	form			
topic		Lections	Workshops	Seminars	Laboratories	Lections	W (S)		
1	2	3	4	5	6	7	8	9	10
	analysis features							19]	
	Seminar (Spatial economics: concept, essence, analysis features)			1				[1, 7, 10-12, 19]	presentations, tests on topics 4 – 5
Topic 6	Regional competitiveness and investment attractiveness	1				2		[1,7-12,14,17,19]	
	Laboratory (Regional competitiveness and investment attractiveness)				2			[1, 7, 8, 10-12, 14, 17, 19]	laboratory test report
Topic 7	Diagnostics of socio-economic development of regions of the Republic of Belarus	1						[7, 9-12, 14, 17, 21, 22]	
	Laboratory (Diagnostics of socio-economic development of regions of the Republic of Belarus)				4			[7, 9-12, 14, 17, 21, 22]	laboratory test report
Topic 8	Fundamentals of regional economic policy	1				2		[2, 8-12, 15, 16]	
	Seminar (Fundamentals of regional economic policy)			2				[2, 8, 10-12, 15, 16]	presentations, discussion
Topic 9	Mechanisms to promote the development of special territories	1						[2-7, 10-12, 16]	
	Seminar (Mechanisms to promote the development of special territories)	ан. С		1		4	2	[2-7, 10-12, 16]	presentations, discussion
Topic 10	Institutional research in regional economics	1				2		[16, 18-20]	
	Seminar (Institutional research in regional economics)			1				[16, 18-20]	survey, tests on topics $6-10$
	Total 1 semester	10		8	10	10	4		Offset
	Amount of hours	10		8	10	10	4		

#### INFORMATIONAL AND METHODOLOGICAL PART

#### Literature

### Main:

1. Macroeconomics: textbook / Ed. A.V. Bondar, V.A. Vorobyova, A.M. Filiptsova. – Minsk: BSEU, 2020. – 366 p. – (in Russian).

2. Ksenzov, S.V. Economics of foreign countries: tutorial for students of higher education institutions majoring in «World Economy» / S.V. Ksenzov. – Minsk: BSEU, 2023. – 167 p. – (in Russian).

3. World economy: textbook / A.A. Pranevich et al; edited by A.A. Pranevich. – Minsk: BSEU, 2020. – 431 p. – (in Russian).

4. Ridevsky, G. V. Center-peripheral processes and development of the regions of Belarus : monograph / G. V. Ridevsky. - Minsk : BelNIIT "Transtechnika", 2020. - 345 p. – (in Russian).

5. Digital Economy: an in-depth course : a textbook / [E. A. Brendeleva et al.] ; edited by M. I. Stolbov, E. A. Brendeleva ; [Federal State Educational Institution of Higher Education "Moscow State Institute of International Relations. relations (un-t) M-va foreign. The business grew. Federation"]. - M. : Publishing house "Scientific Library", 2020. - 385 p. – (in Russian).

6. The potential of sustainable innovative development of the region: the concept and practice of multidimensional assessment : [monograph / N. V. Agabekova et al.]; edited by N. V. Agabekova; Ministry of Education Rep. Belarus, UO "Belarus-ian State Economy. un-t". - Minsk : BGATU, 2021. - 202, [1] p. – (in Russian).

## Additional:

7. Ugriumova, A.A. Regional economics and management: textbook and workshop for universities / A.A. Ugryumova, E.V. Erokhin, M.V. Savelyeva. - 2nd ed. - M.: Yurayt Publishing House, 2023. - 477 p.

8. Shimov, V.N. National economy of Belarus: textbook / V.N. Shimov [and others]; edited by V. N. Shimova. – 5th ed., revised. and additional – Minsk: BSEU, 2018. – 650 p.

9. Sayapova, A.R. Fundamentals of the input-output method: a textbook for universities / A.R. Sayapova, A.A. Shirov. – M.: MAKS Press, 2019. – 336 p.

10. Regional economics and spatial development in 2 volumes. Volume 1: textbook for universities / L.E. Limonov [and others]; under general ed. L.E. Limonov; edited by B.S. Zhikharevich, N.Yu. Oding, O.V. Rusetskaya. - 2nd ed., revised. and additional - M.: Yurayt Publishing House, 2023. - 319 p.

11. Tikhonov, A.O. Global, regional and national economics: textbook / A.O. Tikhonov. - Minsk: Academy of Management under the President of the Republic of Belarus, 2023. - 190 p.

12. Baynev, V.F. Economics of the region: textbook. manual for students of the specialty «Public Administration and Economics» of institutions providing higher education / V.F. Baynev, S.A. Pelikh; edited by S.A. Pelikha. - Minsk: Information Computing Center of the Ministry of Finance, 2007. - 272 p.

13. Bykov, A.A. Economic growth and development: a textbook for students of higher education institutions in the master's degrees «Business Administration», «Economics» / A.A. Bykov. – Minsk: Higher School, 2021. – 303 p.

14. Regional economics: methodological recommendations for studying an academic discipline / V. G. Garkavaya, I. N. Rusak. - Minsk: Four Quarters, 2017. - 52 p.

15. Fateev, V. S. Research in the field of reforming land relations, production location, local economic planning, carried out in the 1910–1930s on the territory of the Northwestern region of the Russian Empire and in the Byelorussian SSR / V. S. Fateev // Scientific works Belarusian State Economic University. Issue 16 / Ministry of Education of the Republic of Belarus, Belarusian State Economic University; [editorial board: A. V. Egorov (editor-in-chief), etc.]. – Minsk: Kolorgrad, 2023. – P. 462-469.

16. Rusak, I.N. System of regional management in the Republic of Belarus / I.N. Rusak // Scientific works of the Belarusian State Economic University. Issue 16 / Ministry of Education of the Republic of Belarus, Belarusian State Economic University; [editorial board: A. V. Egorov (editor-in-chief), etc.]. – Minsk: Kolorgrad, 2023. – P. 392-398.

17. Tochko, A.N. Assessment of investment specialization of regions of the Republic of Belarus / A.N. Tochko // Scientific works of the Belarusian State Economic University. Issue 16 / Ministry of Education of the Republic of Belarus, Belarusian State Economic University; [editorial board: A. V. Egorov (editor-in-chief), etc.]. – Minsk: Kolorgrad, 2023. – P. 437-446.

#### Normative legal acts

18. Constitution of the Republic of Belarus 1994: as amended. and additional adopted for rep. referendums 24 Nov. 1996, Oct 17 2004 and Feb 27 2022 - Minsk: National Center for Legal Information of the Republic of Belarus, 2022. - 192 p.

19. On local government and self-government in the Republic of Belarus: Law of the Republic. Belarus January 4, 2010 No. 108-3: as amended. and additional as of 01/04/2022 [Electronic resource] / National legal Internet portal of the Republic of Belarus. - Access mode: https://pravo.by/document/?guid=3871&p0=hl 1000108. - Access date: 05/04/2024.

20. On the administrative-territorial structure of the Republic of Belarus: Law of the Republic of Belarus dated May 5, 1998 No. 154-Z: as amended by Law No. 229-Z dated December 31, 2014 [Electronic resource] / National Center for Legal Information of the Republic of Belarus. – Minsk, 2019. – Access mode: http://pravo.by.

21. On approval of the Program of Socio-Economic Development of the Republic of Belarus for 2021 – 2025: Decree of the President of the Republic of Belarus. Belarus dated July 29, 2021 No. 292 / National. register of rights. acts of the Republic Belarus, 08/02/2021, 1/19834.

22. National strategy for sustainable development of the Republic of Belarus for the period until 2035 / [Electronic resource]. – Access mode: https://economy.gov.by/uploads/files/Natsionalnaja-strategija-ustojchivogo-razvitija-Respubliki-Belarus-na-period-do-2035-goda.pdf. – Access date: 05/11/2024.

## List of questions for offset

1. Characteristics of the concept «region». The place of regional economics and management of regional systems in the system of economic sciences.

2. Typology of spatial economics.

3. Region as a socio-economic system.

4. Methodology of spatial economics.

5. Scientific approaches to research in the field of spatial economics.

6. Methods of influencing regional development. Administrative and economic methods.

7. Features of the analysis of interregional connections.

8. Concept, principles and methods of regional economic management.

9. A systematic approach to the study of regional economic systems.

10. Competition and competitiveness of regions and cities.

11. Differentiation of regional policy.

12. Theories of regional growth.

13. Theories of regional development.

14. Exporting region model.

15. Strategic planning for regional and urban development.

16. Tools for managing territorial development used in centrally planned economies.

17. Basic methods and tools for regulating the development of regional communities in a market economy.

18. Comparative analysis of the tools used to regulate regional development in countries with different types of economies (centrally planned, market, transition).

19. Features of the investment attractiveness of regions.

20. Institutional research in regional economics.

21. Basic concepts and features of the econometric method in regional studies.

22. State policy of supporting problem regions in the Republic of Belarus.

23. Mechanisms to promote the development of special territories.

# An approximate list of tasks for students' guided independent work in an academic discipline

1. Program-target and variant method in regional management.

2. Methods of extrapolation, expert assessments, modeling in regional management.

3. Model of economic efficiency in regional management. Model of social justice in regional management.

4. The cost-benefit method in regional management.

5. Model by Johann Heinrich von Thünen.

6. Model by Wilhelm Launhardt.

7. Alfred Weber's theory of industrial location

8. Model by Harold Hotelling.

9. The choice of location by enterprises and the agglomeration process.

10. Walter Christaller's theory of central places.

11. The theory of organization of economic space by August Lesch.

12. Spatial model of the city by William Alonso.

13. Importing region: the Harrod-Domar model.

14. Balance of payments and economic growth: Thirlwall's law.

15. Hoyt model.

16. Critical assessment of export-oriented models

17. Application of the input-output model to regional and municipal economies.

18. Theory of growth poles and diffusion of innovations.

19. The evolution of the regional policy of the European Union.

20. The current stage of regional policy of the European Union.

21. Features of regional policy in unitary states (using the example of Spain).

22. Features of regional policy in federal states (using the example of Germany).

23. Forms of state support for territories affected by the Chernobyl accident.

24. Stages of development of SEZ.

25. Foreign experience in assessing the effectiveness of local government bodies.

# List of laboratory classes

1. Methods of extrapolation, expert assessments, modeling.

2. Economic efficiency model.

3. Correlation and regression analysis in regional management.

4. Application packages for spatial analysis: MapViewer, GeoDa, ArcView.

5. Features of SWOT and PEST analysis.

6. Assessing the competitiveness of regions.

7. Approaches to quantitative assessment and methods for measuring the investment climate of regions.

8. Monitoring regional situations and regional problems.

9. Tools and methods for forecasting indicators of economic development of regions of Belarus.

10. Methods for assessing the effectiveness of local authorities.

To obtain competencies in an academic discipline, an important stage is the independent work of students.

48 hours are allotted for independent work of a full-time student receiving advanced higher education in specialty 7-06-0311-01 «Economics».

The content of students' independent work includes all topics of the academic discipline from the «Content of educational material» section.

When studying an academic discipline, the following forms of independent work are used:

•solving individual problems in the classroom during practical classes under the supervision of a teacher in accordance with the training schedule;

•in-depth study of sections, topics, individual issues, concepts;

•preparation for practical classes, including preparation of messages, thematic reports, information and demonstration materials, abstracts, presentations, essays, etc.;

•work with educational, reference, analytical and other literature and materials;

•compiling a review of scientific (scientific and technical) literature on a given topic;

• preparation for passing the intermediate certification.

## Quality control of knowledge acquisition

Diagnosis of the quality of knowledge acquisition is carried out as part of ongoing monitoring and intermediate certification.

*Current* control activities are carried out throughout the semester and include the following forms of control:

test;

express survey in classroom sessions;

survey;

abstract;

educational task;

report on the implementation of research and creative tasks, laboratory research, scientific and technical developments;

other forms.

The result of ongoing monitoring for the semester is assessed by a mark on a ten-point scale and is derived based on the marks given during ongoing monitoring activities during the semester.

Requirements for students when passing intermediate certification.

Students are admitted to intermediate certification in an academic discipline, subject to successful completion of the current certification (implementation of ongoing control measures) in the academic discipline provided for in the current semester by this curriculum.

Interim certification is carried out in the form of an offset.

# Methodology for forming a grade in an academic discipline

Grades for the academic discipline are formed in accordance with the Regulations on the rating system for assessing the knowledge, skills and abilities of BSEU students.

# THE PROTOCOL OF THE COORDINATION OF THE CURRICULUM FOR THE STUDIED ACADEMIC DISCIPLINE WITH OTHER DISCIPLINES OF THE MAJOR

Title of the academic discipline with the current discipline should be endorse	Department	Suggestions about changes in the content of the curriculum institutions of higher discipline education	The decision taken by the department that developed the curriculum (indicating the date and protocol numbers)
1	2	3	4
Macroeconomic Analysis and Politics	Department of Economic Policy	Atauf:	Protocol № dd