

Ministry of Education and Science of Ukraine
V.N. Karazin Kharkiv National University
Department of International Economic Relations and Logistics

“I APPROVE”

Director of the Educational and
Scientific Institute “Karazin
Institute of International
Relations and Tourism
Business”

Mykola PYSAREVSKY



27 August 2026

WORK PROGRAM OF THE ACADEMIC DISCIPLINE

« INNOVATIONS IN THE DEVELOPMENT OF CIVILIZATIONS »

higher education level: third (educational and scientific)

field of knowledge: C Social sciences, journalism, information and
international relations

specialty C1 Economics and international economic relations (by specialization)

educational and scientific program International economic relations

specialization C1.02. International economic relations

type of discipline: elective

National Research Institute "Karazin Institute of International Relations and
Tourism Business"

2026/2027 academic year

The program is recommended for approval by the Academic Council of the Karazin
Institute of International Relations and Tourism Business
August 27, 2026, Protocol No. 1

PROGRAM DEVELOPER: Olena DOVGAL, Doctor of Economics, Professor,
Professor of the Department of International Economic
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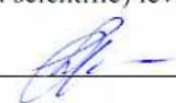
The program was approved at the meeting of the Department of International
Economic Relations and Logistics
Protocol No. 1 dated August 26, 2026

Head of the Department

 Anna ZAYTSEVA

The program was agreed with the guarantor of the educational and scientific
program "International Economic Relations" for the third (educational and
scientific) level of higher education

Guarantor of the educational and scientific program
"International Economic Relations" for the third
(educational and scientific) level of higher education

 Olena DOVGAL

The program was approved by the scientific and methodological commission of the
Educational and Scientific Institute "Karazin Institute of International Relations
and Tourism Business"
Protocol No. 1 dated August 26, 2026

Chairman of the scientific and methodological
commission

 Hanna PANASENKO

INTRODUCTION

The curriculum of the academic discipline "Concepts of World Economic Development" is compiled in accordance with the program of preparation for the third (educational and scientific) level of higher education in the field of knowledge C Social Sciences, Journalism, Information and International Relations, specialty C1 Economics and International Economic Relations (by specialization) specialization C1.02. International Economic Relations.

1. DESCRIPTION OF POSTGRADUATE PRACTICE

1.1. The purpose of teaching the academic discipline is to form the necessary theoretical knowledge and practical skills that will allow for the effective use in practice of methodological approaches to the study of modern concepts, the role and place of innovations in the development of civilizations, the definition of methodological foundations of the theory and practice of global innovation processes at a level that would meet the requirements for the training of doctors of philosophy.

1.2. The main tasks of studying the discipline are the formation and development of knowledge among students about the essence and directions of innovations in civilizational development, the theoretical foundations of the prospects for the development of innovations, and the development of skills in using their theoretical knowledge and tools of economic theory to study practical economic problems.

1.3. Number of credits – 3.

1.4. Total number of hours – 90.

1.5. Characteristics of the academic discipline for training
Elective
Full-time form of study
Year of training
2nd
Semester
3rd
Lectures
12 hours
Practical, seminar classes
24 hours
Independent work
54 hours
Individual tasks
-

1.6. List of competencies that the discipline contributes to:

- general competencies:

GC 04. Ability to solve complex problems based on a systematic scientific worldview, professional ethics and general cultural outlook

- special competencies:

PC 02. Ability to generate new ideas for the development of the theory and practice of international economic relations.

PC 03. Ability to integrate knowledge from different fields, apply a systemic approach and take into account non-economic aspects when solving complex problems of international economic relations and conducting research.

1.7. Planned learning outcomes, the formation of which is facilitated by discipline:

LO 08. Plan and carry out theoretical and applied research on international economic relations using modern scientific tools.

LO 10. Analyze and assess the state and prospects for the development of international economic relations on the basis of a holistic scientific understanding of the economic unity of the world, effectively apply regulatory mechanisms of international economic relations at the national, regional and international levels in the context of modern processes of convergence and divergence.

1.8. Study prerequisites: Global challenges in the system of international economic relations, Peculiarities of world integration processes, Economic and mathematical modeling of global economic phenomena.

2. THEMATIC PLAN OF THE ACADEMIC DISCIPLINE

Topic 1. Innovation system and innovative development

The concept and system of innovation. Types of innovation. Differences between innovation and production processes. Incentives for innovation. Sources and initiators of innovation. Types of innovation. Level of novelty of innovations. Classification of inventions and their relationship with innovations. Innovation rent and quasi-rent. Forms of innovation rent. Technological quasi-rent. Intellectual quasi-rent. Information quasi-rent. Innovation effect in kind. Innovation as an engine of social progress. Innovative type of economic development.

Topic 2. Motives and mechanisms of innovative development of civilizations

"Human factor". Man as an innovator and a conservative. Difference between innovation and creativity. Difference between innovation and invention. Difference between innovation and science. Psychological and intellectual motives of innovative activity. Demographic factor. Economic motive. Sociocultural factors. Religious factor. Motives, origins and consequences of human conservatism. Market innovation mechanisms. Quasi-market innovation mechanism. State and innovation. The role of the state in innovation activity. State regulation of innovation activity. Investments and innovations. The concept of innovation climate. Innovation-investment ring. Organic unity of innovations and investments.

Topic 3. Regularities of innovative development of civilizations

Dynamics of innovative renewal of society. Crisis as an obligatory element of the cyclical dynamics of social systems. Periodic innovative renewal as a general regularity of society as a whole and all components of its systems. Phases of innovation cycles. The connection of innovation rent and quasi-rent with the phases of innovation cycles. The mutual influence of innovation cycles of different durations and their interaction with the cyclical dynamics of various spheres of society. Civilizational sociogenetics. Laws of sociogenetics: heredity, variability and selection. The main elements in the structure of the civilizational genotype: natural and ecological environment, demographic, technological, economic components, social structure, state-political, socio-cultural and historical components. Different levels of civilizations. Factors determining the variability of local and world civilizations. Heredity, variability and selection in the dynamics of civilizations.

Topic 4. Ecological and demographic innovations

Ecological cycles and crises. Chronicle of millennia. Environmental disasters caused by man. Natural cycles as a general form of the movement of matter. Evolution of natural and social systems. Ecological revolution. A number of ecological crises and their consequences. Directions of ecological innovations. Ecological innovations as a basis for overcoming the ecological crisis. Two main fields of application of ecological innovations. Scenarios of ecological development of the world. Formation of noosphere civilization.

Classification of demographic cycles. Demographic cycles of ethnic groups, nations, peoples. Demographic cycles of civilizations. Historical trends in cyclical population dynamics. Trends in the dynamics and structure of the world's population. World demographic transition 1750-2100. World demographic crisis. Demographic challenges of the 21st century.

Topic 5. Technological innovations

Technologies in the structure and dynamics of civilizations. Technological method of production. Cyclic-genetic patterns of technological dynamics. Technological progress - a general pattern of cyclical dynamics of civilizations. Patterns of technological genetics. Innovations in technological dynamics. 10 stages of development of society. Intensity and complexity of innovations. New models of technology and modification of technologies. Change of generations of technology and technology. Technological method of production. Dynamics of natural science discoveries and technical inventions over 300 years. Innovation waves of the 20th century. Structure of technological devices (TU) included in the industrial mode of production. Technological revolution. Structure of the 6th technological device (forecast). Innovative breakthrough in the technological future of civilizations.

Topic 6. Economic innovations

Economic cycles and crises in the dynamics of civilizations. Classification of economic cycles and crises: by hierarchical levels of the economy, its subjects; by types of economic activity; by duration, period of action. Structural dynamics of the economy of civilizations. Economic crises in the dynamics of civilizations and their consequences. State-monopoly capitalism and socialist planned economy. Militarization and totalization of the economy. Waves of totalization of the economy of industrial society. Cycles and crises in the economy of civilizations of the 21st century. Formation of an integral post-industrial type. Globalization of the economy. Vector of polarization movement in the world economy. Reduction of the average duration of economic cycles. Mechanisms of reproduction and innovative renewal of resources. Structural shifts in the economy of civilizations. Structure of the economy of civilizations. Structure of the economy of world civilizations as a percentage of gross product. Innovations in the reproduction and combination of production resources in post-industrial civilization.

Topic 7. Innovations in the socio-political sphere and in the spiritual in the life of civilizations

Civilizational dynamics of social stratification and mobility. Stratification and mobility in the dynamics of world civilizations. Dynamics of the ratio of per capita GDP by civilizations. The main functions of the state in the system of civilizational relations. Forms of political and legal order in different civilizations. The share of the world's population under the political control of civilizations. Revolutions in civilizational dynamics. Regularities of revolutions in the cyclical dynamics of civilizations. Wars in the structure and dynamics of civilizations. Directions of development of innovations in the military-political sphere.

The key role of the spiritual sphere in the structure and dynamics of civilizations. The sphere of spiritual life of society. Interaction of the sphere of spiritual life of society with other spheres of civilizations. Cyclicity in the dynamics of culture. Dynamics of the system of civilizational values. The system of values as the core of the genotype of global civilization.

Topic 8. Innovative development of civilizations in the 21st century.

Trends and scenarios of the dynamics of civilizations. The doctrine of cycles, crises and innovations in the dynamics of civilizations. The energy-ecological future of civilizations. The noospheric approach: inertial and innovative-breakthrough scenarios. Sociodemographic dynamics of civilizations. Energy-ecological dynamics of civilizations. Technological dynamics of civilizations. Economic dynamics of civilizations. Geopolitical dynamics of civilizations. Sociocultural dynamics of civilizations. Global rating of the integral power of the world's leading countries.

3. STRUCTURE OF THE COURSE

Topic names	Number of hours			
	total	including		
		l	s	ind
Topic 1. Innovation system and innovative development	13	2	4	7
Topic 2. Motives and mechanisms of innovative renewal of civilizations	13	2	4	7
Topic 3. Patterns of innovative renewal of civilizations	13	2	4	7
Topic 4. Environmental and demographic innovations	10	1	2	7
Topic 5. Technological innovations	10	1	2	7
Topic 6. Economic innovations	13	2	4	7
Topic 7. Innovations in the socio-political sphere and in the spiritual	9	1	2	6
Topic 1. Innovation system and innovative development	9	1	2	6
Total hours	90	12	24	54

4. TOPICS OF PRACTICAL CLASSES

№ з/п	Topic names	Number of hours
1-2	Topic 1. Innovation system and innovative development	4
3-4	Topic 2. Motives and mechanisms of innovative renewal of civilizations	4
5-6	Topic 3. Patterns of innovative renewal of civilizations	4
7	Topic 4. Environmental and demographic innovations	2
8	Topic 5. Technological innovations	2
9-10	Topic 6. Economic innovations	4
11	Topic 7. Innovations in the socio-political sphere and in the spiritual	2
12	Topic 1. Innovation system and innovative development	2
	Total hours	24

5. ASSIGNMENTS FOR INDEPENDENT WORK

№	Types, content of independent work	Number of hours
1.	Type: extracurricular Content: In-depth study of the material on the topic Innovation system and innovative development	7
2.	Type: extracurricular Content: In-depth study of the material on the topic Motives and mechanisms of innovative renewal of civilizations	7
3.	Type: extracurricular Content: In-depth study of the material on the topic Regularities of innovative renewal of civilizations	7
4.	Type: extracurricular Content: In-depth study of the material on the topic Ecological and demographic innovations	7
5.	Type: extracurricular Content: In-depth study of the material on the topic Technological innovations	7
6.	Type: extracurricular Content: In-depth study of the material on the topic Economic innovations	7
7.	Type: extracurricular Content: In-depth study of the material on the topic Innovations in the socio-political sphere and in the spiritual life of civilizations	6

8.	Type: extracurricular Content: In-depth study of the material on the topic Innovative development of civilizations in the 21st century.	6
Total hours		54

6. INDIVIDUAL TASKS

Not provided for in the curriculum.

7. TEACHING METHODS

When conducting the types of classes specified in the plan, the following methods are used: <https://translate.google.com/?hl=ru&tab=TT&authuser=0>

1. When presenting educational material:

- verbal (conversation, explanation, story, instruction);
- visual (illustration, demonstration, independent observation);
- practical (exercises, practical work, research work).

2. By the organizational nature of learning:

- methods of organizing and implementing educational and cognitive activities;
- methods of stimulating and motivating educational and cognitive activities;
- methods of control and self-control in learning;
- binary (combination of theoretical, visual, practical) teaching methods.

3. By the logic of perception and assimilation of educational material: inductive-deductive, reproductive, pragmatic, research, problem-based, etc.

8. CONTROL METHODS

The mastery of the topic (current control) is controlled in seminar classes in accordance with specific goals, intermediate control - in seminar final classes or by performing practical tasks on course topics.

The following means of diagnosing the level of training of postgraduate students are used: performing practical tasks on course topics; written form of the test.

The final semester control is carried out during the test. The total number of points for the successful completion of the test tasks is 40. Completion time is up to 80 minutes.

The content of the test task and evaluation of answers on the test: 2 theoretical questions - 20 points each.

In case of using prohibited sources on the test, the postgraduate student leaves the classroom at the request of the teacher and receives a total score of zero (0).

9. SCORING SCHEME

Current control, independent work, individual tasks								Total	credit work	Sum
T1	T2	T3	T4	T5	T6	T7	T8	60	40 (20 points for two questions))	100
10	10	10	6	6	6	6	6			
10 points for completing tasks on 1-3 topics and 6 points for completing tasks on 4-8 topics (2 points for each task)										

A postgraduate student is admitted to the final control if, according to the results of the current control, he scored at least 30 points.

Criteria for evaluating answers during the current control:

– 2 points - the answer is correct, complete, consistent, logical; the postgraduate student confidently owns the theoretical and factual material from the entire course, is able to apply it to

specific tasks, is clearly oriented in the material, analyzes cause-and-effect relationships, is able to identify trends, and determine prospects.

- 1 point - the answer is correct, but incomplete, inconsistent, the postgraduate student is uncertainly owning the theoretical and factual material from the entire course, is unable to apply it to specific tasks, is unclearly oriented in the material.
- 0 points - the answer is missing or does not correspond to the content of the task.

Criteria for evaluating answers during the final control:

- 15-20 points - the answer is correct, complete, consistent, logical; the postgraduate student confidently possesses theoretical and factual material from the entire course, is able to apply it to specific tasks, is clearly oriented in the material, analyzes cause-and-effect relationships, is able to identify trends, and determine prospects; the postgraduate student has the skills to use factual material and skillfully applies it in answers; gives answers to theoretical questions using the appropriate terminology, while allowing 1-2 minor errors in the factual material.
- 10-15 points - the answer is correct, consistent, logical, but the postgraduate student allows individual minor omissions of theoretical factual material in the presentation, is able to apply it to specific tasks, in some cases vaguely formulates generally correct answers, is oriented in the material; the postgraduate student has the skills to use factual material.
- 5-10 points – the postgraduate student does not possess most of the theoretical and factual material, makes significant omissions in the answer, is not confident in the regulatory framework, theoretical principles, is unable to apply the acquired knowledge in an integrated manner to analyze specific situations, incorrectly formulates the main theoretical provisions and cause-and-effect relationships.
- 1-5 points – the postgraduate student demonstrates ignorance of most of the theoretical and factual material; the answer does not reveal the questions or tasks posed; makes gross errors.
- 0 points – the answer is missing or does not correspond to the content of the task.

The evaluation criteria for all types of tasks (current and final control) are given in the relevant sections of the distance learning course **Innovations in the development of civilizations:** <https://moodle.karazin.ua/course/view.php?id=14207>

Assessment scale

Total points for all types of learning activities during the semester	Rating for a four-level rating scale
90 – 100	passed
70 – 89	
50 – 69	
1 – 49	not passed

Use of artificial intelligence (AI) technologies

When studying the academic discipline, the use of artificial intelligence (AI) technologies is carried out in accordance with the Policy on the Use of Artificial Intelligence Technologies of the V. N. Karazin Kharkiv National University.

The following models of AI use are used within the discipline:

1. The “AI is prohibited” model. The use of artificial intelligence technologies is not allowed during control measures aimed at checking individual knowledge and the formation of competencies of the student, in particular: oral interview, modular control works, exam (credit), unless otherwise specified by the teacher, other types of assessment for which the teacher has established restrictions on the use of AI.

2. The “AI as an assistant” model. When preparing for practical classes, performing individual tasks, essays, analytical reviews and other written work, it is allowed to use AI for: searching and systematizing information, selecting and primary analyzing scientific sources,

explaining complex concepts, improving the structure of the text, checking grammar, style and design, generating ideas, a work plan or examples. The final text of the work, conclusions, analysis, interpretation of results and decisions made must be prepared independently by the student.

3. The “AI as a tool” model. For certain laboratory, practical, project or research works, the use of artificial intelligence technologies may be a mandatory component of the task. In such cases, students can use generative AI models for: analyzing and preparing data, generating, analyzing and optimizing program code, comparing the results of different AI models, creating visualizations, diagrams or images, analyzing large data sets. conducting experiments using modern artificial intelligence tools. All results obtained using AI are subject to critical analysis, verification and refinement by the student.

Declaration of the use of AI. In the case of using artificial intelligence technologies, the student is obliged to indicate: the name of the service or AI model; date of use; nature of assistance (idea generation, information search, data analysis, code generation, text editing, etc.).

At the request of the teacher, the student must provide the prompts used or explain the method of using AI tools.

Undeclared use of artificial intelligence technologies or submission of AI-generated material as their own result of educational activities is considered a violation of the principles of academic integrity in accordance with the internal regulatory documents of the University.

Enrollment of non-formal education

Students can receive additional points for successfully completing distance courses or trainings on leading educational platforms that are thematically related to the content of the discipline and correlate with the total number of credits.

Examples of relevant non-formal education may include:

- online courses (Coursera, Prometheus, etc.) on topics relevant to the content of the academic discipline;
- participation in certified trainings and seminars on topics relevant to the content of the academic discipline;
- certified programs on topics relevant to the content of the academic discipline, conducted by international organizations or universities.

Enrollment requirements:

- The applicant must provide the teacher with an official document (certificate or diploma) confirming the successful completion of the course.
- The course must be agreed with the teacher. It is recommended to discuss the choice of course in advance.

Each application is considered individually. The procedure for recognizing the results of non-formal education is carried out in accordance with the Procedure for recognizing the results of learning obtained in non-formal education at V.N. Karazin Kharkiv National University. The decision is made by the scientific and methodological commission of the Karazin Institute of International Relations and Tourism Business on the basis of the submitted package of documents from the applicant.

10. RECOMMENDED LITERATURE

Basic literature

Dovgal O. A. Distance learning course: Innovations in the development of civilizations: <https://moodle.karazin.ua/course/view.php?id=14207>

Galchinsky A.S. Economic methodology. The logic of renewal. – K., 2019.

Globalization and regionalization as vectors of development of international economic relations: collective monograph / co-authors; ed. O. A. Dovgal, N. A. Kazakova. Kharkiv: V. N. Karazin KhNU, 2018. 540 p.

Grazhevska N.I. Economic systems of the era of global changes. – K., 2018.

Economic research (methodology, tools, organization, testing). Ed. A. A. Mazaraki. – K., 2017.

Imperatives of development of international economic relations in the context of global challenges: collective monograph / co-authors ; ed. O. A. Dovgal. Kharkiv: V. N. Karazin KhNU, 2022. 528 p. URL: <http://dspace.univer.kharkov.ua/handle/123456789/17920>
 Mocherny S.V. Methodology of economic research. – Lviv, 2019.

Additional literature

Galchynsky A. Global transformations: conceptual alternatives. Methodological aspects. – K., 2016.

Geets V.M. Innovative prospects of Ukraine: [monograph] / Geets V.M., Seminozhenko V.P. – Kh.: Konstanta, 2019. – 271 p.

Dovgal O. A. Innovative economics: textbook / O. A. Dovgal, G. V. Dovgal. □ Kh. : KhNU named after V. N. Karazin, 2015. □ 156 p.

Innovative development of the economy: model, management system, state policy / [L.I. Fedulova, V.P. Aleksandrova, Yu.M. Bazhal et al. ; ed. I.L. Fedulova] ; National Acad. of Sciences of Ukraine, Inst. of Economic Forecasting. – K. : Osnova, 2015. – 549 p.

Transformation of international economic relations in the era of globalization: monograph / Edited by A. P. Golikova, O. A. Dovgal. – Kh. : KhNU named after V. N. Karazin, 2015. – 316 p.

Pehrsson A. *Digital Business Strategy: Content, Context and Cases*. Abingdon ; New York : Routledge, 2024. 168 p. URL: <https://www.routledge.com/Digital-Business-Strategy-Content-Context-and-Cases/Pehrsson/p/book/9781032512556>.

Lenox M. *Strategy in the Digital Age: Mastering Digital Transformation*. Stanford, CA : Stanford Business Books, 2023. 192 p. URL: <https://www.sup.org/books/business/strategy-digital-age>

Deloitte. *Global Powers of Retailing 2023: A Year of Resilience and Rising Sustainability*. 2023. URL: <https://www.deloitte.com/global/en/industries/consumer/analysis/global-powers-of-retailing.html>

Fratesi U. *Regional Policy: Theory and Practice*. Abingdon ; New York : Routledge, 2024. 414 p. URL: <https://www.routledge.com/Regional-Policy-Theory-and-Practice/Fratesi/p/book/9780815364085>

McCann P., Ortega-Argilés R. Smart specialization, regional growth and applications to European Union cohesion policy. *Regional Studies*. 2015. Vol. 49, No. 8. P. 1291–1302. DOI: <https://doi.org/10.1080/00343404.2013.799769>.

Storper M., Venables A. J. Buzz: face-to-face contact and the urban economy. *Journal of Economic Geography*. 2004. Vol. 4, No. 4. P. 351–370. DOI: <https://doi.org/10.1093/jnlecg/lbh027>.

Martin R., Sunley P. On the notion of regional economic resilience: conceptualization and explanation. *Journal of Economic Geography*. 2015. Vol. 15, No. 1. P. 1–42. DOI: <https://doi.org/10.1093/jeg/lbu015>.

11. LINKS TO INFORMATION RESOURCES ON THE INTERNET, OTHER METHODOLOGICAL SUPPORT

- <http://europa.eu.int/> □ European Union electronic portal
- <http://www.bank.gov.ua/> □ official website of the National Bank of Ukraine
- <http://www.cordis.lu/> □ European Association for Technology Transfer, Innovation and Industrial Information
- <http://www.dffd.gov.ua/> □ official website of the State Fund for Fundamental Research of Ukraine
- <http://www.ei.com.ua/> □ news agency Expressinform – main financial indicators of Ukraine
- <http://www.europe-innova.eu/> □ European portal for innovation initiatives
- <http://www.imf.org/> □ official website of the International Monetary Fund
- <http://www.kmu.gov.ua/> □ government portal of the Cabinet of Ministers of Ukraine
- <http://www.me.gov.ua/> □ official website of the Ministry of Economy and European Integration of Ukraine
- <http://www.nttc.edu/> □ National Center for Technology Transfer (NTTC), established by the US Congress in 1989.
- <http://www.osce.org/> □ official website of the Organization for Security and Cooperation in Europe
- <http://www.unctad.org> □ official website of UNCTAD

- <http://www.worldbank.org/> official website of the World Bank