

Educational Institution
"Belarus State Economic University"

SUBMIT
Rector of the Educational Institution
"Belarus State Economic University"
_____ V.Yu. Shutsilin
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Commercialization and Management of Innovations
The curriculum of the higher education institution
on the academic discipline for the specialty

1-25 80 02 World Economy

2019

COMPOSER:

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RECOMMENDED FOR APPROVING:

Department of the World Economy of the Educational Institution "Belarus State Economic University"
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Scientific and Methodological Council of the Educational Institution "Belarus State Economic University"
(Protocol № _____ of _____)

EXPLANATORY NOTE

The academic discipline "Commercialization and Management of Innovations" is an independent discipline for the master students in the specialty 1-25 81 03 "World Economy". In this course, the master students study the theoretical and methodological aspects of the formation and development of an innovative economy, acquire knowledge about innovation processes and innovation infrastructure, get an idea of the management features of various types of innovation activities and possible ways of commercializing innovations. The academic discipline "Commercialization and Management of Innovations" is aimed at the formation of analytical creative thinking, the development of skills and abilities to use methods, analytical tools and incentives in practical work, taking into account the instability of internal and external conditions, as well as the development of specific approaches to decision-making. It provides an opportunity for scientific substantiation of the optimal scientific and technical policy of organizations, forms the basis for making strategic and tactical management decisions in the field of innovation, as well as assessing their impact on the results of innovation activities.

The purpose of the academic discipline "Commercialization and Management of Innovations" is the formation of the master students in-depth theoretical and practical knowledge about the totality of the principles, forms and methods of innovation management, as well as the possibilities of commercialization of innovative products to ensure the sustainable development of the organization and strengthen its competitive position in the national and world markets.

Tasks of the academic discipline:

- development of professional competence in the field of research patterns, processes and forms of development of innovative economy, including National Innovative Systems, on national, regional and international levels;
- development of competencies in the analysis of innovative processes, of the development patterns of the Intellectual Property markets, of tendencies in the field of innovative entrepreneurship;
- mastering the skills, knowledge and competencies for the selection of innovations taking into account goals and tasks in innovative entrepreneurship and management of innovative activities;
- skills formation in the justification of optimal management decisions for creating and maintaining a favorable climate for innovations and innovation organizations;
- providing knowledge about the existing opportunities for the implementation of innovative products and technology transfer at the national, regional and global levels.

The structure of the curriculum and the methodology of teaching the academic discipline take into account the new results of economic research and the latest achievements in the field of pedagogy and information technologies, targeting graduate students to acquire relevant professional competencies. The

academic discipline is based on the study of economic theory, the world economy, and international business.

As a result of studying the discipline "Commercialization and Management of Innovations" the following competencies are formed:

- possess the skills of innovation management, the principles, forms and methods of implementing its results, carry out the justification of innovative projects, apply various methods of commercialization of innovations and technology transfer;
- be able to apply the methods of scientific knowledge (analysis, comparison, systematization, abstraction, modeling, validation of data, decision-making, etc.) in independent research activities, generate and implement innovative ideas.

As a result of studying the academic discipline the master students should:
to know:

- basic concepts of innovative economy, innovations, functions and classification of innovations;
- the main course and the stages of the theory of innovations in the context of the general evolution of the innovative development, modern conceptual approaches to the development of the theory of innovations;
- normative legal acts governing innovative activities at the national, regional and global levels;
- content, structure and the basic model of innovation processes and factors affecting the development of innovative activities;
- public role in the creation of a national innovation system and fostering innovation spheres;
- features of innovative entrepreneurship;
- formation and development of management strategies of innovative organizations and algorithm of their implementation;
- forms and methods of increasing the competitiveness of the organization on the basis of innovations;
- approaches to control of intellectual resources in innovative organizations;
- features of motivation and communication of participants of innovative groups in an organization;
- stages of the examination and selection of innovative projects;
- the main elements of the process of commercialization of innovative projects;
- methods of studying and forming demand for innovative products;
- features of the use of marketing approaches in the commercialization of innovative products;
- procedure for drawing up a sales plan for innovative products;
- methods of technology transfer at the national and international levels
- national and international legal aspects of intellectual property commercialization;
- forms of sale of innovative products, especially its supply to foreign markets;

to be able to:

- analyze processes occurring in innovative economy at the national and global levels;
- identify the ratio of goals and tasks of innovative management to goals and tasks of development of innovative economies;
- form innovative strategies and policies of the organization, approve tasks for their implementation;
- evaluate the prospects of innovative projects proceeding of opportunities for practical application of the expected results;
- identify existing and potential requests in conjunction with the changing technological capabilities of the organization;
- identify ways to transfer technology;
- take into account the peculiarities of countries in the field of technological transfer and patenting of intellectual property;
- analyze, based on the possibilities of commercialization, promising technologies and innovative products;
- evaluate the effectiveness of the implementation of innovative products and intellectual property inside and outside the country.

to possess:

- skills of working with scientific and methodical literature, regulations, reflects the direction and control of the development of innovative processes;
- using of modern information technologies in the management of innovative activities of organizations;
- evaluation of the effectiveness of commercialization and innovation management;
- analysis of specific situations and decision-making on the directions of the organization's innovative activities;
- methods for selecting information on the possibilities of commercialization of innovative products and intellectual property objects.

In accordance with the curriculum of the specialty 1-25 80 02 "World Economy" the curriculum is designed for 100 hours, of which only 36 hours of classroom for the full-time form of training, 10 hours of classroom for part-time form of training. Distribution by the type of occupation for the full-time form of training: lectures – 22 hours, seminars – 14 hours. Distribution by type of occupation for part-time form of training: lectures – 6 hours, seminars – 4 hours.

Form of current certification for the academic discipline is academic credits.

Content of the educational material

Topic 1. Innovation and Innovation Process

The concept and classification of innovation. Theories of innovative development. Modern concepts of innovative economy. The impact of technological structures on economic development.

The concept and structure of the innovation process. Factors of development of the innovation process. Prerequisites for innovation. Sources of innovative ideas. Factors to ensure innovation. Tasks and elements of innovation infrastructure.

Topic 2. National Innovation System

The concept of a National Innovation System. Science and Technological Parks. Technology transfer centers. Organizations of financial support for innovation. National Innovation System of developed countries: European Union countries, USA, Japan, Australia. National Innovation System of developing countries: Asia, South America, Africa. National Innovation System of the Eurasian Economic Union. National Innovation System of the Republic of Belarus.

Legal regulation and stimulation of innovative development.

Topic 3. Innovative Entrepreneurship

The purpose and objectives of innovative entrepreneurship. Sources of ideas for innovative opportunities. Principles of innovative entrepreneurship. Global and national experiences in introducing innovative entrepreneurship in organizations. Entrepreneurial strategies in innovation.

Topic 4. Innovative Organization

Types of innovative organizations. Evaluation of the innovative potential of the company. Innovative company strategy. Sources of financing innovation. Improving the competitiveness of the company on the basis of innovation. Intellectual property management of a company.

Topic 5. Intellectual Resources of Innovative Organization

Requirements for the manager of an innovative company. Conditions for the development of intellectual resources of the company. Interaction of participants of the innovation group. Features of motivation of staff of the innovation group. Providing communications to the participants of innovation groups.

Topic 6. Marketing of Innovative and High-Tech Products

Testing of national and international market of innovations. Study and formation of demand for innovative products. Strategy to meet the needs of innovative products. Marketing analysis of customers. Features of setting prices for innovative and high-tech products. Development of sales plan for innovative and high-tech products.

Topic 7. Technology Transfer and Diffusion of Innovations

Technology as an object of transfer and commercialization. The process of technology diffusion and its role in the innovative development of the national economy. The ratio of the concepts of transfer and diffusion of technology. Foreign experience of technological transfer. Legal basis of technology transfer. Problems of patenting and licensing of technology transfer objects. International technology transfer networks.

Topic 8. Innovative Project

Features of innovative projects. Stages of development of innovative projects. Risks of innovative projects. Examination of innovative projects. Criteria for the selection of innovative projects. Implementation of innovative projects. Evaluation of the effectiveness of investment in an innovative project.

Topic 9. Intellectual Property Commercialization

Legal basis for the commercialization of intellectual property. Intellectual property management. Global experience in the sale of intellectual property. Features of sales of intellectual property. Legal protection of intellectual property. Features of license agreements.

Educational-methodical map of the academic discipline "Commercialization and Management of Innovations"
for the full-time form of higher education

Section number, topics	Section title, topics	Number of class hours						Other *	Form of control of knowledge
		Lectures	Practical classes	Seminar classes	Laboratory classes	Amount of hours GSS			
						L	PC / SC		
1	Innovation and Innovation Process	4						[1-5, 9, 14]	Interview, test
2	National Innovation System	2		2				[1-5, 6, 15]	Interview, test
3	Innovative Entrepreneurship	4		2				[1-5, 7, 8]	Interview, test
4	Innovative Organization	2						[1-5, 10, 14]	Interview, test
5	Intellectual Resources of Innovative Organization	2		2				[1-5, 6, 11]	Interview, test
6	Marketing of Innovative and High-Tech Products	2		2				[1-5, 8, 10]	Interview, test
7	Technology Transfer and Diffusion of Innovations	2		2				[1-5, 7, 11, 15]	Interview, test
8	Innovative Project	2		2				[1-5, 11, 12, 14]	Interview, test
9	Intellectual Property Commercialization	2		2				[1-5, 12, 13, 14]	Interview, test
	Total hours	22		14					Academic credits

Educational-methodical map of the academic discipline "Commercialization and Management of Innovations"
for part-time form of higher education

Section number, topics	Section title, topics	Number of class hours						Other *	Form of control of knowledge
		Lectures	Practical classes	Seminar classes	Laboratory classes	Amount of hours GSS			
						L	PC / SC		
1	Innovation and Innovation Process	1						[1-5, 9, 14]	Interview, test
2	National Innovation System	1						[1-5, 6, 15]	Interview, test
3	Innovative Entrepreneurship	1						[1-5, 7, 8]	Interview, test
4	Innovative Organization	1						[1-5, 10, 14]	Interview, test
5	Intellectual Resources of Innovative Organization			1				[1-5, 6, 11]	Interview, test
6	Marketing of Innovative and High-Tech Products	1		1				[1-5, 8, 10]	Interview, test
7	Technology Transfer and Diffusion of Innovations	1						[1-5, 7, 11, 15]	Interview, test
8	Innovative Project			1				[1-5, 11, 12, 14]	Interview, test
9	Intellectual Property Commercialization			1				[1-5, 12, 13, 14]	Interview, test
	Total hours	6		4					Academic credits

INFORMATION AND METHODOLOGICAL PART

Methodological recommendations on the organization of independent work of master students in the academic discipline

"Commercialization and Management of Innovations"

In mastering the knowledge of the academic discipline, an important stage is independent work. The main directions of independent work are:

- initially a detailed introduction to the curriculum;
- acquaintance with the list of recommended literature on the discipline in general and its topics, its availability in the library and other available sources, the study of the necessary literature on the topic, the selection of additional literature;
- studying and expanding the lecture material of the teacher at the expense of special literature, consultations;
- preparation for seminars on specially designed plans with the study of basic and additional literature;
- preparation for diagnostic monitoring forms (tests, control work and so on);
- preparation for academic credits.

List of recommended competence diagnostic tools

1. Oral forms of diagnosis of competencies: interviews, oral presentations at seminar classes, reports at conferences, evaluation based on discussion.

2. Written forms of competence diagnostics: tests, test papers, essays, abstracts, publication of articles, reports.

3. Oral and written forms of competence diagnostics: reports in classroom, practical exercises with their oral defense.

4. Technical form of competence diagnostics: electronic tests.

Normative and legislative acts

1. National strategy of sustainable social and economic development of the Republic of Belarus for the period until 2020 / Nat. Commis. on sustainable development of Republic of Belarus; ed. L.M. Aleksandrovich [and others]. – Minsk : Unipack, 2004. - 202 p.

2. State program of innovative development of the Republic of Belarus for 2016-2020: Decree of the President of the Republic of Belarus of 31 January 2017 № 31 // National Register of legal acts of the Republic of Belarus. - 02 February 2017 - № 1/16888.

3. On the commercialization of the results of scientific and scientific and technical activities created at the expense of public funds: Decree of the President of the Republic of Belarus of 4 February 2013 № 59 // National Register of legal acts of the Republic of Belarus. - 05 February 2013 - № 1/14056.

LITERATURE

Basic:

1. Vashko, I.M. Economics of Innovation : educational manual / I.M. Vashko, A.D. Lutsevich, G.W. Susha. – Minsk : Academy of Public Administration under the aegis of the President of the Republic of Belarus, 2015. - 338 p.

2. Grishin, V.V. Management of innovative activity in the conditions of modernization of the national economy : educational manual / V.V. Grishin. – M. : Dashkov and K, 2017. - 366 p.

3. Innovation Management : textbook / ed. L.P. Goncharenko. – M. : Yurayt, 2015. - 486 p.

4. Marketing of innovation : textbook / ed. N.N. Molchanov. - M. : Yurayt, 2016. - 527 p.

5. Mukhopad, V.I. Economics and commercialization of intellectual property: textbook / V.I. Mukhopad - M. : Magistr, Infra-M, 2017. - 508 p.

Additional:

6. Alekseev, A.A. Innovative Management: textbook / A.A. Alexeyev. – M. : Yurayt, 2015. - 246 p.

7. Valdaitsev, S.V. Small innovative entrepreneurship : educational manual / S.V. Valdaitsev, N.N. Molchanov, K. Pezoldt. – M. : Prospect, 2016. - 536 p.

8. Innovative entrepreneurship: textbook and guideline / [V.Ya. Gorfinkel et al.] - M. : Yurait, 2018. - 523 p.

9. Innovative management : manual / ed. V.M. Rudenkov. - Minsk : Amaltheia, 2014. - 459 p.

10. Kudashov, V.I. Economics and Management of Innovation: educational manual / V.I. Kudashov. – Minsk : ITC Ministry of Finance, 2015. - 266 p.

11. Medvedev, V.P. Innovations as means of ensuring the competitiveness of organization / V.P. Medvedev. – M. : Magistr : Infra-M, 2015. - 158 p.

12. Sorokin, A.P. Project management of innovative activity : textbook / A.P. Sorokin. – Minsk : Academy of Public Administration under the aegis of the President of the Republic of Belarus, 2015. - 203 p.

13. Tebekin, A.V. Innovation Management : textbook / A.V. Tebekin. – M. : Yurayt, 2016. - 479 p.

14. Basics of research and innovation activity / ed. L.N. Nekhorosheva, V.A. Struk. – Minsk : Pravo i economica, 2016. - 489 p.

15. Shimov, V.N. Innovative development of the economy of Belarus: Driving force and national priorities : monograph / V.N. Shimov, L.M. Kryukov. – Minsk : BSEU, 2014. - 200 p.

PROTOCOL OF HARMONIZATION OF THE CURRICULUM

Title of the discipline, with which requires agreement	Chair	Suggestions about the changes in the content of the curriculum Higher Education for academic discipline	The decision taken by the department to develop a training program (with the date and protocol number)
1.			

ADDITIONS AND CHANGES TO THE CURRICULUM

For the ____ / ____ academic year

No.	Additions and changes	Base

The curriculum was reviewed and approved at a meeting of the department

_____ (protocol number from ____ ____ 201_).

(The name of the department)

Head of the department

(academic degree, academic title) (signature) (Initials Surname)

APPROVED

Dean of the Faculty

(academic degree, academic title) (signature) (Initials Surname)