УНИВЕРСИТЕТ ЗА НАЦИОНАЛНО И СВЕТОВНО СТОПАНСТВО

UNIVERSITY OF NATIONAL AND WORLD ECONOMY

Adopted by the Faculty Council Decisionof Faculty of General economics protocol № ….. / ……

Approved by:

Dean of Faculty
Prof. Georgi Petrunov, PhD

SYLLABUS

Course	**INNOVATIONS**	
Course Category	**OPTIONAL**	
Area of Study	**SOCIAL SCIENCES, ECONOMICS AND LAW**	
Field of Study	**ECONOMICS**	
Degree Programme	**ECONOMICS TAUGHT IN ENGLISH**	
Educational and Qualification Degree	**BACHELOR**	
Faculty	**GENERAL ECONOMICS**	
Department	**ECONOMICS**	
Academic Hours	*Full Time*	**60 hours**
	Distance Learning	
Extracurricular Academic Hours	*Full Time*	**90 hours**
	Distance Learning	
Credits	**6**	
Lecturer	Assoc. prof. Petar Peshev, PhD Chief assist. prof. Antoan Shotarov, Ph.D	

COURSE DESCRIPTION

1. The discipline "Innovation" has been taught to students enrolled in the “Economics taught in English“ degree programme for the “Bachelor” EQD.

2. Description of content:

The lecture course is intended for students in the different degree programs of the General Economics Faculty at UNWE. The aim is to gain knowledge about the main categories and regularities in the technological development of the national economy, about the specifics and the mechanism of management of the innovation processes in the economic system at micro and macro level, in relation to the transition to the new knowledge-based economy.The material is structured into three sections and 13 topics.The first four topics introduce innovation theory by introducing the main categories and concepts, the specifics of the innovation process, and the characteristics of innovation as a result of it. The prerequisites, characteristics, and long-term trends of changes in society as a result of technological development are revealed.In the following four topics the characterization of the firm's innovation system, innovation strategy and policy, innovation evaluation methods, and conditions for maintaining a positive innovation potential is made. The possibilities for managing the firm's innovation system under changing market conditions are examined.The next three topics are devoted to innovation policy in the macro system. The characterization of the national innovation system introduces the main actors, flows, levels, models, principles, levers, and mechanisms for stimulating technological development. It systematizes the idea of the nature and types of innovation strategy and policy of the state. The main approaches and systems for monitoring innovation activity and the level of innovativeness of the national economy are given.In the last two topics, an overview of innovation policy in Bulgaria, the European Union, and countries leading in innovation activity is provided. Familiarity with the specifics of the mechanism for managing innovation processes in developed countries gives an insight into the actual implementation of innovation policy in them. In order to achieve the objectives, Horizon 2020 highlights the common trends, good practices, strengths, and weaknesses in the development of EU innovation policy.

3. Language of teaching:English

CONTENT

№	TOPIC	Academic Hours			
		Full time		Distance form of learning	
		L	S	L	S
1.	**Scientifical and technological development and economic system** Scientific, technical, and technological progress is a driving force in the development of society in the agrarian, industrial and microprocessor revolutions and the emergence of the new knowledge-based economy. The main factors of development are systematized. The main stages and long-wave processes in the development of the economic system under the influence of science, engineering, and technology are characterized. Special attention is paid to scientific and technological	2.4	2.4	-	-

	development in the twentieth century. The prerequisites, nature and characteristic features of the new economy are examined.				
2.	**Innovation** The essence of innovation, its nature, and its manifestation as an activity, process, result, and impact on the economic system is revealed. It clarifies the functions and influence of the various factors and environments that stimulate the emergence and implementation of innovation.	2.3	2.3	-	-
3.	**Product cycle** The individual stages of research, experimentation, and development, and innovation activities are characterized. The different phases through which innovation activity passes and the life cycle of innovation within the product cycle are analyzed. Different types of life cycles are presented.	2.3	2.3	-	-
4.	**Innovativeness of the economic system** The main concepts and dependencies in the knowledge-based economy are derived, and the main approaches and systems for monitoring innovation activity are distinguished. The prerequisites and indicators for monitoring innovation activity at the input and output of the economic system are derived.	4	2.3	-	-
5.	**Corporate innovation system** It shows the diverse approaches that entrepreneurs take in creating and targeting firm innovation structures and the models by which they are built. The different forms of innovation formations for inter-firm integration in innovation activity are presented. The activities in the implementation of innovation projects are characterized and the barriers faced by innovating firms are pointed out.	2.3	2.3	-	-
6.	**Innovation development of the company** The main tasks and processes in the implementation of company innovation are distinguished. It traces the activities from idea generation, concept formation, strategy, plan, and policy that should ensure the creation of the innovation. Characterization of the firm's innovation strategy and policy is made, focusing on the criteria, components, stages, and the selection of the most appropriate ones according to its personnel and resource potential. The types of innovation strategy and policy of the firm are considered according to the sources of innovation, market positions, conditions and rates of market entry, and the advantage of developing own cooperated or purchased	2.3	2.3	-	-

	product and/or process innovations.				
7.	**Management of the company's innovations** The sources and heuristic methods used to generate the idea are systematized. The process of formation and implementation of the innovation process is traced, by highlighting the tasks, differentiating the activities in its development, and analyzing the main processes in the coordination of innovation activities in the course of the innovation process. The main stages in the implementation of innovation projects as well as possible barriers to innovation in the company are identified.	2.3	2.3	-	-
8.	**Economic aspects of the company innovation activity** Main economic indicators in the product cycle are tracked, focusing on different types of innovation performance. The main points, objectives, risk analysis guidelines, and alternative options are presented. The stages, principles, and approaches for calculating cash flows in the formation of innovation projects and methods for their evaluation are discussed.	2.3	2.3	-	-
9.	**National innovation system** An overview of the theoretical concepts for the formation of the national innovation system is provided. The essence is revealed and the structure, the scope, the institutional elements and the links between them, the main flows that move and shape the modern national innovation system are characterized. It identifies opportunities for achieving synergistic effects from the functioning of the national innovation system.	2.3	2.3	-	-
10.	**Government innovation strategy and policy** The changes that have occurred since the middle of the twentieth century in the functions of the state for scientific development and technological innovation are systematized. The nature of the main types of innovation development strategy is analyzed. It reviews the main conceptions of the nature and scope of innovation policy, points out the main points of reference, and systematizes the main objectives that modern states set themselves in conducting innovation policy.	2.3	2.3	-	-
11.	**Mechanism and instruments of the state innovation policy** The framework and functional linkages that define the country's innovation policy are presented. The levels and institutions that implement and conduct the national innovation strategy are outlined. The instruments of	2.3	2.3	-	-

	innovation policy are systematized according to different classification features, linking them to the direction of their use and action.				
12.	**Innovation policy in Bulgaria** A scheme and organogram of the main institutions in the Republic of Bulgaria related to innovation activity with their functions, tasks, capabilities, and levers for innovation policy implementation are presented. The main documents regulating the relations between the different levels, departments, and units in relation to the development of science, research, and implementation of innovations for the fulfillment of set goals and objectives and the envisaged measures for the implementation of the adopted innovation strategy of the Republic of Bulgaria are selected and characterized. The possibilities are demonstrated by using SWOT, PEST, TOWS, A'WOT, and other approaches to analyze the national innovation system of the Republic of Bulgaria and the opportunities for its improvement.	2.3	2.3	-	-
13.	**Innovation policy in European Union and some developed countries** The main models of innovation policy in countries leading in innovation activity are examined. It characterizes the strengths and weaknesses of the mechanism and the instruments they use to achieve the high innovativeness of national economies. The main periods after the adoption of the Lisbon Strategy related to the building of the institutional structure of the European Research Area and the deepening of innovation partnership are traced. It examines the Framework Programmes implemented, the creation of the Innovation Union, and the ideas and initiatives adopted in the Horizon 2020 program for the development of smart growth and a piece of knowledge and innovation-based economy**.**	2.3	2.3	-	-
	Total	**30**	**30**	-	-

Legend: L – lectures;S– seminars

TEACHING AND LEARNING METHODS

Combination of different teaching methods, tailored to the form of study learning. If possible, part of the training in the discipline is organized in an external business environment or appropriate public institutions.

In the regular form of study, 30 hours of lectures and 30 hours of seminars and 90 hours of out-of-class work are provided. Presentations are prepared for all lectures.

The necessary technical resources for the trainings are computer multimedia and Internet connection; e-learning platforms (Teams, etc.), additional digital tools for visualizing the material in the discipline.Microsoft software products are used.

The self-study of the distance-learning students includes individual and/or team research in specific organizations/institutions where they work, thematic written assignments, etc., which reinforce their interest and enable them to express their potential.

EXTRACURRICULAR ACADEMIC HOURS

Components	Hours	
	Full time	**Distance form of learning**
1. Conducting practical classes		
2. Development of coursework/project	20	
3. Preparation of an abstract		
4. Solving case studies		
5. Development of assignment		
6. Study of a set task		
7. Midterm exam / test	30	
8. Others: ……		
9. Preparation for the exam	40	
Total	**90**	

ASSESSMENT

The assessment is complex.

Students receive points for their work during the semester, which together with the results of the semester examination are the basis for determining the final grade. It is formed in accordance with the criteria adopted by the Department of Economics with the accumulation of points throughout the semester of comprehensive assessment in the discipline.

In the case of full-time study, the final grade is formed as follows:

FG = 0,5**E** + 0,3**MTE** + 0,2 **IA,**

where:

FG = Final grade;
E = Exam;
MTE = Midterm exam;
IA = Individual assignments.

Electronic platforms (such as MS Teams; Google Forms; Moodle) and other modern educational technologies are used, both for training and for assessing and controlling its results, including the use of a test center.

The final score is on a six-point system. The minimum grade for successful completion is "Average (3)". Which meets the European criteria for the following grades:

Excellent /6/	Very good /5/	Good /4/	Average /3/		Poor /2/	
A	**B**	**C**	**D**	**E**	**FX**	**F**
Credits are awarded as per the curriculum					No credit awarded	

QUALIFICATION GOALS

This course is designed in compliance with the requirements of the National Qualification Framework[1] in terms of acquired knowledge, skills and competences for the corresponding EQD and Council Recommendation of Key Competences for Lifelong Learning[2]. The curriculum is aimed at the formation of the knowledge (theoretical and factual), skills (cognitive and practical), and competencies (autonomy and responsibility, key competencies for lifelong learning, language learning, civic and social competencies, digital competencies, communicative competencies, professional competences) required for the degree, in accordance with the National Qualifications Framework and the European Reference Framework of Key Competences for Lifelong Learning.

The discipline provides students with the following basic knowledge of the mechanisms, levers, and tools for managing corporate and national innovation systems, the principles for the formation and implementation of innovation strategy and policy, the management of the innovation process in large industrialized countries, especially those of the European Union.

The training in the discipline forms in the students the following basic skills to make comparisons, analyze, track and forecast trends in the innovation activity of the company and the national economy.

The knowledge and skills of Innovation are necessary for the study of Micro- and Macroeconomic Theory and for the preparation of specialists in the management of technological development of innovation processes at the micro- and macro-level**.**

DISSEMINATION OF THE COURSE

1. University of Bradford, Technology Management – United Kingdom
2. Helsinki School of Economics, Technology Management and Policy - Finland
3. Linköping University, Technology Management - Sweden
4. Aalborg University, Technology Management and Policy - Denmark
5. Karl-Franzens-Universität Graz - Austria

[1]The National Qualification Frame of Bulgaria gives the definition of the knowledge, skills and competences which are required as a result of the education process in the corresponding EQD in higher education.

[2]Council Recommendation on Key Competences for Lifelong Learning (OJ 2018/C 189/01)

LITERATURE

A. Basic Literature

1. Georgiev, I. et al.Management of Firm Innovations and Investments, UC-UNWE, Sofia, 2013
2. Damyanov, D. Innovation – Technology, Organization, Management, Financing and Policy, PRIMAX, Ruse, 2009
3. Kerchev, Kr. Innovation and Innovation System, IK-UNWE, Sofia, 2015
4. Kerchev, Kr. Innovations, Teaching and Methodological Manual, IK-UNWE, Sofia, 2015
5. Nenov, T. Innovation Management, Ed. "Science and Economics", University of Economics – Varna, 2010
6. Panteleeva, I. Management of Innovations in the Industrial Enterprise, AI "Tsenov", Svishtov, 2013
7. Slavova, I., Bankova, J., Ivanova, H.Clusters and Cluster Initiatives in Bulgaria: Development and Challenges, Economic and Social Alternatives, 2018, (New – published in 2018)
8. Chobanova, R.A New Paradigm for Economic Development. Fourth National Conference on Political Economy on "The Digital Economy and the Challenges for Political Economy", 2020(New – published in 2020)
9. Shotarov, A.The Impact of Innovation on Competitiveness, 2020, (New – published in 2020)
10. Shotarov, A. Dynamics of Innovation Activity and Competitiveness in the Republic of Bulgaria in the Period 2007–2019, 2021(New – published in 2021)

B. Additional Literature

1. Angelov, G., & [Second Author's Initial if applicable].Innovation Policy: Strategies and Approaches, Center for Science and History of Science, BAS, 2005.
2. Damyanov, D. Innovation, Prima, V., 2010.
3. Vutsova, A. Innovation – Policy and Practice, Sofia, 2006.
4. Drucker, Peter F. Innovation and Entrepreneurship, Classic and Style, Sofia, 2002
5. Innovation.bg Applied Research and Communications Foundation, ARC FUND
(Online platform regularly updated)
6. Kerchev, Kr. Fundamentals of Innovation Policy, University of Economics, Sofia, 2011.
7. Kerchev, Kr. Innovation, Textbook for Distance Learning, IK-UNWE, Sofia, 2012.
8. Ministry of Economy of the Republic of Bulgaria. Innovation Act, 2020(New – published in 2020).
9. Ministry of Economy of the Republic of Bulgaria.Innovation Strategy of the Republic of Bulgaria, 2021(New – published in 2021).
10. Ministry of Economy of the Republic of Bulgaria.National Innovation Fund, 2022(New – published in 2022).
10. National Research Development Strategy, 2020(New – official strategy from 2020).
11. National Strategy for Regional Development of the Republic of Bulgaria, 2022(New – official strategy from 2022).
12. Draft Innovation Act, 2020(New – published in 2020).
13. Applied Research and Communications Foundation, 2019.
Coherent Innovation Product. Innovation.bg. Innovation and Economic Growth(New – published in 2019).

Electronic and web-based resources

1. Doing Business 2018 Full Report
2. European Commission Green Paper
3. EUROSTAT – Community Innovation Survey
4. EUROSTAT – Glossary: Innovation Activity
5. EUIPO – Open Data
6. Global Innovation Index – Executive Report 2018
7. Global Innovation Index Full Report

Compiled by: _____

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