UNIVERSITY OF NATIONAL AND WORLD ECONOMY

Adopted by the Faculty Council Decision of Faculty of …… protocol № ….. / ……

Approved by:

Dean – Assoc. Prof. Svetla Boneva, PhD

COURSE SYLLABUS

Course	***International Industrial Markets (new events, trends, and issues)***
Educational and Scientific Degree	***PhD***
Course Category	***Optional (block B)***
Area of Study	***3. Social, Economic and Law Sciences***
Field of Study	***3.8. Economics***
PhD Programme	***World Economy and International Economic Relations***
Faculty	***International Economics and Politics***
Department	***International Economic Relations and Business***
Academic Hours	**0**
Extracurricular Academic Hours	**250 h**
Credits	**10 ECTS**
Lecturer	***Assoc. Prof. Vasil Petkov, PhD***

1. COURSE DESCRIPTION

The discipline '**International Industrial Markets (new events, trends, and issues)'** is optional in the curriculum of the PhD students in 'World Economy and International Economic Relations' Programme. The training aims at deepening the knowledge in the field of the peculiarities of the international markets, depending on their sectoral affiliation, the investment activity, the reproductive characteristics, and their product significance in the world economy.

The macroeconomic environment in which market processes are formed in the first two decades of the 21-st century is highly dynamic, undefined, and contradictory. It is projected into all sectors of the world economy, causing turbulence, rejecting momentum, stimulating change and renewing. The existing system of international markets fits into a stormy economic environment that remodels both industries and their market relations; the conditions and factors of the economic and market conjuncture by industry are changing world-wide.

An immediate task of doctoral training in this discipline is to transform the knowledge of the regularities in the formation of the sectoral and market conjuncture into practical and applied results and solutions. The methodology for examining the regularities and peculiarities of the sectoral situation is also transformed into a set of applied rules, steps, and empirical methods.

PhD students who choose the discipline 'International Industrial Markets' as one of the required number of optional doctoral minimums will receive useful knowledge and skills that are fully applicable to their work on a subject from another field of international business. In particular, the PhD student will be enriched in collecting, systemizing, and analyzing information that converts information into knowledge. In practice, he will understand and apply system approach and system analysis when analyzing and predicting not only a specific market process but also many other phenomena in the international business. An immediate benefit to the doctoral student will be the application of the discipline; in particular it will form the understanding that each object under investigation should be related to its practical application.

The PhD course in 'International Industrial Markets' as an optional discipline ends with an independent research task. The choice of the subject for the research task belongs to the doctoral student who determines his/her interests and preferences according to the content of the curriculum.

2. CONTENT

№	TOPIC
1	**Section I** **International Agricultural Markets – dependencies, trends, and problems** ***World Agriculture in the 21-st century*** *- major trends, new problems, and solutions. The global food crisis and global food security. The Food Aid System and the World Food Program.*
2	***Characteristics of world agricultural production*** *Impact of natural and climate factors. Biological features. Agrarian and food cycle characteristics.*
3	***International markets for agricultural commodities.*** *Major reproduction trends in the agrarian sector of the world economy (in economic and geographical terms).* *Factors of agricultural commodity supply at foreign markets.* *Economic importance of agrarian production for exporting countries.*

	Factors (extensive and intense) that change the demand for agricultural goods in the world. *Analysis of the supply-demand balance by main groups of agrarian goods during the periods 2005-2015, 2015-2019, and 2020-2023.* *Volume, dynamics, commodity and geographical structure of international trade in agricultural commodities.*
4	***Impact of scientific and technical progress on international agrarian markets.*** *Basic guidelines for the development of scientific and technological progress in the agrarian and food sector. The emergence of agrarian biotechnology industry. Commercialization of biotech production.* *The 'Green' Revolution and its positive and negative effects.* *The 'Genetic' wave of the XX into the XXI century. Penetration of nanotechnology in the agrarian and food sectors.* *The vigorous development of agro-biotechnology and the development of measures to protect the international and national food markets. Stages in the industrial regulation of the markets for high-tech food products.* *Organic Farming: potential and perspective of its development. Expanding the range of bio products, introducing certification programs, restoring ecosystems and natural biological processes to soil fertility. Sectoral aspects for the identification of organic products.*
5	***Organizational structure of the international agricultural market. Multiplicity of market entities.*** *Concentration of companies from the resource agrarian sector at the end of the 20-th and the beginning of the 21-st century as a result of mergers with industrial corporations. Vertical integration.* *Classification of companies in the agricultural sector in the world by field of activity: for the production of resources for agriculture (seeds, feed, fertilizers, plant protection and animal diseases, equipment, packaging), agricultural enterprises, processing companies, wholesale and retail, warehouse and transport infrastructure.* *Classification of the companies in the agricultural sector by functional and commodity diversification – multi-profile vertical and horizontally integrated companies; enterprises operating at the same level in the reproduction chain but often changing the site of activity; companies with narrow specialization.* *Transnational corporations on international agricultural commodity markets.*
	Section II **International Markets for Mineral Raw Materials and Fuels**
6	***Economic importance of mineral raw materials and fuels in the world economy.*** *Demand and supply factors at the international mineral and fuel markets.* *Characteristics and main trends of international trade in mineral raw materials and fuels.*
7	***International markets for energy sources and prospects for their development.*** *World Energy System. International markets for crude oil, natural gas, and coals. Basic forms and methods of trade.*
8	***Prices and Pricing at International Mineral Raw Materials and Fuels Markets.*** *Types of published price information and economic characteristics of the types of published prices. Brokers' markets prices - truly international and paramount in representativeness.*
9	***International markets of ferrous and non-ferrous metals.*** *Status and structure of the metallurgical sector in the world economy.* *Classifications of metallurgical production.*

	International markets for non-ferrous and rare metals. The use of rare metals in the industry began in the second half of the 20-th century. Since the 1950s without their use, the development of modern industrial technologies is inconceivable. All resource and energy-saving technologies are based on the use of the rare elements - they are the basis of all supermagnetic, ultra-light, super-hard, super-resistant, and super-stable construction materials. *International Iron and Steel Markets - status, trends, and perspectives of development by 2030. Problems in raw materials supply to the world steel industry related to changes in the system of long-term iron ore supply contracts and the transition to competitive pricing on a short-term basis.*
	Section III **International Machinery and Equipment Markets**
10	***Economic importance of machine building in the world economy.*** *Reproductive structure of the production of machine-building.* *Sectoral structure of UN classification. Classification of the production of machine-building by scientific knowledge and degree of novelty.* *Company structure of the International Machinery and Equipment Market.* *Goods structure of international trade in machinery and equipment - standard machine-building production, parts of units and details; machine-building special purpose products; complete objects of machine-technical production.*
11	***Characteristics of the cyclical development of the machinery and equipment market.*** *Specialization and cooperation along the stages of reproduction of machines and equipment.* *Factors affecting production and international trade.* *Trends in the sale of the machine production on the international markets.*
12	***Price and pricing characteristics of machines and equipment.*** *Exports indices of machinery and equipment; kilogram prices; cost of consumption; unit cost benefits.* *Rationale for standard machine production; published reference prices and catalogue prices; application of discounts and allowances depending on terms of delivery (INCOTERMS), terms of delivery, payment terms, nature of business and financial relations between partners.* *The sliding price clause in contracts for the delivery of machines and equipment with a prolonged construction period.* *Contractual pricing of unique and specialized machine-building production. Methods for evaluating the quality characteristics of machines in single or small series.*
13	***Competitiveness of machine production.*** *Indicators for determining competitiveness by type of machine production. Indicators for determining the competitiveness of machine building companies. Mechanical engineering maintenance as a competitive factor in international commodity exchange.*
	Section IV **International Technology Market**
14	*Basic regularities and strands of the scientific process. Sophisticated technologies as a subject to international exchange. The features of technology as a commodity. The role of international trade in technologies for accelerating the scientific process. Sectoral, corporate and geographic structure of international trade wih technology .*

3. INDIVIDUAL COURCE PREPARATION

PhD students for whom the discipline 'International Industrial Markets (new events, trends, and issues)' is optional self-employment is expressed in the following consecutive steps:

- *Selection of the topic for the development of a research task accompanied by consultation with the scientific manager;*
- *Survey of sources of information and preparation of bibliographical reference;*
- *Development of content of the research task and discussion with the scientific manager;*
- *Elaboration of the research task on the plan points in the amount of 20-25 printed pages (without the bibliographic reference and the applications).*

4. ASSESSMENT

- *The exam consists of a written and oral part. The writing is done in the form of individual paper-work which should be sent in advance to the exam commission.*
- *During the oral exam the PhD student presents the paper-work and answers the questions of the exam commission;*

The final grade is based on a six-point scale, in which the lowest grade for successful completion of the course is Good (4). Converted to the ECTS grading scale, the grades are as follows

Excellent /6/	Very Good /5/	Good /4/	Average /3/		Poor /2/	
A	**B**	**C**	**D**	**E**	**FX**	**F**
The corresponding number of ECTS credit points is being allocated (10 credits are awarded)			No ECTS credit points are being allocated			

The exam shall be held in offline mode for the full-time PhD students, unless stated otherwise in a Rector's order. For the part-time PhD students and for those taking independent study courses the exam can be held in online mode.

5. DOCTORAL ACTIVITIES

Type of classes/employment	**Lectures**	**Extracurricular Activity**	**Total**
1. *Individual consultations, tutorials*	0	30	**30**
2. Study of specialized literature	0	40	**40**
3. Preparation of individual assignment	0	90	**90**
4. Individual study/preparation for exam	0	90	**90**
Total	0	250	**250**

6. LITERATURE

A. BASIC

1. Bilyanski, V., V. Bozev, 2021. Economic growth as a factor for price convergence in EU member states, Economic and Social Alternatives , 1/2021.

2. Petkov, V., 2014. Types of prices and their application in international commodity markets, GorexPress Publishing House, Sofia.

3. Petkov , V., 2014. Energy Security and Energy Markets in the Black Sea Region Countries, GorexPress Publishing House, Sofia.

4. Petkov, V., 2014. The World Economy: Current Issues in Theory and Practice, GorexPress Publishing House, Sofia .

5. Gelvanovsky, M., 2018. World prices: features of modern dynamics and regularities of changes in relations, Moscow.

6. Klinov, V. G., L.S. Revenko, T.I. Ruzhinskaya, 2012. World commodity markets and prices, "MGIMO - University" Publishing House.

7. Klinov, V., S. Aleksandrovich, 2019. Economic Conjuncture, MGIMO, Moscow .

8. Kondratiev, V., 2015. Industries and sectors of the global economy: features and development trends, International Relations .

9. Kuznetsova, G., 2019. Conjuncture of world commodity markets. REU, Moscow .

10. Chebotaryov. N., 2021. World commodity markets, Russian State University of Oil and Gas

11. Allen, R., 2016. Financial Crises and Recession in the Global Economy, Fourth Edition, Elgaronline.

12. Baker, H., G. Filbeck, 2018. Commodities: Markets, Performance, and Strategies (Financial Markets and Investments).

13. Baley, R., M. Tupy, 2020. Ten Global Trends Every Smart Person Should Know: And Many Others You Will Find Interesting, Cato Institute.

14. Bilyanski, V., 2017. The collapse in oil markets from mid-2014 onwards – economics or policy. Economic Studies. 4/2017.

15. Bilyanski, V., Kirova, S., 2020. Bulgaria's real convergence in the context of the potential EMU membership, Proceedings of CBU in Economics and Business Vol. 1/2020.

16. IMF. World Economic Outlook, October 2023, April 2024.

17. Knoop, T. A., 2009. Recessions and Depressions: Understanding Business Cycles, Praeger.

18. Nagle, T., G. Muller, 2019. The Strategy and Tactics of Pricing: A guide to growing more profitably 6th Edition, Springer.

19. OPEC, Annual Report, 2021, 2022, 2023.

20. Ramge, T., J. Schwochow, 2018. The Global Economy as You've Never Seen It: 99 Ingenious Infographics That Put It All Together, NY.

21. Simon, H., 2019. Price Management: Strategy, Analysis, Decision, Implementation, Springer.

22. Soumaré, I., 2022. Commodity Exchanges: Concepts, Tools and Guidelines.

23. Tooze, A., 2021. Shutdown: How Covid Shook the World's Economy, NY.

24. World Bank, Global Economic Prospects, January 2024, Washington, DC.

B. ADDITIONAL

Statistical Publications by International Organizations

UNITED NATIONS

Monthly Bulletin of Statistics;
Industrial Commodity Statistics Yearbook
Commodity Trade Statistics;
Handbook of World Mineral Trade Statistics;
Energy Statistics Yearbook.

UNCTAD

Handbook of International Trade and Development Statistics;
Commodity Yearbook;
Commodity Price Bulletin (online only).

FAO

Production Yearbook;
Trade Yearbook.

OECD

Main Economic Indicators (monthly);
Trade by Commodities (annual);
Engineering Industries in OECD member countries (annual).

IMF

International Financial Statistics, monthly;
International Financial Statistics Yearbook.

WORLD TRADE ORGANIZATION

International Trade: Trends and Statistics;
Harmonized System, World Customs Organization.

Online resources

European Commission, Internal Market, Industry, Entrepreneurship and SMEs, https://single-market-economy.ec.europa.eu/sectors_en

FAO, The State of Agricultural Commodity Markets 2022, https://www.fao.org/markets-and-trade/publications/detail/en/c/1559693/

OECD, Main Science and Technology Indicators 2024, https://www.oecd.org/sti/msti.htm

The course syllabus is approved by the Department Council of „IER and Business" on …….. (Record № ……).

Lecturer *Assoc. Prof. Vasil Petkov, PhD*

Head of Department *Assoc. Prof. Vasil Petkov, PhD*