Educational Establishment "Belarus State Economic University"

> APPROVED Rector of the Educational Establishment "Belarus State Economic University" ______V.Y. Shutsilin « 27 ~_____2019

Registration No $\frac{4227 - 19}{1}$ st.

LOGISTICS

Study program of higher education institution Major 1-26 80 03 Business Administration Master's degree program Business Administration (in the English language)

COMPILED BY:

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REVIEWERS:

Tsygankow A.A., dean of the Faculty of Marketing and Logistics of Belarus State Economic University, Ph. D. (Economics), associate professor.

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RECOMMENDED FOR APPROVAL:

Department of Logistics and Price Policy of Belarus State Economic University (Protocol No. $\frac{4}{14}$ from " $\frac{14}{14}$ " $\frac{11}{2019}$ 2019)

Scientific-methodical Council of Belarus State Economic University (Protocol No. <u>3</u> from "<u>20</u>" <u>12</u>. 2019) The resources optimization, associated with the management of flows processes in companies, is achieved through the successful application of logistics concepts, systems and technologies. The best result in business is achieved by those companies that use the concept of integrated logistics, which allows combining the efforts of the managing personnel of the company, its structural divisions and logistics partners in the end-to-end management of material and associated flows.

The discipline "Logistics" is an introduction to the concepts, functions, processes of logistics activities. It covers activities involved in physically moving raw materials, inventory, and finished goods from point of origin to point of use or consumption. The content of the discipline covers the planning, organizing, and controlling of logistics activities and supply chain processes in creating sustainable competitive advantage with respect to quality, flexibility, lead time, and cost.

The discipline "Logistics" refers to the variable part of the component of the Higher Educational Establishment – "Module of optional courses" and meets the competence of SC-3 «Be able to use the basic principles of corporate logistics to improve the efficiency of the logistics systems».

The purpose of the discipline is to develop in Masters systemic knowledge and skills for using principles and techniques of logistics in the general system of management of the company.

The objectives of the discipline are the following:

- to take knowledge of logistic management of different flows in organization and supply chain;

- to become proficient in methods of measurement and assessment of logistic activity;

- shaping in analysis, assessment and planning of logistic costs;

- to describe methods and approaches to management of upstream and downstream in the supply chain.

As a result of the discipline studying a post-graduate student for a master's degree should

know:

- definition and main concepts of logistic;

- types of logistics activities in organization;

- content of the main logistics strategies;

- basic methods of logistics processes management (supply, warehousing, distribution, transportation, inventory management, etc.);

- main trends in the development of global logistics and international supply chains.

be able to:

- describe material, financial and informative flows;

- mark out key and maintaining processes of logistics activity in organization;

- identify and to implement the logistics strategy of organization;

- optimize and calculate logistics costs;
- develop perspective logistics business model;
- manage logistics processes in different functional spheres of logistic.
- have skills in:

- choosing and implementing logistics decisions at the micro- and macro level;

- creating and supporting supply chains for different goods and services.

The curriculum for the course provides 100 academic hours (total), including 52 auditory study hours: lectures -26 hours, practical classes -26 hours. The recommended form of control – test (3 credits).

CONTENT

Topic 1. Logistics Concept

Scope and definitions of Logistics. Flows as a key category of Logistics. Types of logistics flows. The 'value added' nature of logistics. Logistics costs as a percentage of GDP and of sales turnover in different industries.

Phases of the Logistics development. Logistics and Supply Chain Management. Supply network. Logistics activity mix. Key and support activities in Logistics.

Topic. 2 Logistics Strategy and Planning

Logistics Mission, Strategy and Plan. 7 "Rules" of logistics. The objectives of logistic strategy: cost reduction, capital reduction, service improvement. Flow of logistics planning. Levels of logistics planning: strategic, tactical, operational. Major logistics planning areas. Logistics strategy planning triangle.

Logistics strategy formulation. "Kanban", just in time (JIT) and "push" and "pull" systems. Choosing the right logistics strategy. Basic logistics strategies. Lean and agile logistics strategies.

Topic 3. Purchasing and Supply Management

The Objectives/Goals of Purchasing. The purchasing process. Types of purchases: routine purchases; commodities; critical items; strategic items. Make-Buy Analysis.

Suppliers selection and evaluation. Suppliers integration and relationship management. Supplier partnerships. Vendor Managed Inventory (VMI). E-procurement.

Topic 4. Stocks Management

The essence and content of logistics stocks. Functions and classification of stocks. Elements of inventory control and the economics of stock management. Dependent and independent demand stock systems. Objective factors influence on stock level. ABC-XYZ analysis.

The overall costs of stock optimizing and stock control. The basic principles of inventory management systems. Systems and methods for stock management. Economic order quantity (EOQ).

Topic 5. Logistics infrastructure

The structure of logistics infrastructure. Objects of logistics infrastructure. Managing the logistics infrastructure.

Transport classification. The priorities and the factors influencing the formation of the transport infrastructure.

Warehousing Basics. Logistics centers. Definition and functions of logistics centers. Classification of logistics centers.

Trends in logistics outsourcing. 2PL, 3PL, 4PL providers.

Topic 6. Order Processing and Logistics Information System

Order. Order processing (order transmission, preparation, routing, picking, shipment and invoicing). Cycle and stages of order cycle. Factors of order execution. Definition, aim and targets of the information logistics.

Information flow. Logistics information system and its structure.

Topic 7. Reverse and Green Logistics

The reverse flow of goods in supply chain. The importance and definition of Reverse Logistics. The objectives of Reverse Logistics. Types and characteristics of returned products. Basic activities in Reverse Logistics. Reverse logistics strategy. Drivers and barriers of Reverse Logistics.

Environmental considerations in logistics. Green Logistics. Comparison of Reverse Logistics and Green Logistics. Barriers to Reverse and Green Logistics.

Topic 8. Global Logistics

Introduction and definition of Global Logistics. Problems and importance of Global Logistics. Logistic strategies in developed and developing countries.

The logistics attractiveness analysis. Logistics Performance Index (customs, infrastructure, international shipments, logistics competence, tracking and tracing, timeliness).

CURRICULUM MAP OF THE STUDY COURSE «LOGISTICS» Major 1-26 80 03 Business Administration (full-time education)

<u>c</u>	Course content	Quantity of hours							
Number of Topic		Lectures	Practical classes	Seminars	Laboratory work	Managing independent work		Other	The form of knowledge
Numbei						Lectures	Practical classes	0	control
1	2	3	4	5	6	7	8	9	10
1	 Logistics Concept 1. Scope and definitions of Logistics. 2. Flows as a key category of Logistics. 3. Logistics costs. 4. Phases of the Logistics development. 5. Logistics activity mix. 	2	2	•	•	2	2	Presentations and handout [1,2,3,4]	Individual presentation. Case study.
2	 Logistics Strategy and Planning Logistics Mission, Strategy and Plan. The objectives of logistic strategy. Levels of logistics planning. Logistics strategy formulation. Lean and agile logistics strategies. 	2	-			2	2	Presentations and handout [1,2,3,4]	Case study.
3	 Purchasing and Supply Management 1. The Objectives/Goals of Purchasing. 2. The purchasing process. 3. Make-Buy Analysis. 4. Suppliers selection and evaluation. 5. Suppliers integration and relationship management. 6. E-procurement. 	-	e			4	2	Presentations and handout [1,2,3,4]	Individual presentation. Case study report.

4	 Stocks Management The essence and content of logistics stocks. Functions and classification of stocks. Dependent and independent demand stock systems. ABC-XYZ analysis. Systems and methods for stock management. Economic order quantity (EOQ). 	90		-		2	2	Presentations and handout [1,2,3,4]	Individual presentation
5	 Logistics Infrastructure 1. Objects of logistics infrastructure. 2. Transport infrastructure. 3. Warehousing Basics. 4. Logistics centers. 5. Logistics outsourcing. 	2	2	-	-	2	4	Presentations and handout [1,2,3,4]	Quiz. Project
6	 Order Processing and Logistics Information System 1. Order processing. Cycle and stages of order cycle. 2. Definition, aim and targets of the information logistics. 3. Logistics information system and its structure. 	•	-	-	-	2	2	Presentations and handout [1,2,3,4]	Individual presentation.
7	 Reverse Logistics 1. The reverse flows in supply chain. 2. Basic activities in Reverse Logistics. 3. Reverse logistics strategy. 4. Environmental considerations in logistics. Green Logistics. 		-	-	-	2	2	Presentations and handout [1,2,3,4]	Case study.
8	 Global Logistics 1. Introduction and definition of Global Logistics. 2. Logistic strategies in developed and developing countries. 3. Logistics Performance Index. 	2	2	-	-	2	4	Presentations and handout [1,2,3,4]	Project
	Total	8	6	-	-	18	20		Test

INFORMATION AND METHODOLOGICAL PART

Methodological recommendations of the organization of independent work of students for the course "Logistics"

The independent students work is an important element of providing profound knowledge on logistics topics. The recommended time for independent work is on average 2-2,5 hours for a two-hour auditory study.

The main directions of the student's independent work are:

- first-hand view of study program;

- first-hand view of literature recommended, its availability in the library and from other sources;

- carrying on research on given by the lecturer material, reading additional literature and searching for more information;

- studying and expanding the lecture material through special literature and consultations;

- preparation for practical classes with specially developed plans through the study of main and additional literature;

- preparation for distant forms of control (independent individual work, presentations, business tasks solutions, case studies, tests and other tasks);

- preparation for the diagnostic forms of control (quizzes, tests, etc.);

- preparation for the test.

LITERATURE

Primary:

1. Christopher, M. Logistics & Supply Chain Management, 5th Edition - FT Press, 2016. – 305 p.

2. Ghiani, G., Laporte, G., Musmanno, R. Introduction to logistics systems management. – Chichester: Wiley, 2013. – 455 p.

3. Rudd J. A Practical Guide to Logistics: An Introduction to Transport, Warehousing, Trade and Distribution. 1st Edition – London: Kogan Page Limited, 2019. – 384 p.

4. Rushton, A., Croucher, P., Baker, P. The Handbook of logistics and distribution management. - London: Kogan Page Limited, 2017. – 912 p.

Additional:

5. Bookbinder, J.H. Handbook of Global Logistics: transportation in International Supply Chain. – NY: Springer Science + Business Media, 2013. – 551 p.

6. Connecting to compete: trade Logistics in the Global Economy. – New-York: World Bank, 2014. – 59 p.

7. Gupta, S. M. Reverse supply chains: issues and analysis. - London: CRC Press, 2013. - 401 p.

8. Harrison, A., van Hoek, R. Logistics Management and Strategy: competing through the supply chain. – Harlow: Pearson Education Limited, 2008. – 316 p.

9. Hensher, D.A., Zhang, Z., Rose, J.M. Logistics challenges from China: drivers of the logistics industry growth, and bottlenecks constraining development // Working Paper. – 2015. – January. – 11 p.

10. Waters, D. Global logistics and distribution planning: strategies for management. – London: Kogan Page Limited, 2003. – 436 p.

11. Waters, D. Global Logistics: new directions in supply chain management. London: Kogan Page Limited, 2010. – 510 p.

The study program coordination protocol to other study disciplines of the specialization

Study discipline for coordination	Department	Suggestions of the alterations in the study program contests	The solution was taken the Department according to the study program (data and protocol number)
Marketing Management	Marketing Department	No remarks	Protocol № from 2019 г.

Supplements and alterations to the study program of the study discipline for 20__/20__ academic year

N⁰	Supplemets and alterations	Grounds

The study program is recommended to approve by the Department of Logistics and Price Policy of Belarus State Economic University (Protocol N_{Pol} from ______20_).

Head of the Department of Logistics and Price Policy

Signature

Name

APPROVED

Director of Institute of Masters Programs:

Signature

Name