

Educational Establishment

“Belarusian State Economic University”

APPROVED

Rector of the Educational  
Establishment

“Belarusian State Economic  
University”

 V.N. Shimov

“28” 10 2015

Registration number 20.39.15 st.

## LOGISTICS

Study Program for Master’s Degree in the Specialization:

1-26 81 01 Business Administration

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**Readers:**

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**Recommended for approval:**

by the Department of Logistics and Price Policy, Belarus State Economic University (minutes № 4 from 24.04 2015)

by the Department of Finance, Belarus State Economic University (minutes № 3 from 25.09 2015)

by the Scientific and Methodological Council, Belarus State Economic University (minutes № 1 from 28.10 2015)

## **Explanatory note**

Knowledge of the principles of effective organization of flow processes and supply chain management is currently objectively necessary element of training in logistics. The course "Logistics" provides a wide range of undergraduate knowledge and skills in the analysis and planning of logistics systems, enabling in the future to effectively use this knowledge in practice.

The object of the course of Logistics is study of the major activities of companies involved in profitably coordinating supply and demand in the marketplace to deliver consumer value.

The aim of the course is to develop in masters systemic knowledge and skills in the sphere of analysis and organization of supply chain taking into consideration new business models and industry solutions, innovative features and recent global trends.

### Targets of the course (implementation of requirements to qualification):

- take knowledge of logistic management of different flows in organization and supply chain;
- become proficient in methods of measurement and assessment of logistic activity;
- shaping in analysis, assessment and planning of logistic costs;
- describe methods and approaches to management of upstream in supply chain;
- analyze principles of financial flows in logistical systems.

### After learning of the course master must:

#### ***have known:***

- definition of logistic;
- main concepts of logistics;
- main parts of logistical system;
- logistical activity in organization;
- management of supply chain.

#### ***be good in:***

- describe material, financial and informative flows;
- mark out key and maintaining processes of logistic activity in organization;
- identify the organization logistical strategy;
- make logistic decisions in different functional spheres of logistic in organization.

***have skills in:***

- assessment methods for logistic environment;
- management methods for material, financial and informative flows;
- assessment effective methods for different directions and logistic activity and logistic in general.

The course "Logistics" is taught in close connection with other disciplines in the curriculum of specialty 1-26 81 01 "Business Administration": "Marketing Management", "Strategic Management".

Total academic hours for the course – 236, including total academic hours in auditorium – 72, including 42 h – lectures, 30 h – seminars. Form of control recommended – exam.

## **The content of educational material**

### **Topic 1 Logistics Concept**

Scope and definitions of logistics. Logistics and Supply Chain Management. Phases of the logistics development. Logistics activity mix. Key and support activities in logistics. The 'value added' nature of logistics. Logistics costs as a percentage of GDP and of sales turnover in different industries.

### **Topic 2 Logistics Strategy and Planning**

7 "Rules" of logistics. The objectives of logistic strategy. Flow of logistics planning. Levels of logistics planning. Major logistics planning areas. Logistics strategy formulation. Choosing the right logistics strategy.

### **Topic 3 Reverse Logistics and Green Supply Chain Management**

The reverse flow of goods in the supply chain. Types of the product returns. Basic activities in reverse logistics. Drivers and barriers of reverse logistics. Environmental considerations in the Supply Chain Management. Barriers in Green Supply Chain Management.

### **Topic 4 Customer Service and Logistics**

The components of customer service. Two conceptual models of service quality. Developing a customer service policy. Levels of customer service. Measuring customer service.

### **Topic 5 Purchasing and Supply Management**

The Objectives/Goals of Purchasing. The purchasing process. Types of purchases. Make-Buy Analysis. Supplier selection, evaluation and measurement. Supplier integration and relationship management. E-procurement.

### **Topic 6 Control of Stock Levels**

The essence and content of logistics stocks. Functions and classification of stocks. Elements of inventory control and the economics of stock management. Objective factors increase the level of reserves. Optimizing and stock control. The basic principles of inventory management systems. Systems and methods for stock management. "Kanban", just in time (JIT) and "push" and "pull" systems. ABC-XYZ analysis.

### **Topic 7 Order Processing and Information Systems**

Order. Order Processing. Cycle and stages of order cycle. Factors of order execution. Definition, aim and targets of information logistics. Informative logistical flow. Informative logistical systems and its targets.

### **Topic 8 Logistical infrastructure**

The structure and the concept of logistical infrastructure. Objects of logistical infrastructure. Managing the logistical infrastructure. The priorities and

the factors influencing the formation of the transport and logistical infrastructure. Trends in the development of integrated logistical outsourcing. Logistical centers. Information and communication infrastructure. Warehousing Basics.

### **Topic 9 Investment and finance in logistics**

The Basics (managing capital requirement; origin of capital and capital utilization; managing fixed assets and current assets; financial supply chain concept). Financing deliveries of goods and inventory (overdraft facilities and supplier's credit; factoring, forfeiting, cash forwarding). Financing of Logistics Real Estate (Self Financing and External Financing; Rent and Leasing). Financing of Logistics Movables (Internal and External Financing; Leasing; Build-Operate-Transfer Models).

### **Topic 10 Business Models and Industry Solutions**

Business Models. Logistical industry solutions (in Manufacturing, Trade, Service sector, E-Business). International and Global Business Models. Development of Logistics Services Offers.

### **Topic 11 Global Logistics**

New directions in logistics. Using marketing and services strategies for logistics customer service. Logistic strategies in developed and developing countries. Introduction and definition of Global Logistics. Problems and importance of Global Logistics. The logistics attractiveness analysis. Logistics Performance Index (customs, infrastructure, international shipments, logistics competence, tracking and tracing, timeliness).

**Teaching and methodical card of the course “Logistics” for full-time Master degree**

Theme number	Outline	Quantity of Academic hours					Students self-studies	Control methods
		Lectures	Practical studies	Seminars	Laboratory work	Other		
1	Logistics Concept	6	4			1,4,5,8,10		Oral and writing test
2	Logistic Strategy and Planning	4	2			3-5, 8, 10, 12		Oral and writing test
3	Reverse Logistics and Green Supply Chain Management	2	2			3, 4, 7, 12		Oral and writing test
4	Customer Service and Logistics	4	2			1, 3, 8, 10		Oral and writing test
5	Purchasing and Supply Management	4	4			3,4,6,8,10		Oral and writing test
6	Control of Stock Levels	4	2			3, 5, 6, 12		Oral and writing test
7	Order Processing and Information Systems	2	2			3, 4, 5, 9		Oral and writing test
8	Logistical infrastructure	4	2			1, 3, 4, 6		Oral and writing test
9	Investment and Finance in logistics	4	4			1, 2, 5, 7		Oral and writing test
10	Business models and industry solutions	4	4			3-6, 9,11, 12		Oral and writing test
11	Global Logistics	4	2			4, 5, 8, 9, 11, 12		Oral and writing test
	<b>Total</b>	<b>42</b>	<b>30</b>					<b>Exam</b>

## **Information and methodology**

### ***Methodical recommendations to organize self-students work on the course “Logistics”***

The important stage in learning course is students' independent work. The recommended budget time for independent work is on average 2-2.5 hours to 2 hours of practical studies.

The main areas of students' independent work are:

- Firsthand detailed acquaintance with program and structure of the course;
- Learning reading list (compulsory and additional); visiting libraries and other informative places; search more specific research/working papers for exact topics of the course;
- Learning and finding additional lecture materials through special documents and consultations;
- Be prepare for testing (oral and writing tests, computer tests);
- Be prepare for exam.



## LITERATURE


### Compulsory:

1. Ghiani, G., Laporte, G., Musmanno, R. Introduction to logistics systems management. – Chichester: Wiley, 2013. – 455 p.
2. Gleissner, H., Femerling, J. C. Logistics: Basics – Exercises – Case Studies. - New-York: Springer, 2013. – 311 p.
3. Gudehus, T., Kotzab, H. Comprehensive Logistics. – New-York: Springer, 2012. – 912 p.
4. Rushton, A., Croucher, P., Baker, P. The Handbook of logistics and distribution management. - London: Kogan Page Limited, 2010. – 636 p.
5. Waters, D. Logistics: an introduction to Supply Chain Management. – Mendham: Ashford Colour Press Ltd., 2003. – 354 p.

### Additional:

6. Bookbinder, J.H. Handbook of Global Logistics: transportation in International Supply Chain. – NY: Springer Science + Business Media, 2013. – 551 p.
7. Connecting to compete: trade Logistics in the Global Economy. – New-York: World Bank, 2014. – 59 p.
8. Harrison, A., van Hoek, R. Logistics Management and Strategy: competing through the supply chain. – Harlow: Pearson Education Limited, 2008. – 316 p.
9. Kasim, E.S., Omar, N.H. Supply chain management practices of an automobile manufacturer in Malsydis // Asia-Pacific Management Accounting Jopurnal. – 2010. – Volume 5, Issue 1. – PP. 66-88.
10. Simchi-Levi, D., Chen, X., Bramel, J. The logic of Logistics: Theory, Algorithms and Applications for Logistics and Supply Chain Management. – NY: Springer-Verlag, 1997. – 281 p.
11. Waters, D. Global logistics and distribution planning: strategies for management. – London: Kogan Page Limited, 2003. – 436 p.
12. Waters, D. Global Logistics: new directions in supply chain management. London: Kogan Page Limited, 2010. – 510 p.

### Protocol of program endorsement

Name of the course, which is connected with this course	Competent department	Department proposals of changes in course program structure	Department decision (minutes, number and date)
Marketing Management	Economics and Management	<i>MS</i> 	<i>Принято № 2 от 24.09.2015г.</i>

**Changes in program**  
for 20\_\_ / 20\_\_ year

№	Changes	Reason

Work program is reviewed and approved by Department  
\_\_\_\_\_ (minutes № \_\_ from \_\_\_\_\_ 2015).

Head of Department

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

Approved:  
Director of Institute of Masters Programs:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date