

INVENTORY AND WAREHOUSING LOGISTICS

COURSE SYLLABUS ABSTRACT

of higher education institution

6-05-1042-01 «Transport logistics»

(speciality code and name)

Regional transport and logistics systems

(profiling)

	STUDY MODE	
	Full-time	Part-time (shortened)
Year	2	2
Semester	4	4
Lectures, hours	34	6
Practical classes, hours	16	4
Laboratory classes, hours	16	4
In-class test, semester (hours)	–	4 (2 hours)
Course project, semester	5	4
Exam, semester	4	4
Contact hours	66	16
Independent study, hours	78	128
Total course duration in hours / credit units	144 / 4	

1. Course outline

Stocks in the logistics system. Goals and objectives of inventory management. The concept and types of stocks. Types of costs in the formation of stocks. Inventory management models. Management of different groups of inventory items. Designing optimal inventory management systems in supply chains. Essence of warehousing logistics. Warehouses in logistics. Development of a storage system. Logistics and technological processes in the warehouse. Modern technical equipment of the warehouse. Commissioning system and equipment management. Warehouse costs as part of logistics costs. Design of warehouse facilities and logistics zones of cargo handling. Warehouse optimization. Warehouse performance evaluation system.

2. Course learning outcomes

Upon completion of the course, students will be expected

to know:

- he basic terms and concepts of the discipline "Inventory and warehousing logistics";
- the modern concepts of the logistics management of the organization's inventories;
- the classification of inventories;
- the structure of logistics costs in the formation of inventories;
- the methods of analysis and forecasting of the need for inventories;
- the approaches to determining the required level of safety inventories;
- the procedure for determining the main parameters of the order cycle; logistics systems and inventory management models;
- logistics analysis and inventory level control, procedures for controlling inventory levels in logistics systems;
- the classification of warehouses, loading and unloading and reloading facilities;
- the content of the logistics process in the warehouse;
- he current trends in the development of the warehouse (warehouse) and the technical equipment of the logistics infrastructure;
- the logistics principles in relation to the management of the flow of goods passing through the warehouse (warehouse) and distribution network; the legal framework of warehouse activities, the main types of documents accompanying the processes in the warehouse;

be able to:

- to analyze and predict inventory requirements;
- to apply inventory optimization techniques;
- to determine the optimal size of the insurance stock;
- to design optimal models and strategies for inventory management;
- to determine the necessary standards of customer service;
- to determine the cost of warehousing;
- to analyze warehouse systems and model their components;
- to develop a technological process in a warehouse;
- to calculate the operational performance of the warehouse;
- to select the number and location of warehouses in the service region;
- to determine the effectiveness of inventory management and the logistics process in the warehouse;
- to use the acquired knowledge to assess and identify reserves to improve the efficiency of inventory management and the logistics process in the warehouse;

to possess a skill:

- of forecasting the need for inventories;
- to use methods for designing an optimal inventory management strategy;
- to use inventory management technologies;
- to use procedures for controlling inventory levels in logistics systems;
- of creating warehouse systems and their infrastructure;
- to use the technology for calculating warehouse space and the necessary lifting and transport equipment;
- to use methods for determining the location and number of warehouses in the service area;
- to use logistics tools to evaluate and optimize inventory management and warehouse systems.

3. Competencies

To master the basics of research activities, to search, analyze and synthesize information.

Solves standard tasks of professional activity based on the use of information and communication technologies.

Be capable of self-development and improvement in professional activity.

Possess the skills of designing inventory management systems in the links of the logistics chain and managing material and information flows in warehouses to ensure the functioning of the warehouse as a unified logistics system and improve the quality of logistics service.

4. Requirements and forms of midcourse evaluation and summative assessment

A modular rating system is used. The form of midcourse evaluation is the defense of individual assignments and a course project. The form of summative assessment is an exam.