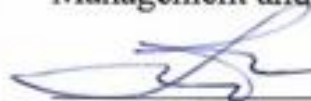


MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL AVIATION UNIVERSITY
 Faculty of Transport, Management and Logistics
 Logistics Department

AGREED

Dean of the Faculty of Transport,
 Management and Logistics


 Tetyana MOSTENSKA
 «04» 04 2023

APPROVED
 Vice-Rector for Academics


 Anatoliy POLUKHIN
 «06» 04 2023



Quality Management System
COURSE TRAINING PROGRAM
 on
“Logistics Management”

Educational Professional Program: “Logistics”

Field of study: 07 «Management and Administration»

Specialty: 073 «Management»

Mode of study	Semester	Total (hours/ ECTS credits)	Lectures	Practicals	Self-study	HW/ CGP/ C	TP/ CPr	Form of semester control
Full-time	1	120/4	17	17	86	-	TP – 1 s.	Examination – 1 s.

Index: CM-7-073-3/21-2.1.4

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Quality Management System
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“Logistics Management”

Document
Code

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The Course Training Program on “Logistics Management” is developed on the basis of the Educational Professional Program “Logistics”, Master Curriculum № CM-7-073-3/21 and Master Extended Curriculum № ECM-7-073-3/22 for Specialty 073 “Management” and corresponding normative documents.

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INTRODUCTION

The Course Training Program on the subject “Logistics Management” is developed based on the "Methodical guidance for the subject Course Training Program", approved by the order № 249/од, of 29.04.2021 and corresponding normative documents.

1. EXPLANATORY NOTES

1.1. Place, objectives, tasks of the subject

The place of the academic subject: this subject is the theoretical and practical basis of the set of knowledge and skills that form the profile of a specialist in the field of logistics.

The goal of the academic subject is: mastering theoretical knowledge on logistics management and acquiring practical skills and abilities to use the principles and methods of logistics management in the process of managing an enterprise to increase its stability, coordinate actions and resolve conflict situations.

The tasks of the academic subject are:

- acquisition of theoretical knowledge of logistics management and logistics administration;
- organization of logistics service at the enterprise;
- understanding of tasks related to design, planning, regulation, control in logistics systems;
- formation of skills regarding the organization of coordination of the activities of the structural units of the company, as well as interaction with business partners.

1.2. Learning outcomes the subject makes it possible to achieve

After completing the course, the student will learn to solve complex tasks and problems in the field of logistics business process management, which involves conducting research and is characterized by the uncertainty of conditions and requirements. Will form decision-making skills in complex and unpredictable conditions that require the use of new approaches and forecasting.

Will be able to identify problems in the organization and justify the methods of solving them. Will have the skills to make, justify and ensure the implementation of management decisions in unpredictable conditions, taking into account the requirements of current legislation, ethical considerations and social responsibility. Learn to demonstrate leadership skills and the ability to work in a team, interact with people, influence their behavior to solve professional problems. Will learn to ensure personal professional development and planning of own time. Will be able to delegate authority and management of the organization (unit). Learn to plan and implement informational, methodical, material, financial and personnel support of the organization (unit). Will be able to use methodological



tools for substantiating strategic decisions regarding the management of logistics business processes.

Will be able to analyze and structure the problems of the organization as part of a single supply chain. Will develop skills to analyze and structure organizational problems, make effective management decisions and ensure their implementation. Will acquire the ability to make innovative decisions.

We note that knowledge of logistics management forms the necessary competencies of a modern manager.

As a result of the study of the subject, the student must achieve the following **learning outcomes (LO)**:

- LO 1: critically consider, choose and use the necessary scientific, methodical and analytical tools for management in unpredictable conditions;
- LO 2: to identify problems in the organization and justify the methods of solving them;
- LO 3: to design effective management systems for organizations;
- LO 4: to justify and manage projects, generate entrepreneurial ideas;
- LO 14: to demonstrate in-depth knowledge of the essential properties of modern logistics concepts and structural features of the formation of logistics systems, patterns of design, operation and development of logistics systems;
- LO 18: to apply specialized conceptual knowledge, which is the basis for original thinking and innovation, in particular, in the context of research of the competitiveness of logistics systems.

1.3. Competencies the subject makes it possible to acquire

As a result of studying the discipline the student must acquire the following **competencies (integral competency – IC, general competency – GC, professional competency – PC)**:

EC1. Ability to solve complex tasks and problems in the field of logistics business process management or in the learning process, which involves research and / or innovation and is characterized by uncertainty of conditions and requirements.

GC1. Ability to conduct research at the appropriate level.

GC3. Skills in the use of information and communication technologies.

GC4. Ability to motivate people and move towards a common goal.

GC6. Ability to generate new ideas (creativity).

GC7. Ability to think abstractly, analyze and synthesize.

GC8. Ability to formulate conclusions and recommendations based on the results of research, to calculate the effectiveness of research.

GC10. Ability to make decisions in complex and unpredictable conditions that require the use of new logistics approaches.

GC11. Ability to make management decisions under conditions of uncertainty and risk.

PC1. Ability to select and use management concepts, methods and tools,



including in accordance with the defined goals and international standards of supply chain management.

PC2. Ability to establish values, vision, mission, goals and criteria by which the organization determines further directions of development, develop and implement appropriate strategies and plans.

PC6. Ability to develop leadership skills and demonstrate them in the process of managing people.

PC10. Ability to manage the organization and its development.

PC12. Ability to design, maintain and improve logistics management systems.

PC14. Ability to design supply chains, align the supply chain strategy with the business strategy of the enterprise.

PC15. Ability to choose methods and tools for data analysis and processing in logistics.

PC16. Ability to conduct business intelligence and process large databases to improve supply chains (networks).

PC17. Ability to manage risks in functional areas of logistics and supply chains, develop measures to prevent risk situations, implement international supply chain security standards.

PC18. Ability to make innovative decisions to optimize logistics business processes.

1.4. Interdisciplinary connections

This subject complements the knowledge of such subjects as "Strategic Supply Chain Management" and "HR management", and is also a basis for studying further subjects, namely "Risk Management in Logistics", "Logistics Systems Design", "Methodology of Applied Research in Logistics" and others.


2. COURSE TRAINING PROGRAM ON THE SUBJECT

2.1. The subject content

Training material is structured according to the module principle and consists of two educational modules:

– educational module No. 1 "Functions and methods of management of the interaction of supply chain entities", which is a logically completed, relatively independent, integral part of the educational and work curriculum, the mastery of which involves conducting a modular control work and analyzing the results of its implementation;

– a separate second module (educational component) is a Term Paper (TP), which is completed in the first semester. TP is an important component of consolidating and deepening the theoretical and practical knowledge and skills

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acquired by the student in the process of assimilating the educational material of the discipline

2.2. Modular structuring and integrated requirements for each module

– Module No. 1 "Functions and methods of management of the interaction of supply chain subjects"

Integrated requirements of module #1:

Know:

- scientific principles of logistics management;
- logistics management strategy and tactics;
- basic requirements for the development of effective management of logistics systems;
- existing types of organizational structures of enterprises;
- logistics management strategy and tactics;
- the technology of developing the job description of the logistics manager;
- logistics management system, methods and techniques of logistics analysis;
- principles of motivation of logistics managers.

Learning outcomes:

- use a systematic approach in enterprise management;
- to develop optimal organizational structures of the logistics service;
- to organize logistics in various companies (production, trade, transport, etc.);
- use methods of motivating logistics personnel to reduce total costs;
- to develop logistics strategies for enterprises of different types of activity;
- draw up plans for current and operational logistics activities of the enterprise, including logistics;
- conduct a logistics audit of the enterprise;
- to develop systems of balanced indicators and a structure of indicators of logistics activity.

Topic 1. Evolution of the scientific foundations of logistics management.

Schools of scientific management: the theory of scientific management by F. Taylor, the theory of human relations in management by E. Mayo, the theory of classical management by A. Fayol, the theory of rational management by P. Drucker. Prerequisites of corporate management of logistics activities. Basic principles of logistics management.



Topic 2. The essence, tasks and features of effective logistics management.

The main definitions of logistics management, effective logistics management, supply objects, subjects of logistics activity. Logistics management as an integrated system of administration and partnership of economic subjects of logistics. Features and main directions of effective logistics management. Logistics criteria and criteria of effective logistics management.

Topic 3. Theoretical and methodological foundations of logistics management.

Market laws of logistics as a methodological basis of logistics management. Evolution of logistics management methodology and its main stages: reactive logistics, marketing logistics, strategic and global logistics management. Hierarchy of logistics activities and levels of logistics management: intra-operational, inter-operational, inter-functional, production, managerial, corporate, inter-organizational, global logistics management. Logistics mission and logistics goals. Organization and functioning of logistic business processes, networks, chains, flows, systems. Hierarchy and heterarchy of logistics systems management. Organizational and economic mechanisms of effective logistics management.

Topic 4. Scientific principles of logistics management.

Process system as the basic basis of effective logistics management. Main properties of the system. Integrated logistics systems. Qualities of logistics systems. Complex and integration principle of management. Use of the marketing-behavioral principle of management. Reproducible and optimization management principle. Optimization of investment and resource provision of management decisions based on the use of economic and mathematical methods. Use of the situational and variable principle. Directive-dynamic principle of management. Use of the functional-cost principle.

Topic 5. Functions of logistics management.

The concept of production (working) functions of logistics: ordering, transportation, production, warehousing, distribution, distribution, implementation, consumption, customer service. Functions of logistics management: 1) logistics goal setting, 2) logistics planning, 3) organization of logistics activities, 4) motivation of activities, 5) coordination of the movement of supply objects and interaction of logistics subjects, 6) controlling the formation, provision and use of logistics functions.

Topic 6. Methods and technologies of logistics management.

Specifics of organizational forms of business process management in logistics systems. Classification of logistics management methods. Methods of effective



logistics management: normative-legal, organizational-technological, research-analytical, economic, economic-mathematical, moral-psychological. Algorithms of management decisions in logistics activities. Management of modern logistics technologies: customer orientation and complexity of ERP, MRP, DRP logistics services. IT technologies in the management of logistics business processes and business functions.

Topic 7. Logistics management strategy and tactics.

Strategic planning of long-term logistics activities. The innovative nature of the development of logistics business entities. Conditions, possibilities and expediency of creating stabilization, functioning, transformation, development and liquidation of logistics enterprises and networks. The search for modern ways of implementing partnership and integration of enterprises and organizations of a complete system of logistics service for the production of the final product and service for the final consumer - the client-customer of complex logistics services. Use of basic strategic directions of organization and management of logistics functions and business processes: diversification, specialization, concentration, differentiation, integration and competition of enterprises in the market of logistics services.

Topic 8. Modern organizational forms of partnership management in logistics systems.

Modern trends of vertical integration. Consecutive stages of the formation of a chain of complex logistics services. Twelve stages of partnership formation. Market distribution of risks, powers and responsibilities of logistics network entities. Use of outsourcing and vertical disintegration. Creation of e-commerce logistics hubs. Use of forms and methods of management of virtual logistics corporate associations. Development of the functions of a system integrator and coordinator of logistics system entities. Development of international transport infrastructure. Management of the integration of national transport systems and the creation of a single information logistics space, a single global cross-border logistics system.

Topic 9. Cluster strategy of logistics management.

Prerequisites and expediency of the geoeconomic stage of strategic management of logistics development. Transport and logistics cluster as a modern form of organization of logistics activity. Basic concepts of clustering. Cluster according to M. Porter. Classification of clusters. The dual nature of the concept of logistic clustering. Formation of transport and logistics clusters and their cores. Formation of horizontal functional integration of economic subjects. A collection of business enterprises of logistics centers of adjacent support and service companies as an informal association, functioning on the basis of the "4K" criteria: 1) concentration within the territory and industry, 2) competition in the fight for



the market of consumers of services of the business environment of the cluster, 3) cooperation in ensuring the complexity and efficiency of logistics services, 4) competitiveness in the quality of services and interaction of logistics chain subjects.

Topic 10. Synergistic efficiency of logistics management.


Social and economic efficiency of logistics activities in the conditions of globalization of the world market of production and consumption of products and services. The leading role of the interests of consumers - customers of logistics services. Corporateness as the main feature of logistics activity: the priority of serving corporate customers and the corporate principle of partnership interaction of business entities of the logistics supply chain. Organizational corporate culture and moral and ethical principles of interaction between subjects of logistics activity. Synergy as a complementary effect of partnership interaction. The geoeconomic effect of post-logistics influence on the integration processes of optimizing the use of resources, solving demographic problems. Additional possibilities of cognitive development of humanity, communication and mutual understanding.

Module No. 2 " Term Paper "

The Term Paper (TP) is completed in the first semester, in accordance with the methodical recommendations approved in the established order.

Its purpose is the formation of effective management of logistics activities of supply chain entities. The goals and objectives of the TP are the formation of the structure and composition of interacting enterprises of the supply chain. Development of a tree of goals, resources and results of an integrated supply chain logistics service. Formation of corporate organizational culture of supply chain enterprises. Development of provisions on coordination, coordination and management of logistics business processes in the supply chain. Development of an algorithm for determining target values of key performance indicators of the chain. Development of a roadmap for the implementation of supply chain goals. The goals and tasks of the TP are the student's acquisition of skills in the use of scientific principles of logistics management - system-process, complex-integration, functional-cost and situational-variable.

In the process of performing the TP, the student will learn to choose effective forms of partner interaction of enterprises. Will acquire the ability to establish values, a system vision and a single mission for interacting collectives of logistics chain subjects, to use different activity scenarios depending on changes in real situations on the logistics services market.

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Carrying out, registration and defense of the TP is carried out by the student individually in accordance with methodical recommendations. The time required to complete the TP is 30 hours of self-study.



2.3. Training schedule of the subject

№	Topic (thematic section)	Total, hour			
		Total	Lectures	Practicals	Self-study
1	2	3	4	5	6
1 semester					
Module 1 «Functions and methods of management of the interaction of supply chain subjects»					
1.1	Evolution of the scientific foundations of logistics management	2	–	–	2
1.2	The essence, tasks and features of effective logistics management	4	2	–	2
1.2	Theoretical and methodological foundations of logistics management	6	2	2	2
1.3	Scientific principles of logistics management	8	2	2	4
1.4	Logistics management functions	8	2	2	4
1.5	Methods and technologies of logistics management	10	2	2	6
1.6	Logistics management strategy and tactics	10	2	2	6
1.7	Modern organizational forms of partnership management in logistics systems	12	2	2	8
1.8	Cluster strategy of logistics management	12	2	2	8
1.9	Synergistic efficiency of logistics management	11	1	2	8
1.10	Module Test #1	7	–	1	6
Total by the Module 1		90	17	17	56
Module 2 Term Paper					
Management of the interaction of the subjects of the logistics supply chain		30	–	–	30
Total by the Module 2		30	–	–	30
Total by the subject		120	17	17	86

2.4. List of Examination Questions

The list of questions and content of tasks for preparation for the exam are developed by the leading teacher of the department in accordance with the course



training program, approved at the meeting of the department and distributed among students.

3. BASIC CONCEPTS OF GUIDANCE ON THE SUBJECT

3.1. Teaching methods

It is recommended to use the following teaching methods during mastering the subject: lectures using multimedia presentations, work in small groups, seminar-discussion, brainstorming, solving situational tasks, cases, business game, used to activate the educational and cognitive activity of students during the study of this subject.

3.2. List of references (basic and additional)

Basic literature

3.2.1. Tan Miller, Matthew J. Liberatore (2020). Logistics Management: An Analytics-Based Approach. Business Expert Press. 186 p.

3.2.2. Oleksandra Horbatenko (2020) Logistics Management. Course material. Oldi+. 150 p.

3.2.3. Alan Harrison, Heather Skipworth, Remko I. van Hoek, James Aitken (2019). Logistics Management and Strategy. Pearson UK. 496 p.

3.2.4. Nguyen Hoang Tien, Dinh Ba Hung Anh, Tran Duy Thuc (2019). Global Supply Chain and Logistics Management. Academic Publications. 162 p.

3.2.5. Donald Bowersox, David Closs and M. Bixby Cooper (2020) Supply Chain Logistics Management, 5th Edition. McGraw Hill. 480 p.

Additional literature

3.2.6. Irwin Christopher, M., (2016), Logistics & supply chain management, Pearson Education, New York CSCMP

3.2.7. Li, L. (2014), Managing Supply Chain and Logistics, Competitive Strategy for a Sustainable Future, World Scientific Publishing Company, Singapore

3.2.8. Sweeney, E., Grant, D.B., Mangan, J., (2017), Strategic Adoption Of Logistics And Supply Chain Management, International Journal of Operations & Production Management, DOI: 10.1108/IJOPM-05-2016-0258

3.2.9. Topps, J., Taylor, G., (2018), Managing the Retail Supply Chain: Merchandising Strategies that Increase Sales and Improve Profitability, Kogan Page Limited, London

3.3. Internet resource

3.3.1. Supply Chain Digest. URL: <http://scdigest.com/>

3.3.2. Official site of International Warehouse Logistics Association. URL: <http://www.iwla.com>



3.3.3. Logist.FM (logistics news, solutions and publications). URL: <http://logist.fm/>

3.3.4. Methodical guidance papers of the department (in electronic form).

4. RATING SYSTEM OF KNOWLEDGE AND SKILLS ASSESSMENT

4.1. Assessment of certain kinds of academic activities is carried out in accordance with table 4.1.

4.2. A student gets a credit for the completed assignment if the student's performance has been assessed positively.

Table 4.1


Kind of academic activities	Max grade
	Full-Time Study 1 semester
Module 1	
Completing complex tasks in practical classes, solving situational problems and considering business cases on the topic "Modern organizational forms of partnership management in logistics systems"	50 (summary) (2×16 g. ; 1×18g.)
<i>For carrying out Module Test 1, a student must receive not less than</i>	30
Carrying out Module Test 1	30
Total by the Module 1	80
Semester examination	20
Total by the subject	100

Module 2 Term Paper	
Carrying out of Term Paper	60
Defense of Term Paper	40
Carrying out and defense of Term Paper	100

4.3. The total of Grades for individual academic activities completed by a student constitutes a Current Semester Module Grade, which is entered into the Module Control Register.

4.4. The Total Semester Grade on the results of carrying out and defence of the **Term Paper** is entered into a student's record book and academic card, for example: **92/Ex/A, 87/Good/B, 79/Good/C, 68/Sat./D, 65/Sat./E etc.**

4.5. The Total Semester Grade is converted into a grade on the national scale and the ECTS scale.

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4.6. The Total Semester Grade is entered in an Examination Register, a student’s record book and academic card, e.g.: **92/Ex/A**, **87/Good/B**, **79/Good/C**, **68/Sat/D**, **65/Sat./E**, etc.

4.7. The Total Grade on the subject corresponds to the Total Semester Grade. The Total Grade on the subject is entered into Diploma Supplement.



(Ф 03.02 – 01)

АРКУШ ПОШИРЕННЯ ДОКУМЕНТА

№ прим.	Куди передано (підрозділ)	Дата видачі	П.І.Б. отримувача	Підпис отримувача	Примітки
	Центр	06.04.23	Мисиріна	<i>[Signature]</i>	

(Ф 03.02 – 02)

АРКУШ ОЗНАЙОМЛЕННЯ З ДОКУМЕНТОМ

№ пор.	Прізвище ім'я по-батькові	Підпис ознайомленої особи	Дата ознайомлення	Примітки

(Ф 03.02 – 04)

АРКУШ РЕЄСТРАЦІЇ РЕВІЗІЇ

№ пор.	Прізвище ім'я по-батькові	Дата ревізії	Підпис	Висновок щодо адекватності

(Ф 03.02 – 03)

АРКУШ ОБЛІКУ ЗМІН

№ зміни	№ листа (сторінки)				Підпис особи, яка внесла зміну	Дата внесення зміни	Дата введення зміни
	Зміненого	Заміненого	Нового	Анульованого			

(Ф 03.02 – 32)

УЗГОДЖЕННЯ ЗМІН

	Підпис	Ініціали, прізвище	Посада	Дата
Розробник				
Узгоджено				
Узгоджено				
Узгоджено				