



Syllabus Course Program



LOGISTICS CONTROLLING

Specialty

073 – Management

Institute

Institute of Education and Science in Economics,
Management and International Business

Educational program

Business administration (in English)

Department

Business, Trade and Logistics (206)

Level of education

Master's level

Course type

Special (professional), Elective (optional)

Semester

2

Language of instruction

English,

Lecturers and course developers



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PhD in Technical Sciences, Associate Professor, Associate Professor of
Department of Business, Trade and Logistics

Authored and co-authored over 200 scientific and methodological
publications. Senior lecturer of courses "Fundamentals of Entrepreneurship",
"Commercial Logistics", "Management of innovation development",
"International Technical Regulation"

More about the lecturer on the department's website

<http://web.kpi.kharkov.ua/business/uk/vykladachi/>

General information

Summary

The course is aimed at students getting a general idea of organizational and methodological principles of formation and functioning of the logistics controlling system at the enterprise. Students will learn about the conceptual framework of logistics controlling; the types of logistics controlling and their characteristics; the characteristics of objects and subjects of logistics controlling; the system of logistics controlling indicators; and the process of controlling logistics objects.

Course objectives and goals

To form students' skills and abilities necessary for the construction of a logistics controlling system at the enterprise and solving tasks of coordinating logistics activities to achieve the company's goals. To develop students' understanding of the entrepreneurial process based on the concept of informational and advisory support for making effective managerial decisions; creating and ensuring the functioning of the overall information management system of the enterprise.

Format of classes

Lectures, workshops, consultations, self-study, individual task. Final control in the form of a differentiated grading.

Competencies

SC07. Ability to develop projects, manage them, and demonstrate initiative and entrepreneurship.

SC09. Ability to analyze and structure organizational problems, make effective managerial decisions, and ensure their implementation.

SC10. Ability to manage an organization and its development.

Learning outcomes

LO 02. To identify problems within an organization and justify methods for solving them.

LO 04. To justify and manage projects, and generate entrepreneurial ideas.

LO 05. To plan organizational activities in both strategic and tactical dimensions.

Student workload

The total volume of the course is 120 hours (4 ECTS credits): lectures - 32 hours, workshops - 16 hours, self-study - 72 hours.

Course prerequisites

For successful studying the course, it is necessary to have knowledge and practical skills, which are confirmed by the entrance exam in Management and administration (Order of the Ministry of Education and Science of Ukraine No. 157 dated February 11, 2022)

Features of the course, teaching and learning methods, and technologies

Lectures are conducted interactively using information and computer technologies. In workshops, discussions, situation analysis, problem solving, testing, performance of individual and group tasks are used. Study materials are available to students through OneDrive, Teams.

Program of the course

Topics of the lectures

Topic 1. (Lecture 1) Logistics Controlling in the Management System

1. The essence and characteristics of logistics controlling in the enterprise management system.
2. The main goal and functions of logistics controlling.
3. The main concepts of controlling.
4. The content model of logistics controlling in enterprise management.
5. The expediency and necessity of implementing logistics controlling in the activities of logistics enterprises.

Topic 2. (Lecture 2) Types of Logistics Controlling

1. Comparative characteristics of strategic and operational controlling.
2. Characteristics of strategic controlling: definition, goals, tasks, and directions of controlling.
3. Characteristics of operational controlling: definition, goals, tasks, and directions of controlling.

Topic 3. (Lectures 3-4) Subjects and Objects of Logistics Controlling

1. Definition and classification of subjects of logistics controlling.
2. Professional competencies of subjects of logistics controlling.
3. The main objects of management in the logistics controlling system.
4. The concept of responsibility accounting in controlling and the notion of responsibility centers.
5. Classification of responsibility centers.
6. Principles of allocating responsibility centers in the enterprise and the main requirements for them.

Topic 4. (Lectures 5-6) System of Logistics Controlling Indicators

1. The main indicators of logistics controlling.
2. Indicators of logistics controlling at the strategic management level.
3. Indicators of logistics controlling at the operational management level.
4. Composition of KPI indicators of logistics controlling.
5. The system of logistics controlling indicators.

Topic 5. (Lectures 7-8) Organization of the Logistics Controlling Department at the Enterprise

1. The structure of the logistics controlling department at the enterprise.
2. The place of the controlling department in the enterprise management system.
3. Formation of the target functions and elements of the logistics controlling system.
4. Options for organizing the logistics controlling department.
5. The mechanism for implementing the logistics controlling system in the enterprise management structure.

Topic 6. (Lectures 9-10) Information Support of the Logistics Controlling System

1. Information base of logistics controlling.
2. Financial reporting of the logistics enterprise.
3. Movement of information flows in the logistics system in the process of making managerial decisions.
4. Coordination of logistics enterprise departments.
5. Information and analytical system supporting managerial decision-making.

Topic 7. (Lectures 11-12) Strategic Analysis of the Logistics System. The Interrelation of Logistics and Corporate Strategy

1. Strategic analysis in the logistics controlling system.
2. Portfolio analysis. Potential analysis.
3. SWOT analysis. Scenario development.
4. The process of forming logistics and corporate strategy.
5. The impact of logistics controlling on the formation and achievement of logistics and corporate strategy.

Topic 8. (Lecture 13) Management Tools in the Logistics Controlling System. Logistics Leverage

1. Leverage as a controlling tool in managing logistics costs.
2. Calculation models for assessing logistics leverage.
3. Managerial decisions that can be made based on the logistics leverage indicator.

Topic 9. (Lectures 14-15) Controlling of Logistics Projects

1. The essence of controlling logistics projects, its goals and tasks.
2. Principles, functions, and types of logistics project controlling.
3. Criteria for evaluating logistics projects in controlling.
4. The process of creating a logistics project controlling system and its stages.
5. The process of implementing logistics project controlling.

Topic 10. (Lecture 16) Expert Diagnosis of the Financial and Economic Condition of a Logistics Enterprise

1. Content, goals, and tasks of expert diagnosis of the financial and economic condition of a logistics enterprise.
2. Methods of strategic diagnosis of a logistics enterprise and their characteristics.
3. Methods of operational diagnosis and their characteristics.
4. Financial screening.

Topics of the workshops

Workshop 1. Logistics Controlling in the Management System. Types of Logistics Controlling

The essence and features of logistics controlling in the enterprise management system. The main purpose and functions of logistics controlling. Basic concepts of controlling. Comparative characteristics of strategic and operational controlling. Characteristics of strategic controlling and operational controlling. Questioning. Testing.

Workshop 2. Subjects and Objects of Logistics Controlling. System of Logistics Controlling Indicators

Definition and classification of subjects of logistics controlling. Professional competencies of logistics controlling subjects. The main objects of management in the logistics controlling system.

The main indicators of logistics controlling. Indicators of logistics controlling at the strategic level of management. The main indicators of logistics controlling. Indicators of logistics controlling at the strategic management level. Indicators of logistics controlling at the operational management level.

Composition of KPI indicators of logistics controlling. The system of logistics controlling indicators. Questioning. Testing.

Workshop 3. Organization of the Logistics Controlling Department at the Enterprise

The structure of the logistics controlling department at the enterprise. The place of the controlling department in the enterprise management system. Formation of the target functions and elements of the logistics controlling system. Questioning. Testing. Solution of the task on the topic "Analysis of the activities of a logistics enterprise".

Workshop 4. Verification work No. 1

Testing on the topics: Logistics Controlling in the Management System. Types of Logistics Controlling. Subjects and Objects of Logistics Controlling. System of Logistics Controlling Indicators. Organization of the Logistics Controlling Department at the Enterprise.

Workshop 5. Information Support of the Logistics Controlling System. Strategic Analysis of the Logistics System. The Interrelation of Logistics and Corporate Strategy

Information base of logistic controlling. Financial reporting of a logistics enterprise. Movement of information flows in the logistics system in the process of making management decisions.

Strategic analysis in the logistics controlling system. SWOT analysis. Scenario development. The process of forming a logistics and corporate strategy. Questioning. Testing. Solving tasks on the topics: "Operative diagnosis of the financial and economic status of a logistics enterprise", "Diagnostics of the strategic position of a logistics enterprise".

Workshop 6. Management Tools in the Logistics Controlling System. Logistics Leverage. Controlling of Logistics Projects

Leverage as a controlling tool in managing logistics costs. Calculation models for assessing logistics leverage. The essence of controlling logistics projects, its goals and tasks. Principles, functions, and types of logistics project controlling. Questioning. Testing. Solving tasks on the topics: "Analysis of the threat of bankruptcy", "Development of recommendations for improving the strategic and operational contours of enterprise management".

Workshop 7. Expert Diagnosis of the Financial and Economic Condition of a Logistics Enterprise

Content, goals, and tasks of expert diagnosis of the financial and economic condition of a logistics enterprise. Methods of strategic diagnosis of a logistics enterprise and their characteristics. Methods of operational diagnosis and their characteristics. Financial screening. Questioning. Testing.

Workshop 8. Verification work No. 2. Presentation of individual tasks

Testing on the topics: Information Support of the Logistics Controlling System. Strategic Analysis of the Logistics System. The Interrelation of Logistics and Corporate Strategy. Management Tools in the Logistics Controlling System. Logistics Leverage. Controlling of Logistics Projects. Expert Diagnosis of the Financial and Economic Condition of a Logistics Enterprise.

Defending the individual task. Summing up

Topics of the laboratory classes

no laboratory classes.

Self-study

The individual task must be fulfilled by the student on the base of any logistics enterprise. The main purpose is to perform an expert diagnosis of the financial and economic status of the logistics enterprise. Plan:

1. Name of the enterprise, form of ownership, activities, number of working personnel.
2. Organizational structure of the enterprise.
3. Main suppliers, consumers and other business partners, competitors in the market.
4. Financial and economic status of the enterprise.
5. Strategic analysis of the enterprise taking into consideration factors of the external and internal environment, financial screening.
6. Identification of problems and development of proposals to eliminate "bottlenecks" in the strategic and operational activities of the logistics enterprise.

Course materials and recommended reading

1. Gleissner, H., & Femerling, J.C. (2013) Logistics. Springer Texts in Business and Economics. Springer International Publishing Switzerland. doi: [10.1007/978-3-319-01769-3_2](https://doi.org/10.1007/978-3-319-01769-3_2)
2. Pfohl, HC. (2023). Logistics Controlling. In: Logistics Management. Springer, Berlin, Heidelberg. doi: 10.1007/978-3-662-66564-0_5
3. Belch, Paulina, & Belch, Pawel. (2020). Controlling of logistics in production enterprises with separated processes of logistics in the context of empirical research. Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu 64(3):131-140. doi: 10.15611/pn.2020.3.11
4. Bojanić, R., Jelacic, D., Perovic, V., & Nerandzic, B. (2022). The Role of Logistics Controlling in Process Performance Measurement in Industrial Systems. Proceedings on 18th International Conference on Industrial Systems – IS'20, 391-398. doi: 10.1007/978-3-030-97947-8_52.
5. Teplická, K., & Szalay, Z. (2021). Significance of logistic controlling as a base for filling goals of business strategy. Acta logistica. 8. 209-216. doi: 10.22306/al.v8i3.217.
6. Nadiya, P., Ovdiienko, O., & Marchuk, V. (2023). Implementation of the logistics controlling concept in the management of transport enterprises. 6-18. doi: 10.46783/smart-scm/2023-18-1.
7. Gleißner, H., & Moeller, K. (2013). Logistics Controlling. doi: 10.1007/978-3-8349-6478-6_6.

8. Ailawadi, Satish C., & Singh, P. Rakesh. (2021). Logistics and Supply Chain Management. PHI Learning Pvt. Ltd.
9. Lun, Y. H. V., Lai, K., Cheng, T. C. E., & Yang, D. (2023). Shipping and Logistics Management. Springer International Publishing.

Assessment and grading

Criteria for assessment of student performance, and the final score structure

- 100% Final assessment as a result of a differentiated grading (25%) and Continuous assessment (75%).
- 20% The differentiated grading (including individual task (written) and its oral presentation);
- 75% Continuous assessment:
- 35% practical assessment (including problem solving);
 - 25% current monitoring (online tests);
 - 15% participation in discussions in practical classes

Grading scale

Total points	National	ECTS
90–100	Excellent	A
82–89	Good	B
75–81	Good	C
64–74	Satisfactory	D
60–63	Satisfactory	E
35–59	Unsatisfactory (requires additional learning)	FX
1–34	Unsatisfactory (requires repetition of the course)	F

Norms of academic integrity and course policy

The student must adhere to the Code of Ethics of Academic Relations and Integrity of NTU "KhPI": to demonstrate discipline, good manners, kindness, honesty, and responsibility. Conflict situations should be openly discussed in academic groups with a lecturer, and if it is impossible to resolve the conflict, they should be brought to the attention of the Institute's management.

Regulatory and legal documents related to the implementation of the principles of academic integrity at NTU "KhPI" are available on the website: <http://blogs.kpi.kharkov.ua/v2/nv/akademichna-dobrochesnist/>

Approval

Approved by



August 28, 2024

Head of the department
Olena PROKHORENKO

Guarantor of the educational
program



August 28, 2024

Pavlo BRIN