Syllabus
Course Program

Logistics Management

Specialty
073 – Management

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

Educational program
Business administration

Department
Management (204)

Level of education
Master's level

Course type
Elective

Semester
2

Language of instruction
English

Lecturers and course developers

Valentin Kovshik

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Ph.D. (C.Sc.) in Economic Sciences, associate professor of Management department

Authored and co-authored over 30 scientific and methodological publications.
Courses: Operations management, Supply chain management, Logistics management, Information technology in management, SMM management
More about the lecturer on the department's website

General information

Summary

The Logistics Management course is focused on mastering of modern methods of the logistics systems development at various companies and their management, as well as the use of modern technologies and knowledge to ensure effectiveness of logistics processes.

Course objectives and goals

Formation of modern managerial thinking and knowledge system in the field of logistics, development of logistics and supply chain systems and organization of relevant management activities

Format of classes

Lectures, workshops, self-study. Individual assignment (abstract). Final control in the form of an exam.

Competencies

GC 02. Ability to communicate with representatives of other professional groups of different levels (with experts from other fields of knowledge / types of economic activity).
GC 04. Ability to motivate people and move towards a common goal.
GC 05. Ability to act on the basis of ethical considerations (motives).

SC 01. Ability to choose and use management concepts, methods and tools, including in accordance with the defined goals and international standards.
SC 04. Ability to effectively use and develop the organization's resources.
SC 10. Ability to manage the organization and its development.
SC1.1. Ability to develop a business strategy for the organization and functional strategies for the main strategic areas of management.
SC1.2. Ability to choose an effective strategic advantage in accordance with the external environment and the internal environment of the company.

Learning outcomes

LO 02. Identify problems in the organization and justify methods of solving them.
LO 06. To have the skills to make, justify and ensure the implementation of management decisions in unpredictable conditions, considering the requirements of current legislation, ethical considerations and social responsibility.
LO 07. Organize and carry out effective communications within the team, with representatives of different professional groups and in the international context.
LO 10. Demonstrate leadership skills and the ability to work in a team, interact with people, influence their behavior to solve professional problems.
LO 11. Ensure personal professional development and time management.
LO1.1. Demonstrate the skills of forming a business strategy for the organization.
LO1.2. Be able to determine the most effective functional strategies of the organization.
LO1.3. Be able to conduct a comprehensive business diagnosis of the enterprise.

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

To successfully complete the course, it is necessary to have basic knowledge and practical skills corresponding to the results of bachelor's level of education for the specialty 073 "Management" and complete the courses Management of organizations, Strategic change management, Project management.

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

Lectures are delivered interactively with the use of multimedia technologies. Workshops focus on the use of modern information technology and popular software tools that are required in real-world situations. Learning materials are available to students via OneNote Class Notebook, Google Classroom.

Program of the course

Topics of the lectures

Topic 1. The concept and essence of logistics. The purpose of logistics activities.
Topic 2. Logistics management and Supply Chain Management (SCM) concepts.
Topic 3. Warehousing
Topic 4. Procurement and distribution logistics
Topic 5. Management of logistics costs of enterprises.
Topic 6. Logistics strategy of a company.
Topic 7. Logistics performance, SCOR model

Topics of the workshops

Topic 1. Logistics processes at enterprises
Topic 2. Building the structure of the logistics network. It's modeling.
Topic 3. Economic order quantity.
Topic 4. Modeling of logistics functions at the enterprise and their connection. Toyota case
Topic 5. SCOR model
Topic 6. Inventory Planning (MRP, DRP)
Topic 7. Management of logistics costs of enterprises
Topic 8. Formation of strategy of logistic activity in production.

Topics of the laboratory classes

No laboratory classes are included in the plan.

Self-study

The course involves learning additional materials regarding the topics of the lectures.
Also, the course includes performing an individual assignment related to processing of theoretical information (abstract) as well as a calculation task using spreadsheets.
Students are also recommended additional materials (videos, articles) for independent study and analysis.

Course materials and recommended reading

1. Gabrielova, T., Lytvynenko, S., Ivannikova, V., & Lytvynenko, L. (2020). Cargo Science and Logistics. Kyiv: Condor.
2. Rossi, R. (n.d.). Inventory Analytics. Retrieved from https://doi.org/10.11647/OBP.0252
3. Luca, S. D., Pace, R. D., & Djordjevic, B. (Eds.). (2020). Transportation Systems Analysis and Assessment. Retrieved from https://doi.org/10.5772/intechopen.75294
4. Szymonik, A. (2012). Logistics and Supply Chain Management. Retrieved from https://www.researchgate.net/publication/297369572_Logistics_and_Supply_Chain_Management
5. Agolla, J. E. (2021). Smart Manufacturing: Quality Control Perspectives. In Quality Control—Intelligent Manufacturing, Robust Design and Charts. IntechOpen. https://doi.org/10.5772/intechopen. Retrieved from 95143
6. Yuan, X.-M. (2020). Impact of Industry 4.0 on Inventory Systems and Optimization. In Industry 4.0—Impact on Intelligent Logistics and Manufacturing. IntechOpen. Retrieved from https://doi.org/10.5772/intechopen.90077
7. Bartholdi, John J. III. (2008). Warehouse and Distribution Science. Supply Chain and Logistics Institute, School of Industrial and Systems Engineering, Georgia Institute of Technology. Retrieved from https://www.warehouse-science.com/book/index.html
8. Крикавський, Є. В. (2005). Логістичне управління. Львів: Львівська політехніка.
9. Окландер, М. А. (2008). Логістика. Київ: Центр учбової літератури.
10. Кальченко, А. Г. (2000). Логістика: Київ: КНЕУ.
11. Пономарьова, Ю. В. (2005). Логістика: Київ: Центр навчальної літератури.
12. Сумець, О. М., Голофаєва, І. П., & Білоцерківський, О. Б. (2010). Логістика: Теорія, ситуації, практичні завдання. Харків: Міськдрук.
13. PricewaterhouseCoopers. (n.d.). Shifting patterns: The future of the logistics industry. From PwC website: Retrieved from https://www.pwc.com/gx/en/industries/transportation-logistics/publications/the-future-of-the-logistics-industry.html
14. Ковшик, В. І. (2014). Алгоритм вибору підходу до управління логістичними витратами підприємства. Вісник НТУ «ХПІ»,.
15. Ковшик, В. І. (2015). Інформаційні технології в контексті управління логістичними витратами промислових підприємств. Вісник Хмельницького Національного Університету. Економічні Науки

Assessment and grading

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

100% final grade is the result of the final assessment (30%) and continuous assessment (70%).
Final assessment: exam (reporting on the individual assignment, answering open-ended questions) (30%)
Continuous assessment: mid-term test (30%); completion of the tasks during the workshops (40%)

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

Head of the department
Olena PROKHORENKO

Guarantor of the educational program
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