Syllabus
of the elective component

Transportation Logistics

Discipline	**Transportation logistics**
Higher education level	**second (master's degree)**
Moodle course web-page	*https://dl.khadi.kharkov.ua/course/view.php?id=761*
Educational component volume	**4 credits (120 hours)**
Final control form	**test**
Consultations	**according to the schedule**
Department	**Transport Systems and Logistics Department**
Language of teaching	**English**
Course leader	**Svichynskyi Stanislav, PhD, Associate Professor**
Contact phone	*+38 (057) 707-37-83, 707-36-97*
E-mail	*tsl@khadi.kharkov.ua, s.svichinsky@gmail.com*

Educational Component Summary

The purpose is to train future specialists in the ability to apply a logistic approach to organizing the transport process, interact with transport and forwarding companies, estimate transport costs and analyze current transport information to optimize business processes at the enterprise, organize the work of the transport link of both logistics supply chain and goods distribution in such a manner that the goods are delivered in the required quantity, on time and with minimal costs.
The subject is the theoretical and methodical foundations of the application of the logistic approach to the organization of the work of the transport link of the logistics supply chain, methodical regulations for assessing the quality of transport service for users of logistics services.
The main tasks of studying the academic discipline are:

- to study the basics and principles of the logistic approach to the organization of the transport process;
- to develop the skills to apply modern approaches to transport services for clients;
- to develop the skills to create a cargo delivery system;
- to develop the ability to solve the problems of designing cargo and passenger delivery systems, and planning and organizing their work independently.

Prerequisites for studying the educational component:
Integrated transport systems; Supply chain management.

Competencies acquired by the applicant

***General competencies*:**

- ability to develop projects and manage them;
- ability to evaluate and ensure the quality of performed works;
- ability to generate new ideas (creativity).

Special (professional) competencies:

- ability to research and manage the functioning of transport systems and technologies;
- ability to manage supply chains and logistics centers;

– ability to manage freight transportation by types of transport;

– ability to use the methods and approaches necessary to create cargo delivery systems and assess the level of logistics service.

Training results consist in acquiring the following skills:

– make effective decisions in the field of transport systems and technologies, taking into account technical, social, economic and legal aspects, generate and compare alternatives, assess required resources and limitations, analyze risks;

– develop new and improve existing transport systems and technologies, determine development goals, existing limitations, performance criteria and areas of use;

– develop cargo and passenger transportation technologies by modes of transport based on research and relevant data;

– analyze and evaluate the efficiency of supply chains and logistics centers, calculate relevant indicators;

– develop cargo delivery systems, and evaluate and analyze the level of transport service for consumers.

Thematic plan

Theme №	Theme (L, PW, SEW)	Hours	
		full-time training	part-time training
1	L. Logistics service for clients.	4	1
	PW. Selection of a logistics intermediary.	2	-
	SEW. The relationship between logistics and marketing. Marketing logistics.	4	6
2	L. Transport logistics infrastructure.	2	-
	PW. Customer service radius.	4	6
3	L. Quality of transport service.	4	1
	PW. Assessment of the quality of the cargo delivery system.	2	2
	SEW. Transport cost structure. Quality system management.	4	6
4	L. Transport and logistics design.	6	2
	PW. Organization of international unimodal transportation. Synthesis of the cargo delivery system.	4	2
	SEW. Analytical dependencies used to describe membership functions. Contents of logistics front and back office functions.	12	16
5	L. Cargo transportation routing.	4	2
	PW. Development of a city cargo delivery system.	4	-
6	L. Optimal number of entry points on the delivery route.	2	-
	SEW. Dependence of the cost of transportation on technical and operational factors.	8	12
7	L. The optimal number of arrival points on the delivery route under variable transportation demand.	2	-
	SEW. Factors causing fluctuations in transportation demand. Statistical methods of describing fluctuations in demand. Reservation of transport fleet capacity.	12	16
8	L. Ensuring the efficiency of transport and logistics systems of freight transport.	4	2
	PW. Determining the probability of delivery of goods "just in time".	4	2

Theme №	Theme (L, PW, SEW)	Hours	
		full-time training	part-time training
8	SEW. Logistic properties of containers and packaging. Container and packaging functions. Types of packaging. The role of containers and packaging in logistics operations. Containerization.	20	30
9	L. Ensuring the functioning of transport and logistics systems of passenger transport.	4	2
	SEW. Functional of modern software for transport planning and modeling.	8	12
Sum	**L**	**32**	**10**
	PW	**16**	**6**
	SEW	**72**	**104**
Total		**120**	**120**

Individual educational and research task: not provided.

Teaching methods:
1) verbal:
    1.1 traditional: lectures, explanations, talks, etc.;
    1.2 interactive: discussions;
2) visual: illustration method, demonstration method;
3) practical (traditional): practical classes.

Evaluation system and requirements:

Ongoing achievements

1 The applicants' ongoing achievement in the performance of the both educational activities and self-education work while training is evaluated using a four-point scale with the further conversion into the 100-point scale. While evaluating all kinds of works provided by the educational program are taken into account.
1.1 Lectures are evaluated by determining the quality of specific tasks performance.
1.2 Practical classes are evaluated by the quality of performance of the tests or individual tasks, execution and design of the report on practical works.
2 The final evaluation of the discipline is determined as a sum of points on:
- passed standard tests, verbal questioning, attendance and communication activity level;
- in-class practical tasks execution and theoretical preparation.

Applicants' evaluation score scale according to the ongoing control is given in table1.

Table 1 – Points distribution under the themes defining a final test score according to the discipline ongoing assessment

Ongoing assessment									Discipline total score
Theme 1	Theme 2	Theme 3	Theme 4	Theme 5	Theme 6	Theme 7	Theme 8	Theme 9	100
12	4	12	20	16	4	4	16	12	

Final estimation

1 The final test score is got by the applicant at the last double-lesson according to the discipline ongoing assessment. The condition to pass the test is not less than 60 points score.
2 Higher education applicants who have an ongoing assessment score less than 60 points can increase it at the last class by taking a combination of written and oral tests that comprise both answering 2 professionally-oriented question and a problem solution with further commenting the work done or standard tests. The applicants who made the tasks previewed by the practical classes are allowed to pass the final test.
3 Extra-points are awarded to the applicants for participation in scientific events.
3.1 Extra-points are added to the achieved sum of points by the higher education applicant for the current educational activity.
3.2 The number of extra-points awarded for different types of individual tasks depends on their volume and importance:

– discipline prize-winning places on the at the international / all-ukrainian competition of scientific students' works – 20 points;

– discipline prize-winning places at all-Ukrainian olympiads – 20 points;

– participation in the international / all-Ukrainian competition of scientific students' works – 15 points

– participation in international / all-Ukrainian scientific conferences of students and young scientists – 12 points;

– participation in all-Ukrainian discipline competitions – 10 points

– participation in KhNAHU discipline competitions and scientific conferences – 5 points;

– implementation of individual scientific and research (educational and research) tasks of increased complexity – 5 points.

3.3 The number of extra points might not exceed 20 points.
4 The result of the study is evaluated on a two-point scale (passed/failed) according to table 2. The total score comprising the extra-points might not exceed 100 points.

Table 2 – Conversion of the score into national evaluation system

According to 100-point scale	**According to the national scale**
between 60 scores and 100 scores	Passed
less than 60 scores	Failed

Recognition of non-formal and informal training results

The procedure for the recognition of training results obtained in non-formal and informal education is regulated by СТВНЗ-83.1-01:2021 «Визнання результатів неформальної та інформальної освіти».

To recognise these results, an applicant should submit an application to the dean of the faculty and attach certificates and other documents confirming the competencies obtained. Based on the results of the application consideration, a subject-specific commission is established to review the submitted documents, interview the applicant and decide on the re-crediting of training results or the appointment of certification in the form of a final control (10 working days are given for preparation). Based on the results of the control, the commission assigns a final grade. If the applicant receives less than 60 points, the results of non-formal or informal education are not credited. When re-crediting training results in a discipline, the applicant is exempt from studying it.

Course policy:

– the course involves working in the team, the environment in the audience is friendly, creative, open to constructive criticism;

–the discipline requires mandatory attendance of lectures and practical classes, as well as self-education work;

– self-education work involves studying certain discipline themes, which are submitted in accordance with the program for self-education work, or have been considered briefly;

– all the tasks provided by the program must be completed within the prescribed time-frame;

– if the higher education applicant is absent for valid reasons, he/she passes the completed tasks during the self-education work and consultations provided by the teacher;

– while studying the course, higher education applicants should follow the rules of academic integrity set out in such documents: «Rules of academic integrity of participants of the KhNAHU Education process» (https://www.khadi.kharkov.ua/fileadmin/P_Standart/pologeniya/stvnz_67_01_dobroch_1.pdf), «Academic integrity. The text check of academic, scientific and qualification works for the plagiarism» (https://www.khadi.kharkov.ua/fileadmin/P_Standart/pologeniya/stvnz_85_1_01.pdf), «Moral and ethical code of participants of the KhNAHU educational process» (https://www.khadi.kharkov.ua/fileadmin/P_Standart/pologeniya/stvnz_67_01_MEK_1.pdf).

– in case of detecting the plagiarism, the applicant receives 0 points for the task and must retake the tasks provided in the syllabus;

– cheating during control works and examinations is prohibited (including mobile devices). Mobile devices are only allowed to be used during online testing.

Recommended literature:

1. Bowersox D., Closs D. Logistical Management: The Integrated Supply Chain Process. New Delhi: McGraw Hill Education, 2017. 752 p.
2. Logistics Development Strategies And Performance Measurement : Roundtable Report. Paris: The International Transport Forum, 2016. 145 p.
3. Competition Assessment Reviews: Logistics Sector in ASEAN / Paris: OECD, 2021, 150 p.
4. Смирнов І., Косарева Т. Транспортна логістика. К.: Центр навчальної літератури, 2018. 224 с.
5. Крикавський Є.В. Логістика. Львів: Львівська політехніка, 2004. 464 с.
6. Горбачов П.Ф., Макарічев О.В., Немна Т.В., Свічинський С.В. Визначення закону розподілу критерію ефективності перевезень вантажів у міжнародному сполученні. *Комунальне господарство міст*. 2018. № 144 (2018). С. 15–23.
7. Горбачов П.Ф., Макарічев О.В., Немна Т.В., Свічинський С.В. Експериментальне дослідження прибутковості міжнародних автомобільних перевезень вантажів за разовими заявками. *Системи управління, навігації та зв'язку*. 2018. № 4 (50). С. 50–56.
8. Horbachev P. Makarichev O., Svichynskyi S., Ivanov I. Framework for designing sample travel surveys for transport demand modelling in cities. Transportation. 2022. vol. 49, issue 1. P. 115–136.
9. Горбачов П.Ф., Свічинський С.В. Інтервальне моделювання потреб населення міст у перевезеннях громадським транспортом на основі функції розселення : монографія. Харків: ХНАДУ, 2016. 148 с.
10. Свічинський С.В. Оцінка ефективності прийнятих рішень. *Вплив пандемії на мобільність*: лекції IV Міжнародної освітньої школи зі сталої мобільності (Київ, Харків, 21-24 квітня 2021 року). К.: Екодія, 2021. С. 43–49.

Additional sources:

1. Асоціація «Український логістичний альянс» : офіційний веб-сайт. URL: http://ula-online.org/.

2. Council of Supply Chain Management Professionals : official web-site. URL: http://cscmp.org/.

3. Центр транспортних стратегій : веб-сайт інформаційно-консалтингового центру «ЦТС». URL: http://cfts.org.ua/.

4. Empowering Logistics: Competence, Network, Standard : official web-site of the European Logistics Association. URL: http://www.elalog.eu/.

5. The BVL : official web-site of Bundesvereinigung Logistik e.V. URL: http://www.bvl.de/en.

6. Асоціація міжнародних автомобільних перевізників України : офіційний веб-сайт. URL: http://www.asmap.org.ua/.

7. Верховна Рада України : офіційний веб-портал. URL: http://rada.gov.ua/.

8. TradeMaster: портал топ-менеджерів оптової та роздрібної торгівлі. URL: https://trademaster.ua/.

Syllabus Developer _____ Stanislav SVICHYNSKYI
signature

Head of Department _____ Petro HORBACHOV
signature