Elective Component (EC) Syllabus Freight Transportation

Discipline	Freight Transportation
Higher Education Level	The first one (Bachelor Degree)
Moodle course page	https://dl2022.khadi-kh.com/course/view.php?id=342
Educational Component	3 credits (90 hours)
Volume	
Final Control	Test
Consultations	According to the schedule
Department	Transport Systems & Logistics dpt
Language of teaching	English
Course Leader (Manager)	Kalinichenko Oleksandr, PhD, Associate Professor
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Educational Component Summary:

The purpose is to prepare specialists to independently solve production functions and typical tasks in the field of rational organization of the transport process and its management in freight transportation.

The subject of the study is a pedagogically adapted system of concepts about the principles of organization of freight transportation and freight management, advanced forms and methods in the organization of the transport process in the transportation of goods, as well as the study of innovative approaches in the organization and management of freight transportation.

The main tasks of the academic discipline is to form in students formation of a set of knowledge, skills and ideas on the basics of road transport management at a level that ensures practical activity in the specialty.

Prerequisites for studying the educational component: Freight Transportation Study, General course of transport; Fundamentals of vehicle operation.

Competencies acquired by the applicants:

General competencies:

Skills in the use of information and communication technologies;

Ability to conduct research at the appropriate level;

Ability to develop and manage projects;

Skills in safe work practices;

Commitment to environmental protection;

Ability to work autonomously and in a team;

Knowledge and understanding of the subject area and understanding of professional activities;

Ability to think abstractly, analyze and synthesize.

Special (professional) competencies:

Ability to analyze and predict the functioning of transport systems and technologies, taking into account the impact of the external environment;

Ability to organize and manage loading and unloading operations and warehouse operations in transport; Ability to organize and manage the transportation of goods by road;

Ability to optimize logistics operations and coordinate orders for the transportation of goods from producer to consumer, comply with laws, regulations and requirements of quality management systems; Ability to assess and ensure the safety of transportation activities;

Ability to evaluate plans and proposals for the organization and technology of transportation drawn up by other entities and make the necessary changes based on the technical and operational parameters and principles of operation of transport infrastructure facilities and devices, vehicles;

Ability to use modern information technologies, automated control systems and geographic information systems in the organization of the transportation process.

Ability to take into account the human factor in transportation technologies.

Training results according to the educational program are to:

Critically evaluate scientific values and achievements of society in the development of transport technologies

Apply, use modern information and communication technologies to solve practical problems in the organization of transportation and design of transport technologies

Investigate transport processes, experiment, analyze and evaluate the parameters of transport systems and technologies.

Formulate, modify, develop new ideas for improving transport technologies.

Develop, design, manage projects in the field of transport systems and technologies.

Develop and use transport technologies taking into account the requirements for environmental protection.

Find solutions for rational methods of organizing loading and unloading operations. Plan schedules for loading and unloading operations. Choose mechanisms and means of loading and unloading operations. Organize and manage the transportation of goods in various combinations. Choose the type, brand, type of vehicles and routes. Monitor the progress of transportation.

Explain the operational, technical, economic, technological, legal, social and environmental efficiency of transportation.

Recognize qualitative and quantitative indicators of vehicle operation. Evaluate the structural elements of vehicles. Establish the relationship between the structural elements of vehicles.

			Hours	
Theme, №	Theme (I I W PW SFW)	full-time	part-time	
		training	training	
-				
	L - Transport characteristics of cargoes	4	2	
1	R (LW, SEW) - Determination of cargo transportation characteristics	4	2	
	SEW - Transport classification of goods	10		
	L - Containers and packaging	2	2	
2	PR (LW, SEW) - Purpose of cargo packaging means	2	4	
	SEW - Transportation package	10		
	L - Cargo labeling	4	2	
3	ETC (LW, SEW) – Marking of a transport package	4		
	SEW - Basic parts of labeling	10		
	L - Measures to increase the level of cargo safety	2	2	
4	R (LW, SEW)		2	
	SEW- Methods of securing cargo	8		
	L - Compatibility of goods during storage and transportation	2	2	
5	R (LW, SEW) - Determination of the limits of compatibility of goods	2		
5	during transportation in one vehicle			
	SEW- Storage modes	10		
	L - Cargo flows	2		
6	R (LW, SEW) - Determination of characteristics of cargo flows	4		
0				
	SEW- Unevenness of transportation	10		
	L	16	10	
In total	R (LW, SEW)	16	8	
	SEW	58	72	

Thematic plan

Teaching methods:

1) verbal: 1.1 traditional: lectures, explanations, stories, etc.;

2) visual: illustration method, demonstration method

3) practical: 3.1 traditional: practical classes, seminars;

Evaluation system and requirements:

The final evaluation of the discipline is determined by adding the total sum of points on practical and theoretical preparation.

Ongoing achievement

- survey (0-20 points);

- level of knowledge on defending practical (laboratory) works (0-20 points);

- timely execution and defending practical (laboratory) works (0-10 points);

- attendance (0-10 points).

Component of the	Points						
final evaluation	16-20	11-15	6-10	0-5			
Survey	The answer to the question is complete, concrete, contains definitions of terms, classification	The answer contains not a complete definition of terms, classification	The answer contains the definition of the basic terms with the help of the teacher	The wrong answer is given, the undiscovered essence of the question			
Level of knowledge on defending practical (laboratory) works	The student gives the answer to the method of decision, correctly presented calculations and complete conclusions	The student gives the answer to the method of decision, in calculations there are minor errors or inaccuracies, conclusions are not presented completely	The student passes the general sense on the method of decision, in calculations there are significant errors or inaccuracies, conclusions are not presented completely	The student cannot convey the general sense of work, in calculations there are significant errors or inaccuracies, no conclusions are given			
Component of the	Points						
	9-10	6-8	2-5	0-1			
Timeliness of execution and defending practical (laboratory) works	The student defends the work the same week, when it began	The student defends the work during the next week, after its beginning	The student defends the work during the month when it started	The student defends the work before the final control			
Attendence	The student attended more than 90% of the classes	Thestudentattended from 75%to90%ofclasses	Thestudentattended from 50%to75%oftheclasses	The student attended less than 50% of the classes			

Table 1 -	– Assessment	of the	level o	of practical	training
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Assessment of theoretical training level (0-40 points):

- polling or conducting of the current control in the form of the test or control tasks (0-30 points);

- attendance (0-10 points).

Table 2 – Assessment of the level of theoretical training

Component of the	Points

final evaluation	24-30	16-23	8-15	0-7		
Survey	The answer to the question is complete, concrete, contains definitions of terms, classification	The answer contains definitions of terms, classification	The answer includes the definition of the basic terms	The given answers are incorrect, the question essence is undiscovered		
Component of the	Points					
final evaluation	9-10	6-8	2-5	0-1		
Attendance	The student attended more than 90% of the classes	The student attended from 75% to 90% of the classes	The student attended from 50% to 75% of the classes	The student attended less than 50% of the classes		

The result of the study is estimated (choose required): – on a double scale (passed/failed) according to table 2; – on a 100-point scale (for differentiated test) according to table 3.

Table 3 – Conversion of the score into the 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

Table 4 – Applicants' evaluation score scale according to the final control of the academic discipline.

Evaluation	Evaluati	on score	ECTS grades	
score in points	accord nationa	ling to al scale	Grade Criteria	
	exam	test		
90-100	Excellent	passed	A The theoretical content of the course is master completely, without gaps, the necessary practi- skills to work over the mastered material are developed, all the training tasks provided by t program are accomplished, the quality of their performance is estimated by the number of po- close to the maximum	
80–89	Very good	pa	В	The theoretical content of the course is mastered completely, without gaps, the necessary practical skills to work over the mastered material are basically developed, all the training tasks provided by the program are accomplished, the quality of performance of most of them is estimated by the number of points close to the maximum.
75-79	Good	passe	С	The theoretical content of the course is mastered completely, without gaps, some practical skills to work with the mastered material are not developed sufficiently, all the training tasks provided by the program are accomplished, the quality of performance of none of them is estimated by the minimum number of points, some tasks can have mistakes

Evaluation	Evaluati	on score	ECTS grades		
score in	accore	ling to	Grade	Criteria	
points	exam	test	-		
67-74	Satisfactory		D	The theoretical content of the course is partially mastered, but the gaps are not significant, the necessary practical skills to work over the mastered material are basically developed, most of the training tasks provided by the program are accomplished, some of the completed tasks may contain mistakes	
60–66			E	The theoretical content of the course is partially mastered, some practical skills to work over the mastered material are not developed, many training tasks according to the program are not completed, or the quality of performance of some of them is estimated by the number of points close to the minimum.	
35–59	Unsatisfactory	ailed	FX	The theoretical content of the course is partially mastered, practical skills to work over the mastered material are not developed, most of the tasks provided by the programs are not completed, or the quality of their performance is estimated by the number of points close to the minimum; additional self-education work according to the course can improve the quality of the performance of educational tasks (in case of the second study)	
0-34	Failed	3 3 3	F	The theoretical content of the course is not mastered, the necessary practical skills to work over the mastered material are not developed, all the completed educational tasks contain serious errors, additional self-education work according to the course doesn't have any significant quality improvement in educational tasks performance (due to mandatory second study)	

Course policy:

- the course involves working in the team where the environment 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» (<u>https://www.khadi.kharkov.ua/fileadmin/P_Standart/pologeniya/stvnz_85_1_01.pdf</u>), «Moral and ethical code of participants of the KhNAHU educational process» (<u>https://www.khadi.kharkov.ua/fileadmin/P_Standart/pologeniya/stvnz_67_01_MEK_1.pdf</u>).

- 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.

Reference

Крук В.В. Курс лекцій з дисципліни «Організація автомобільних перевезень» / В.В. Крук 1. , В.З. Гудь, Т.Д. Навроцька. – Тернопіль : ТНТУ, 2016. – 132 с.

М.Г. Босняк «Вантажні автомобільні перевезення». Навчальний посібник, - К.: 2. Видавничий Дім «Слово», 2010.- 408 с.

Коваленко В.М., Щуріхін В.К., Машика Н. Б. Вантажні автомобільні перевезення: 3. Підручник. - К.: Літера ЛТД, 2006. - 304 с.

4. Організація автомобільних перевезень: у 2-х ч.: навч. посібник /М. С. Оліскевич. - Львів : Видавництво Львівської політехніки, 2017. - Ч. 1: Вантажні перевезення. — 336 с.

Калініченко О.П. Організація перевезень вантажів: Конспект лекцій. – Харків: ХНАДУ, 5. 2006 – 116 c.

Extra-reference

О.В. Павленко, Н.Ю. Шраменко, О.О. Северін, П.Ф. Горбачов, О.П. Калініченко. 1. Математичні методи оптимізації транспортних процесів: навчальний посібник. – Харків: Видавництво XHAДУ, 2008. – 204 с.

Методичні вказівки до практичних занять з дисципліни «Вантажні перевезення» для 2. студентів денної форми навчання. ХАРКІВ. ХНАДУ. 2017. – 36 с.

3. Павленко, О. В., Калініченко, О. П., & Нефьодов, В. М. (2018). Методика формування ресурсозберігаючої технології доставки вантажів транспортно-логістичним центром. Комунальне господарство міст. Серія: Технічні науки та архітектура, (142), 96-102.

4. Підвищення ефективності доставки дрібнопартійних вантажів на розвізних маршрутах в міських умовах. Альошинський Є.С., О.П. Калініченко, В.В. Севідова. Збірник матеріалів Міжнародної науково-технічної конференції «Інтелектуальні технології управління транспортними процесами» - Харків: ХНАДУ, 2020. С. 108-110.

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