# MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE NATIONAL AVIATION UNIVERSITY

Faculty of Transport, Management and Logistics Management of Foreign Economic Activity of Enterprises Department

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«»2022	«»2022



**Quality Management System** 

### **COURSE TRAINING PROGRAM**

on

"EU Transport Policy"

Educational Professional Program: "Management of Foreign Economic Activity"

"Logistics"

"Aviation Logistics"

"Management of Airlines and Airports"

Field of study: 07 "Management and Administration"

Specialty: 073 "Management"

Form of	Semester	Total (hours /	Lectures	Prac-	Self-	HW/	TP/CPr	Form of semester
study		ECTS credits)		ticals	study	CGP/C		control
Full-	6	105/3.5	34	17	54	1 HW –	-	Graded Test –
time						6 s.		6 s.

Index: CB-7-073-2/21-2.1.20, CB-7-073-3/21-2.1.20, CB-7-073-4/21-2.1.20, CB-7-073-5/21-2.1.20



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The Course Training Program on "EU Transport Policy" is developed on the basis of the Educational Professional Programs "Management of Foreign Economic Activity", "Logistics", "Aviation Logistics", "Management of Airlines and Airports", Bachelor Curricula № CB-7-073-2/21, № CB-7-073-3/21, № CB-7-073-4/21, № CB-7-073-5/21 and Bachelor Extended Curricula № ECB-7-073-2/21, № ECB-7-073-3/21, № ECB-7-073-4/21, № ECB-7-073-5/21 for the Specialty 073 "Management" and corresponding normative documents.

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	«»2022

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#### INTRODUCTION

The Course Training Program (CTP) on "EU Transport Policy" is developed based on the "Methodical guidelines for the development and design of the course training program of the subject of full-time and part-time study", approved by the order of the rector № 249/од. of 29.04.2021 and corresponding regulatory documents.

### 1. EXPLANATORY NOTES

### 1.1. Place, objectives, tasks of the subject

The subject is the theoretical and practical basis of the totality of knowledge and skills that form the profile of a specialist in management.

The **purpose** of teaching the subject is to master the theoretical knowledge and practical skills of the problems of integration of Ukrainian and EU transport systems in the implementation of the EU-Ukraine Association Agreement.

The **tasks** of the study of the subject are as following:

- to familiarize students with European transport and logistics standards;
- to study the policy of the European Green Deal and its impact on the development of green logistics and green supply chains;
- to familiarize with the EU requirements for improving the quality of transport infrastructure in Ukraine and its integration into the TEN-T network;
- to familiarize students with the European perspectives of smart infrastructure development and implementation of smart technologies in the activities of logistics operators in order to reduce harmful emissions into the environment;
- to study the forms of integration of Ukraine and the EU in the transport and logistics industry;
- studying the regularities and principles of formation and operation of transport and logistics networks.

### 1.2. Learning outcomes the subject makes it possible to achieve

As a result of studying the subject, the student must acquire the following must achieve such **learning outcomes**:

- to demonstrate knowledge of theories and concepts of European integration;
- to master the methods of managerial analysis;
- to be able to use the research tools;
- to substantiate the consequences of the European integration policy;
- to evaluate general trends in the EU transport policy.

### 1.3. Competences the subject makes it possible to acquire

As a result of studying the subject, the student must acquire the following **competences**:

- ability to analyze the peculiarities of integration policy under different initial conditions of the economy, to develop management measures in the field of transport;
- ability to analyze and assess the consequences of European integration in the national economy;
  - possession of methods and techniques of scientific research;
  - understanding of methodical peculiarities of economic research;
  - ability to use the fundamental economic knowledge in the professional activity.
  - ability to generate new ideas (creativity).

### 1.4. Interdisciplinary connections

The subject "EU Transport Policy" is the basis for the study of such subjects as: "Crisis management", "Strategic Management", "Transport logistics", "Foreign Economic Activity of the Enterprise", "International Innovation Management", "Management of Airlines and Airports".



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#### 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: Module  $N_2$  1 "Transport management standards in EU countries"; Module  $N_2$  2 "European logistics and transport-logistics networks" that are logically complete, relatively independent, holistic part of the subject, learning of which provides module test and analysis of its performance.

# 2.2. Modular structuring and integrated requirements for each module Module №1 "Transport management standards in EU countries"

Integrated requirements to the module №1: know the basics of European transport policy and understand the philosophy of economic integration; know the basic indicators of development in the integration of transport systems; know and be able to use research tools; understand modern models and standards of transport development; be able to analyze the economic development of Ukraine and other countries.

### Topic 1. Features of the EU transport policy development

The components of the EU transport policy. International organizations in the field of transport. The water area of transport operations of international organizations. International organizations of railroad transport operations. International organizations of road transport operations. Technical aspects of the EU transport policy.

### Topic 2. Environmental and economic aspects of EU transport policy

Technical aspects of EU transport policy. Economic aspects of the EU transport policy. Investment funds and procedures for the funding infrastructure projects. The main fund instruments of TEN-T funding. Main forms of CEF financial support. Financial support of transport infrastructure of Ukraine by the World Bank Group. Assessment of the level of environmental impact of each transport mode.

### **Topic 3. European transport**

Road transport in Europe. Requirements for road transport infrastructure in the EU. Rail transport in Europe. Model of the organization structure of rail transportation in the EU countries. Requirements for the EU rail infrastructure. Maritime transport in Europe. Directions for increasing the level of maritime transport competitiveness in the world market. Requirements to the infrastructure of the EU sea ports.

### Topic 4. Problems and prospects of EU transport policy development

The concept of common transport policy in the EU founding treaties. Aims and objectives of the EU common transport policy. Single European Transport Area: directions of development. Regulations of the EU. The concept of competitive and environmentally sustainable transport system. Effective basic system for multimodal intercity transportation and transport. Worldwide equal competition conditions for long-haul traffic and intercontinental freight traffic. Barriers in the development of a Single European Transport Area.

### **Topic 5. EU aviation development strategy**

The essence of aviation development and the role of European policy. Historical aspects of the EU aviation market. Strategic objectives of air transport in the EU. Domestic air transport market in the EU. Single market. External aviation. European Commission's proposals for the Single European Sky. Trait of the EU internal air transport market. EU air traffic regulation: Regulation 1008/2008. Main segments of the air traffic regulation in the EU.



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### Topic 6. Single European Sky (SES): opportunities and risks for Ukraine

Basic principles of the Single European Sky. European air navigation services system. Characteristics of European airspace. EU in international relations. Single European Sky. Examples of normative legal acts of the SEA. Legal acts of the EU in the aviation sector. Network functions of the Single European Sky. Cooperation with Eurocontrol and ICAO. Key aspects of air transport renovation.

# Topic 7. Formation of adaptation strategies and model of aviation enterprise in the context of global challenges

Importance and prerequisites for the development of air enterprises. Features of using aviation infrastructure. Formation of strategies and adaptation of aviation enterprise in conditions of global challenges. European standards and models of European airports operation. Trends in the development of the largest airports of the EU. Prospects of airport development in the context of EU airport development.

### Topic 8. Prospects for the air transport development of the European Union

Resumption of air transportation after COVID-19. Development of aviation transport strategy of Ukraine on the way to common aviation space between Ukraine and EU. Air transport liberalization. Modernization of air navigation equipment. Improvement of airports competitiveness. Deregulation of economic activity, including airport and aviation taxes and financial reporting, by implementing modern approaches to economic regulation of economic activity. Incentives for existing air carriers. Increase of competition in the field of air transportation and ground support market. Prospects for signing the Ukraine-EU Common Aviation Area Agreement: risks and opportunities.

### Module № 2 "European logistics and transport-logistics networks"

Integrated requirements to the module №2: be able to use research tools; know the main mechanisms of transport policy; know the structure of the transport system of the EU and Ukraine; understand the mechanisms of transport and logistics operators' interaction; justify the consequences of integration policy; evaluate the general trends in the EU transport policy.

# Topic 1. Logistics development trends in the EU. Forms of integration of Ukraine and the EU in the logistics industry

Condition and trends of development of transport and logistics system in the context of globalization and integration processes. Programs of improvement of transport and logistics systems, directions of state support of their development. Challenges of EU logistic system development. Directions of transport and logistics system of Ukraine in the conditions of European integration, principles of state policy of transport. The forms of integration of transport systems of Ukraine and the EU. Perspective directions of transit potential realization. Logistic interaction levels in the Ukrainian and EU transport complex.

### Topic 2. Smart logistics infrastructure and EU digital logistics projects

The concept of smart logistics infrastructure. Types of innovations in logistics. Stages of implementation and the nature of the logistics innovation's impact on the supply chain. Miniaturization of electronics. Internet of things. Electronic commerce (eCommerce). 3D printing. The concept of transparency in logistics processes. Unmanned vehicle. Grouping of cars (Platooning). Omnichannel logistics. Logistics of the circular economy. Modern technologies in the structure of the logistics process. Projects of digital logistics in the EU countries.



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# Topic 3. Standardization of logistics services and certification of the competence of logistics personnel

Logistics services in the EU. Adapting European standards to domestic practice. Competence levels of European standards for certification of logistics. Development of benchmarks. Professional standards in the field of logistics. Competence levels of specialists. Formation of logistic thinking. Development of a set of competencies for supply chain management.

# Topic 4. EU transport and logistics clusters: essence, types, conditions of creation and barriers for development

The concept, characteristics and significance of clusters in the EU. Principles of network structures formation. Criteria for classification of European clusters. Types of EU clusters. Classification of European transport and logistics clusters. Mapping of European transport and logistics clusters. Prerequisites for formation of clusters: natural, social, economic, and institutional. Structure of transport and logistics clusters. Sources and levels of formation of cluster effects at different levels.

### Topic 5. Modern EU cluster policy: tools of action

Stages of development of cluster policy in the EU. National cluster programs in the European Union. Levels of development and functioning of cluster programs. Features of EU national cluster programs. Overview of the current cluster policy in Europe. The most important goals of state cluster programs. Cluster support in European regions. Goals and objectives of regional cluster programs. Smart specialization of regions. Signs of smart specialization. European initiatives in support of clusters.

# Topic 6. Regularities in the creation and operation of cluster organizations in the EU countries

The concept of the cluster organization, its structure and functions. The main tasks of the functioning of cluster organizations. Features of the cluster organizations in the EU. Organizational and legal forms of cluster organizations. Sources of cluster incomes. Measures to support cluster organizations in the EU. Features of functioning and training of cluster personnel. Professional skills of the cluster manager. Effectiveness of cluster organization: criteria and characteristics.

# Topic 7. Successful practices in the development of EU transport and logistics network structures

Factors of transport-logistic clusters development in EU countries. Comparative characteristics of transport and logistics clusters of Poland and Germany according to the criteria of goals, objectives, types of joint projects. Structure of maritime, railroad and road clusters of EU countries. Factors of success of maritime, rail and road clusters of EU countries. Features of transport and logistics networks operation around airports. Transport and logistics networks on the basis of large urban agglomerations.

### Topic 8. Possibilities of adapting EU cluster policy standards in Ukraine

Identification of transport and logistics clusters in the structure of the state economy. Methods of identification of clusters: calculation of indicators of specialization, size and focus. Qualitative analysis to identify potential clusters. Potential regions of formation of transport and logistics clusters in the structure of the national economy and ways to assess their potential. Regularity of development of network structures in Ukraine. Barriers to the development of transport and logistics clusters in Ukraine. Possibilities of implementing the European experience of supporting enterprise clusters in domestic practice.



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# 2.3. Training schedule of the subject

			Total,	hours	
No	Topic (thematic section)	Total	Lectures	Practicals	Self-study
1	2	3	4	5	6
	Module №1 "Transport management standards	in EU co	untries"	T	1
1.1.	Features of the EU transport policy development	7	2	2	3
1.2.	Environmental and economic aspects of EU transport policy	5	2		3
1.3.	European transport	7	2	2	3
1.4.	Problems and prospects of EU transport policy development	5	2		3
1.5.	EU aviation development strategy	7	2	2	3
1.6.	Single European Sky (SES): opportunities and risks for Ukraine	5	2		3
1.7.	Formation of adaptation strategies and model of aviation enterprise in the context of global challenges	4	2		2
1.8.	Prospects for the air transport development of the European Union	4	2		2
1.9.	Module test № 1	4	-	2	2
	Total for the module № 1	48	16	8	24
	Module № 2 "European logistics and transport-l	ogistics	networks	,,	
2.1.	Logistics development trends in the EU. Forms of integration of Ukraine and the EU in the logistics industry	4	2	-	2
2.2.	Smart logistics infrastructure and EU digital logistics projects	8	4	2	2
2.3.	Standardization of logistics services and certification of the competence of logistics personnel	5	2		3
2.4.	EU transport and logistics clusters: essence, types, conditions of creation and barriers for development	6	2	2	2
2.5.	Modern EU cluster policy: tools of action	5	2		3
2.6.	Regularities in the creation and operation of cluster organizations in the EU countries	6	2	2	2
2.7.	Successful practices in the development of EU transport and logistics network structures		2		3
2.8.	Possibilities of adapting EU cluster policy standards in Ukraine	7	2	2	3
2.9.	Carrying out the homework	8	-	-	8
2.10.	Module test № 2	3	-	1	2
Total f	or the module № 2	57	18	9	30
Total f	Total for 6 semester 105 34 17				
Total f	or the subject	105	34	17	54



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### 2.4. Homework

Homework is performed in the sixth semester, in accordance with the approved methodical guidelines, in order to consolidate and deepen the theoretical knowledge and skills of the student in the studying the subject.

Homework is performed by the student individually in accordance with the topics offered by the teachers of the department.

The time required to complete homework is 8 hours.

### 3. BASIC CONSEPTS OF GUIDANCE ON THE SUBJECT

### 3.1. Teaching methods

It is recommended to use the following teaching methods during mastering the subject:

- explanatory and illustrative method;
- method of problem presentation;
- reproductive method;
- research method.

The implementation of these methods is carried out during lectures, practicals, independent problem solving, work with educational literature, etc.

### 3.2. List of references

### **Basic references**

- 3.2.1. Lytvynenko L., Novak V., Kyrylenko O. EU Transport Policy Strategies: Tutorial: training. Kyiv: Publishing House "Condor", 2021. 80 p.
- 3.2.2. Problems and priorities of the economic integration of the transport systems of Ukraine and the EU: collective monograph / General ed. by Doctor of Economics, Prof. O. M. Palyvoda. URL: https://er.nau.edu.ua/bitstream/NAU/61408/1/Monograph.pdf
- 3.2.3. Кириленко О., Паливода О., Разумова К., Зарубінська І., Новак В., Литвиненко Л., Гращенко І. Транспортна політика €С: навч. посіб.: практикум. К.: Кондор-Видавництво, 2021. 184 с.
- 3.2.4. Партола А. І., Паливода О. М., Боняр С. М. Інноваційний розвиток транспорту України: кластерний підхід: монографія. К.: Державний університет інфраструктури та технологій, 2020. 206 с.

### **Additional references**

- 3.2.5. Paksoy T., Kochan C.G., Ali S.S. Logistics 4.0. Digital Transformation of Supply Chain Management. CRC Press, 2020. 368 p.
- 3.2.6. Button K. J., Gillingwater D. Future Transport Policy (Routledge Library Editions: Global Transport Planning). 1st Ed., Kindle Ed. Milton Park: Routledge, 2021. 283 p.
- 3.2.7. Smart Urban Mobility: Transport Planning in the Age of Big Data and Digital Twins. Kindle Edition. Amsterdam: Elsevier Science, 2023. 203 p.

#### 3.3. Internet information resources

- 3.3.1. Eurostat: official statistics. URL: https://ec.europa.eu/eurostat
- 3.3.2. Transport infographics & maps. URL: https://ec.europa.eu/transport/facts-fundings/infographics\_en
- 3.3.3. EU transport policy. URL: https://ec.europa.eu/info/policies/transport en
- 3.3.4. Trans-European Transport Network (TEN-T). URL: https://ec.europa.eu/transport/themes/infrastructure/ten-t\_en
  - 3.3.5. The European Cluster Collaboration Platform. URL: https://clustercollaboration.eu/
  - 3.3.6. Cluster policy in Europe. URL: https://www.clusterportal-bw.de/en/cluster-policy/
  - 3.3.7. EU. Transport. URL: https://transport.ec.europa.eu/index\_en
- 3.3.8. Key principles for transport of tomorrow. URL: https://www.businesseurope.eu/sites/buseur/files/media/position\_papers/internal\_market/2020-09-22\_pp\_key\_principles\_for\_transport\_of\_tomorrow.pdf
  - 3.3.9. Official website of the State Statistics Service of Ukraine. URL: https://ukrstat.org/en/
- 3.3.10. National Transport Strategy of Ukraine 2030. URL: https://mtu.gov.ua/files/for\_investors/230118/National%20Transport%20Strategy%20of%20Ukraine.pdf



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### 4. RATING SYSTEM OF KNOWLEDGE AND SKILLS ASSESSMENT

4.1. Grading of different kinds of academic activities performed by a student and obtained knowledge and skills are realized in values in line with Table 4.1.

Table 4.1

	- ****
Kind of Academic Work	Maximum Grade Values
6 semester	v arues
Module № 1	
Carrying out tasks on practicals	10 points $\times$ 2 = 20
, ,	20 points $\times$ 1 = 20
For admission to complete module test №1, a student must receive not less than	24
Carrying out Module Test №1	10
Total by the Module №1	50
Module № 2	
Carrying out tasks on practicals	10 points $\times$ 2 = 20
	5 points $\times$ 2 = 10
Carrying out and defense of the Homework	10
For admission to complete module test №2, a student must receive not less than	24
Carrying out Module Test №2	10
Total by the Module №2	50
Total by the subject	100

The credit rating is determined (in balls and on a National Scale) based on the results of all types of educational work during the semester.

- 4.2. The completed curricular activity is accounted enrolled student if the student received for them a positive rating.
- 4.3. The sum of grades received by the student for certain types of completed educational work is the Current Module Grade, which is entered into the Module Register.
- 4.4. The Total Semester Grade is entered into the Examination Register, educational cards and into a student's record book in values, National Scale grades, and ECTS Scale grades, for example: 92/Excellent/A, 87/Good/B, 79/Good/C, 68/Sat./D, 65/Sat./E, etc.
- 4.5. The Total Grade is equaled the Total Semester Grade. The Total Semester Grade is entered into the Diploma Supplement.



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 $(\Phi 03.02-01)$ 

# АРКУШ ПОШИРЕННЯ ДОКУМЕНТА

<b>№</b> прим.	Куди передано (підрозділ)	Дата видачі	П.І.Б. отримувача	Підпис отримувача	Примітки

 $(\Phi 03.02-02)$ 

# АРКУШ ОЗНАЙОМЛЕННЯ З ДОКУМЕНТОМ

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

(Ф 03.02–04)

# АРКУШ РЕЄСТРАЦІЇ РЕВІЗІЇ

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

(Φ 03.02–03)

### АРКУШ ОБЛІКУ ЗМІН

№ листа (сторінки)					Підпис особи,	Дата	
<b>№</b> зміни	Зміненого	Заміненого	Нового	Анульо- ваного	яка внесла зміну	Дата внесення зміни	введення зміни

 $(\Phi 03.02-32)$ 

# УЗГОДЖЕННЯ ЗМІН

	Підпис	Ініціали, прізвище	Посада	Дата
Розробник				
Узгоджено				
Узгоджено				
Узгоджено				