

# SYLLABUS

## **Economic theory and economics of railway transport**

(Subjects)

Semester and year of study I semester of 2019-2020 academic year

Educational level (first or second) first

Branch of knowledge

Code and name of the specialty

Lectures and practical classes according to the schedule <http://rasp.kart.edu.ua>

Teacher team:

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Course web page:: <http://do.kart.edu.ua/>

Additional information resources: <http://metod.kart.edu.ua>



Goals and objectives of the discipline The economic life of society, like no other, directly affects everyone, because his primary interests - economic. Satisfaction of material needs, no matter how it contradicts the spiritual principle, is the first and natural desire of man and society. On the one hand, unlimited needs that are constantly changing and growing, on the other - limited resources to meet them, in addition, they are distributed among regions, countries, classes, social groups so that they can not help but sometimes form acute social problems. How to get out of this with the least economic and social costs, getting the most efficiency? Only based in practice on a systematic knowledge of the laws of economic life - economic theory. Today, for a large part of the population, the terms and concepts of "market", "price", "inflation", "unemployment", "deficit", "taxes", etc. - are not abstract categories of purely economic theory, but filled with deep meaning of phenomena affecting their everyday life. Transport is one of the most important sectors of the economy, which meets the needs of the economy and the population in transportation, but is also the largest part of the infrastructure, serves as a material and technical basis for the formation and development of territorial division of labor, has a significant impact on the dynamism and efficiency regions and the country as a whole. The decline in the level of social production in the last decade of the last century has caused a significant reduction in rail transport, which, combined with

inflation, has significantly reduced its revenues. At the same time, the need to maintain in good condition the entire material and technical base of the industry, maintaining a low level of tariffs for socially necessary passenger traffic remained. The economics of railway transport studies the conditions and develops scientific recommendations, in compliance with which a more complete and high-quality satisfaction of the needs of the economy and the population in transportation with minimal costs is achieved. It is possible to increase the efficiency of railway transport by improving its organizational structure; renewal of its fixed assets and rolling stock; introduction of the newest technologies and high-speed movement; providing new types of services and capturing new sectors of the transport market; increasing the profitability of freight and passenger transport and integration into the European transport system. The course aims to form and develop the following student competencies: 1. Value-semantic competence (involves competence in expanding the student's worldview in various economic laws and categories, it is directly related to the values of various economic phenomena, the ability to see and understand the world, navigate it, realize their role and purpose, creative orientation, be able to choose target and meaningful settings for their actions and deeds, make the right economic decisions); 2. General cultural competence (understanding of cultural, historical and regional features that have developed in Ukraine and abroad in the field of application and development of economic theory); 3. Educational and cognitive competence (formation of the student's knowledge and skills of goal-setting, planning, generating ideas, analysis, self-assessment of educational and cognitive activities, creative skills of productive activities in the process of forming economic relations. Within this competence distinguish facts from conjecture, mastery of measurement skills, the use of probabilistic, statistical and other economic methods of cognition.); 4. Information competence (with the help of economic theory the ability to independently search, analyze and select the necessary information, organize, transform, store and transmit it) is formed; 5. Communicative competence (development of the applicant's skills of teamwork through the implementation of group projects in the field of economic theory, ways of interacting

with others and individuals, the ability to present their own project and qualified discussion in the field); 6. Competence of personal self-improvement (aimed at mastering the methods of intellectual self-development, maintaining a constant thirst for self-improvement and self-knowledge by constantly searching for non-traditional approaches to solving economic issues).

Why should you choose this course? The market transformation of the economic system of Ukraine objectively requires the training of a new generation of specialists who have a thorough knowledge of the modern market economy, the laws of its development and functioning. Without such knowledge it is impossible to train not only a qualified specialist of any profile, but also a modern educated person in general. The level of economic knowledge, economic culture of citizens have always been and remain an important factor in the economic progress of society. Conversely, the lack of such knowledge becomes a factor in slowing down progress, hindering the implementation of economic reforms. This course is aimed at forming in students a holistic system of economic knowledge, modern economic thinking and economic behavior, equipping them with knowledge of methods of economic analysis, without which it is impossible to make and implement effective economic and managerial decisions. To date, despite the growth of capital investment in railway transport, the amount of available investment is insufficient to meet the needs of technical re-equipment of railway transport. On the railways, the tendency to increase the physical deterioration and obsolescence of fixed assets is progressing. The situation is complicated by the lack of real financial support from the state. If you are interested in research related to improving the efficiency of railway transport - you need this course! The economics of railway transport is based on economic theory and the theory of economic doctrines, which is the theoretical basis of this discipline. Applicants are expected to have: basic knowledge of mathematics, economic theory, basics of current legislation, macroeconomics and microeconomics. During the study of the course, issues related to the role of transport in accelerating the socio-economic development of the country are considered; organization of freight and passenger transportation; organization of

labor and wages on rail transport; operating costs and transportation costs and tariff policy on rail transport. Course overview. This course, which is studied from September to December, gives students a deep understanding of economic processes and phenomena of a market economy and practical recommendations in doing business and government regulation. An experienced team of teachers with extensive practical experience provides qualified assistance (by e-mail and in person at the specified time of consultation) for the course of the discipline in the relevant content modules: Number of ECTS credits - 3. Lectures - 30 hours. Seminars - 20 hours. Independent work - 60 hours. The total number is 110 hours. The course consists of one lecture per week and one practical lesson. It is accompanied by text material, visual examples and group tasks. Students will have the opportunity to apply the acquired knowledge and solve practical problems during discussions in the classroom and business project development.

### **Economic theory and economics of railway transport / course scheme**

Consider	Lectures	Execute
	Reference material	
	Presentations	
	Discussion in the audience	
	Group tasks	
	Individual consultations	
	Test	

### **Course resources**

Information about the course is posted on the University website (<http://kart.edu.ua>), including the curriculum, lecture materials, tasks and rules of course evaluation). Additional material and links to electronic resources are available on the University's website in the section "distance learning" along with the issues to consider during the preparation for discussion in the audience. The necessary preparation must be completed before the next lecture. You have to be prepared for discussions and brainstorming - we want to know what you think!

### **Plan of lectures, seminars**

Week	Number of hours	Lecture topic	Number of hours	Topic of practical, seminar and laboratory classes Lecture.
1	2	№1. Economic theory: content and methods of economic research. Economic systems, economic diversity	2	Sem. 1 Economic theory: content and methods of economic research. Property relations and their role in the economic system of society
2	2	Lecture.№2 Modern market, its structure and functions. Demand and supply	2	Sem. 2. Modern market, its structure and functions. Supply and demand
3	1	Lecture.№3 Enterprise (firm). Production costs and profit	1	Sem. 3. Enterprise (firm) in the system of economic relations. Entrepreneurship. Production costs.
4	2	Lecture.№4. Features of the formation of costs and profits in non-competitive markets	2	Sem. 4 Features of the formation of costs and profits in non-competitive markets
5	2	Lecture.№5. Measurement of national production. The main indicators of macroeconomics. General macroeconomic equilibrium: the model of aggregate demand and aggregate supply	2	Sem. 5 Measurement of national output. The main indicators of macroeconomics. General macroeconomic equilibrium: the model of aggregate demand and aggregate supply
6	2	Lecture.№6. Macroeconomic instability: economic cycles. Unemployment and inflation	2	Sem. 6 Macroeconomic imbalance. Theory of cycles of economic development. Macroeconomic instability: unemployment and inflation
7	2	Lecture.№7 Money and their functions. Monetary system	2	Sem. 7 Money and their functions. Demand for money. Money supply.
8	2	Lecture.№8. State regulation of the economy	2	Sem. 8 Banking system of the economy. State regulation of Economy. Forms and methods of state regulation of the economy.
Modular knowledge control				
8	2	Object, subject, tasks of the course of railway transport economics Economics of railway transport as an academic discipline. Object and subject of the discipline. Railway transport products and its features. Definition of the transport complex of the country	2	Comparative characteristics of different modes of transport
9	2	Organization and planning of freight and passenger traffic. Indicators of freight traffic. Contents of the freight plan. Qualitative indicators of freight traffic. Indicators of passenger traffic.	2	Calculation of quantitative and qualitative indicators of freight and passenger transportation of railway transport

10	2	Organization of work on railway transport. Labor productivity and ways to increase it in modern conditions. Features of the organization of work on the railway. Working hours and rest time. Ways to determine the number of staff. Labor productivity and methods of its definition.	2	Calculation of the contingent of employees. Determination of labor productivity.
11	2	Remuneration of railway workers The essence of wages. Tariff system of remuneration. Forms and systems of remuneration. Types of surcharges and the procedure for determining them. Determination of the annual salary fund.	2	Calculation of wages, annual general wage fund, average monthly wages
12	2	Operating costs of railway transport. Definition and classification of operating costs. Operating cost planning by elements. Planning of operating costs by articles.	2	Calculation of operating costs by elements and articles
13	2	Calculation of operating costs by elements and articles The cost of transportation by rail. The concept of cost of rail transport and methods of its definition. Influence of qualitative indicators of rolling stock use on transportation costs.	2	Calculation of the cost of rail transport
14	2	Tariff policy and tariffs on railway transport. Determination of tariffs. Freight railway tariffs. Differentiation of rail freight. Differentiation of passenger railway transportation. Ways to improve tariffs.	2	Determination of income generation, profit and their use.
15	1	Determining the economic efficiency of measures on railway transport.	1	Calculation of economic efficiency of measures on railway transport
<b>Modular knowledge control</b>				
<b>Credit from the discipline</b>				

### Evaluation rules

When filling in the student's test report and test book (individual curriculum), the grade given on a 100-point scale must be transferred to the national scale (5, 4, 3,) and the ECTS scale (A, B, C, D). , E)

Determination of the name on the state scale (assessment)	Determination of the name on the ECTS scale	On a 100-point scale	ECTS assessment
EXCELLENT - 5	<b>Excellent</b> - excellent performance with only a small number of errors	90-100	A
GOOD - 4	<b>Very good</b> - above average with a few errors	82-89	B

	<b>Well</b> - in general correct work with a certain number of gross errors	75-81	C
SATISFACTORY - 3	<b>Satisfactory</b> - not bad, but with a number of shortcomings	69-74	D
	<b>Enough</b> - the performance meets the minimum criteria	60-68	E
Unsatisfactory - 2	<b>Unsatisfactory</b> - you need to work before getting a test (without re-studying the module)	35-59	FX
	<b>Unsatisfactory</b> - serious further work required (re-study of the module)	<35	F

### Tasks for independent work on 1 module:

- Students are asked to choose one of 10 topic options to create their own project during the semester. For timely and correct performance of the task 20 points are accrued to the current modular control. For timely and partially correct performance - from 10 to 15 points. Points are not awarded for a failed task. The course of the current task and questions for discussion are sent to the teacher's e-mail or checked by him personally.
- Students should review one student's or group's work during the semester in person and express their critical remarks.

№	Project topics
	Name topics
1	Pricing in different types of markets.
2	National economy as an object of economic theory.
3	The law of demand and its explanation by the basic provisions of the theory of consumer behavior.
4	Employment and unemployment in the domestic economy.
5	Monetary policy of the National Bank of Ukraine.
6	The role of the public sector in stabilizing the national economy.
7	Features of the capital market in Ukraine.
8	Trends in property development in Ukraine and in the world.
9	Features of the formation of labor markets, land and capital in Ukraine.
10	Demand for goods in a perfectly competitive market.

**Attending lectures:** Points for this component are accrued in general, if the student did not attend more than 50% of lectures in the module without good reason. 0.4 points are awarded for attending each lecture. The maximum amount is 6 points.

**Degree of involvement:** The purpose of the course is to engage you in a discussion, expand your learning opportunities for yourself and your peers, and give



you another way to test your knowledge of law. Participation will be evaluated based on the number and accuracy of your answers. Issues, although encouraged, are not evaluated in this block. We strive to provide all students with equal and fair opportunities to increase their own involvement. The maximum amount is 10 points.

**Practical training:** Evaluated by attendance (up to 6 points), degree of involvement (up to 3 points) and work on tasks (up to 15 points). The maximum amount is 24 points.

**Modular testing:** Evaluated by the correct answers to the test modular questions (12 questions in the test, each correct answer is evaluated at 3.3 points). The maximum number is 40 points per module.

**Tasks for independent work on the 2nd module:** ● Students are asked to choose one of 50 topics to write an essay. For timely and correct performance of the task 20 points are accrued to the current modular control. Points are not awarded for a failed task. The course of the current task and questions for discussion are sent to the teacher's e-mail or checked by him personally. ● Students should review one student's work during the semester in person and express their critical remarks.

Topics of abstracts:

1. Planning of the contingent of railway transport workers. Factors that affect productivity.
2. What costs are part of the cost of works at railway enterprises.
3. Tariff system on railway transport and its components.
4. Features of the organization of work on railway transport.
5. The essence and importance of economic efficiency. Basic principles of determining economic efficiency.
6. Classification of operating costs by elements
7. The value of measures of scientific and technological progress.
8. The main indicators of the plan of labor and wages. Features of the organization of work on railway transport.
9. The essence and significance of the economic effect.

10. Revenues of railways from transportation and their structure. Revenue planning.
11. Products and operation of railway transport, its meters. Features of transport products.
12. Available and accounting contingent and their calculation.
13. The essence of wages. Forms and systems of remuneration. Tariff system.
14. Profit of the enterprise. Types of profit.
15. Determination of the total annual salary fund. Basic and additional salary funds.
16. The essence of wages.
17. Productivity. Indicators of increasing productivity.
18. Methods for determining the contingent of railway transport.
19. Factors that affect productivity.
20. The concept of cost of rail transport. Methods for determining the cost of rail transport.
21. Basic principles of labor organization in railway transport.
22. Operating cost planning. Nomenclature of costs and grouping of costs by main features.
23. Features of transport and transport products as a sphere of material production.
24. Classification of operating costs.
25. The essence and importance of economic efficiency.
26. Indicators of efficiency of use of fixed assets.
27. Basic principles of determining economic efficiency.
28. What types of valuations are taken into account fixed assets.
29. Performance indicators of fixed assets.
30. Depreciation of fixed assets and depreciation.
31. Work planning and locomotive fleet.
32. The cost of transportation. Features of determining the cost of rail transport.

33. Fixed assets of railway transport - definition, classification, structure, accounting.

34. General definition of production costs. Factors influencing cost reduction.

35. The essence of the innovation event.

36. Characteristics of the material and technical base of railway transport. The main directions of its development.

37. Physical and moral depreciation of fixed assets. Indicators of the use of fixed assets.

38. The concept of profit. Profitability of fixed assets.

39. Operational work of railway transport. What documents regulate the operational work of railways. 40. Railway transport as a sphere of material production.

41. The impact of quality indicators of rolling stock use on the cost of transportation.

42. The main production assets of railway transport

43. Factors influencing the reduction of the cost of railway transport products.

44. How revenues from freight are determined.

45. How are revenues from passenger traffic determined?

46. Tariffs on railway transport and how they are divided.

47. The main directions of improving the tariff policy on railway transport.

48. Criteria of comparative economic efficiency.

49. The essence of the method of unit cost rates.

50. The essence of the method of calculating costs for individual items of the cost nomenclature.

**Attending lectures:** Points for this component are not accrued at all, if the student did not attend more than 50% of lectures in the module without good reason. 1 point is awarded for attending each lecture. The maximum amount is 8 points.

**Degree of involvement:** The purpose of participating in the course is to involve you in the discussion, to expand learning opportunities for yourself and your peers. Participation will be evaluated based on the number and accuracy of your

answers. Issues, although encouraged, are not evaluated in this block. We strive to provide all students with equal and fair opportunities to increase their own involvement. The maximum amount is 12 points.

**Practical training:** Evaluated by the degree of activity of students in the classroom. The maximum amount is 20 points. Modular testing: Evaluated by the correct answers to the test modular questions. The maximum number is 40 points per module.

**Test:** ● The student receives a credit for the results of the modular 1st and 2nd control by accumulating points. The maximum number of points that a student can receive is 100 (up to 60 points of current control and up to 40 points of testing). The arithmetic mean of the sum of modular grades is the credit score. If the student does not agree with the proposed scores, he can increase them on the test, answering questions from the teacher.

### **Expected learning outcomes**

This discipline will allow students to form an economic worldview on current issues: the solution of economic issues of individuals, certain sectors of the economy - railways or government agencies. Consideration of this course will allow students to learn to separate essential economic information from insignificant and understand the peculiarities of the development of Ukraine's economy. Solving problems, considering specific situations, students learn different methods of economic analysis, independently assess the economic reality and draw conclusions about the best business solutions for the available limited resources and alternative uses.

### **Teacher team:**

● Kosych Maryna Vasylivna (<http://kart.edu.ua/2015-09-15-11-05>) - lecturer on economic theory at UkrDUZT. Received the degree of Ph.D. in the specialty 08.01.01 - "Economic Theory" at Kharkiv National University. V.N. Karazin in 2005. Areas of research: natural monopolies.

● Kudelya Victoria Ivanivna (<http://kart.edu.ua/pro-kafedru-ekbiupt-ua/kolectuv-kafedru-ekbiypt-ua/kudelya-viktoriya-ivanivna>) - lecturer, Candidate

of Economic Sciences, Associate Professor of the Department of Economics , business and personnel management on transport UkrDUZT. Candidate of Economic Sciences (2006, specialty 08.07.04 - Economics of Transport and Communications). Areas of scientific activity: ways to increase the competitiveness of rail freight, investment and innovation development of the railway complex of Ukraine, risk management, economics of railway transport.

- Myroshnychenko Yuliya Volodymyrivna (<http://kart.edu.ua/kafe-ekbiupt-ua/kolectuv-kafedru-ekbiupt-ua/myroshnychenkoyuv-ua>) - lecturer on the organization of production at railway transport enterprises in UkrDUZT. Received the degree of Ph.D. in the specialty 08.00.03 - "Economics and Management of the National Economy" in UkrDUZT in 2011. Areas of research: social policy of the state in passenger transport by rail; ways to increase the competitiveness of passenger rail transport; strategic development of railway transport enterprises; macroeconomic instability and its consequences for the country's economy; labor economics and social - labor relations; personnel policy at enterprises.
- Chelyadinova Natalia Gennadiyivna (<http://kart.edu.ua/pro-kafedru-ekbiupt-ua/kolectuv-kafedru-ekbiupt-ua/chelyadinova-nataliya-gennadiivna>) - lecturer, Ph.D., associate professor of economics , business and personnel management on transport UkrDUZT. Received the degree of Ph.D. in the specialty 08.00.03 - "Economics and Management of the National Economy" in UkrDUZT in 2012. Areas of research: innovation and investment development of railway transport; ways to increase the competitiveness of rail transport; personnel management; economics of railway transport.

### **Code of Academic Integrity**

Violation of the Code of Academic Integrity of the Ukrainian State University of Railway Transport is a serious violation, even if it is unintentional. The code is available at: <http://kart.edu.ua/documentu-zvo-ua> In particular, compliance with the Code of Academic Integrity of UkrDUZT means that all work on exams and tests must be performed individually. When working independently, students can consult

with teachers and other students, but must solve problems on their own, guided by their own knowledge, skills and abilities. References to all resources and sources (for example, in reports, independent papers or presentations) should be clearly identified and properly designed. In the case of s working closely with other students on individual tasks, you must indicate the degree of their involvement in the work.

### **Integration of students with disabilities**

Higher education is a leading factor in raising social status, achieving spiritual, material independence and socialization of young people with disabilities and reflects the state of development of democratic processes and humanization of society. To integrate students with disabilities into the educational process of the Ukrainian State University of Railway Transport, a system of distance learning based on modern pedagogical, information, telecommunication technologies has been created. Access to distance learning materials from this course can be found at: <http://do.kart.edu.ua/>