(Ф 03.02 – 92)

NATIONAL AVIATION UNIVERSITY

Faculty of Economics and Business Administration

Logistics Department

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| AGREEDActing Dean of the Faculty of Economics and Business Administration \_\_\_\_\_\_\_\_\_\_\_\_ S. Petrovska «\_\_\_»\_\_\_\_\_\_\_\_\_\_\_\_2018 | APPROVED Vice-Rector for Academics  and Educative Activity \_\_\_\_\_\_\_\_\_\_\_\_Т. Ivanova «\_\_\_»\_\_\_\_\_\_\_\_\_\_\_\_2018 |

Quality management system

**Course Training Program**

**on**

**«Systems Approach in Logistics»**

Field of study: 07 «Management and Administration»

Speciality: 073 «Management»

Specialization: «Logistics»

Year of study –2 Semester – 4

Lectures - 34 Graded Test – 4 semester

Practicals - 17

Self-study - 39

Total (hours/credits ECTS) – 90/3

Homework (1) – 4 semester

Index ECB-6-073/16-3.13

**QMS NAU CTP11.02.04-01-2018**

The Course Training Program on “Systems Approach in Logistics” is based on the Bachelor Extended Curriculum № ECB-6-073/16 for Speciality 073 «Management» and Specialization «Logistics», Syllabus for this Subject, Index CB-6-073/16-3.13, approved by the Rector“” 2018 and correspondent normative documents.

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Discussed and approved by the Scientific-Methodological-Editorial Board of the Faculty of Economics and Business Administration, Minutes №\_\_of “\_\_\_\_\_”2018.

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**1. INTRODUCTION**

Course Training Program of the course was developed based on the Syllabus of discipline “Systems Approach in Logistics” and “The guidelines for the development and execution of Syllabus and Course Training Program”, enacted by decree 16.06.15 №37/роз.

**2. SUBJECT CONTENT**

**2.1. Training schedule of the subject**

|  |  |  |
| --- | --- | --- |
| №  | Topic(Thematic section) | Academic Hours |
| All | Lectures | Practicals | Self- stud |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Module №1 «Systems approach as basis of managerial activity» |
| 1.1 | Subject, methods and objectives of the course | 9 | 22 | 2 | 3 |
| 1.2 | Concept of system and logistics system | 9 | 22 | 2 | 3 |
| 1.3 | Composition of system. Structure logistics systems. | 9 | 22 | 2 | 3 |
| 1.4 | Classification of systems and relationships within systems. | 9 | 22 | 2 | 3 |
| 1.5 | Module test №1 | 4 | 2 | - | 2 |
| **Total for the module №1** | **40** | **18** | **8** | **14** |
| Module №2 «Systems Analysis in Logistics» |
| 2.1 | Modelling of logistics systems | 7 | 2 | 2 | 3 |
| 2.2 | Information in systems analysis | 7 | 2 | 2 | 3 |
| 2.3 | Behaviour and development of systems.Systems management. | 9 | 22 | 2 | 3 |
| 2.4 | Procedures and methods of systems analysis. | 9 | 22 | 2 | 3 |
| 2.5 | Analysis and synthesis of logistics systems. | 6 | 2 | 1 | 3 |
| 2.6 | Performance of the homework | 8 | - | - | 8 |
| 2.7 | Module test №2 | 4 | 2 | - | 2 |
| **Total for the module №2** | **50** | **16** | **9** | **25** |
| **Total for the subject** | **90** | **34** | **17** | **39** |

**2.1.1. Homework**

During mastering of the course “Systems Approach in Logistics” the students are supposed to conduct the homework entitled “Systems Analysis of Logistics Systems”.

The homework on the course is performed in the 4th semester with the aim of improving the theoretical knowledge and the skills obtained during the mastering of the academic discipline in the sphere of systems approach (SA) to logistics.

The aim of the homework is enhancement, generalization and deepening of the knowledge and use of methodology of SA in logistics as the prerequisites to the formation of the future subject of decision-making in logistics systems, supporting independent problem-solving for specific tasks of systems analysis and obtaining the skills of logistics systems development for a case study (an enterprise).

The execution, formatting and defense of the HW is carried out by the student individually in accordance with the methodical recommendations.

Time is needed to carry out each home task – 8 hours of self-study.

**3. BASIC CONCEPTS OF GUIDANCE ON THE SUBJECT**

**3.1. List of References**

**The basic literature**

* + 1. Вдовин В. М., Суркова Л. Е., Валентинов В. А. Теориясистем и системныйанализ: учебник. Издательско-торговаякорпорация «Дашков и К». – 2016. – 644 с.
		2. Сурмин Ю. П. Теориясистем и системныйанализ: Учеб. пособие. — К.: МАУП, 2003. — 368 с.:Библиогр. в концеглав.
		3. Федулов Ю. Г., Юсов А. Б. Теориясистем: монографія. Директ-Медиа. – 2015. – 366 с.
		4. Jackson, M. Systems Thinking: Creative Holism for Managers, Chichester: John Wiley & Sons, Ltd. – 2003.
		5. Lin, Y. General Systems Theory: A Mathematical Approach. Springer Science & Business Media. – 2006. – 382 p.
		6. Meadows, D.H. Thinking in Systems: A Primer, Chelsea Green Publishing. – 2008.
		7. Miller, J.H., and Page, S.E. Complex Adaptive Systems. An Introduction to Computational Models of Social Life. Princeton: Princeton U.P. – 2007.
		8. Sterman, J. Business Dynamics: Systems thinking and modeling for a complex world. Boston: McGraw Hill. – 2010.
		9. Weinberg, G.M. An Introduction to General Systems Thinking. Dorset House Publishing Company, Incorporated; 25 Anv edition, April. 2011.

**The additional literature**

* + 1. Ременников В.Б. Разработкауправленческогорешения. Учеб. Пособие. – М.: ЮНИТИ-ДАНА. – 2000.
		2. Christopher, W.F. Holistic Management: Managing What Matters for Company Success. Hoboken: Wiley Interscience. – 2007.
		3. Mele, C., Polese, F. Key dimensions of Service Systems: Interaction in social & technological networks to foster value co-creation, in Demirkan, H., Spohrer, J., Krishna, V. (eds.). The Science of Service Systems. Springer. – 2010.

**3.2. List of basic guidance materials for the subject**

|  |  |  |  |
| --- | --- | --- | --- |
| № | The name of the material | Code topics for thematic plan | The number of |
| 1. | Lecture notes | 1.1−1.42.1-2.5 | electronic version |
| 2. | Methodological recommendations for performance of practicals classes | 1.1−1.42.1-2.5 | electronic version |
| 3. | Methodological recommendations for carry out homework | 2.6 | electronic version |
| 4. | Methodological recommendations for performance of self-study on mastering of educational material | 1.1−1.52.1-2.7 | electronic version |

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

4.1. Grading of different kinds of academic work performed by a student is done in accordance with Table 4.1.

Table 4.1

|  |  |  |
| --- | --- | --- |
| **Module №1** | **Module №2** | Мах Grade |
| Kind of academic activities | Мах grade | Kind of academic activities | Мах grade |
| Response to questions at practical class (4 points\*4) | 16 | Response to questions at practical class (4 points\*5)  | 20 |  |
| Performance of individual practical assignment(8 points\*1) | 8 | Performance of individual practical assignment(8 points\*1) | 8 |
| Performance and defense of the homework | 6 |
| *For carrying out module test № 1,the student must score not less than 15 values* | *For carrying out module test № 2, the student must score not less than 22 values* |
| Carrying out module test №1 | 15 | Carrying out module test №2 | 15 |
| **Total for the module 1** | **39** | **Total for the module 2** | **49** |
| **Semester graded test** | **12** |
| **Total for the subject** | **100** |

4.2. The completed curricular activity is accounted if the student received a positive mark according to the national scale given in table 4.2 below

Table 4.2

Correspondence between the Grades and the National Scale

|  |  |
| --- | --- |
| Grades | National scale |
| Response to questions at practical class | Performance of individual practical assignment | Carrying out homework №1 | Carrying out module tests |
| 4 | 8 | 6 | 14-15 | Excellent |
| 3 | 6-7 | 5 | 12-13 | Good |
| 2,5 | 5 | 4 | 9-11 | Satisfactory |
| Less than 2,5 | Less than5 | Less than 4 | Less than 9 | Bad |

4.3. The grades a student has been given for the different kinds of academic work are summed up and the result constituting a Current Module Grade is entered into the Module Grade Register.

4.4. The Current Module Grade and the Module Test Grade together represent a Total Module Grade whose correspondence to the National Scale is shown in Table 4.3.

Table 4.3

Correspondence between the Total Module Grades and the National Scale

|  |  |  |
| --- | --- | --- |
| Module №1 | Module №2 | National scale |
| 35-39 | 44-49 | Excellent |
| 29-34 | 37-43 | Good |
| 24-28 | 30-36 | Satisfactory |
| Less than24 | Less than30 | Bad |

4.5. The Semester Module Grade is calculated as the Total Module Grades. The correspondence between Semester Module Grade values and the National Scale is given in Table 4.4. Correspondence between the Graded Test Grades and the National Scale is given in Table 4.5.

|  |  |  |
| --- | --- | --- |
| Table 4.4 |  | Table 4.5 |
| Correspondence between the Semester Module Grades and the National Scale |  | Correspondence between the Graded Test Grades and the National Scale |
| Grades | National scale |  | Grades | National scale |
| 79-88 | Excellent |  | 12 | Excellent |
| 66-78 | Good |  | 10 | Good |
| 53-65 | Satisfactory |  | 8 | Satisfactory |
| Less than 53 | Bad |  |  |  |

4.6. The Semester Module Grade and the Semester Graded Test Grade together make up a Total Semester Grade whose correspondence to the National Scale and the ECTS Scale is shown in Table 4.6.

Table 4.6

Correspondence between Total Semester Grade in the National Scale and the ECTS Scale

|  |  |  |
| --- | --- | --- |
| Grades | National scale | ECTS Scale |
| Grades | Explanation |
| **90-100** | Excellent | **А** | **Excellent**(excellent carrying out with few mistakes) |
| **82-89** | Good | **В** | **Good**(above average with some mistakes) |
| **75-81** | **С** | **Good**(in general, correct carrying out with a number of significant mistakes) |
| **67-74** | Satisfactory | **D** | **Satisfactory**(not bad, but a lot of mistakes) |
| **60-66** | **Е** | **Satisfactory**(carrying out meets the minimum criteria) |
| **35-59** | Bad | **FХ** | **Bad**(with the possibility of re-compiling) |
| **1-34** | **F** | **Bad**(with obligatory repeated course) |

4.7. The Total Semester Grade is entered into the Examination Register and into a student’s record book in values, National Scale grades, and ECTS Scale grades.

4.8. The Total Semester Grade is entered into a student’s record book, for example: ***92/Ex/А****,* ***87/Good/В****,* ***79/Good/С****,* ***68/Sat./D****,* ***65/Sat./Е*** etc.

4.9. The Total Grade for the discipline is equal to the Total Semester Grade.

The Total Grade for the discipline is entered to the Diploma Supplement.

**(Ф 03.02 – 01)**

**АРКУШ ПОШИРЕННЯ ДОКУМЕНТА**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| №прим. | Кудипередано (підрозділ) | Датавидачі | П.І.Б. отримувача | Підписотримувача | Примітки |
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**(Ф 03.02 – 02)**

**АРКУШ ОЗНАЙОМЛЕННЯ З ДОКУМЕНТОМ**

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| --- | --- | --- | --- | --- |
|  № пор. | Прізвищеім'япо-батькові | Підписознайомленоїособи | Датаознайом-лення | Примітки |
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**(Ф 03.02 – 04)**

**АРКУШ РЕЄСТРАЦІЇ РЕВІЗІЇ**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  № пор. | Прізвищеім'япо-батькові | Датаревізії | Підпис | Висновокщодоадекватності |
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|  |  |  |  |  |
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**(Ф 03.02 – 03)**

**АРКУШ ОБЛІКУ ЗМІН**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| № зміни | № листа (сторінки) | Підписособи, якавнеслазміну | Датавнесеннязміни | Датавведеннязміни |
| Зміненого | Заміненого | Нового | Анульо-ваного |
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**(Ф 03.02 – 32)**

**УЗГОДЖЕННЯ ЗМІН**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Підпис | Ініціали, прізвище | Посада | Дата |
| Розробник |  |  |  |  |
| Узгоджено |  |  |  |  |
| Узгоджено |  |  |  |  |
| Узгоджено |  |  |  |  |