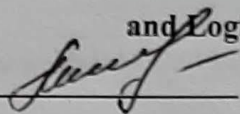


MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
SUMY NATIONAL AGRARIAN UNIVERSITY

Marketing and Logistic Department

APPROVED BY
Head of Marketing

and Logistic Department


Lyshenko M.O.

“ 06 ” 07 2020y.

SYLLABUS FOR EDUCATIONAL DISCIPLINE (SYLLABUS)

3III 6 “LOGISTICS”

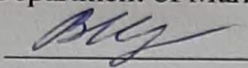
Direction of training: 073 “Management”

Educational program: Management

Faculty: Economics and Management

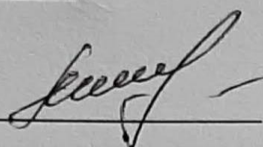
2020-2021 academic year

Syllabus of the educational discipline "Logistics" for students of direction training 073 "Management".

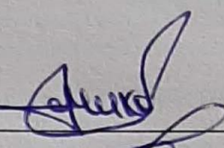
Compiled by: PhD Senior Lecturer of Department of Marketing and Logistic
Shumkova V.I. 

Syllabus endorsed by *Marketing and Logistic Department*

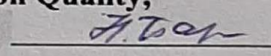
Protocol № 15 from 23.06.2020

Head of Department  Lyshenko M.O.

AGREED:

Guarantor of the educational program  (A.M. Mykhailov)

Dean of the Faculty  (N.I. Strochenko)

Methodist of the Department of Education Quality,
Licensing and Accreditation  (T.M. Boyaruk)

Registered in the electronic database: date: 06.07.2020 y.

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1. Description of the discipline

Indicators	Direction of training, education level	Characteristics of discipline
		daily form
Amount of credits - 5	Field of knowledge: 07 Management and Administration	<i>Normative</i>
	Direction of training: <i>073 Management</i>	
Modules – 2		Year of training:
Content modules: 3		2020-2021
Individual task:		Course
		4
		Semester
Total amount of hours - 150		7
		Lectures
Hours for week: classes – 4 individual work - 4		46 h
		practical classes
		30 h
	Laboratory	
	-	
	Individual work	
	74 h	
	Individual tasks:	
-		
Type of control: <i>exam</i>		

Ratio amount of hours of classes to individual work (%):
for daily form - 50,67/49,33 (76/74)

2. The purpose and objectives of the discipline

2.1. Purpose: To obtain knowledge on the management of material, information and other flows using logistic approach in the areas of production and circulation, effective operation of logistics systems at the micro and macro level.

2.2. Objective: To study the methodology of material and related information flows based on systematic approach in the production and circulation.

2.3. Following the completion of discipline a student:

must know: the essence of modern logistics concepts, types of material flow, logistics operations and systems, the nature and objectives of the procurement logistics concept production, distribution, transport and information logistics, species distribution centers in logistics chains, information flows in logistics, principles of logistics information management system of material inventory essence of logistics services, logistics service description, the essence of logistics costs.

will be able to: determine the novelty of logistic approach in management of resources, determine the form of material flow, group and choose the best vendor to determine the economic size of the order, calculate the optimal number of intermediaries in the distribution channels, to choose the type of vehicle, to analyze ABC-XYZ to manage inventory, calculate degree the efficiency of the logistics system and evaluate it to determine the parameters of the logistic service.

3. The program of the course

(Approved by the State Institution "Scientific and Methodological Center for Information and Analytical Support of higher educational institutions "Agrosvita" from 28.01.2016)

Content module 1. *Theoretical basis of the study of logistics*

Theme 1. *Logistics as an instrument of the market economy.* The concept, essence and tasks of logistics. Preconditions, causes and stages of the logistics development. Goal, objectives and functions of logistics. Kinds of logistics. Relationships with other corporate functions. Logistics organizational structures. Organizational integration. The role of the logistics or distribution manager.

Theme 2. *Materials flow and logistics operations.* Material flow and its characteristics. Type of material flows. Logistics operations.

Theme 3. *Concepts of Logistics system design.* Purpose of Logistics Systems. Physical Structure of the System. Management Structure of Logistics Systems. Information Flow. Types of Inventory Control Systems. Storekeeping.

Theme 4. *Solving Inventory Management Problems.* The significance of inventories in a firm's operation. Relevant Costs. Classification of Inventory Management Models. Codification and standardization

Theme 5. *Designing the Logistics Network.* Classification of Location Problems. Single-Echelon Single-Commodity Location Models. Two-Echelon Multicommodity Location Models. Logistics Facility Location in the Public Sector. Data Aggregation.

Content module 2. *Theoretical basis of procurement and production logistics*

Theme 6. *Procurement logistics.* The essence and objectives of procurement logistics. The task of "make or buy". Choosing a supplier. Determining the economic order quantity. The system supplies "just in time" in the procurement logistics.

Theme 7. *Purchasing and supply relationships.* Choosing the right supply relationships. Partnerships in the supply chain. Supply base rationalization. Supplier networks. Supplier development. Implementing strategic partnerships.

Theme 8. *Supply chain management.* What is supply chain management. The development chain. Supply Chain Principles, methodology and solutions. Global optimization. Managing uncertainty and risk. The evolution of supply chain management. The complexity. Key issues in supply chain management.

Theme 9. *Monitoring and Evaluation of Supply Chains.* Objectives. Monitoring and Evaluation basics. Developing an M&E Plan. Indicators for M&E of Supply Chains. Data Collection Methodologies. Data Collection Tools. Providing feedback and Reporting.

Theme 10. *Supply chain planning and control.* Planning and control within the focal firm. Managing inventory in the supply chain. Inter-firm planning and control. Just-in-time (JIT). Lean thinking.

Theme 11. *Concept of materials management in production logistics.* Approaches to materials management in production logistics. Logistics concept «MRP». Micro-logistic system KANBAN.

Theme 12. *Value and logistics costs.* Where does value come from? How can logistics costs be represented? Activity-based costing (ABC). A balanced measurement portfolio.

Theme 13. *Competing through logistics. Hard objectives.* Supportive capabilities. Soft objectives. Order winners and qualifiers.

Theme 14. *Logistics strategy.* Defining “strategy”. Aligning strategies. Differentiating strategies.

Content module 3. *Distribution logistics, transportation logistics and logistics of services*

Theme 15. *Logistics of distribution.* The essence of distribution logistics. Logistics intermediaries in distribution channels. Distribution centers in the supply chain. Why have a warehouse. Types of warehouses. Today’s warehouse requirements. Problem areas in Warehousing. Changing trends of warehousing. Retail warehousing. Warehouse management system. Warehousing functions. Warehousing costs. Value adding activities in a warehouse.

Theme 16. *Maximum-Minimum Inventory Control Systems.* Inventory and the reasons for their creation. Inventory management systems. Purpose of an Inventory Control System. Key Inventory Control Terms. Three Types of Max-Min Inventory Control Systems. Determining How Much to Order or Issue. Determining When to Place an Order or Issue. Setting Max-Min Levels. Two Design Issues for Inventory Control Systems. Selecting an Appropriate Max-Min System.

Theme 17. *Putting the end-customer first.* The marketing perspective. Segmentation. Quality of service. Setting priorities for logistics strategy.

Theme 18. *Transport logistics.* Nature and objectives of transport logistics. Selection of the type of vehicle.

Theme 19. *Global transport logistics. Development in trade networks.* Trends in logistics. Different levels of integration. Outsourcing of logistics activities. Policy recommendations.

Theme 20. *Managing logistics internationally.* Drivers and logistics implications of internationalisation. Logistical implications of internationalisation. Time-to-market. Global consolidation. Risk in international logistics. The tendency towards internationalisation. The challenges of international logistics and location. Organising for international logistics. Reverse logistics.

Theme 21. *Intermodality and logistics.* The need for sustainable transport. Characteristics of intermodal transport. Logistics and intermodal transport. Policy recommendations.

Theme 22. Provision of logistics infrastructure. The need for logistics infrastructure development. The need for new financing and operating schemes. Partnership between public and private sectors. Minimising costs of infrastructure projects. Distribution of costs. Regional issues. Policy recommendations.

Theme 23. Information and communication technology (ICT) developments for supporting logistics. Advancement of logistics in the information society. Effects of advanced information technologies and technological innovation on logistics. Policy recommendations.

4. Structure of the course

Numbers and names of themes	Amount of hours					
	daily form					
	total	including				
l		p	l	in	iw	
Module 1. Conceptual foundations of logistics						
Content module 1. Theoretical basis of the study of logistics						
Theme 1. Logistics as an instrument of the market economy.	14	2	2			10
Theme 2. Materials flow and logistics operations.	4	2	2			
Theme 3. Concepts of Logistics system design.	4	2	2			
Theme 4. Forecasting Logistics Requirements.	10	2				8
Theme 5. Designing the Logistics Network.	2	2				
Total for content module 1	34	10	6			18
Content module 2. Procurement and production logistics						
Theme 6. Procurement logistics.	4	2	2			
Theme 7. Purchasing and supply relationships.	4	2	2			
Theme 8. Supply chain management.	12	2	2			8
Theme 9. Monitoring and Evaluation of Supply Chains.	10	2				8
Theme 10. Supply chain planning and control.	4	2	2			
Theme 11. Concept of materials management in production logistics.	2	2				
Theme 12. Value and logistics costs.	2	2				
Theme 13. Competing through logistics.	2	2				
Theme 14. Logistics strategy.	2	2				
Total for content module 2	42	18	8			16
Total for module 1	76	28	14			34
Module 2. Logistics as a factor in increasing the competitiveness of the enterprise						
Content module 3. Distribution logistics, transportation logistics and logistics of services						
Theme 15. Logistics of distribution.	18	2	6			10
Theme 16. Maximum-Minimum Inventory Control Systems.	18	2	4			12
Theme 17. Putting the end-customer first.	2	2				
Theme 18. Transport logistics.	4	2	2			
Theme 19. Global transport logistics.	4	2	2			
Theme 20. Managing logistics internationally.	12	2				10
Theme 21. Intermodality and logistics.	2	2				
Theme 22. Provision of logistics infrastructure.	10	2				8
Theme 23. Information and communication technology (ICT) developments for supporting logistics.	4	2	2			
Total for module 2	74	18	16			40
Total	150	46	30			74

5. Themes of lectures and their plans

№	Names of themes	Amount of hours
1	<p>Theme 1. Logistics as an instrument of the market economy.</p> <ol style="list-style-type: none"> 1. The concept, essence and tasks of logistics. 2. Preconditions, causes and stages of the logistics development. 3. Goal, objectives and functions of logistics 4. Kinds of logistics 	2
2	<p>Theme 2. Materials flow and logistics operations.</p> <ol style="list-style-type: none"> 1. Material flow and its characteristics. 2. Type of material flows. 3. Logistics operations. 4. Material flow analysis. 	2
3	<p>Theme 3. Concepts of Logistics system design.</p> <ol style="list-style-type: none"> 1. Purpose of Logistics Systems. 2. Physical Structure of the System. 3. Management Structure of Logistics Systems. 4. Information Flow. 5. Types of Inventory Control Systems. Storekeeping. 	2
4	<p>Theme 4. Solving Inventory Management Problems.</p> <ol style="list-style-type: none"> 1. The significance of inventories in a firm's operation 2. Relevant Costs. 3. Classification of Inventory Management Models 4. Codification and standardization 	2
5	<p>Theme 5. Designing the Logistics Network.</p> <ol style="list-style-type: none"> 1. Classification of Location Problems. 2. Single-Echelon Single-Commodity Location Models. 3. Two-Echelon Multicommodity Location Models. 4. Logistics Facility Location in the Public Sector. 5. Data Aggregation. 	2
6	<p>Theme 6. Procurement logistics.</p> <ol style="list-style-type: none"> 1. The essence and objectives of procurement logistics. 2. The task of "make or buy". 3. Choosing a supplier. 4. Determining the economic order quantity. 5. The system supplies "just in time" in the procurement logistics. 	2
7	<p>Theme 7. Purchasing and supply relationships.</p> <ol style="list-style-type: none"> 1. Choosing the right supply relationships. 2. Partnerships in the supply chain. 3. Supply base rationalization. 4. Supplier networks. 5. Supplier development. Implementing strategic partnerships. 	2
8	<p>Theme 8. Supply chain management.</p> <ol style="list-style-type: none"> 1. What is supply chain management? 2. The development chain. 3. Supply Chain Principles, methodology and solutions. 4. Global optimization. 5. Managing uncertainty and risk. 	2

9	Theme 9. Monitoring and Evaluation of Supply Chains. <ol style="list-style-type: none"> 1. Objectives. 2. Monitoring and Evaluation basics. 3. Developing an M&E Plan. 4. Indicators for M&E of Supply Chains. 	2
10	Theme 10. Supply chain planning and control. <ol style="list-style-type: none"> 1. Planning and control within the focal firm. 2. Managing inventory in the supply chain. 3. Inter-firm planning and control. 4. Just-in-time (JIT). Lean thinking. 	2
11	Theme 11. Concept of materials management in production logistics. <ol style="list-style-type: none"> 1. Approaches to materials management in production logistics. 2. Logistics concept “MRP”. 3. Micro-logistic system KANBAN. 	2
12	Theme 12. Value and logistics costs. <ol style="list-style-type: none"> 1. Where does value come from? 2. How can logistics costs be represented? 3. Activity-based costing (ABC). 4. A balanced measurement portfolio. 	2
13	Theme 13. Competing through logistics. <ol style="list-style-type: none"> 1. Hard objectives. 2. Supportive capabilities. 3. Soft objectives. 4. Order winners and qualifiers. 	2
14	Theme 14. Logistics strategy. <ol style="list-style-type: none"> 1. Defining “strategy”. 2. Aligning strategies. 3. Differentiating strategies. 	2
15	Theme 15. Logistics of distribution. <ol style="list-style-type: none"> 1. The essence of distribution logistics. 2. Logistics intermediaries in distribution channels. 3. Distribution centers in the supply chain. 4. Why have a warehouse. Types of warehouses. 5. Today’s warehouse requirements. 6. Warehousing functions. 7. Warehousing costs. 8. Retail warehousing. 	2
16	Theme 16. Maximum-Minimum Inventory Control Systems. <ol style="list-style-type: none"> 1. Inventory and the reasons for their creation. 2. Inventory management systems. 3. Purpose of an Inventory Control System. 4. Key Inventory Control Terms. 5. Three Types of Max-Min Inventory Control Systems. 6. Determining How Much to Order or Issue. 	2
17	Theme 17. Putting the end-customer first. <ol style="list-style-type: none"> 1. The marketing perspective. 2. Segmentation. 3. Quality of service. 4. Setting priorities for logistics strategy. 	2
18	Theme 18. Transport logistics. <ol style="list-style-type: none"> 1. Nature and objectives of transport logistics. 2. Selection of the type of vehicle. 	2

19	Theme 19. Global transport logistics. 1. Development in trade networks. 2. Trends in logistics. 3. Different levels of integration. 4. Outsourcing of logistics activities. Policy recommendations.	2
20	Theme 20. Managing logistics internationally. 1. Drivers and logistics implications of internationalization. 2. Logistical implications of internationalization. 3. Time-to-market. 4. Global consolidation. 5. Risk in international logistics.	2
21	Theme 21. Intermodality and logistics. 1. The need for sustainable transport. 2. Characteristics of intermodal transport. 3. Logistics and intermodal transport. Policy recommendations	2
22	Theme 22. Provision of logistics infrastructure. 1. The need for logistics infrastructure development. 2. The need for new financing and operating schemes. 3. Partnership between public and private sectors.	2
23	Theme 23. Information and communication technology (ICT) developments for supporting logistics. 1. Advancement of logistics in the information society. 2. Effects of advanced information technologies and technological innovation on logistics. Policy recommendations.	2
Total		46

6. Themes of practical classes

№	Names of themes	Amount of hours
1	Practical class 1. Logistics as a science of materials management	2
2	Practical class 2. Material flows and logistic operations	2
3	Practical class 3. Logistic systems and chains	2
4	Practical class 4. Procurement logistics	2
5	Practical class 5. Purchasing and supply relationships.	2
6	Practical class 6. Supply chain management.	2
7	Practical class 7. Supply chain planning and control.	2
8	Practical class 8. Logistic of distribution (part 1)	2
9	Practical class 9. Logistic of distribution (part 2)	2
10	Practical class 10. Logistics organization of warehouse	2
11	Practical class 11. Transport logistics	2
12	Practical class 12. Global transport logistics.	2
13	Practical class 13. Logistics of stocks and logistics service	2
14	Practical class 14. Logistics of stocks (part 1)	2
15	Practical class 15. Logistics of stocks (part 2)	2
Total		30

7. Individual work

№	Names of topics	Amount of hours
1	Theme 1. Logistics as an instrument of the market economy. 1. Relationships with other corporate functions 2. Logistics organizational structures 3. Organizational integration 4. The role of the logistics or distribution manager	10
2	Theme 2. Basic inventory planning and management. 1. The need to hold stocks 2. Inventory replenishment systems 3. Demand forecasting	8
3	Theme 3. Supply chain management. 1. The evolution of supply chain management. 2. The complexity. 3. Key issues in supply chain management.	8
4	Theme 4. Monitoring and Evaluation of Supply Chains. 1. Supply chain security and risk 2. Corporate vs. supply chain security 3. Methodology	8
5	Theme 5. Logistics of distribution. 1. Problem areas in Warehousing. 2. Changing trends of warehousing. 3. Warehouse management system. 4. Value adding activities in a warehouse.	10
6	Theme 6. Maximum-Minimum Inventory Control Systems. 1. Determining How Much to Order or Issue. 2. Determining when to place an order or issue. 3. Setting Max-Min Levels. 4. Two Design Issues for Inventory Control Systems. 5. Selecting an Appropriate Max-Min System.	12
7	Theme 7. Managing logistics internationally. 1. The tendency towards internationalization. 2. The challenges of international logistics and location. 3. Organizing for international logistics. 4. Reverse logistics.	10
8	Theme 8. Provision of logistics infrastructure. 1. Minimizing costs of infrastructure projects. 2. Distribution of costs. 3. Regional issues. Policy recommendations	8
Total		74

8. Training methods

During the teaching of discipline “Logistics” are used illustration, Information, problematic and interactive teaching methods with the use of:

- lectures accompanied by the multimedia program;
- solving the tasks;
- drafting matrices and graphic schemes;
- self-esteem of knowledge;
- use of training and control tests;
- use of basic abstracts of lectures.

9. Methods of control

1. Rating control on 100-point scale assessment ECTS
2. Conducting of intermediate control during the semester (intermediate attestation)
3. Assessment of the current work of students:
 - level of knowledge that has been demonstrated in practical classes;
 - activity during the discussion issues submitted to classes;
 - express- control during the practical classes;
 - independent study of the topic as a whole or specific issues;
 - perform of analytical and computational tasks;
 - writing of abstracts;
 - testing results;
 - test results in Moodle for distance learning;
 - writing assignments during the control works;
 - industrial situations, case studies etc.

10. Distribution of points

Current testing and individual work													Individual work	Total for modules and individual work	Attestation	Final test - exam	Total
Module 1 - 20 points					Module 2 - 20 points												
Content module 1					Content module 2				Content module 3								
T1	T2	T3	T4	T5	T6-8	T9-10	T11-12	T13-14	T15-17	T18-19	T20-21	T22-23					
3	2	5	5	5	3	2	2	3	3	3	2	2	15	55 (40+15)	15	30	100

Grading scale: national and ECTS

Total points for all educational activities	Assessment ECTS	Assessment on the national scale
		for exam
90 – 100	A	excellent
82-89	B	good
75-81	C	
69-74	D	satisfactorily
60-68	E	
35-59	FX	unsatisfactory with possibility of re-drafting
1-34	F	unsatisfactorily with compulsory repeated study of discipline

11. Methodical maintenance

1. Logistics. Workbook for practical classes for English-speakers students' 4 course direction training 073 "Management".
2. Logistics. Abstract of lectures for English-speakers students' 4 course direction training 073 "Management".
3. Methodical complex of the discipline "Logistics".
4. Multimedia support program of lectures.
5. Moodle discipline "Logistics". URL: <https://cdn.snau.edu.ua/moodle/course/view.php?id=2201>

12. Recommended Literature

Basic:

1. The Logistics Handbook. A Practical Guide for the Supply Chain Management of Health Commodities (The USAID | DELIVER PROJECT, Task Order 1, is funded by the U.S. Agency for International Development under contract no. GPO-I-01-06-00007-00, beginning September 29, 2006.)
http://deliver.jsi.com/dlvr_content/resources/allpubs/guidelines/LogiHand.pdf
2. Prof. Dr. Thorsten Blecker Prof. Dr. h. c. Wolfgang Kersten Prof. Dr. Christian M. Ringle. Innovative Methods in Logistics and Supply Chain Management Current Issues and Emerging Practices.- 1st pdf edition.- August 2014 <https://hiicl.org/sites/hiicl.org/files/books/2014/blecker-2014-innovative-methods-logistics-and-supply-chain-management.pdf>
3. G. Giani. Introduction to logistics systems. Planning and control. http://www.pc-freak.net/international_university_college_files/Introduction%20to%20Logistic%20Systems%20Planning%20&%20control.pdf
4. GS1 Transport & Logistics and Customs Reference Book - 2014/15
http://www.gs1.org/docs/tl/GS1_T_L_Reference_Book_2014.pdf
5. Alan Harrison and Remko van Hoek. Logistics Management and Strategy. Competing through the supply chain. - 3rd edition.
<http://197.14.51.10:81/pmb/CHIMIE/Logistics%20Management%20and%20Strategy%20Competing%20Through%20the%20Supply%20Chain.pdf>
6. Basic Concepts of Supply Chain Management –
<http://catalogimages.wiley.com/images/db/pdf/R0471235172.01.pdf>
7. Juri Kondratjev Logistics. Transportation and warehouse in supply chain
https://www.theseus.fi/bitstream/handle/10024/91465/Eng_Thesis_Final.pdf?sequence=1
8. Deciding a Distribution Network Design: Varying from Centralized to Decentralized Pattern
https://gupea.ub.gu.se/bitstream/2077/2262/1/gbs_thesis_62.pdf
9. Maritime logistics. A guide to contemporary shipping and port management -2nd edition.
https://www.koganpage.com/media/project_kp/document/maritime-logistics-2.pdf
10. Supply Chain and Logistics Management Made Easy
<http://ptgmedia.pearsoncmg.com/images/9780133993349/samplepages/9780133993349.pdf>

13. Information resources

1. Logistics: the distance course <https://site/marketingdistance>
2. <http://www.mr.com.ua>
3. <http://udc.com.ua/>
4. <http://www.i2.com.ua>
5. <http://www.profibook.com.ua>
6. <http://www.bdo.com.ua>
7. <http://www.univest-group.com/propoz/>
8. <http://bredmarketing.bigmir.net>
9. <http://www.glecsys.kiev.ua/promo.shtml>
10. <http://www.sebso.com.ua/>