#### Syllabus of the educational component \_\_\_\_\_ (the code of the educational course (EC) in the educational program (EP))

# **Organization of production**

Subject name	Organization of production
Higher education level	First (bachelor's degree)
Moodle course webpage	https://dl2022.khadi-kh.com/course/view.php?id=1399
Volume of the educational	4 credits ECTS (120 hours)
component	
Form of final control	Credit Test
Consultation	According to the schedule
Department name	Economics and Entrepreneurship
Teaching language	English
Head of Course	Tetiana Dedilova, Candidate of Science (Economics),
	Associate Professor
Contact phone number	0502818328
E-mail:	dedilova@ukr.net

### Summary of educational component:

**The goal of the course** is a formation of competences in the field of ensuring the rational organization of the production process; practical use of the principles of scientific organization of labor; mastering the basics of production planning, organizing the labor of the main and auxiliary enterprises.

**Subject course:** theoretical and methodological foundations, methodological provisions of production organization at the modern stage.

# The main tasks of the study of the academic discipline are:

- introducing students to the theory and modern practice of production organization;
- acquisition by students of the ability to analyze the processes taking place in production;
- consolidation of skills of independent performance of technical and economic calculations and substantiation of parameters of rational organization of production systems;
- development of research and organizational abilities of students in the process of preparation of organizational production projects and their implementation

# Prerequisites:

Management; Economics of the enterprise; Marketing; Labor economics and social and labor relations.

#### Student's competences upon completion of this Course will be:

- to be able of making informed decisions;
- to be able of adapting and acting in a new situation;

- to be able of demonstrating knowledge and understanding of the problems of the subject area, the foundations of the functioning of the modern economy at the micro-, meso-, macro- and international level;

 to justify economic decisions based on an understanding of the regularities of economic systems and processes and using modern methodological tools;

- to independently identify problems of an economic nature when analyzing specific situations, proposing ways to solve them.

#### Program Learning Outcomes (PLO) will be:

To apply analytical and methodical tools to substantiate proposals and make management decisions by economic agents (individuals, households, enterprises and state authorities).

To conduct an analysis of the functioning and development of business entities, to determine functional areas, to calculate the relevant indicators that characterize the effectiveness of their activities.

To be able to solve professional tasks related to the organization of business and trade structures and solve problems in crisis situations, taking into account external and internal influences.

To know the basics of business planning, assessment of the market situation and the results of business and trade structures taking into account risks.

To perform an interdisciplinary analysis of socio-economic phenomena and problems in some or a few professional areas, taking into account risks and possible socioeconomic consequences.

	Theme	Hours		
Session	(Lecture Classes (LC), Practical Classes (PC), Individual Work (IW))	Full-time learning	Part-time learning	
1	2	3	4	
	LC. Scientific principles of the organization of production	2	1	
1	PC	-	-	
	IW. A system of indicators evaluating the level of production organization at the enterprise	6	7	
	LC. Enterprise as a branch of industry	2	-	
2	PC. Level of labor organization	2	1	
2	IW. The structure and essence of management at an industrial enterprise	5	8	
	LC. Organization of the production process	4	1	
3	PC. The level of production organization	2	1	
3	IW. Areas of industrial and non-industrial activity of the enterprise	5	8	
	LC. Types of production and their features	2	1	
4	PC. Level of management organization	2	-	
	IW. Fundamentals of designing a complex production process	5	8	
	LC. Manufacturing structure	2	-	
5	PC	-	-	
	IW. Factors influencing the organizational structure of the enterprise	5	8	
	LC. Organization of flow production	2	-	
6	PC. Duration of the manufacturing process	2	1	
	IW. Economic aspects and efficiency conditions of progressive forms of production organization	5	8	
	LC. Flexible production systems	2	1	
7	PC	-	-	
	IW. Modern directions of strategic development of the enterprise	5	8	

#### Thematic Plan

1	2	3	4
8	LC. Organization of the work of auxiliary productions	4	-
	PC. Justification of the type of production and the form of organization of the production process	2	1
	IW. Ways to reduce the cost of repairs and increase their quality	5	8
	LC. Marketing as a tool for increasing the competitiveness of industrial enterprises	2	-
9	PC	-	-
	IW. The process of pricing in industrial enterprises. Types of advertising. Features of the B2B market	5	8
	LC. Production forecasting and planning	2	1
10	PC. Calculation of the size of the batch of products. Calculation of the production capacity of the workshop	2	-
	IW. System of indicators of production efficiency. The essence and purpose of business planning at the production	6	8
	LC. Planning at the enterprise	2	-
11	PC	-	-
	IW. Operational planning methods	5	7
	LC. Quality of industrial products	2	1
12	PC. Calculation of the indicators of ensuring the activity of workshops	2	-
	IW. Competitiveness of products and methods of its assessment	5	8
	LC. Innovative development of industrial enterprises	2	-
13	PC	-	-
	IW. Organization of the process of development and production of a new product at the enterprise	5	8
	LC. Organization of labor at an industrial enterprise	2	-
14	PC. Manufacturing program. Gross, commodity and sold products	2	-
	IW. Labor rationing at the enterprise	5	8
	Lecture Classes (LC)	32	6
Total	Practical Classes (PC)	16	4
	Individual Work (IW)	72	110

# Individual educational and research task (if available): -.

# **Teaching methods:**

1) verbal:

1.1 traditional: lectures, explanations etc.;

1.2 interactive (non-traditional): problem lectures, discussions, etc.;

2) visual: method of illustrations, method of demonstrations;

3) practical:

3.1 traditional: practical classes;

3.2 interactive (non-traditional): business games, quizzes, brainstorming method, case method.

# Grade policy:

### Formative Assessment

1 The current success of applicants for the performance of educational types of work in training sessions and for the performance of independent work tasks is evaluated using a four-point rating scale with subsequent transfer to a 100-point scale. During the evaluation of the current academic performance, all types of work stipulated in the training program are taken into account.

1.1 Lecture classes are evaluated by determining the quality of performance of specified tasks.

1.2 Practical classes are evaluated by the quality of performance of a control or individual task, performance and design of practical work.

1.3 Seminar classes are evaluated by the quality of the performance of an individual task/abstract.

2 Evaluation of the current performance of higher education applicants is carried out at each practical session on a four-point scale ("5", "4", "3", "2") and entered in the log of academic performance:

 – «excellent»: the applicant flawlessly mastered the theoretical material, demonstrates in-depth knowledge of the relevant topic or academic discipline, the main provisions;

– «good»: the applicant has mastered the theoretical material well, possesses the main aspects from primary sources and recommended literature, presents it in a reasoned manner; has practical skills, expresses his thoughts on certain problems, but certain inaccuracies and errors are assumed in the logic of the presentation of theoretical content or in the analysis of practical material;

– «satisfactory»: the applicant has mainly acquired theoretical knowledge of the educational topic or discipline, orients himself in primary sources and recommended literature, but answers unconvincingly, confuses concepts, answers additional questions uncertainly, does not have stable knowledge; when answering questions of a practical nature, reveals inaccuracy in knowledge, does not know how to evaluate facts and phenomena, connect them with the future profession;

– «unsatisfactory»: the applicant has not mastered the educational material of the topic (discipline), does not know scientific facts, definitions, hardly orients himself in primary sources and recommended literature, lacks scientific thinking, practical skills are not formed.

3 The final score for the current activity is recognized as the arithmetic mean sum of points for each lesson, for individual work, current control works according to the formula:

 $\mathsf{K} \ current = (\mathsf{K}1 + \mathsf{K}2 + \dots + \mathsf{K}n)/n ,$ 

where K *current*– final evaluation of success based on the results of current control; K1, K2, ..., K*n* – evaluation of the success of the current control measure; n – number of measures of current control.

Grades are converted into points according to the calculation scale (Table 1).

# Summative Assessment

1 An applicant of higher education receives a credit in the last lesson in the discipline based on the results of the current evaluation. The average score for the current activity is converted into points on a 100-point scale, according to the conversion table (Table 1).

Applicants of higher education who have an average current score in the discipline lower than "3" (60 points) can increase their current score in the last session by taking tests in the discipline.

scale							
4-point	100-point	4-point	100-point	4-point	100-point	4-point	100-point
scale	scale	scale	scale	scale	scale	scale	scale
5	100	4.45	89	3.90	78	3.35	67
4.95	99	4.4	88	3.85	77	3.3	66
4.9	98	4.35	87	3.80	76	3.25	65
4.85	97	4.3	86	3.75	75	3.2	64
4.8	96	4.25	85	3.7	74	3.15	63
4.75	95	4.20	84	3.65	73	3.1	62
4.7	94	4.15	83	3.60	72	3.05	61
4.65	93	4.10	82	3.55	71	3	60
4.6	92	4.05	81	3.5	70	from 1.78	from 35
						to 2.99	to 59
						retak	king
4.55		4.00	80	3.45	69	from 0	from 0
	91					to 1.77	to 34
4.5	90	3.95	79	3.4	68	retak	ling

**Table 1** – Recalculation of the average grade for the current activity into a multipoint

Evaluation of knowledge of applicants by means of testing is carried out according to a scale:

- «Excellent»: not less than 90% of correct answers;
- «Very good»: from 82% to 89% of correct answers;
- «Good»: from 74% to 81% of correct answers;
- «Satisfactory»: from 67% to 73% of correct answers;
- «Satisfactory enough»: from 60% to 66% of correct answers;
- «Unsatisfactory»: less than 60% of correct answers.

2 The conditions for receiving a credit are:

- making up all missed lessons;
- average current grade in the discipline not lower than "3" (60 points).

3 For performing individual independent work and participating in scientific events, applicants are awarded additional points.

3.1 Additional points are added to the sum of points scored by the student of higher education for the current educational activity.

3.2 The number of additional points awarded for different types of individual tasks depends on their volume and importance:

 prize places in the discipline at the international / all-Ukrainian competition of scientific student works – 20 points;

- prize places in the discipline at the all-Ukrainian Olympiads – 20 points;

 participation in the international / all-Ukrainian competition of scientific student works – 15 points;

 participation in international / all-Ukrainian scientific conferences of students and young scientists – 12 points;

- participation in all-Ukrainian Olympiads in the discipline - 10 points;

participation in Olympiads and scientific conferences of the KhNAHU in the discipline – 5 points;

– performance of individual scientific and research (educational and research) tasks of increased complexity – 5 points.

3.3 The amount of additional points may not exceed 20 points.

- 4 The learning result is evaluated:
- on a two-point scale (passed/failed) according to Table 2;
- on a 100-point scale according to Table 3.

100-point scale	National Scale
from 60 points to 100 points	credited
less than 60 points	not credited

# Table 2 – The scale for transferring points to the national evaluation system

Table 3 – The scale for evaluatin	g the knowledge of students based on the results
of the final control of the academic discip	line

Score	Evaluat	ion on a	6		
in points	nationa exam	al scale credit	Grade	Criteria	
90- 100	Excellent	Credited	A	The theoretical content of the course is fully mastered, without gaps, the necessary practical skills for working with the mastered material are formed, all educational tasks stipulated in the training program have been completed, the quality of their performance was evaluated with a number of points close to the maximum	
80–89	q		В	The theoretical content of the course is fully mastered, without gaps, the necessary practical skills for working with the mastered material are mainly formed, all educational tasks stipulated in the training program have been completed, the quality of performance of most of them was evaluated with a number of points close to the maximum	
75-79	Good	Credited	С	The theoretical content of the course is fully mastered, without gaps, some practical skills of working with the mastered material are insufficiently formed, all educational tasks stipulated in the training program have been completed, the quality of performance of none of them has been evaluated with the minimum number of points, some types of tasks have been completed with errors	
67-74	Average		D	The theoretical content of the course is partially mastered, but the gaps are not of a significant nature, the necessary practical skills for working with the mastered material are basically formed, most of the educational tasks stipulated in the training program have been completed, some of the completed tasks may contain errors	

Score	national scale		Evaluation according to the ECTS scale			
in points			Grade	Criteria		
60–66			E	The theoretical content of the course is partially mastered, some practical work skills have not been formed, many educational tasks stipulated in the training program have not been completed, or the quality of some of them has been evaluated with a number of points close to the minimum		
35–59	Below average	Not credited	FX	The theoretical content of the course is partially mastered, the necessary practical work skills have not been formed, most of the educational tasks stipulated in the training program have not been completed, or the quality of their performance has been evaluated with a number of points close to the minimum; with additional independent work on the course material, it is possible to improve the quality of the performance of educational tasks (with the possibility of re-compilation)		
0–34	Failing	Not	F	The theoretical content of the course has not been mastered, the necessary practical work skills have not been formed, all completed educational tasks contain gross errors, additional independent work on the course material will not lead to any significant improvement in the quality of the performance of educational tasks (with a mandatory repeat course)		

# Course policy:

the course involves working in a team where the environment is friendly, creative, open to constructive criticism;

 mastering the discipline involves mandatory attendance at lectures and practical classes, as well as independent work;

 independent work involves the study of certain topics of the discipline that are made in accordance with the program for independent processing, or were considered briefly, providing answers to theoretical questions and test tasks;

- all the tasks stipulated in the training program must be completed in due time;

 if the student is absent from the classes for good reason, he or she presents the tasks completed during the independent preparation and consultation of the teacher;

while studying the course, students must adhere to the rules of academic integrity set forth in the following documents: "Rules of academic integrity of participants in the educational process of the KhNAHU" (<u>https://www.khadi.kharkov.ua/fileadmin/P\_Standart/pologeniya/stvnz\_67\_01\_dobroch\_1.p</u> <u>df</u>), "Academic integrity. Checking the text of academic, scientific and qualification works for

(<u>https://www.khadi.kharkov.ua/fileadmin/P\_Standart/pologeniya/stvnz\_85\_1\_01.pdf</u>, "Code of ethics for participants in the educational process at KNADU" (<u>https://www.khadi.kharkov.ua/fileadmin/P\_Standart/pologeniya/stvnz\_67\_01\_MEK\_1.pdf</u>).

 in the case of detection of plagiarism, the applicant receives 0 points for the task and must re-perform the tasks provided for in the syllabus; write-offs during control work are prohibited (including using mobile devices).
 Mobile devices are allowed to be used only during online testing.

# **Recommended literature:**

### Basic

1. Belenzon, S., Patacconi, A. (2018). Organization of Production, the: An International Perspective. In: Augier, M., Teece, D.J. (eds) The Palgrave Encyclopedia of Strategic Management. Palgrave Macmillan, London. <u>https://doi.org/10.1057/978-1-137-00772-8\_697</u>

2. Chris Ejiogu. Production Management (ME 3105): Course Note. URL: <u>https://www.academia.edu/42214468/PRODUCTION\_MANAGEMENT\_ME\_3105\_Course</u>\_Note

3. Production And Operations Management. Study guide. RAI Technology University. URL: <u>https://ftp.idu.ac.id/wp-</u> <u>content/uploads/ebook/ip/BUKU%20MANAJEMEN%20OPERASI/Productions\_&\_Operations\_Management.pdf</u>

4. S N Chary (2019). Production and Operations Management. (6th Ed.) McGraw-Hill. 972.

5. Tullock, G. (2012). Economic Hierarchies, Organization and the Structure of Production: 7 (Studies in Public Choice). Springer. 196.

### Aditional sources:

1. Edwin Scott Roscoe (2012). Organization for Production: An Introduction to Industrial Management. Literary Licensing, LLC. 486.

2. Ministry of Economy of Ukraine. Official site URL: <u>https://www.me.gov.ua/?lang=uk-UA</u>

3. Missbauer, H., Uzsoy, R. (2020). Production Planning with Capacitated Resources and Congestion. Springer. 285.

4. S P Singh (2014). Production and Operations Management. Vikas Publishing. 389.

Developer of the syllabus of the educational discipline, Cand. Sc. (Ec.), ass. prof.

Tetiana DEDILOVA

Head of the Department, Dr. Sc. (Ec.), prof.

Oksana DMYTRIIEVA