MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

SIMON KUZNETS KHARKIV NATIONAL UNIVERSITY OF ECONOMICS

"APPROVED"
Vice-rector for educational and methodical work

Karina NEMASHKALO

PRODUCTION AND SERVICE MANAGEMENT

syllabus of the educational discipline

Branch of knowledge	**all**
Specialty	**all**
Education level	**first (Bachelor degree)**
Educational Program	**all**

Discipline status	**selective**
Language of teaching, learning and grading	**english**

Head of the department of management, logistics and innovation **Olena IASTREMSKA**

Kharkiv
2022

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ

ХАРКІВСЬКИЙ НАЦІОНАЛЬНИЙ ЕКОНОМІЧНИЙ УНІВЕРСИТЕТ ІМЕНІ СЕМЕНА КУЗНЕЦЯ

"ЗАТВЕРДЖУЮ"
Проректор з навчально-методичної роботи

Каріна НЕМАШКАЛО

МЕНЕДЖМЕНТ ВИРОБНИЦТВА ТОВАРІВ ТА ПОСЛУГ

робоча програма навчальної дисципліни

Галузь знань	**усі**
Спеціальність	**усі**
Освітній рівень	**перший (бакалаврський)**
Освітня програма	**усі**

Статус дисципліни	**вибіркова**
Мова викладання, навчання та оцінювання	**англійська**

Завідувач кафедри менеджменту,
логістики та інновацій Олена ЯСТРЕМСЬКА

Харків
2022

APPROVED

at the meeting of the management, logistics and innovation department

Minutes No. 1 dated August 25, 2022

Developer: Tetiana .Sigaieva, PhD, associate professor of the department of management, logistics and innovation

List of updating and re-approval

of the work program of the discipline

Academic year	**Date of the department`s meeting**	**Minute`s number**	**Head of department signature**

Annotation of the discipline

Production and service management has been a key element in the improvement in productivity in businesses around the world. Creating a competitive advantage through operations requires an understanding of how the operations function contributes to productivity growth.

Organization of the enterprise represents any productive process as in production and in service areas. Production and service management aims to provide an efficient and rational organization of this activity. If the operational functions are carried out efficiently, the organization can never succeed. Qualitative development of management can improve the balance of enterprise (organization), its flexibility to be consistently competitive. Therefore, the study of theory and practice of production and service management is always relevant in Ukraine as for industrial enterprises and enterprises that provide services.

Purpose of studying the discipline – formation of competence in the peculiarities of managing the activities of organizations of production and non-production spheres, as well as mastering the principles and methods of rational organization, planning and control of the enterprise system, acquiring skills and abilities to perform calculations related to the justification of decisions to support the established mode of operation and development of the enterprise system.

The object of the discipline is the management of the organization of production and non-production spheres of the enterprise.

The subject of the discipline is the principles of planning, development and efficient use of production resources of the organization (enterprise) system in market conditions.

Characteristics of the discipline

Course	**3**
Semester	**5**
Number of credits ESTS	**5**
Form of final assessment	**pass**

Structural and logical scheme of studying the discipline

Prerequisites	Post-requisites
Management	Personnel Management
Marketing	Strategic Management
Business Analysis	Innovation Management

Competences and results of studying a discipline:

Competency	Learning results
Ability to develop a specific operating system of the organization	Essence of production and service management management and its components as one of the main functions of effective management of the organization
Ability to create the operating strategy of the organization	Skills to develop bases and categorical devices of management
Ability to evaluate the effectiveness of the operating system	Experience of analysis of forms of organization of the production process
Ability to use the tools of creation and reconstruction of production units	Experience in analyzing forms of organization of the production process
Ability to count calendar and plan specifications for different types of operating systems	Habits to assess the methods of the current functioning of the operating system
Ability to use project management techniques in specific contexts	Identification of forms of organization of the production process
Ability to organize marketing innovation activities	Analysis bases of quality management and performance management operations

Ability to evaluating and planning quality in the operating system	Ability to control and assess problems of the operating strategy of the organization
Ability to count the efficiency rates of operating systems.	Ability to initiate monitoring characteristics of the infrastructure company (organization)
Ability to justify the feasibility of implementing new techniques and technologies in the enterprise develop	Identification content and objectives for operational planning and its role in increasing the efficiency of the operating system

Program of the discipline

Content module 1. Operations strategy and managing change

Topic 1. Introduction to the field.

What are production and service management. Transformation processes. Differences between services and goods. Production and service management in the organizational chart.

Historical development of production and service management. . Manufacturing strategy paradigm. Service quality and productivity. Total quality management and quality certification. Business process reengineering. Supply chain management. Electronic commerce. Current issues in production and service management.

Topic 2. Operations Strategy and Competitiveness.

Operations competitive dimension. Order winners and qualifiers. The marketing-operations link. The corporate strategy. Design process. The financial perspective. The customer perspective. The internal perspective. The learning and growth perspective. Strategic fit. Fitting operational activities to strategy. Developing a manufacturing strategy. Operations strategy in services .

Topic 3. Project management

Structuring projects. Pure project. Functional project. Matrix project. Work breakdown structure.

Network-planning models. Time−cost models. Managing resources. The product development process. Economic analysis of product development projects. Sensitivity analysis to understand project trade-offs. Designing for the customer. Quality function deployment. Designing products for manufacture and assembly. Measuring product development performance.

Topic 4. Process analysis

Process flowcharting. Types of processes. Measuring process performance. Process analysis examples. Process throughput time reduction. Process selection. Types of processes. Process flow structures. Product-process matrix. Specific process equipment selection. Manufacturing process flow design.

Topic 5. Service process selection and design

An operational classification of services. Designing service organizations. Service strategy: Focus and advantage. Three contrasting the production-line approach. The self-service approach. The personal-attention approaches. Applying behavioral science to service encounters. New service development process. Total quality management. Quality specification and quality costs. Developing quality specifications. Cost of quality. Six-sigma Quality. ISO 90 certification.

Content module 2. Supply Chain Design

Topic 6. Supply chain strategy.

Measuring supply chain performance. Supply chain design strategy. Outsourcing. Design for logistics. Value density . Global sourcing. Mass customization.

Topic 7. Strategic capacity management

Capacity planning concepts. Economies and diseconomies of scale. The experience curve. Where economies of scale meet the experience curve. Capacity focus. Capacity flexibility. Capacity planning. Considerations in adding capacity. Determining capacity requirements. Using decision trees to evaluate capacity alternatives. Capacity planning in service versus manufacturing.

Topic 8. Lean production

The Toyota production system. Elimination of waste. Respect for people. Lean implementation requirements. Lean layouts and design flows. Lean applications for line flows. Lean applications for job shops. A stable schedule. Work with suppliers.

Topic 9. Operations Consulting and Reengineering

The nature of the management consulting industry. Economics of consulting firms. When operations consulting is needed. The operations consulting process. Operations consulting tool. Principles of reengineering.

Topic 10. Aggregate sales and operations planning

Overview of sales and operations planning activities. The aggregate operations plan. Production planning environment. Relevant costs. Aggregate planning techniques.

The list of practical (seminar),classes, as well as questions and tasks for independent work are given in the table "Rating plan of the discipline".

Education and training methods

The main method of learning in the discipline is the explanatory and illustrative method, which is a tool for studying theoretical material, all lectures are presented in the form of presentations using Microsoft PowerPoint. In the discipline teaching also provides for the use of active, game and interactive teaching and learning methods – problem and mini-lectures, group and game discussions, small group work, case studies, presentations, brainstorming, group and individual research work, etc.

Using methods of activating the educational process

The theme of the discipline	Methods of activation educational process
Topic 1. Introduction to the field	Presentations, discussions
Topic 2. Operations Strategy and Competitiveness	Case method, brainstorming, presentations
Topic 3. Project management	Case method, brainstorming, presentations
Topic 4. Process analysis	Small group work, brainstorming, computer simulation, scenario method, presentations
Topic 5. Service process selection and design	Work in small groups, presentations, discussions
Topic 6. Supply chain strategy.	Small group work, brainstorming, computer simulation, presentations
Topic 7. Strategic capacity management	Work in small groups, computer simulation, presentations
Topic 8. Lean production	Work in small groups, presentations, discussions
Topic 9. Operations Consulting and Reengineering	Presentations, discussions
Topic 10. Aggregate sales and operations planning	Work in small groups, computer simulation, presentations

Assessment system of learning outcomes

The system of assessment of the formed competencies of students takes into account the types of activities that, according to the program of the discipline, include lectures, practical, as well as independent work. Assessment of the formed competencies of students is carried out on a cumulative 100-point system.

Current control of this discipline is carried out in the following forms:

practical tasks. The total number of points is 35 points;

checking presentation (20 points);

essay (10 points);

cconducting colloquium and independent work (35 points).

The final control in the form of a differentiated test is to assess the student's knowledge of the discipline based on the results of all types of work at lectures, seminars and practical, during independent work and writing a colloquium, the task of which contains test tasks and 2 diagnostic tasks. The maximum number of points for the colloquium is 30 points.

A student should be considered certified if the sum of points obtained by the results of the final / semester academic assessment is equal to or exceeds 60. The minimum possible number of points for current and module control during the semester is 35 and the minimum possible number of points gained at the colloquium is 25.

The final grade in the discipline is calculated taking into account the points obtained during the current control and the points obtained during the colloquium, according to the cumulative system.

The forms of evaluation and the distribution of points are given in the table "Rating plan of the discipline"

Rating plan of the discipline

Topics	**Forms of organization of the educational process**		**Control measures**	**The amount of points**
Content module 1. Operations strategy and managing change				**45**
1	**Lecture**	**Topic 1.** Introduction to the field		
	Practice	**Practice 1.** Historical development of production and service management	defense of the practical task	**5**
	Preparing for classes	Research, selection and review of literature sources and information from the Internet on a given topic		
2	**Lecture**	**Topic 2. Operations Strategy and Competitiveness**		
	Practice	**Practice 2.** Solving tasks on the themes of the Decision Tree	defense of the practical task and presentation	**10**
	Preparing for classes	Research, selection and review of literature sources and information from the Internet on a given topic. Practical task and formulation of conclusions.		

3	**Lecture**	**Topic 3.** Project management		
	Practice	Practice 3. Solving tasks on the themes of the Decision Tree	defense of the practical task	**5**
	Preparing for classes	Research, selection and review of literature sources and information from the Internet on a given topic.		
4	**Lecture**	**Topic 4.** Process analysis		
	Practice	**Practice 4.** Solving tasks on the topic "Types of production"	defense of presentation and practice task	**15**
	Preparing for classes	Research, selection and review of literature sources and information from the Internet on a given topic. Practical task and formulation of conclusions.		
5	**Lecture**	**Topic 5. Service process selection and design**		
	Practice	**Practice 5.** Solving tasks on the topic "Types of production**"**	defense of the practical task	**10**
	Preparing for classes	Research, selection and review of literature sources and information from the Internet on a given topic. Practical task and formulation of conclusions.		
Content module 2. Supply Chain Design				**55**
6	**Lecture**	**Topic 6. Supply chain strategy.**		
	Practice	**Practice 6.** Solving tasks on the topic " Mass customization "	colloquium writing	**15**
	Preparing for classes	Research, selection and review of literature sources and information from the Internet on a given topic. Practical task and formulation of conclusions.		
7	**Lecture**	**Topic 7. Strategic capacity management**		
	Practice	**Practice 7.** Using decision trees to evaluate capacity alternatives.	defense of the practical task, writing independent work	**10**
	Preparing for classes	Research, selection and review of literature sources and information from the Internet on a given topic. Practical task and formulation of conclusions.		
8	**Lecture**	**Topic 8. Lean production**		
	Practice	**Practice 8.** Solving tasks on the Lean applications for job shops. A stable schedule.	defense of the practical task	**10**

	Preparing for classes	Research, selection and review of literature sources and information from the Internet on a given topic.		
9	**Lecture**	**Topic 9. Operations Consulting and Reengineering**		
	Practice	**Practice 9.** Solving tasks on the aggregate operations plan	Essay checking	**10**
	Preparing for classes	Research, selection and review of literature sources and information from the Internet on a given topic.		
10	**Lecture**	**Topic 10. Aggregate sales and operations planning**		
	Practice	**Practice 10**. Solving tasks on the aggregate operations plan	colloquium writing	**10**
	Preparing for classes	Research, selection and review of literature sources and information from the Internet on a given topic.		
		The maximum number of points in discipline		**100**

Recommended literature

Main

1. Veretennikova G.B. Planning and organization of enterprise activity [Electronic resource] : textbook / G.B. Veretennikova, V.V. Tomakh, I.M. Gerashchenko ; Kharkiv National University of Economics named after S. Kuznets. - Kharkiv : HNEU named after S. Kuznets, 2020. - 209 c. Access mode: http://www.repository.hneu.edu.ua/handle/123456789/20036

Additional

2. Demchenko G.V. Aligned schedule as a tool for improving the quality of operational management of an industrial enterprise / G.V. Demchenko, V.A. Zakharov // Economic development and heritage of Semen Kuznets: materials of the international scientific conference, May 30-31, 2019 / S. KuznetsKhNUE S - Kh. 2019 - P. 51-53. Access mode : http://www.repository.hneu.edu.ua/handle/123456789/21325.

3. Nichayeva I.A. Features of enterprise management based on the use of modern technologies and management systems / I.A. Nichayeva // Effective Economy. - 2017. - №9. Access mode: http://www.economy.nayka.com.ua/?op=1&z=5771

4. Pysmak V. O. Innovative development of the management potential at a modern enterprise / V. O. Pysmak, L. O. Mazhnyk, T. Sigaieva // Economy of Development. - 2021. - Volume 20. - Issue 1. - P. 46-55. Access mode : http://repository.hneu.edu.ua/handle/123456789/27163.

5. Sigaieva Tetiana Modern concepts of work organization in virtual enterprises as a direction of development of operation strategy / T. Sigaieva // Problems and prospects of enterprise development. - 2017. - №4 (19.) - P. 141-146. Access mode: http://repository.hneu.edu.ua/bitstream/123456789/19707/1/Modern.pdf.

Information resources

6. Production and service management Site of personal educational systems of S. Kuznets KNEU s - [Electronic resource]. https://pns.hneu.edu.ua/course/view.php?id=9006