NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE

Department of Management named after Prof. J. S. Zavadskyi

"CONFIRMED"

Dean of the Faculty of Agrarian

Management Horo

Anatolii OSTAPCHUK

2023

"APPROVED"

at the meeting of Department of Management named after Prof.

J. S. Zavadskyi

Protocol № 8 dated «22» May

Head of Department

Les Tetiana BALANOVSKA

"REVIEWED"

Program Coordinator "Management"

Vitalii LUTSIAK

PROGRAM OF THE COURSE QUALITY MANAGEMENT

Specialization 073 Management

Educational Program "Management"

Faculty (Institute) of Agrarian Management

Developer: the Associate Professor of the Department of Management named after Prof. J. S. Zavadskyi, PhD of Economic Sciences, Assosiate Professor Drahnieva N. I.

1. Description of the course "Quality Management"

Field of knowledge, specialization, educational program, educational degree					
Educational and qualification level	Bac	helor			
Specialty	073 Ma	nagement			
Educational-professional program	Management				
Chara	cteristics of the course				
View	norn	native			
Total number of hours	1	50			
Number of credits ECTS		5			
Number semantic modules		2			
Course project (work) (if available in curriculum)	-				
Form of control	Exam				
Descriptions of the cou	rse for full-time and dis	stance learning correspondence form			
		of training			
Year of preparation	3	-			
Semester	5	-			
Lectures	30 hrs.	-			
Practical works	30 hrs.	-			
Laboratory classes	-	-			
Independent work	90 hrs.	-			
Individual tasks	-	-			
Number of weekly hours for full-time students:	2 1				
classroom	<i>3 hrs.</i>				

2. The purpose, objectives, and competencies of the course "Quality Management"

The purpose of studying the academic discipline is to give future specialists a system of knowledge on the theoretical foundations and methodological guidelines on the organization of product quality management in enterprises, assessment of the existing level of quality and development of practical recommendations for its improvement.

The objectives of the course are: study of modern approaches to defining the content of the "quality" category, product quality as an object of management, transformation of the stages of system quality management of products, features of the quality of agricultural products; consideration of the place of product quality management in the general management system of the enterprise, classification of product quality indicators; planning and assessment of product quality, taking into account the factors of personnel motivation and quality control of raw materials and finished products; research of product quality management systems, the main stages of their development and implementation in domestic enterprises; the impact of standardization and certification on increasing the quality potential; analysis of economic efficiency of quality management, in particular, costs of quality management and indicators of economic efficiency of product quality management; study of advanced Japanese, American and European experience in the field of quality management.

Acquisition of competencies:

Integral competence (IC): The ability to solve complex specialized tasks and practical problems, which are characterized by complexity and uncertainty of conditions, in the field of management or in the learning process, which involves the application of theories and methods of social and behavioral sciences.

general competences (CG):

- GC 4. Ability to apply knowledge in practical situations.
- GC 5. Knowledge and understanding of the subject area and understanding of professional activity.
 - GC 14. Ability to work in an international context.
 - GC 15. Ability to act on the basis of ethical considerations (motives).

Professional (special) competencies (PC):

- PC 2. The ability to analyze the results of the organization's activities, to compare them with the factors of influence of the external and internal environment.
- PC 4. The ability to determine the functional areas of the organization and the connections between them.
 - PC 7. Ability to choose and use modern management tools.
- PC 10. The ability to evaluate the performed work, ensure their quality and motivate the personnel of the organization.

Program learning outcomes (PLO) of the educational programme:

- PLO 1. To know one's rights and responsibilities as a member of society, to be aware of the values of civil society, the rule of law, the rights and freedoms of a person and a citizen in Ukraine.
 - PLO 5. Describe the content of the functional areas of the organization.
- PLO 6. Demonstrate the skills of searching, collecting and analyzing information, calculating indicators to substantiate management decisions.
- PLO 8. Apply management methods to ensure the effectiveness of the organization's activities.
- PLO 11. Demonstrate the skills of situation analysis and communication in various areas of the organization.
- PLO 19 Demonstrate the ability to make independent decisions, develop a sufficient number of alternative options, choose optimal solutions and bear responsibility for their implementation.
- PLO 26. To carry out a study of the international business environment and to determine the peculiarities of the enterprise's entry into foreign markets.
- PLO 32. Study the business environment and understand the process of business implementation and regulation

3. The program and structure of the course «Quality Management»

CONTENT MODULE 1. HUMAN RESOURCES MANAGEMENT SYSTEM OF THE ORGANIZATION

Topic 1. Product quality as an object of management

The essence of the "quality" category. Formation of a modern idea of quality. Economic aspects of product quality. Factors affecting product quality. Legal aspects of quality assurance. The place of quality management in the general management system.

Quality and competitiveness. Quality of life. Legal responsibility for the quality of products and services. Quality and consumer protection movement. State protection of the rights of consumers of products in Ukraine.

Topic 2. Foreign experience of quality management in the USA, Japan and Europe

Peculiarities of quality management in Eastern European countries. Practice of quality management in the countries of Western Europe, the USA and Japan. Comprehensive management of product quality, activities of quality circles, development of a national program for quality control, creation of a system for studying customer requests and a system for motivating employees in Japan.

The specifics of product quality planning, control and costs for new product development, production preparation, and product quality assurance in the United States.

European movement for product quality. The concept of harmonization of standards. Activities of the European Committee for Assessment and Certification of Quality Systems, the European Council for Testing and Certification, the European Foundation for Quality Management.

Features of quality management in developing countries. Development of a systematic approach to quality management based on international standards and principles. Competitions and awards in the field of quality.

Topic 3. Standards as a regulatory framework of quality management

Basic concepts and definitions of standardization. History of creation of quality standards. Standardization bodies in Ukraine. State and departmental standardization services.

The procedure for the development of state standards, their approval, publication, verification, revision, change and cancellation. Procedure for implementation of standards and technical and economic efficiency of standardization. Information provision and ownership of standards, codes of practice and technical conditions. Interstate systems of standards. A new concept of standardization activity in Ukraine. International, European and regional activities of Ukraine in the field of standardization.

Topic 4. Compliance assessment

Basic concepts and definitions in the field of conformity confirmation. Legal basis of certification in Ukraine. State certification system. Certification of production and certification of products in the system.

Implementation of product certification. The procedure for certification of quality systems. Choice of certification mechanism and actions to be taken by the consumer in relation to a supplier with a certified quality system. Accreditation of certification bodies and testing laboratories in Ukraine. Audit in the field of quality.

CONTENT MODULE II. EFFICIENCY OF QUALITY MANAGEMENT

Topic 5. Basic concept of quality management

The main elements of the TQM strategy. Conditions for the successful implementation of TQM. Industrial logic of total quality management. Japanese Material Requirements Planning (MRP) system. Western system of planning with consideration of reorder point (ROP). Just-In-Time (JIT) and Just-In-Case (JIC) systems. New approaches to human resource management in TQM conditions. Organization of training. Distribution of authority and quality in human resource management in TQM conditions. Theory of goal setting. Implementation of total quality management methods in Ukraine.

Topic 6. Statistical methods of quality control

The essence of statistical methods of quality control. Information collection procedure. Statistical series and its characteristics. Seven quality control tools: checklist, histogram, scatter diagram, stratification method, Pareto diagram, cause

and effect diagram (Ishikawa), Shewhart control chart). The principles of their construction and application. Study of statistical methods of quality control.

Topic 7. Product quality indicators

Classification of products and determination of the nomenclature of quality indicators for products of various types. Classification of product quality indicators according to various essential features. Usability of quality indicators.

Basic concepts and definitions in the field of metrological assurance of product quality. Classification of measurements and their main characteristics. Product quality indicator system. Forecasting and planning the level of product quality. Evaluation of the level of quality of different and one type of products. Assessment of the level of product quality at the stages of its production and consumption. Evaluation of the level of quality and efficiency of work.

Activities of the state metrological service in Ukraine. State metrological control and supervision. State tests of measuring equipment. European international cooperation in the field of metrological assurance of product quality.

Topic 8. Quality audit

Reasons for the motivation of quality assessment. Characteristics of types of quality audits. Validity of assessment results. Preparation for an external compliance audit

Structure of the course

Names of semantic	Amount of hours											
modules and themes	Daily form				C	Correspondence form						
	total	otal including			total	including						
		1	р	lab	ind	i.w.		1	р	lab	ind	i.W
1	2	3	4	5	6	7	8	9	10	11	12	13
CONTENT MODULE 2. THE GENERAL THEORY OF MANAGEMENT												
1. Product quality as an	23	4	4			15		2	2			17
object of management												
2. Foreign experience of	18	4	4			10		2	2			17
quality management in the												
USA, Japan and Europe												
3. Standards as a	18	4	4			10		2	-			17
regulatory framework for												
quality management												
4. Compliance assessment	18	4	4			10		-	-			17
Total for semantic module	77	16	16			45		6	4			68
2												
CONTENT				ANA	<u>GEM</u>		FUNC:	ΓΙΟ	NS	ı		ı
5. Basic concept of total	23	4	4			15		-	2			16
quality management												
6. Statistical methods of	18	4	4			10		-	2			16
quality control												
7. Product quality	18	4	4			10		2	2			16
indicators												
8. Quality audit	14	2	2			10		-	-			16
Total for semantic module	73	14	14			45		2	6			64
2												
T 11	150	30	30			90		8	10			132
Total hours												

4. Topics of seminars

No	Title of topic	Number of
		hours
1	Topic 1. Product quality as an object of management	2
2	Topic 2. Foreign experience of quality management in the USA, Japan	2
	and Europe	
3	Topic 3. Standards as a regulatory framework for quality management	2
4	Topic 4. Compliance assessment	2
5	Topic 5. Basic concept of total quality management	2
6	Topic 6. Statistical methods of quality control	2
7	Topic 7. Product quality indicators	2
8	Topic 8. Quality audit	1
	Total hours	15

5. Topics of practical lessons

No॒	Title of topic	Number
		of
		hours
1	Topic 1. Product quality as an object of management	2
2	Topic 2. Foreign experience of quality management in the USA, Japan and	2
	Europe	
3	Topic 3. Standards as a regulatory framework for quality management	2
4	Topic 4. Compliance assessment	2
5	Topic 5. Basic concept of total quality management	2
6	Topic 6. Statistical methods of quality control	2
7	Topic 7. Product quality indicators	2
8	Topic 8. Quality audit	1
	Total hours	15

6. Topics of laboratory lessons

are not provided the curriculum

No	Title of topic	Number of hours
1		
2		

7. Independent work topics

No	Topic title	Number of
- '-	1	hours
1	Topic 1. Product quality as an object of management	15
2	Topic 2. Foreign experience of quality management in the USA, Japan	10
	and Europe	
3	Topic 3. Standards as a regulatory framework for quality management	10
4	Topic 4. Compliance assessment	10
5	Topic 5. Basic concept of total quality management	15
6	Topic 6. Statistical methods of quality control	10
7	Topic 7. Product quality indicators	10
8	Topic 8. Quality audit	10
	Total hours	90

8. Samples of control questions, tests for assessing the level of knowledge acquisition by students.

Control questions, sets of tests to determine the level of knowledge acquisition by students.

1. To study the contribution to the development of labor and product quality management by Deming, Juran, Crosby, Feigenbaum, Ishikawa, Taguti.

- 2. Investigate Ukraine's participation in the activities of international and regional quality management organizations.
- 3. Investigate the reasons for the need to improve and ensure the quality of products and services.
- 4. To study the evolutionary stages of the target quality management system in the enterprise management system. To analyze the main directions of development in the investigated enterprise.
- 5. Familiarize yourself with the responsibility of senior management in the quality management system.
- 6. Investigate the role of ongoing control and actions taken when non-conformities are detected in the quality system.
- 7. To study how operational management of processes in the quality system is carried out.
- 8. Get acquainted with the forms of stimulation in the field of quality, which are used by modern organizations.
 - 9. To study the most relevant areas of activity of quality managers.
- 10. To characterize the types of work that must be performed in the formation of the program for improving the qualifications of employees in the field of quality and their management within the framework of the "Quality" target program.
 - 11. Study the system of indicators of the quality of agricultural products.
- 12. Carry out a full characterization of the concepts of "base sample" and "optimal value of the characteristics of product quality indicators."
- 13. Familiarize yourself with typical methods for assessing the level of quality of products and services.
- 14. Determine the conditions under which it is possible to solve the problem of product quality in Ukraine.
- 15. To characterize the features of Japanese, American and European experience in the field of quality management.
- 16. Investigate the essence of the TQM concept, its general and system-wide principles. The sequence of works in the creation of TQM.
- 17. Study the main types of quality documents that are used in modern enterprises.
- 18. Familiarize yourself with the main elements of quality according to ISO and the social and psychological aspects of the implementation of DSTU ISO standards in enterprises of Ukraine.
 - 19. Investigate what product certification and quality system certification are.
 - 20. Determine the organizational structure of certification bodies in Ukraine.
 - 21. Familiarize yourself with the certification of production in the system.

- 22. Determine which main tasks of quality management are solved with the help of standards at the stage of design, development, production of products.
- 23. Study the general requirements for the construction, presentation, design and content of standards. The procedure for developing, approving, issuing, checking, changing and canceling standards.
- 24. List the main functions of the bodies belonging to the state and departmental metrological service.
- 25. Study the rights, duties, types of work, and requirements for domestic certification auditors.
- 26. Determine the role of Ukraine in European and international activities in the field of metrology.
 - 27. To study seven methods of statistical quality control.
- 28. Familiarize yourself with the identification of product quality costs. Investigate Taguti's loss function.
- 29. To study the model of business excellence of the organization of the European Foundation of Quality Management.

Tests to determine the level of knowledge acquisition by students

Question 1. The object of science "Management" is:

- a. socio-economic organizations;
- b. organizational experience;
- c. organizational relationships and processes.

Question 2. Describe Maslow's Hierarchy of Needs

- a. Self Actualization meaningful work which expresses the inner self of the employee
- $b.\ Esteem-promotions,\ contests,\ high-performance\ evaluations$
- c. Belongingness and Love friends at work
- d. Safety and security met through job security (i.e. union protection, tenure, etc)
- e. Physiological needs met by having a job (i.e. food, shelter, air, and water)

Question 3. Weber's bureaucratic approach:

- a. Structure
 - b. Specialization
 - c. Predictability and stability
 - d. Rationality
 - e. Democracy

Question 4. What systems include abstract?

- a. chemical;
- b. organisms;
- c. hypothesis;
- d. population;
- e. theory;
- f. social;
- g. logic.

Question 5. Stages of development organizations do not include:

- a. birth;
- b. decline;
- c. aging;
- d. youth.

Question 6. The five basic elements of culture in organizations include:

- a. Assumptions
- b. Values
- c. Behavioral norms
- d. Behavioral patterns
- e. Artifacts

Question 7. Who is not an administrative management theorist?

- a. Henri Fayol;
- b. Max Weber;
- c. James Mooney;
- d. Luther Gulick

Question 8. Who is one of the founding fathers of modern bureaucratic theory?

- a. Woodrow Wilson;
- b. Adam Smith;
- c. Max Weber;
- d. Karl Marx.

Question 9. A classical approach that claims decisions about organization and job design should be based on precise, scientific procedures.

- a. Rule of law;
- b. Service technology role;
- c. Strategy and structure changes;
- d. Scientific management

Question 10. A system that must interact with the environment to survive.

- a. Organizational ecosystem
- b. Normative forces
- c. Closed system
- d. Open system

Question 11. The essence and evolution of organization theory

Question 12. Analysis of factors internal and external environment of an organization

9. Teaching methods

Teaching methods are ways of joint activities and communication between teachers and graduates, providing positive motivation to learn, mastering the system of professional knowledge, skills and abilities, forming a scientific worldview, development of cognitive forces, culture of mental work of future professionals.

The following teaching methods are used during the educational process:

Depending on the source of knowledge: verbal (explanation, conversation, discussion, dialogue); visual (demonstration, illustration); practical (problem solving, business games).

By the nature of cognitive activity: explanatory-visual problem statement; partial search and research methods.

By place in educational activities:

- methods of organization and implementation of educational activities that combine verbal, visual and practical methods; reproductive and problem-searching; methods of educational work under the guidance of a teacher and methods of independent work of higher education students;
- methods of stimulating and motivating educational work, including cognitive games, educational discussions, role situations;
- methods of control and self-control over educational activities: methods of oral, written control; individual and frontal, thematic and systematic control.

In the process of teaching the discipline to intensify the educational and cognitive activities of higher education seekers provides for the use of the following educational technologies:

- work in small groups allows to structure practical seminars on the form and content, creates opportunities for participation of each student in higher education in the work on the topic of the lesson, provides the formation of personal qualities and experience of social communication;

- *seminars-discussions* involve the exchange of views and views of participants on this topic, as well as develop thinking, help to form views and beliefs, the ability to formulate opinions and express them, learn to evaluate other people's suggestions, critically approach their own views;
- *brainstorming* a method of solving urgent problems, the essence of which is to express as many ideas in a limited period of time, discuss and select them;
- case method a method of analysis of specific situations, which allows to bring the learning process closer to the real practical activities of specialists and involves consideration of industrial, managerial and other situations, complex conflicts, problematic situations, incidents in the study of educational material;
- *presentations* speeches to the audience, used to present certain achievements, results of the group, a report on the implementation of individual tasks, briefings, demonstrations;
- *didactic games* a method of imitation (imitation, reflection) of managerial decisions in various situations according to the rules already developed or formed by the participants, is implemented through independent solution of higher education students, given the lack of necessary knowledge when there is a need to master new content or look for new connections in already learned material;
- banks of visual support help to intensify the creative perception of the content of the discipline with the help of clarity.

10. Forms of assessment

The main forms of training during the study of the discipline "Management" are lectures, seminars (practical) classes, consultations, independent work of higher education.

According to the above forms of organization of training, the forms of control of mastering the program are: self-control, writing modular tests, essays, individual practical tasks and exams for the period of study of the discipline.

The control measures carried out at the university determine the compliance of the level of knowledge, skills and abilities acquired by students with the requirements of normative documents on higher education and ensure timely adjustment of the educational process.

According to the "Regulations on examinations and assessments at the National University of Life and Environment Science of Ukraine", approved by the Academic Council of the National University of Life and Environment Science of Ukraine on April 26, 2023, protocol No. 10, the types of knowledge control of higher education students are current control, intermediate and final attestation. Ongoing control is carried out during practical, laboratory and seminar classes and aims to check the level of readiness of higher education students to perform specific work.

Intermediate certification is carried out after studying the program material of each content module. The teaching material of the disciplines taught during one semester - autumn or spring, is divided by lecturers into two or three content modules.

Intermediate attestation should determine the level of knowledge of higher education students from the program material of the content module (rating assessment from the content module), obtained during all types of classes and independent work.

Forms and methods of intermediate certification, mastering the program material of the content module are developed by the lecturer of the discipline and approved by the department in the form of testing, written tests, colloquium, experimental results, which can be evaluated numerically, calculation or calculation work, etc.

The mastering of the content material of the content module by a higher education student is considered successful if his / her rating is not less than 60 points on a 100-point scale.

The level of knowledge of higher education students obtained through non-formal education programs (Article 8, paragraph 3 of the Law of Ukraine "On Education") must be confirmed by relevant documents (eg, learning English - certificates B1 and above; training courses BAS (Business Automation Software)) - SAB certificate (union of business automators); training on the courses of the Cisco Network Academy–Cisco industry certificate; training on the training of appraisers on expert monetary valuation of land - qualification certificate, etc.).

The presence of supporting documents is the basis for enrollment in a separate laboratory work, topic of lecture or practical lesson, content module or all educational material of the discipline, if the program of non-formal education corresponds to the work program of the discipline.

The decision on enrollment of knowledge acquired in non-formal education programs is made by the lecturer of the discipline together with the head of the department.

Enrollment in all academic material of the discipline does not exempt the applicant from higher education from taking the exam in this discipline.

The rating of the applicant for higher education in educational work is rounded to an integer.

The academic work rating may be affected by the additional work rating and the penalty rating.

The rating for additional work is added to the rating for training and may not exceed 20 points. It is determined by the lecturer and is provided to higher education students by the decision of the department for work that is not provided for in the curriculum, but contributes to improving their knowledge of the discipline.

The maximum number of points (20) is given to the applicant for higher education for:

- receiving a diploma of the first degree of the winner of the student scientific conference of the educational-scientific institute or faculty (college) in the corresponding discipline;
- receiving the diploma of the winner (I, II or III place) of the II stage of the All-Ukrainian Student Olympiad in the discipline or specialty (direction of training) in the current academic year;

- receiving a diploma (I, II or III degree) of the winner of the All-Ukrainian competition of student research papers in the relevant discipline in the current academic year;
- authorship (co-authorship) in the submitted application for an invention or received a patent of Ukraine in the relevant discipline;
- authorship (co-authorship) in a published scientific article in the relevant discipline;
- production of a personal training stand, model, device, appliance; development of a computer program (provided that this is used in the educational process in the teaching of the discipline).

Penalty rating does not exceed 5 points and is deducted from the rating of educational work. It is determined by the lecturer and is introduced by the decision of the department for students of higher education who untimely mastered the materials of content modules, did not follow the work schedule, missed classes and more.

Final certification includes semester and state certification of applicants for higher education.

Semester certification is conducted in the form of a semester exam or semester test in a particular discipline.

Semester exam (hereinafter - the exam) - is a form of final certification of mastering higher education theoretical and practical material in the discipline for the semester.

Semester test (hereinafter - test) is a form of final certification, which consists in assessing the mastering of higher education theoretical and practical material (performed certain types of work in practical, seminar or laboratory classes and during independent work) in the discipline for the semester.

Differentiated test is a form of certification that allows you to assess the implementation and mastery of higher education program training or industrial practice, preparation and defence of course work (project).

Applicants for higher education are required to take exams and tests in accordance with the requirements of the working curriculum within the timeframe provided by the schedule of the educational process. The content of exams and tests is determined by the working curricula of disciplines.

11. Distribution of grades received by students.

The assessment of the knowledge of a higher education student takes place on a 100-point scale and is translated into national assessments according to the table. 1 "Regulations on examinations and credits at the National University of Life and Environment Science of Ukraine", approved by the Academic Council of the National University of Bioresources and Nature Management of Ukraine on April 26, 2023, protocol No. 10. according to the table. 1.

Rating of the applicant of higher education,	Evaluation results on national exams,		
points	tests		
	Exam		
90-100	excellent		
74-89	good		
60-73	satisfactorily		
0-59	fail		

For determination of the rating of the student (listener) from mastering to the discipline Rcourse (100 points) obtained ranking in certification (30 points) added to the rating of student (listener) for Academic work \mathbf{R}_{ed} (70 points): Rcourse = \mathbf{R}_{ed} + \mathbf{R}_{at}

The rating of the student of higher education on academic work is rounded to the nearest whole number.

The rating for academic work can be affected by the rating from additional work and the penalty rating.

Final attestation includes semester and state attestation of students of higher education.

Semester certification in the academic discipline "Management" is conducted in the form of a semester exam.

12. Educational and methodological support

- 1. Балановська Т. І., Драгнєва Н.І. Управління якістю: навчальний посібник. Київ: ФОП Ямчинський О.В., 2021. 176с.
- 2. Методичні вказівки до дисципліни «Управління якістю» для підготовки фахівців ОС «Магістр» напряму підготовки «Менеджмент» спеціалізації «Менеджмент організацій і адміністрування». Т. І. Балановська, Н. І. Драгнєва. КОМПРИНТ. 212с.
 - 3. elearn.nubip.edu.ua/course/view.php?id=603

13. Recommended sources of information

Main

- 4. Principles of management. 2019. URL: https://d3bxy9euw4e147.cloudfront.net/oscms-prodcms/media/documents/PrinciplesofManagement-OP.pdf
- 5. Karam Pal Management Concepts and Organizational Behaviour. URL: http://www.ddegjust.ac.in/studymaterial/mcom/mc-101.pdf
- 6. Coleman Patterson Management Briefs Management and Leadership Theory Made Simple. 2010.
- 7. Peter F. Drucker The Effective Executive: The Definitive Guide to Getting the Right Things Done. Harper Business; Revised edition. 2006. 208 p.
 - 8. Dorling Kindersley Essential Manager: Leadership. 2015.
- 9. James Burrow, Brad Kleindl, Kenneth Everard Business principles and management. Thomson. 2008. 736 p.

Additional

- 1. Kenneth Blanchard Ph.D., Spencer Johnson M.D. The One Minute Manager. 2001. 354 p.
- 2. John Maxwell The 21 Irrefutable Laws of Leadership: Follow Them and People Will Follow You. 2017. 338 p.
- 3. Daniel Goleman Leadership: The Power of Emotional Intelligence. 2011. 78 p.
- 4. Балановська Т.І., Гогуля О.П., Драгнєва Н.І., Драмарецька К.П., Троян А.В. Управління персоналом: навчальний посібник. 2-ге вид. Київ: ЦП «КОМПРИНТ», 2018. 417 с.
- 5. A Study of Business Process Reengineering by Kevin Lam. URL: http://www.doc.ic.ac.uk/~nd/surprise 95/journal/vol2/tmkl/article2.html.
- 6. An Introductory Guide by Peter Carter URL: http://www.teamtechnology.co.uk/business-process-reengineering.html.
- 7.Mastering Strategy: Management. URL: https://resources.saylor.org/wwwresources/archived/site/textbooks/Mastering%20S trategic%20Management.pdf
- 8. Gilbreth L.M. The psychology of management. The Macmillan Company. 1921. URL: https://www.gutenberg.org/files/16256/16256-h/16256-h.htm