

**PJSC "Higher Education Institution" INTERREGIONAL ACADEMY OF  
PERSONNEL MANAGEMENT"**

**Danube branch**



**SYLLABUS**

*of the academic discipline (selective)*

***QUALITY MANAGEMENT***

Specialty                      **D3 Management**

Educational level:        **First (bachelor's) level**

Educational program:    **Management**

## General information about the academic discipline

Name of the discipline	<b>Quality Management</b>
Code and name of specialty	<b>D3 Management</b>
Level of higher education	First (bachelor's) level
Discipline status	Selective
Number of credits and hours	<b>3 credits / 90 hours.</b> Lectures: 16 Seminars/practical classes: 14 Students' independent work : 60
Terms of study of the discipline	6 semester
Language of instruction	Ukrainian
Type of final control	Pass/fail (credit)

## General information about the teacher. Contact information.

<b>Miroshnichenko Oleksiy Volodymyrovych</b>	
Academic degree	PhD in Economics
Position	Associate Professor of the Department of Economics and Management
Areas of scientific research	Socio-cultural aspects of modern management; historical memory and national identity as resources of socially responsible business; HR management and language policy in organizations; methodology of scientific research in the context of digitalization and military challenges.
Links to the registers of identifiers for scientists	Google Scholar <a href="https://scholar.google.com/citations?user=f_m_u7EatP4C&amp;hl=ru">https://scholar.google.com/citations?user=f_m_u7EatP4C&amp;hl=ru</a> ORCID: <a href="https://orcid.org/0009-0002-4404-2766">https://orcid.org/0009-0002-4404-2766</a>
Contact information:	
E-mail:	menedzmentuk@gmail.com
Contact phone number	+380677445957
Instructor's portfolio on the website	<a href="https://izmail.maup.com.ua/assets/files/miroshnichenko-portfolio-a.pdf">https://izmail.maup.com.ua/assets/files/miroshnichenko-portfolio-a.pdf</a>

### **Discipline's description.**

The course covers the evolution of quality approaches (from control to TQM), the study of international standards of the ISO 9000 series, as well as the mastery of practical tools for statistical control and process improvement. losses and increase customer loyalty.

**The subject of the discipline** is a system of methods, means and measures aimed at establishing, ensuring and maintaining an appropriate level of quality at all stages of the life cycle of a product or service.

**The aim of the discipline** is to form a systematic understanding of the category of "quality" in future managers and to master professional competencies in the creation, implementation and continuous improvement of quality management systems (QMS) in modern organizations.

**The objectives of the discipline** are to master the methodology of Total Quality Management; to study the principles of standardization and certification; to master the tools for analyzing defects and their causes (Ishikawa diagram, Pareto diagram, etc.). The course provides for the development of process audit skills and the formation of a quality-oriented corporate culture, where each employee is responsible for the final result.

As a result of studying the selective educational component "Quality Management", applicants must:

**Know:**

- terminology and evolutionary stages of the development of quality management;
- basic requirements of international standards ISO 9001:2015;
- the philosophy and principles of TQM (Total Quality Management);
- seven classic quality control tools and the Six Sigma concept;
- procedure for certification of products and quality systems.

**Be able to:**

- apply statistical methods to analyze the stability of production and service processes;
- to identify "bottlenecks" in the activities of the enterprise and propose measures to eliminate them;
- develop elements of the quality management system documentation (guidelines, procedures, instructions);
- use the Deming cycle (PDCA) to continuously improve management decisions

**Prerequisites for the discipline.** The study of the course is based on the knowledge and competencies gained during the mastering of such compulsory disciplines as "Management" in terms of understanding management functions and organizational structures; "Statistics" for the use of methods for collecting and processing quantitative data in quality control; "Enterprise Economics" to assess the costs of ensuring the quality and efficiency of QMS implementation; "Marketing" in the context of the study of consumer expectations and product requirements

**Post-requisites for the discipline.** The acquired knowledge of quality management will become the foundation for the study of the following mandatory disciplines, such as "Operational Management" in terms of operational control and process design; "Fundamentals of Business Management" for the formation of a holistic model of an effective enterprise; "Strategic enterprise management", where quality is a key factor in long-term competitive advantage. The competencies of the course will also be used during the pre-graduation practice and the performance of the bachelor's qualification work.

## Content of the discipline

№	Topic name	Teaching Methods/Assessment Methods
Topic 1	Conceptual Foundations of Quality Management and Evolution of Approaches to Quality Management	<b>Teaching methods:</b> <ul style="list-style-type: none"> <li>- construction of Pareto, Ishikawa diagrams and control maps for diagnosing processes;</li> <li>- modeling of system errors and their impact on product quality;</li> <li>- working out an algorithm for continuous improvement of managerial decisions;</li> <li>- analysis of the practices of implementing TQM and Lean systems at leading enterprises.</li> </ul> <b>Assessment methods</b> <ul style="list-style-type: none"> <li>- assessment of the quality of construction and interpretation of graphic control tools;</li> <li>- project control: protection of fragments of QMS documentation (process maps, instructions) and audit checklists;</li> <li>- test control: verification of knowledge of ISO 9001 standards and basic quality concepts on the training platform;</li> <li>- Analytical control: assessment of the student's ability to calculate the cost of quality and justify measures to improve it.</li> </ul>
Topic 2	Total Quality Management (TQM)	
Topic 3	International standardization of quality management systems	
Topic 4	The Process Approach and the Deming Cycle as the Basis for Continuous Improvement	
Topic 5	Classic Quality Control and Analysis Tools	
Topic 6	Qualimetry and methods for estimating quality assurance costs	
Topic 7	Statistical methods of process control and the concept of "Six Sigma"	
Topic 8	Certification of products and quality systems. State Policy in the Field of Technical Regulation	
Module Assessment Task		
Final assessment: pass/fail (credit)		

### Technical Equipment and Software.

Material and technical support of the educational process involves the use of specialized classrooms and library funds. Multimedia equipment (projector, computer) is used to visualize the educational material during lectures and seminars. Practical tasks and in-depth study of individual topics are provided by access to the Internet through free Wi-Fi coverage.

### Forms and methods of assessment.

The system of assessment of applicants' knowledge includes current and final (semester) control in the form of a test.

*Current assessment* is carried out systematically during practical classes in order to check the level of mastery of the theoretical foundations of quality management, the formation of skills in statistical analysis of processes, as well as the ability to use specialized digital tools to monitor and improve quality indicators.

*Forms of student participation in the educational process that are subject to ongoing control.*

Students' participation in the educational process is realized through oral presentations, presentations of analytical studies on the effectiveness of quality management systems (QMS) at real enterprises, reports based on the results of case studies (for example, the experience of implementing Lean or Six Sigma), as well as active participation in team professional discussions. The written component of the work includes the implementation of control and test tasks for knowledge of ISO 9001 standards, the development of work

instructions and process maps, as well as the preparation of analytical notes based on the results of internal audits.

**Methods of ongoing assessment include:** The methodological control tools combine oral forms (interviews, defense of individual projects) and written types of work (construction of Pareto and Ishikawa diagrams, calculation tasks in qualimetry and estimation of quality costs). The assessment is also based on observing the activity of applicants in solving problem situations related to identifying the causes of defects, checking presentations based on the results of the implementation of the PDCA cycle and conducting testing on the key methodological blocks of the course.

#### Grading system and requirements.

Table of distribution of points received by students\*

Topics	Ongoing knowledge assessment						Final control		Total points
	Seminar 1 (Topic 1,2)	Seminar 2 (Topic 3,4)	Seminar 3 (Topic 5)	Seminar 4 (Topic 6)	Seminar 5 (Topic 7)	Seminar 6 (Topic 8)	Module assessment task	Pass /Fail	
Work in a seminar class	6	6	6	6	6	6	20	20*	100
Independent work	4	4	4	4	4	4			

\*The table contains information about the maximum points for each type of academic work of a higher education applicant.

#### Evaluation criteria and procedure

Assessment of students' educational achievements is carried out in accordance with the current Regulations on Assessment in a Higher Education Institution.

**Modular Assessment.** Modular Assessment (MA) is carried out at the final lesson of each content block in the form of written testing.

When evaluating the unit test, the volume and correctness of the tasks are taken into account:

- grade "excellent" (A) is given for the correct completion of all tasks (or more than 90% of all tasks);
- grade "good" (B) is given for completing 80% of all tasks;
- grade "good" (C) is given for completing 70% of all tasks;
- the grade "satisfactory" (D) is given for the correct completion of 60% of the proposed tasks;
- the grade "satisfactory" (E) is given if more than 50% of the proposed tasks are correctly completed;
- An "unsatisfactory" (FX) rating is given if less than 50% of the tasks are completed.
- Failure to appear for the unit test - 0 points.

The above scores are converted into rating points as follows:

"A" - 18-20 points;

"B" - 16-17 points;

- "C" - 14-15 points;
- "D" - 12-13 points.
- "E" - 10-11 points;
- "FX" - less than 10 points.

The final semester assessment in the discipline "Quality Management" is a mandatory form of assessment of students' learning outcomes. It is carried out within the terms determined by the curriculum and covers the amount of material determined by the course program.

The final assessment is carried out in the form of a test. A student who has completed all the necessary work is admitted to the semester assessment.

The final grade is given based on the student's learning outcomes during the semester. The student's assessment consists of points accumulated from the results of the current assessment and incentive points.

Students who have completed all the required tasks and received a score of 60 points or higher receive a grade corresponding to the grade received, without additional testing.

For students who have completed all the necessary tasks, but received a score below 60 points, as well as for those who want to improve their score (result), the teacher conducts the final work in the form of a test during the last scheduled lesson in the discipline in the academic semester.

#### *Evaluation of Additional (Individual) Educational Activities*

Additional (individual) types of educational activities include the participation of applicants in the work of scientific conferences, scientific circles of applicants and problem groups, preparation of publications, participation in All-Ukrainian Olympiads and competitions and International competitions, etc., in excess of the scope of tasks that are established by the relevant work program of the academic discipline.

By the decision of the department, students who participated in research work and performed certain types of additional (individual) types of educational activities can be awarded incentive (bonus) points for a certain educational component.

#### **Assessment of independent work (Maximum — 4 points)**

The total number of points received by a student for independent work is one of the components of academic success in the discipline. Independent work on each topic, according to the course program, is evaluated in the range from 0 to 4 points using standardized and generalized criteria for assessing knowledge.

#### Scale for evaluating the performance of independent work (individual tasks)

Maximum possible assessment of independent work (individual tasks)	Execution level			
	Excellent	Good	Satisfactory	Unsatisfactory
4	4	3	2	0-1

Forms of assessment include: current assessment of practical work; current assessment of knowledge acquisition based on oral answers, reports, presentations and other forms of participation during practical (seminar) classes; individual or group projects that require the development of practical skills and competencies (optional format); solving situational problems; preparation of resumes on independently studied topics; testing;

preparation of draft articles, conference abstracts and other publications; other forms that ensure a comprehensive assimilation of the curriculum and contribute to the gradual development of skills for effective independent professional (practical, scientific and theoretical) activities at a high level.

To assess the learning outcomes of a higher education applicant during the semester, a 100-point, national and ECTS assessment scale is used

#### Summary assessment scale: national and ECTS

Total points for all types of learning activities	ECTS assessment	National scale assessment	
		for exam, course project (work), internship	For pass/fail (credit)
90 – 100	A	excellent	pass
82 – 89	B	good	
75 – 81	C		
68 – 74	D	satisfactorily	
60 – 67	E		
35 – 59	FX	unsatisfactory with the possibility of reassembly	fail unsatisfactory with the possibility of retaking
0 – 34	F	unsatisfactory with mandatory re-study of the discipline	fail with mandatory re-study of the discipline

#### Discipline's Policy

The policy of the discipline is based on the principles of a systematic approach, focus on results and continuous improvement, which reflects the fundamental philosophy of quality management. Since the course involves mastering practical tools of statistical control, attending practical classes is critical for the formation of skills in analyzing processes and identifying the causes of defects. Students must adhere to the established deadlines for the implementation of project tasks, since timeliness is one of the key characteristics of the quality of managerial activities.

Academic integrity is an unwavering requirement when developing process maps, work instructions, and conducting individual research; The use of third-party sources or the help of artificial intelligence to generate ideas or visualize data is allowed only with critical reflection and reference to primary sources. During classroom work, activity, constructive criticism and team interaction are encouraged, which allows you to simulate real conditions of work of quality groups (Quality Circles).

Ethical behavior and respect for the opinions of other participants in the educational process are mandatory, since the culture of quality in the organization begins with personal responsibility and mutual respect. Communication with the teacher to explain complex methodologies or appeal the results of the assessment takes place through official digital channels within the work schedule, maintaining high standards of business communication and organizational culture.

#### Recommended sources of information

##### Basic literature:

1. The Law of Ukraine "On Technical Regulations and Conformity Assessment". URL: <https://zakon.rada.gov.ua/laws/show/124-19#Text>

2. Law of Ukraine "On Standardization". URL: <https://zakon.rada.gov.ua/laws/show/1315-18#Text>
3. DSTU EN ISO 9000:2022 Quality Management Systems. Basic provisions and glossary of terms (EN ISO 9000:2015, IDT; ISO 9000:2015, IDT)
4. DSTU EN ISO 9001:2018 Quality Management Systems. Requirements (EN ISO 9001:2015, IDT; ISO 9001:2015, IDT)
5. General Quality Management: Textbook /O. V. Nanka, R. V. Antoshchenkov, V. M. Kis, I. O. Listopad, N. I. Moiseeva, I. V. Halych, A. O. Nikiforov. – Kharkiv: KNTUSG, 2019 – 205 p.
6. Orobchuk M. G. Quality Management: Textbook. Lviv: LNU. I. Franko, 2019. – 280 p..
7. Fundamentals of standardization, certification and metrology: Course of lectures / I.V. Kalynych, I. Pichkar. - Uzhhorod: PGFC SHEI "UzhNU", 2022. - 75 p..
8. Standardization, certification and metrology [Text] : study. Manual. – Kryvyi Rih : [DonNUET], 2023. – 90 p..

#### **Additional literature:**

1. Aksonova L. I. Effectiveness of the Quality Management System in the Aspect of Internal Audit Tasks. - 2020.- №4. – P. 8 – 10.
2. Golovenko T. M., Shovkomud O. V. Fundamentals of Standardization and Quality Management of Light Industry Products: Electronic Manual. Utsk: NTU, 2021.
3. Denysiuk, O. G., & Maidanovych, V. V. Management of the quality of production of the enterprise: theoretical aspects and principles of application. Economics, Management and Administration, 2023. (1(103), 26–35. [https://doi.org/10.26642/ema-2023-1\(103\)-26-35](https://doi.org/10.26642/ema-2023-1(103)-26-35)
4. Elguviri, H. Role of the principles of quality management in the economic activity of the enterprise. Scientific notes of the University "KROK". 2020. (1 (57), 112–124. <https://doi.org/10.31732/2663-2209-2020-57-112-124>.
5. General Quality Management: Textbook / O. V. Nanka, R. V. Antoshchenkov, V. M. Kis, I. O. Listopad, N. I. Moiseeva, I. V. Halych, A. O. Nikiforov. Kharkiv: KNTUSG, 2019, 205 p.
6. Kropyvna A. V., Bondarenko G. S., Kropyvnyi V. M. Standardization: study. Manual. [Electronic edition]. Kropyvnytskyi: CSTU, 2021. 307 p..
7. Turchak I. O. Principles of quality and assortment management in the supply management of industrial enterprise. Economy. Finance. Law. 2021. № 8. Pp. 32–36.

#### **Information resources:**

1. The State Enterprise "Ukrainian Research and Training Center for Standardization, Certification and Quality Problems" (SE "UkrNDNC") is an official resource with up-to-date DSTU and ISO registers in Ukraine. URL: <https://uas.gov.ua/>
2. The International Organization for Standardization (ISO) is the official website of the International Organization for Standardization (ISO 9000 section). URL: <https://www.iso.org/iso-9001-quality-management.html>
3. The American Society for Quality (ASQ) is a global resource with access to a knowledge base on Lean, Six Sigma, and quality tools. URL: <https://asq.org/>
4. The National Quality Portal is a platform for the exchange of experience of quality management specialists and auditors. URL: <http://quality.ua/>