

# Quality management

## COURSE SYLLABUS

Code and name of specialty	073 – Management	Institute	Institute of Education and Science in Economics, Management and International Business
Program name	Management of Organizations and Administration	Department	Management and taxation
Type of program	Educational and Professional	Language of instruction	English / Ukrainian

### LECTURERS

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**PhD (Economics), Associate Professor of Management and Taxation Department (NTU “KhPI”). Authored over 80 scientific, educational and methodical publications. Leading lecturer of the courses: “Operations Management ”, “Quality Management and Product Certification ”, “Technology Management ”, “Business Planning ”.**

### GENERAL DESCRIPTION OF THE COURSE

<b>Summary</b>	The course aims to acquire knowledge and skills necessary for effective quality management, study of quality philosophy, statistical methods of quality control of products and services, quality criteria, experience of domestic and foreign theory and practice
<b>Course objectives</b>	<ul style="list-style-type: none"> <li>● formation and systematization of knowledge of theoretical and practical bases of management and quality control, standardization and certification of products;</li> <li>● ability to use modern approaches to quality control, national and international standards ISO 9000: 2000, 9001: 2015.</li> </ul>
<b>Program competences</b>	<p>GC01. The ability to realize own rights and responsibilities as a member of society, understand the values of civil (democratic) society and the need for its sustainable development, rule of law, human and civil rights and freedoms in Ukraine.</p> <p>GC10. The ability to conduct research at an appropriate level.</p> <p>SC01. The ability to identify and describe the characteristics of organizations.</p> <p>SC02. The ability to analyze the results of organization activity, to compare them with the factors of the external and internal environment.</p> <p>SC04. The ability to determine the functional areas of the organization and the relationships between them.</p> <p>SC10. The ability to assess the performed works, to ensure their quality, and to motivate the staff of the organization.</p> <p>SC1.2. Ability to formulate the main tasks associated with the implementation of risk management in the organization</p> <p>SC1.3. Understand the principles of business ethics and use them in professional activities</p>
<b>Types of classes and control</b>	Lectures, practical classes, consultations. Final control - exam
<b>Term</b>	8

<b>Student workload (credits) / Type of course</b>	6/ Elective	<b>Lectures (hours)</b>	20	<b>Workshops (hours)</b>	20	<b>Self-study (hours)</b>	140
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Learning outcomes	Teaching and learning methods	Forms of assessment (Continuous assessment CAS, final assessment FAS)
LO 02. To keep moral, cultural, scientific values and to increase achievements of society, to use different types and forms of effective activity for maintaining a healthy lifestyle.	Lectures with presentations, discussions, practical classes (seminars, workshops), individual work (abstract, essay, participation in conferences and specialized seminars, work with original research on quality management).	Assessment of seminars (CAS), assessment of tests (CAS), checking of lecture notes (CAS), assessment of individual assignments (CAS), exam (FAS)
LO 03. To demonstrate knowledge of theories, methods, and functions of management, modern concepts of leadership.	Interactive lectures with presentations, discussions, practical classes, case-studies	Written assignment (CAS), practical assessment (CAS), online tests (CAS), exam (FAS)
LO 04. To show skills of identification of problems and justification of management decisions.	Interactive lectures with presentations, discussions, practical classes, students' feedback method, individual tasks, problem-studies	Assessment in practical classes (CAS), problem sheets (CAS), exam (FAS)
LO 05. To describe the content of the functional areas of the organization	Interactive lectures with presentations, discussions, practical classes, students' feedback method, individual tasks, project-method	Written assignment (CAS), practical assessment (CAS), online tests (CAS), exam (FAS)
LO 06. To show skills of search, collecting, and analysis of information, calculation of indicators to substantiate management decisions.	Research method, practical classes, teamwork, case method, student feedback method, individual tasks	Written Individual Assignments (CAS), Assessment of Practical Lessons (CAS), Data Collection and Research Reporting (CAS), Exam (FAS)
LO1.1. Develop an operational strategy, calendar plans, organize operational activities, effectively manage the resources and stocks of the organization	Interactive lectures with presentations, discussions, practical classes, case-studies	Written assignment (CAS), practical assessment (CAS), online tests (CAS), exam (FAS)
LO1.2. Explain the general principles and patterns of integrated management of material, information, financial and other flows	Research method, practical classes, teamwork, case method, student feedback method, case-studies, individual tasks	Written Individual Assignments (CAS), Assessment of Practical Lessons (CAS), Data Collection and Research Reporting (CAS), Exam (FAS)

### ASSESSMENT AND GRADING

Range s of points corres pondi ng to grade s	Total score (points) for all types of learning activities	ECTS grading scale	The national grading scale	Allocation of grade points
	90-100	A	excellent	
	82-89	B	good	
	74-81	C		
	64-73	D	satisfactory	
	60-63	E		
	35-59	FX	Unsatisfactory (with the exam retake option)	
	0-34	F	Unsatisfactory (with mandatory repetition of the course)	

100% final assessment in the form of exam (40%) and current assessment (60%).  
40% exam: individual task (written) and its oral presentation (30%), answer to the exam (10%)  
60% current rating:  
• 30% assessment of tasks in practical classes (participation in discussions and situational tasks);  
• 30% intermediate control (4 online tests)

#### Course policy

Students are required to attend classes according to schedule and adhere to ethical behavior. In case of absence, students will have to complete all tasks to compensate for missed classes. Participation in practical classes requires prior preparation and advance study of all necessary materials for productive discussions during the class. Written assignments must be submitted within the prescribed deadlines.

## COURSE STRUCTURE AND CONTENT

<b>Lecture 1</b>	The main issues of quality management. Domestic and international experience in quality management. Basic concept of total quality management	<b>Workshop 1</b>	The concept of quality in the modern sense. Factors that shape and ensure quality..	<b>S e l f - s t u d y</b>	The relationship between product quality and the success and efficiency of the national economy, product competitiveness and national prestige. Quality and development of scientific, technical and social progress.
<b>Lecture 2</b>	Quality management systems	<b>Workshop 2</b>	The main elements of the TQM strategy. Conditions for successful implementation of TQM.		Japanese Material Requirements Planning (MRP) system. Western Reorder Order Planning (ROP) Just-In-Time (JIT) Just-In-Case (JIC)
<b>Lecture 3</b>	Quality system in ISO standards series 9000, 9001	<b>Workshop 3</b>	Quality management system models		Models of quality management systems: Feigenbaum model, Oettinger model, Juran model. General characteristics of ISO 9000 series standards, the evolution of quality standards. Structure of basic ISO 9000 series standards. Organization of works on implementation of ISO 9000 series standards in Ukraine.
<b>Lecture 4-5</b>	Statistical methods of quality control	<b>Workshop 4-5</b>	Statistical methods of quality control. The procedure for collecting information for analysis. Quality control tools: checklist, histogram, scatter plot, stratification method, Pareto chart, causal chart (Isikawa), control chart Schewhart).		Principles of construction and application of quality control tools
<b>Lecture 6</b>	Quality Management Tools and Quality Function Deployment Process (QFD)	<b>Workshop 6</b>	Procedure for collecting source data for quality management tools. Procedure for building and applying tools. Key elements and tools of the Quality function. Quality House Concept and Consumer Voice Tracking Stages in Quality Function Deployment.		Study of lecture and additional material in preparation for practical classes on the topic 6. Abstract presentation.
<b>Lecture 7</b>	Certification of enterprise quality systems	<b>Workshop 7</b>	Stages of certification of quality systems. Register of quality systems, its structure and functions. Certification of quality systems in Ukraine.		Analysis of normative documents on certification of quality systems in Ukraine. International, regional, national - regulatory framework for quality system certification.
<b>Lecture 8</b>	Costs of quality and their classification	<b>Workshop 8</b>	Structure of profits and expenses. Cost classification. Payback of quality costs. Equal costs for product quality. Practical use of quality cost analysis.		calculations, fulfillment of individual tasks
<b>Lecture 9</b>	Accounting for quality costs in terms of TQM	<b>Workshop 9</b>	Algorithm of activity on financing of expenses for quality. The main tasks of measuring the cost of quality. Collection of data on quality costs.		Collection of data on quality costs. Regulatory documents for the collection and analysis of quality costs.
<b>Lecture 10</b>	Quality audit and quality awards	<b>Workshop 10</b>	Types of audits and models of quality assessment. Characteristics of types of quality audits. Reliability of evaluation results. Technology of external audit procedure.		Characteristics of types of quality audits. Reliability of evaluation results. Self-assessment and internal audits.

## RECOMMENDED READING

**C** 1. Evans, J. R. (2002). Total quality management. *Infor*, 40(4), 364.  
**o** 2. Anderson, J. C., Rungtusanatham, M., & Schroeder, R. G. (1994). A theory of  
**n** quality management underlying the Deming management method. *Academy of*  
**p** management Review, 19(3)  
**u** 3. Hoyle, D. (2007). *Quality management essentials*. Routledge.  
**i** 4. Dahlgaard, J. J., Khanji, G. K., & Kristensen, K. (2008). *Fundamentals of total*  
**s** quality management. Routledge.  
**o** 5. Walton, M. (1988). *The Deming Management Method: The Bestselling Classic*  
**r** *for Quality Management!*. Penguin.  
**y** 6. Krijnen, A. (2007). *The Toyota way: 14 management principles from the*  
world's greatest manufacturer..

**R** 1. Шаповал М.І. Менеджмент якості : підручник/ М.І. Шаповал. – 3-тє вид. випр.. і  
**e** доп. – К. : Знання, КОО, 2007. – 471 с.  
**с** 2. Кириченко Л.С., Мережко Н.В. Основи стандартизації, метрології та управління  
**о** якістю – К : КНТЕУ, 2001  
**m** 3. Капінос, Г. І., & Грабовська, І. В. (2016). *Управління якістю. навчальний*  
**m** *посібник/ГІ Капінос, ІВ Грабовська.–К.: Кондор-Видавництво.*  
**e** 4. Ілляшенко, С. М. (2010). *Інноваційний менеджмент. Підручник.*  
**n** 5. *Управління якістю : навч. посіб. для студентів економічних спеціальностей / Б*  
**d** *езродна С. М. – Чернівці: ПВКФ «Технодрук», 2017. – 174 с*  
**e**  
**d**

### Academic integrity

Students are expected to adhere to the Code of Ethics of Academic Relations and Integrity of NTU “KhPI”: show discipline, politeness, friendliness, honesty, responsibility

The content of this syllabus is consistent with the course program.