

Faculty of Mechanical Engineering / QUALITY AND STANDARDISATION / QUALITY AND MANAGEMENT SYSTEM

Course:	QUALITY AND MANAGEMENT SYSTEM			
Course ID	Course status	Semester	ECTS credits	Lessons (Lessons+Exercises+Laboratory)
12315	Mandatory	1	6	3+2+0
Programs	QUALITY AND STANDARDISATION			
Prerequisites	n/a			
Aims	The aim of the study is for students to master knowledge in the field of Quality and Management Systems. Students should be trained to understand, recognize and apply the concept and philosophy of quality and management systems.			
Learning outcomes	After passing the exam in this subject, students will be able to: 1. They differ in the basic dimensions and concepts of quality, 2. They interpret the trilogy of qualities, 3. They understand the standards of the management system, 4. They interpret the PDCA cycle of management system standards, 4. They apply a systemic way of thinking, 6. Applies risk-oriented thinking.			
Lecturer / Teaching assistant	Aleksandar Vujovic			
Methodology	Classic lecture of each chapter, discussions and explanations with students during the presentation; short oral tests of understanding and knowledge of parts of the material covered in the lectures; Demonstration of work on at least one demonstrative example; independent work on the preparation of a seminar paper			
Plan and program of work				
Preparing week	Preparation and registration of the semester			
I week lectures	History of quality			
I week exercises	History of quality			
II week lectures	Philosophy of quality			
II week exercises	Philosophy of quality			
III week lectures	Criteria for defining the quality of products and services			
III week exercises	Criteria for defining the quality of products and services			
IV week lectures	Trilogy of quality			
IV week exercises	Trilogy of quality			
V week lectures	Systems and a systemic approach to thinking			
V week exercises	Systems and a systemic approach to thinking			
VI week lectures	Measurement and sampling			
VI week exercises	Measurement and sampling			
VII week lectures	I test			
VII week exercises	I test			
VIII week lectures	The structure of management system standards			
VIII week exercises	The structure of management system standards			
IX week lectures	PDCA cycle of management system standards			
IX week exercises	PDCA cycle of management system standards			
X week lectures	Quality management system			
X week exercises	Quality management system			
XI week lectures	Environmental protection management system			
XI week exercises	Environmental protection management system			
XII week lectures	Information security management system			
XII week exercises	Information security management system			
XIII week lectures	Risk-oriented thinking			

XIII week exercises	Risk-oriented thinking					
XIV week lectures	Management system certification					
XIV week exercises	Management system certification					
XV week lectures	Test II					
XV week exercises	Test II					
Student workload						
Per week			Per semester			
6 credits x 40/30=8 hours and 0 minuts 3 sat(a) theoretical classes 0 sat(a) practical classes 2 excercises 3 hour(s) i 0 minuts of independent work, including consultations			Classes and final exam: 8 hour(s) i 0 minuts x 16 =128 hour(s) i 0 minuts Necessary preparation before the beginning of the semester (administration, registration, certification): 8 hour(s) i 0 minuts x 2 =16 hour(s) i 0 minuts Total workload for the subject: 6 x 30=180 hour(s) Additional work for exam preparation in the preparing exam period, including taking the remedial exam from 0 to 30 hours (remaining time from the first two items to the total load for the item) 36 hour(s) i 0 minuts Workload structure: 128 hour(s) i 0 minuts (cources), 16 hour(s) i 0 minuts (preparation), 36 hour(s) i 0 minuts (additional work)			
Student obligations			Attendance at lectures and exercises; preparation of a seminar paper			
Consultations			Every working day in office 419			
Literature			[1] Krivokapić, Z. (2011). Sistem menadžmenta kvalitetom, Mašinski fakultet, Podgorica [2] Juran, J., Feo, J. (2010). Jurans Quality Handbook, McGrawHill, New York [3] Arsovski, S. (2016). Nauka o kvalitetu, Fakultet inženjerskih nauka, Kragujevac [4] Masing, W. (2014). Handbuch Qualitaetsmanagement, Carl Hanser Verlag, Muenchen [5] MEST ISO 9001:2016 – Sistem menadžmenta kvalitetom [6] MEST ISO 14001:2016 – Sistem upravljanja zaštitom životne sredine [7] ISO/IEC 27001 – Information security management			
Examination methods			I and II test 20 points each; seminar paper 10 points; final exam 50 points A passing grade is obtained if at least 50 points are accumulated cumulatively			
Special remarks						
Comment						
Grade:	F	E	D	C	B	A
Number of points	less than 50 points	greater than or equal to 50 points and less than 60 points	greater than or equal to 60 points and less than 70 points	greater than or equal to 70 points and less than 80 points	greater than or equal to 80 points and less than 90 points	greater than or equal to 90 points