



Subject card

Subject name and code	PRODUCT QUALITY, PG_00044281						
Field of study	Engineering Management						
Date of commencement of studies	October 2022	Academic year of realisation of subject			2023/2024		
Education level	first-cycle studies	Subject group			Obligatory subject group in the field of study Subject group related to scientific research in the field of study		
Mode of study	Part-time studies (on-line)	Mode of delivery			blended-learning		
Year of study	2	Language of instruction			Polish		
Semester of study	4	ECTS credits			4.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Ewa Marjańska					
	Teachers	dr inż. Ewa Marjańska					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	16.0	0.0	16.0	0.0	0.0	32
	E-learning hours included: 24.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours		Self-study	SUM	
	Number of study hours	32	6.0		62.0	100	
Subject objectives	Getting to know the methods of testing the quality of selected products. Self-assessment of the quality of selected products.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_U08] analyses engineering and managerial solutions in decision-making processes, taking into account pro-quality and pro-environmental aspects, as well as safety of work processes	Wyniki tłumaczenia Assesses the quality of selected goods			[SU4] Assessment of ability to use methods and tools		
	[K6_W07] knows the basic conditions concerning norms and standards covering particular areas of the organization's functioning, including in particular those concerning technical resources and processes	Defines basic commodity concepts and analyzes various norms			[SW3] Assessment of knowledge contained in written work and projects		
	[K6_W11] has the basic knowledge of mathematics, physics and chemistry necessary to solve technical problems	combines knowledge in the field of chemistry, physics, commodity science and economics;			[SW3] Assessment of knowledge contained in written work and projects		

Subject contents	<p>LECTURE: Types of commodity science and its history; Commodity, product, good; Classification and systematization of goods; Commodity coding rules; Polish codes and code systems in other countries; Coding rules for consumer and shipping units; Quality, quality characteristics and types of goods inspection; Factors influencing the quality; Quality measurement, quality control; Tasks and goals of consumer organizations; Organization, goals, tasks of standardization; Polish, factory and European standards; Harmonization of standards; Testing and assessing the quality of food products using organoleptic methods; Certification in the EU and Poland; Quality assurance systems and HACCP; Packaging as an integral part of the goods; Labeling rules; Transportation of goods; Storage of goods; Selected properties of goods.</p> <p>LABORATORY: Examination of selected physicochemical properties of some metals, alloys and precious stones; Testing the acidity of selected products; Testing the water content in selected fat products; Determination of the quality of selected products of the fermentation industry, dairy products and bread; Quality evaluation and classification of paper products;</p>																				
Prerequisites and co-requisites																					
Assessment methods and criteria	<table border="1"> <thead> <tr> <th data-bbox="456 647 794 674">Subject passing criteria</th> <th data-bbox="799 647 1137 674">Passing threshold</th> <th data-bbox="1142 647 1481 674">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="456 680 794 707">Mini projects</td> <td data-bbox="799 680 1137 707">60.0%</td> <td data-bbox="1142 680 1481 707">20.0%</td> </tr> <tr> <td data-bbox="456 714 794 741">Exam</td> <td data-bbox="799 714 1137 741">60.0%</td> <td data-bbox="1142 714 1481 741">30.0%</td> </tr> <tr> <td data-bbox="456 748 794 775">Activity in classes</td> <td data-bbox="799 748 1137 775">60.0%</td> <td data-bbox="1142 748 1481 775">10.0%</td> </tr> <tr> <td data-bbox="456 781 794 808">Laboratory reports</td> <td data-bbox="799 781 1137 808">60.0%</td> <td data-bbox="1142 781 1481 808">15.0%</td> </tr> <tr> <td data-bbox="456 815 794 842">Presentations</td> <td data-bbox="799 815 1137 842">60.0%</td> <td data-bbox="1142 815 1481 842">25.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	Mini projects	60.0%	20.0%	Exam	60.0%	30.0%	Activity in classes	60.0%	10.0%	Laboratory reports	60.0%	15.0%	Presentations	60.0%	25.0%
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Recommended reading	Basic literature	<ol style="list-style-type: none"> Praca zbiorowa pod redakcją Laboratorium z towaroznawstwa wybranych artykułów spożywczych i nieżywnościowych, wydanie drugie rozszerzone, Gdańsk 2007, W. Nalepa, Towaroznawstwo artykuły przemysłowe, PWE Warszawa, 1986; A. Korzeniowski, Towaroznawstwo artykułów przemysłowych, Badanie jakości wyrobów, część I, AE Poznań, 1999; M. Małecka, B. Pacholek, Ocena jakości wybranych produktów spożywczych i wody, AE Poznań, 2001. 																			
	Supplementary literature	<p>H. Całus, Podstawy obliczeń chemicznych, Wydawnictwa Naukowo-Techniczne, Warszawa 1987</p>																			
	eResources addresses	<p>Podstawowe https://enauczanie.pg.edu.pl/moodle/course/view.php?id=25289 - E-learning course. Classes are held on the MS Teams platform. Link to course meetings. Adresy na platformie eNauczanie: Jakość Produktu NSTAC. online 2023/2024 - Moodle ID: 25289 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=25289</p>																			
Example issues/ example questions/ tasks being completed																					
Work placement	Not applicable																				