



Subject card

Subject name and code	The History of Poland's and Worldwide (Craft) Beer Revolution, PG_00059434						
Field of study	Chemical Technology, Civil Engineering, Chemistry, Technical Physics, Environmental Engineering, Electrical Engineering, Power Engineering, Electronics and Telecommunications, Biotechnology, Geodesy and Cartography, Biomedical Engineering, Electronics and Telecommunications, Chemistry in Construction Engineering, Biomedical Engineering, Biomedical Engineering, Nanotechnology, Spatial Development, Engineering and Technologies of Energy Carriers, Corrosion, Nanotechnology, Automation, Robotics and Control Systems, Green Technologies, Green Technologies, Spatial Development, Power Engineering, Power Engineering						
Date of commencement of studies	February 2022		Academic year of realisation of subject		2022/2023		
Education level	second-cycle studies		Subject group				
Mode of study	Full-time studies		Mode of delivery		at the university		
Year of study	1		Language of instruction		Polish		
Semester of study	2		ECTS credits		2.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Power Electronics and Electrical Machines -> Faculty of Electrical and Control Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Roland Ryndzionek				
	Teachers		dr inż. Roland Ryndzionek				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	0.0	0.0	0.0	30
	E-learning hours included: 0.0						
Historia piwnej rewolucji w Polsce i na świecie 22/23 - Moodle ID: 25256 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=25256							
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	30	2.0	18.0	50		
Subject objectives	Introducing the student to the subject of what beer and brewing is in Poland and in the world. What is the role of the engineer's profession in the beer world. Getting the student acquainted with historical beer styles produced in Gdansk and other regions of Poland. Introduction to sensory features of beer, desirable aromas and disadvantages, facts and myths. Discussing the beer revolution in Poland and in the world. Discussion on the culture of beer consumption and analysis of its influence on human health.						
Learning outcomes	Course outcome	Subject outcome		Method of verification			
	[K7_U71] is able to apply knowledge from humanistic, social, economic or legal sciences in order to solve problems	The student has general knowledge about the history of Gdansk and Polish brewing.		[SU2] Assessment of ability to analyse information			
	[K7_K71] is able to explain the need to apply knowledge from humanistic, social, economic or legal sciences in order to function in a social environment	Knows and applies the principles of sensory evaluation.		[SK2] Assessment of progress of work			
	[K7_W71] has general knowledge in humanistic, social, economic or legal sciences, including their fundamentals and applications	Students can talk about beer, know the history of Polish styles and can evaluate sensory defects.		[SW2] Assessment of knowledge contained in presentation			

Subject contents	<p>Historical overview. Discussion of historical beer styles brewed in Gdansk (e.g. beers brewed by Jan Hevelius), Poland and in the world. What is industrial and home brewing. Reproducing historical styles, or the role of the engineer in modern brewing. Whether brewing in Poland is legal (and legal regulations applied in Europe). Ingredients needed for brewing beer. Brewing methods, yeast propagation, types of hops, bottom and top fermentation. Introduction to the sensory qualities of beer, beer evaluation according to BJCP and PSPD criteria. Facts and myths about beer. Foodpairing, i.e. combining beer with food. Health aspects and culture of beer consumption.</p>								
Prerequisites and co-requisites									
Assessment methods and criteria	<table border="1"> <thead> <tr> <th data-bbox="454 533 788 555">Subject passing criteria</th> <th data-bbox="799 533 1139 555">Passing threshold</th> <th data-bbox="1150 533 1473 555">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="454 562 788 584">test</td> <td data-bbox="799 562 1139 584">60.0%</td> <td data-bbox="1150 562 1473 584">100.0%</td> </tr> </tbody> </table>	Subject passing criteria	Passing threshold	Percentage of the final grade	test	60.0%	100.0%		
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Recommended reading	<p>Basic literature</p>	<p>Denis De Keukeleire. Fundamentals of beer and hop chemistry, Quím. Nova 23 (1) Feb 2000</p> <p>Adom KK, Liu RH.. Antioxidant activity of grains. J Agric Food Chem 50:61827, 2002.</p>							
	<p>Supplementary literature</p>	<p>Stan Hieronymus, Brew Like a Monk</p> <p>J. Herz & A. Dulye.: Beer & Food Course, Brewers Association</p> <p>John J. Palmer.: Jak warzyć piwo. Kompendium wiedzy piwowara domowego. 2020</p> <p>Jerzy Gibadło.: Wybierz sobie piwo. Przewodnik po stylach piwnych, 2021</p> <p>Piwowar, polski kwartalnik piwowarski</p> <p>Wiki.piwo.org</p>							
	eResources addresses								
Example issues/ example questions/ tasks being completed	<p>What is an IBU? Give the ranges for degrees Plato for the IPA style</p>								
Work placement	Not applicable								