



Subject card

Subject name and code	The History of Poland's and Worldwide (Craft) Beer Revolution, PG_00057840						
Field of study	Civil Engineering, Environmental Engineering, Materials Engineering, Informatics, Mathematics, Transport, Management, Management, Materials Engineering, Management, Economic Analytics, Economic Analytics, Space and Satellite Technologies, Automatic Control, Cybernetics and Robotics, Ocean Engineering, Green Technologies, Green Technologies, Coastal and Offshore Engineering, Mechatronics, Ocean Engineering, Mechanical Engineering, Materials Engineering, Space and Satellite Technologies, Coastal and Offshore Engineering, Ocean Engineering, Transport and Logistics, Ocean Engineering						
Date of commencement of studies	February 2021	Academic year of realisation of subject			2021/2022		
Education level	second-cycle studies	Subject group			Optional subject group Humanistic-social subject group		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	2	Language of instruction			Polish		
Semester of study	3	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 - Moodle ID: 22135 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=22135							
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_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	The student has general knowledge about the history of Gdansk and Polish brewing.			[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.			[SW1] Assessment of factual knowledge		
	[K7_U71] is able to apply knowledge from humanistic, social, economic or legal sciences in order to solve problems	Knows and applies the principles of sensory evaluation			[SU4] Assessment of ability to use methods and tools		

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="454 530 791 560">Subject passing criteria</th> <th data-bbox="801 530 1141 560">Passing threshold</th> <th data-bbox="1144 530 1481 560">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="454 564 791 593">test</td> <td data-bbox="801 564 1141 593">50.0%</td> <td data-bbox="1144 564 1481 593">100.0%</td> </tr> </tbody> </table>	Subject passing criteria	Passing threshold	Percentage of the final grade	test	50.0%	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								