GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	The history of the beer in Poland and around the world, PG_00072989		
Field of study	Technical Physics		
Date of commencement of studies	February 2026	Academic year of realisation of subject	2026/2027
Education level	second-cycle studies	Subject group	
Mode of study	Full-time studies	Mode of delivery	e-learning
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 -> Faculties of Gdańsk University of Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Roland Ryndzionek	
	Teachers	dr hab. inż. Roland Ryndzionek	

Lesson types

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: 30.0

eNauczanie source addresses:

Moodle ID: 8251 Historia piwnej rewolucji w Polsce i na świecie [2026/2027]
https://enauczanie.pg.edu.pl/2025/course/view.php?id=8251

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

Introduction to brewing in Poland and around the world. The role of engineers in the automation of breweries and production. Familiarization with historical beer styles produced in Gdańsk and other regions of Poland. Introduction to sensory characteristics, desirable aromas and defects, facts and myths. Discussion of the beer revolution in Poland and around the world. Dynamic growth of non-alkoholic beers.

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	Can apply historical, cultural, and legal knowledge to analyze phenomena and processes related to 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 rules governing sensory evaluation.	[SK3] Assessment of ability to organize work
[K7_W71] has general knowledge in humanistic, social, economic or legal sciences, including their fundamentals and applications	Has general knowledge of the history of brewing in Gdańsk and Poland.	[SW1] Assessment of factual knowledge

Subject contents

Course content – lecture

Historical overview. Discussion of historical beer styles brewed in Gdańsk (including beers brewed by Johannes Hevelius), Poland, and around the world. What is industrial and home brewing? Process automation and introduction to industrial issues known, among others, at the Amber Brewery. Non-alkoholic beers. Beer brewing methods, yeast propagation, types of hops, bottom and top fermentation. Is brewing legal in Poland (and legal regulations applicable in Europe). Introduction to the sensory characteristics of beer – beer evaluation according to BJCP and PSPD criteria.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
test	60.0%	100.0%

Recommended reading	Basic literature	*Denis De Keukeleire. Fundamentals of beer and hop chemistry, Quím. Nova 23 (1), Feb 2000* *Adom KK, Liu RH.. Antioxidant activity of grains. J Agric Food Chem 50:6182–7, 2002.*
	Supplementary literature	*Stan Hieronymus, Brew Like a Monk* *J. Herz & A. Dulye.: Beer & Food Course, Brewers Association* *John J. Palmer.: Jak warzyć piwo. Kompendium wiedzy piwowara domowego. 2020* *Jerzy Gibadło.: Wybierz sobie piwo. Przewodnik po stylach piwnych, 2021* *Piwowar, polski kwartalnik piwowarski* *Wiki.piwo.org*
	eResources addresses	
Example issues/ example questions/ tasks being completed	*What is infusion mashing, single-temperature mashing?* *Examples of mechatronic systems in industrial breweries.*	
Practical activites within the subject	Not applicable	

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