University of Gdańsk

Subject card

Subject name and code	Circular Economy, PG_00179537		
Field of study	Chemistry		
Date of commencement of studies	October 2026	Academic year of realisation of subject	2026/2027
Education level	Master's studies	Subject group	Optional 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	academic	Assessment form	credit
Conducting unit	Faculty of Chemistry -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	prof. dr hab. Ewa Siedlecka	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	30.0	0.0	0.0	0.0	30

E-learning hours included: 0.0

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	30	10.0	20.0	60

Subject objectives

The course aims to familiarise students with the principles of the circular economy, their implementation, and the challenges associated with implementing them.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[CHEMMU2_K03] Understands the need for systematic work on various projects of a long-term nature and knows how to set priorities for the implementation of undertaken tasks.	Completes tasks assigned during classes and those given as homework	[SK2] presentation/project/paper/ report
[CHEMMU2_U03] Finds necessary information in specialist literature, databases and other sources, lists basic scientific journals in chemistry.	can find examples of implementing the circular economy in specialist literature	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report
[CHEMMU2_W11] Demonstrates general knowledge about the current trends in the development of chemistry as a science and the latest discoveries in this field.	knows the selected technologies used in the circular economy	[SW1] oral statement/ conversation/discussion
[CHEMMU2_W02] Has extended and in-depth knowledge in the field of basic chemistry.	understands concepts related to the circular economy (CE) and uses appropriate terminology, understands the idea of CE,	[SW1] oral statement/ conversation/discussion [SW2] presentation/project/paper/ report
[CHEMMU2_K04] Correctly identifies and resolves dilemmas related to the profession of a chemist.	knows and understands the principles of circular economy and the problems resulting from their implementation	[SK1] oral statement/conversation/ discussion
[CHEMMU2_U04] Applies acquired knowledge of chemistry and related scientific disciplines.	knows and understands the current limitations related to the introduction of the circular economy into the economy	[SU2] presentation/project/paper/ report

<table>
<tr><td>Subject contents</td><td>Definition and concepts related to the circular economy (CE). Discussion of the idea and premises for introducing CE. Discussion of the principles of CE using examples from Poland and abroad. Discussion of technologies included in CE. Presentation of the advantages of the system and challenges during its implementation using examples. Based on the discussed content, propose a system based on CE for a selected plant, city, etc.The classes will be enriched with study visits.</td></tr>
<tr><td>Prerequisites and co-requisites</td><td>lack</td></tr>
<tr><td>Assessment methods and criteria</td><td>
<table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>presentation</td><td>51.0%</td><td>40.0%</td></tr>
<tr><td>tasks during classes</td><td>51.0%</td><td>40.0%</td></tr>
<tr><td>activity during classes</td><td>51.0%</td><td>20.0%</td></tr>
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</td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td>given by the instructor during the class</td></tr>
<tr><td>Supplementary literature</td><td>given by the instructor during the class</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td></td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
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