University of Gdańsk

Subject card

Subject name and code	Radioactivity around us, PG_00132878		
Field of study	Criminology		
Date of commencement of studies	October 2025	Academic year of realisation of subject	2025/2026
Education level	Bachelor's studies	Subject group	
Mode of study	full-time studies	Mode of delivery	e-learning
Year of study	1	Language of instruction	English Polish
Semester of study	1	ECTS credits	2.0
Learning profile	academic	Assessment form	credit
Conducting unit	Faculty of Chemistry -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Dagmara Strumińska-Parulska, prof. UG	
	Teachers		

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

Additional information:

Lecture based on the multimedia presentation in-class or online learning.

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	Familiarize students with the topics of the course content

<table>
<tr><td>Learning outcomes</td><td>
<table>
<tr><th>Course outcome</th><th>Subject outcome</th><th>Method of verification</th></tr>
<tr><td></td><td>Student:
gains knowledge in the scope of classes.
finds necessary information in specialist literature, databases and other sources,
lists basic scientific journals in the field of chemistry
implements directions of further education
knows the limitations of his/her own knowledge;
understands the need for further education and is able to inspire others to do so
understands the need for systematic work on various long-term projects and is able to determine priorities in the implementation of undertaken tasks
undertakes research tasks consciously and responsibly, understanding the social aspects of practical use of acquired knowledge and skills and the related responsibility
characterizes the effects of human interference in the natural environment and explains the mechanisms of the response of living organisms to its pollution</td><td>[SW1] oral statement/ conversation/discussion
[SU1] oral statement/conversation/ discussion
[SK1] oral statement/conversation/ discussion</td></tr>
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<tr><td>Subject contents</td><td>Radiochemistry and radiation protection basics. Sources and distribution of natural and artificial radionuclides. Radiotoxicity and its groups. Dosimetry and its units. Radiation doses. Sources of radiochemical contamination and radiation doses evaluation. Food examples and their influence on the radiation dose. The Chernobyl and the Fukushima accidents. Monitoring of radioactive food contamination. Radiological effects of smoking cigarettes.</td></tr>
<tr><td>Prerequisites and co-requisites</td><td>no formal requirements</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>Activity during classes</td><td>51.0%</td><td>100.0%</td></tr>
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</td></tr>
<tr><td>Recommended reading</td><td>
<table>
<tr><td>Basic literature</td><td>Frontasyeva M., Perelygin V., Vater P., Radionuclides and Heavy Metals in Environment, Springer, 2000
Dahlgaard H., Nordic Radioecology: The Transfer of Radionuclides through Nordic Ecosystems to Man, Elsevier, 1994,
Magil J., Galy J., Radioaktywność - radionuklidy - promieniowanie, Springer, 2005,</td></tr>
<tr><td>Supplementary literature</td><td>-</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
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<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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