University of Gdańsk

Subject card

Subject name and code	Chemistry in the media space II, PG_00121247		
Field of study	Chemical Business, Chemistry, Environmental Protection		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2025/2026
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	2	Language of instruction	Polish ENG
Semester of study	3	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. Artur Giełdoń	
	Teachers	dr hab. Rafał Ślusarz dr Agnieszka Kowalczyk	

Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	30.0	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	5.0	15.0	50

Subject objectives	The use of available electronic forms of media to promote and disseminate chemical knowledge.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[CHEMMU2_U08] Prepares and presents oral presentations in various fields of chemistry in Polish and English, using acquired knowledge and skills as well as basic sources of scientific information.	The student is able to correctly select and apply appropriate methods and tools appropriate to the purpose of the media content to be communicated. Students are able to effectively plan and organize their work, independently acquiring and consolidating knowledge in an orderly and systematic manner, using information technology. Student is able to correct erroneous information indicating the place of their falsification. Student is able to in an advanced degree use gimp, avogadro and pymol programs. The student is able to skillfully conduct a discussion, present his own concept and justify one's own position.	[SU1] oral statement/conversation/ discussion
	[CHEMMU2_U07] Defines and implements the directions of own further education.	The student is able to correctly select and apply appropriate methods and tools appropriate to the purpose of the media content to be communicated. Students are able to effectively plan and organize their work, independently acquiring and consolidating knowledge in an orderly and systematic manner, using information technology. Student is able to correct erroneous information indicating the place of their falsification. Student is able to in an advanced degree use gimp, avogadro and pymol programs. The student is able to skillfully conduct a discussion, present his own concept and justify one's own position.	[SU1] oral statement/conversation/ discussion [SU5] implementation of a problem task
	[CHEMMU2_K06] Undertakes research tasks consciously and responsibly, understanding the social aspects of the practical application of the acquired knowledge and skills and the responsibility related to it.	The student understands the differences in individual and team preparation of material popularizing chemical knowledge and its publication on the Internet. The student understands the importance of critical evaluation of the existing knowledge, demonstrates readiness to constantly expand it and to consult competent experts.	[SK2] presentation/project/paper/ report [SK5] implementation of a problem task
	[CHEMMU2_W15] Formulates general principles for creating and developing selected forms of individual entrepreneurship enabling the use of knowledge coming from science.	The student recognizes the appropriate method of popularization of chemical knowledge and assigns them to the selected topic/problem, is able to characterize the advantages of the selected form of multimedia communication. The student is able to verify whether the given information is true. The student is able to explain the differences in usefulness and possibilities between different media depending on the content conveyed and the platform used.	[SW5] implementation of a problem task

	Course outcome	Subject outcome	Method of verification
	[CHEMMU2_K07] Can think and act in an entrepreneurial manner.	The student understands the differences in individual and team preparation of material popularizing chemical knowledge and its publication on the Internet. The student understands the importance of critical evaluation of the existing knowledge, demonstrates readiness to constantly expand it and to consult competent experts.	[SK5] implementation of a problem task
	[CHEMMU2_W02] Has extended and in-depth knowledge in the field of basic chemistry.	The student recognizes the appropriate method of popularization of chemical knowledge and assigns them to the selected topic/problem, is able to characterize the advantages of the selected form of multimedia communication. The student is able to verify whether the given information is true. The student is able to explain the differences in usefulness and possibilities between different media depending on the content conveyed and the platform used platform.	[SW2] presentation/project/paper/ report [SW5] implementation of a problem task

Subject contents

During the course, modern in-depth forms of communicating chemical knowledge using the Internet will be discussed (editing of advanced social media articles, multimedia preparation, advanced digital image processing).

Publishing advanced scientific content in a way that is accessible to any audience using molecular modeling software (avogadro, pymol) and also ball models, as well as filming and visualizing chemical experiments. The class will discuss the poster as a static means of conveying information as well as the problem of verifying posted information and the appropriate selection of sources to ensure their reliability and credibility.

The knowledge gained will then be used by students to develop electronic forms of media to promote and disseminate chemical knowledge, so that they effectively focus attention and are designed to reach a specific audience.

Electronic media have long ceased to be solely a means of conveying information. They are now a melting pot of variety aimed at focusing the attention of the recipient on the form of the message. Therefore, the information prepared must be designed to reach a specific audience.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
making a multimedia video	51.0%	30.0%
making posts placed on websites with graphics made using the learned programs	51.0%	30.0%
making a popular science poster	51.0%	30.0%
observation and evaluation of student activity during classes	51.0%	10.0%

Recommended reading

Basic literature	Jones L, Atkins P, Laverman L. General Chemistry
Supplementary literature	Jędryczkowski J. Prezentacje multimedialne w pracy nauczyciela, Zielona Góra, Oficyna Wydawnicza Uniwersytetu Zielonogórskiego, Richard H. Social Media: Effective Strategies For Dominating Social Media Marketing with Facebook, Twitter, YouTube, Instagram, LinkedIn, and Pinterest Falls J., Deckers E. Media społecznościowe bez ściemy. Jak kreować markę. Witkowski B. GIMP. Poznaj świat grafiki komputerowej. Boniecki J. Smartfonowy zawrót głowy (czyli fotografowanie smartfonem).
eResources addresses	

Example issues/ example questions/ tasks being completed

- making a multimedia video,
- making posts placed on websites with graphics made using the learned programs,
- making a popular science poster
- observation and evaluation of student activity during classes

Work placement

Not applicable

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