The history of nuclear chemistry

Educational subject description sheet

Basic information

Study programme Chemia (General Chemistry) **Speciality** - **Organizational unit** Faculty of Chemistry **Study level** First-cycle programme **Study form** Full-time **Education profile** General academic	**Didactic cycle** 2024/25 **Subject code** 02CENS.12HS.03215.24 **Lecture languages** English **Course type** Elective **Block** Humanities and social subjects

Subject coordinator	Tomasz Pospieszny
Lecturer	Tomasz Pospieszny

Period	**Activities and hours**	**Number of ECTS points**
Semester 2	• Lecture: 30, Graded credit	2

Goals

Code	Goal
C1	Familiarization with the history and development of nuclear chemistry in Poland.
C2	Familiarization with the history and development of nuclear chemistry in the world.
C3	Discussion of the most important aspects of the development of nuclear chemistry.

Entry requirements

No prerequisites required.

Subject learning outcomes

Code	Outcomes in terms of	Learning outcomes	Examination methods
Knowledge – Student:			
W1	knows the basic events in the development of exact sciences.	CEN_K1_W01, CEN_K1_W02, CEN_K1_W03, CEN_K1_W04	Essay
W2	knows the history and development of nuclear chemistry in Poland.	CEN_K1_W01, CEN_K1_W02, CEN_K1_W03, CEN_K1_W04	Essay
W3	knows the history and development of nuclear chemistry in the world.	CEN_K1_W01, CEN_K1_W02, CEN_K1_W03, CEN_K1_W04	Essay
W4	knows the most important aspects of the development of nuclear chemistry.	CEN_K1_W01, CEN_K1_W02, CEN_K1_W03, CEN_K1_W04	Essay
Skills – Student:			
U1	is able to draw conclusions from the descriptions of scientific discoveries.	CEN_K1_U01, CEN_K1_U02	Essay

Study content

No.	Course content	Subject learning outcomes	Activities
1.	Fundamental events in the development of exact sciences.	W1, W2, W3, W4, U1	Lecture
2.	History and development of nuclear chemistry in Poland.	W1, W2, W3, W4, U1	Lecture
3.	History and development of nuclear chemistry in the world.	W1, W2, W3, W4, U1	Lecture
4.	The most important aspects of the development of nuclear chemistry.	W1, W2, W3, W4, U1	Lecture

Additional information

Activities	Teaching and learning methods and activities
Lecture	Lecture with a multimedia presentation of selected issues

Activities	Credit conditions
Lecture	Obtaining a positive grade requires the written essay. The grading scale with corresponding percentage distribution is as follows: • Grade 5.0 - Achieving the intended learning outcomes above 90% of the maximum possible number of points. • Grade 4.5 - Achieving the intended learning outcomes in the range of 80 - 89.9% of the maximum possible number of points. • Grade 4.0 - Achieving the intended learning outcomes in the range of 70 - 79.9% of the maximum possible number of points. • Grade 3.5 - Achieving the intended learning outcomes in the range of 60 - 69.9% of the maximum possible number of points. • Grade 3.0 - Achieving the intended learning outcomes in the range of 51-59.9% of the maximum possible number of points. • Grade 2.0 - Not achieving the intended learning outcomes; below 51% of the maximum possible number of points.

Literature

Obligatory

1. T. Pospieszny, New alchemy or the history of radioactivity, Wydawnictwo Sophia, Warsaw 2022.

Optional

1. A.K. Wróblewski, The history of physics, PWN, Warsaw 2006

Calculation of ECTS points

Activities	Activity hours*
Lecture	30
Reading the indicated literature	15
Preparation of a project	15
Student workload	**Hours** 60
Number of ECTS points	**ECTS** 2

* academic hour = 45 minutes

Efekty uczenia się dla kierunku

Kod	Treść
CEN_K1_U01	The graduate can use basic chemical terminology according to IUPAC and PTChem recommendations
CEN_K1_U02	The graduate can present the knowledge acquired in an accessible manner
CEN_K1_W01	The graduate knows and understands basic chemical laws and issues
CEN_K1_W02	The graduate knows and understands basic physics and their relationship to chemical laws
CEN_K1_W03	The graduate knows and understands techniques of higher mathematics for the formal description of basic physical and chemical processes
CEN_K1_W04	The graduate knows and understands fundamental knowledge of natural sciences