1.	**Field of study**	**Mathematics**
2.	Faculty	Faculty of Science and Technology
3.	Academic year of entry	2023/2024 (winter term)
4.	Level of qualifications/degree	second-cycle studies
5.	Degree profile	general academic
6.	Mode of study	full-time

7.	**General information about the module**
Module name	**Advanced Inorganic Chemistry**
Module code	W4-MT-S2-23-ZChN
Number of the ECTS credits	3
Language of instruction	Polish
Purpose and description of the content of education	Moduł Zaawansowana chemia nieorganiczna ma za zadanie rozszerzyć wiedzę studenta na temat związków nieorganicznych bloku p i d. Student zapoznaje się z nomenklaturą, sposobem otrzymywania i właściwościami związków nieorganicznych opartych na metalach bloku f. Szczególnym aspektem tego modułu będzie rozwinięcie wiedzy studenta z zakresu nowoczesnych metod badań i identyfikacji związków nieorganicznych.
List of modules that must be completed before starting this module (if necessary)	not applicable

8. Learning outcomes of the module

Code	Description	Learning outcomes of the programme	Level of competenc (scale 1-5)
ZChN_01	Zna nomenklaturę, budowę i właściwości związków nieorganicznych opartych na metalach bloku f.	KN_Ch_W01	3
ZChN_02	Zna nowoczesne metody badań związków nieorganicznych.	KN_Ch_U04 KN_Ch_W03	4 4
ZChN_03	Potrafi samodzielne wyszukiwać informacje w literaturze w celu podnoszenia kompetencji zawodowych i osobistych.	KN_Ch_K01 KN_Ch_U07	4 4
ZChN_04	Odpowiada za bezpieczeństwo pracy własnej i innych.	KN_Ch_U06 KN_Ch_W06	4 4
ZChN_05	Opracowuje raporty i sprawozdania z zakresu syntezy i eksperymentalnych metod analizy i identyfikacji związków nieorganicznych bloku p, d i f.	KN_Ch_U05	4
ZChN_06	Rozumie znaczenie chemii nieorganicznej dla rozwoju techniki oraz dostrzega jej interdyscyplinarny charakter jako nauki.	KN_Ch_U07 KN_Ch_W02	5 5

9.	Methods of conducting classes	
Code	**Category**	**Name (description)**
a02	Lecture methods / expository methods	Monographic lecture *an exhaustive discussion of one issue, usually related to the research interests of the person teaching the course or a thorough presentation of one selected issue*
d01	Programmed learning methods	Working with a computer *e.g., Webquest; implementation of educational tasks using electronic and digital devices, computer programs and Internet applications; the academic teacher acts as a consultant; students' work is carried out step by step according to the plan laid own by the person teaching the course and following his instructions, and proceeds towards producing the indicated results within the set deadline*
e01	Practical methods	Laboratory exercise / experiment *[also conducted as fieldwork] a method of practical application of knowledge; implemented in three stages: the recognition of a problem induced by the task content, the formulation of the problem and the attempt to solve it accompanied by the assessment of the effects; the goal is to acquire skills, abilities and habits, and to consolidate the acquired knowledge so that it becomes operational; the laboratory method assumes greater independence of learners than carrying out an experiment*

10.	Forms of teaching				
Code	**Name**	**Number of hours**	**Assessment of the learning outcomes of the module**	**Learning outcomes of the module**	**Methods of conducting classes**
ZChN_fs_01	workshop	30	course work	ZChN_01, ZChN_02, ZChN_03, ZChN_04, ZChN_05, ZChN_06	a02, d01, e01

11.	The student's work, apart from participation in classes, includes in particular:		
Code	**Category**	**Name (description)**	**Is it part of the BUNA?**
a02	Preparation for classes	Literature reading / analysis of source materials *reading the literature indicated in the syllabus; reviewing, organizing, analyzing and selecting source materials to be used in class*	Yes
a03	Preparation for classes	Developing practical skills *activities involving the repetition, refinement and consolidation of practical skills, including those developed during previous classes or new skills necessary for the implementation of subsequent elements of the curriculum (as preparation for class participation)*	Yes

Information on the details of the module implementation in a given academic year can be found in the syllabus available in the USOS system: https://usosweb.us.edu.pl.