1.	**Field of study**	**Biology**
2.	Faculty	Faculty of Natural Sciences
3.	Academic year of entry	2025/2026 (winter term)
4.	Level of qualifications/degree	first-cycle studies
5.	Degree profile	general academic
6.	Mode of study	full-time

7.	**General information about the module**
Module name	**General and inorganic chemistry III**
Module code	1BL_25_99
Number of the ECTS credits	4
Language of instruction	Polish
Purpose and description of the content of education	The aim of the module is to familiarise students with advanced topics in general and inorganic chemistry in the context of teacher training, in particular with the chemical properties of d-block elements and their selected compounds. The content covers methods of obtaining these compounds, predicting their properties and reactivity, as well as practical applications. Laboratory classes develop the ability to plan and carry out chemical reactions and to prepare reports on experiments. The module develops independence in searching for scientific information and improving professional competencies, taking into account the principles of safe work in the laboratory.
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)
W01	Knows how to obtain selected compounds of d-block elements.	1KN_Ch_U02 1KN_P_W02	5 4
W02	Predicts the properties and reactivity of compounds of elements in block d.	1KN_Ch_U03	5
W03	Possesses the ability to apply knowledge of the chemistry of d-block elements in practice.	1KN_Ch_W01	4
W04	Prepares reports on experiments conducted with inorganic compounds.	1KN_Ch_U05 1KN_Ch_U06	3 5
W05	Can independently plan and carry out a chemical reaction involving inorganic compounds.	1KN_Ch_U08 1KN_Ch_W03	4 4
W06	Can independently search for information in literature in order to improve professional competence.	1KN_Ch_K01 1KN_Ch_U07	3 5
W07	Responsible for their own safety and that of others	1KN_Ch_K02 1KN_Ch_U08	4 4

9.	Methods of conducting classes	
Code	**Category**	**Name (description)**
b02	Problem-solving methods	Lecture-discussion *transmission of content involving interaction with the lecture audience; discussion of lecture-related issues is one of its elements or constitutes its follow-up*
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*
f02	Methods of self-learning	Individual work with a text *searching for and acquiring new information using textbooks and other written sources (including their digital versions); searching for texts, selecting fragments for analysis/interpretation, using other texts to solve a problem related to the studied issue*

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**
01	workshop	45	course work	W01, W02, W03, W04, W05, W06, W07	b02, e01, f02

11.	The student's work, apart from participation in classes, includes in particular:		
Code	**Category**	**Name (description)**	**Is it part of the BUNA?**
a01	Preparation for classes	Search for materials and review activities necessary for class participation *reviewing literature, documentation, tools and materials as well as the specifics of the syllabus and the range of activities indicated in it as required for full participation in classes*	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
b01	Consulting the curriculum and the organization of classes	Getting acquainted with the syllabus content *reading through the syllabus and getting acquainted with its content*	No
c02	Preparation for verification of learning outcomes	Studying the literature used in and the materials produced in class *exploring the studied content, inquiring, considering, assimilating, interpreting it, or organizing knowledge obtained from the literature, documentation, instructions, scenarios, etc., used in class as well as from the notes or other materials/artifacts made in class*	No
e01	Activities complementary to the classes	Undertaking, on one’s own initiative and individually, activities aimed at expanding the scope or depth of the teaching content, also beyond the walls of the University *a set of activities undertaken independently and on the student's own initiative, aimed at expanding the depth and scope of knowledge and skills, their revision and repetition, retention or verification, also activities carried outside the university, e.g., in a culture promoting or educational institution, a laboratory, in the open air, etc.; also self-education*	No

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.