DOCTORAL SCHOOL OF WROCŁAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

SUPERVISOR/TEAM/ DECLARING/CONDUCTING COURSE: Marcin Drag

DEPARTMENT: Chemical Department

SCIENTIFIC DISCIPLINE: Chemical Sciences

COURSE CARD

Course name in Polish: Chemia Biologiczna Course name in English: Chemical Biology

Course language Polish

University-wide general course type*:

The course is intended for all PhD students: YES / NO

1) BASIC COURSE

2) SPECIALIST COURSE

3) SEMINAR

4) HUMANISTIC COURSE

5) LANGUAGE

Subject code: NCQ100110W

* delete as applicable

	Lecture	Foreign language course	Seminar	Mixed forms
Number of hours of organized classes in university (ZZU)	30			
Grading	Exam	Exam	Oral presentation	Exam, inspection, evaluation classes
Number of ECTS points	0			

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. Fundamental knowledge in organic chemistry and biochemistry.

COURSE OBJECTIVES

- C1 Introduction to chemical biology
- C2 Introduction to technologies used in chemical biology.
- C3 Introduction to knowledge about Activity Based Probes used in biological systems

PROGRAM CONTENTS

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Form of classes - lecture		Number of hours
Lec 1	Introduction to chemical biology	2
Lec 2	Analytical methods in chemical biology	4
Lec 3	Activity based probes for biological studies.	4
Lec 4	Investigation of small molecules interactions with macromolecules.	4
Lec 5	Combinatorial methods in chemical biology.	2
Lec 6	Metabolomics	4
Lec 7	Proteomics.	2
Lec 8	Presentations based on scientific manuscripts.	8
	Total hours	30

	Form of classes – foreign language course (Lng)	Number of hours
Lng1		
Lng2		
Lng3		
	Total hours:	

	Form of classes – seminar (Sem)	Number of hours
Sem1		
Sem2		
Sem3		
	Total hours:	

	Form of classes – mixed forms (mix)	Number of hours
Mix1		
Mix2		
Mix3		
	Total hours	

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TEACHING TOOLS USED

- N1. Multimedia lecture
- N2. Stimulation of scientific discussion with participants of the lecture

ACHIEVED SUBJECT LEARNING OUTCOMES

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Type of learning outcome	Code of learning outcome	Assessment of learning outcome	
Knowledge	P8U_W	Seminar	
Knowledge	P8S_WG	Seminar	
Skills	P8U_U	Seminar	
Skills	P8S_UW	Seminar	
Skills	P8S_UK	Seminar	
Skills	P8S_UU	Seminar	
Social competence	P8U_K	Seminar	
Social competence	P8S_KK	Seminar	
Social competence	P8S_KO	Seminar	
Social competence	P8S_KR	Seminar	

PRIMARY AND SECONDARY LITERATURE

PRIMARY LITERATURE:

Any academic book about organic chemistry and biochemistry.

SECONDARY LITERATURE:

Literature in the form of scientific manuscripts will be distributed during the course.

SUBJECT SUPERVISOR (NAME AND SURNAME, E-MAIL ADDRESS)

prof. Marcin Drag

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