

DESCRIPTION OF THE COURSE OF STUDY

Course code	0512.6.BIOT1.E.SD_B/C/S/Z	
Name of the course in	Polish	<i>Seminarium dyplomowe</i>
	English	<i>Diploma seminar</i>

1. LOCATION OF THE COURSE OF STUDY WITHIN THE SYSTEM OF STUDIES

1.1. Field of study	Biotechnology
1.2. Mode of study	Full-time studies
1.3. Level of study	First-cycle studies
1.4. Profile of study*	General academic
1.5. Person/s preparing the course description	Grzegorz Czerwonka Ph.D.
1.6. Contact	gczewonka@ujk.edu.pl

2. GENERAL CHARACTERISTICS OF THE COURSE OF STUDY

2.1. Language of instruction	English
2.2. Prerequisites*	-

3. DETAILED CHARACTERISTICS OF THE COURSE OF STUDY

3.1. Form of classes	Seminar	
3.2. Place of classes	Classes in the teaching room of the UJK	
3.3. Form of assessment	Seminar - credit with grade	
3.4. Teaching methods	Lecture, discussion, demonstration, independent experiments, project	
3.5. Bibliography	Required reading	“A Practical Guide to Dissertation and Thesis Writing” Mark Stephan Felix and Ian Smith, 2019 Cambridge Scholars Publishing
	Further reading	-

4. OBJECTIVES, SYLLABUS CONTENT AND INTENDED LEARNING OUTCOMES

<p>4.1. Course objectives (including form of classes)</p> <p>C1. To acquire the ability to use and compile scientific articles available in databases and in paper form.</p> <p>C2. To acquire the ability to plan and analyze experiments and describe them and draw conclusions</p> <p>C3. Acquaintance with the methodology of thesis writing</p> <p>C4. To prepare and present multimedia presentations, self-presentation.</p>
<p>4.2. Detailed syllabus (including form of classes)</p> <p>Preparation of presentation of selected articles in the field of white biotechnology topics - issues related to the use of microorganisms for the design of sustainable industrial processes (bioprocesses, biocatalysis), used in the production of chemicals, new materials, biofuels, among others.</p> <p>Preparation of a presentation of selected articles in the field of red biotechnology thesis topics - topics in the use of biotechnological methods in health care and medicine, and including modern molecular diagnostics, design and manufacture of biopharmaceuticals, gene therapy and regenerative medicine.</p> <p>Preparation of a presentation of selected articles in the field of gray biotechnology thesis topics - topics related to the use of biotechnology methods in environmental remediation (removal or reduction of hazardous substances in various elements of the environment) and ensuring biodiversity (and including genetic, species and ecosystem diversity).</p> <p>Preparation of a presentation of selected articles in the field of gold biotechnology work topics - issues related to biotechnology of nanostructures, nanoparticles and computer technology and bioinformatics</p> <p>Information retrieval. Translation from a foreign language of excerpts of articles. Presentation of undergraduate theses. Discussing the main topics of the theses. Substantive and technical guidance. Use of statistical methods. Undergraduate thesis reviews. Substantive and editorial elements considered by reviewers. Presentation of undergraduate theses in PowerPoint. Discussion and correction of errors. Specifics and conduct of the undergraduate examination. Discussion of the elements to be evaluated during the thesis defense. Gathering materials, conducting the experiment, developing the results and writing the thesis.</p>

4.3 Intended learning outcomes

Code	A student, who passed the course	Relation to learning outcomes
	within the scope of KNOWLEDGE:	

W01	Is able to use foreign language terminology in the field of science and life sciences and related disciplines	BIOT1A_W07
W02	Is able to use scientific and measuring apparatus used in biotechnology	BIOT1A_W08
W03	Knows and can apply the principles of safety and hygiene of work in the laboratory	BIOT1A_W10
within the scope of ABILITIES:		
U01	Designs and conducts experiments on the issue studied in the thesis	BIOT1A_U05
U02	Is able to combine knowledge of biotechnology and science and critically evaluate their sources and draw conclusions	BIOT1A_U07
U03	Is able to use scientific language typical of biotechnology	BIOT1A_U08
U04	Is able to use a foreign language typical of biotechnology	BIOT1A_U09
within the scope of SOCIAL COMPETENCE:		
K01	Is aware of the limitations of his knowledge and is aware of the need for its continuous expansion	BIOT1A_K01
K02	Is able to initiate actions in favor of social environment	BIOT1A_K02
K03	Is able to initiate actions in the public interest related to the promotion of achievements of biotechnology	BIOT1A_K04

4.4. Methods of assessment of the intended learning outcomes																					
Teaching outcomes (code)	Method of assessment (+/-)																				
	Exam oral/written*			Test*			Project*			Effort in class*			Self-study*			Group work*			Others* e.g. standardized test used in e-learning		
	Form of classes			Form of classes			Form of classes			Form of classes			Form of classes			Form of classes					
	L	C	...	L	C	...	L	C	...	L	C	...	L	C	...	L	C	...	L	C	...
W01																					
W02																					
W03																					
U01																					
U02																					
U03																					
U04																					
K01																					
K02																					
K03																					

*delete as appropriate

4.5. Criteria of assessment of the intended learning outcomes		
Form of classes	Grade	Criterion of assessment
Seminar	3	Credit - presentation, development of 51-60% of the presented scope of the topic.
	3,5	Credit - presentation, development of 61-70% of the presented scope of the topic
	4	Credit - presentation, development of 71-80% of the presented scope of the topic
	4,5	Credit - presentation, development of 81-90% of the presented scope of the topic
	5	Credit - presentation, development of 91-100% of the presented scope of the topic

5. BALANCE OF ECTS CREDITS – STUDENT’S WORK INPUT

Category	Student's workload	
	Full-time studies	Extramural studies
<i>NUMBER OF HOURS WITH THE DIRECT PARTICIPATION OF THE TEACHER /CONTACT HOURS/</i>	60	
<i>Participation in classes, seminars, laboratories*</i>	60	
<i>INDEPENDENT WORK OF THE STUDENT/NON-CONTACT HOURS/</i>	90	
<i>Preparation for the classes, seminars, laboratories*</i>	70	
<i>Gathering materials for the project/Internet query*</i>	10	
<i>Preparation of multimedia presentation</i>	10	
<i>TOTAL NUMBER OF HOURS</i>	150	
ECTS credits for the course of study	6	

**delete as appropriate*

Accepted for execution (date and legible signatures of the teachers running the course in the given academic year)

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