University of Gdańsk

Subject card

Subject name and code	Scientific research at the Intercollegiate Faculty of Biotechnology UG&MUG, PG_00193170		
Field of study	Biotechnology		
Date of commencement of studies	October 2025	Academic year of realisation of subject	2025/2026
Education level	Master's studies	Subject group	Obligatory subject group in the field of study
Mode of study	full-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	1	ECTS credits	1.0
Learning profile	academic	Assessment form	credit
Conducting unit			
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Andrea Lipińska	
	Teachers	dr hab. Andrea Lipińska	

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	0.0	0.0	0.0	0.0	15

E-learning hours included: 0.0

Learning activity and number of study hours

Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
Number of study hours	15	0.0	0.0	15

Subject objectives

The aim of the course is to acquaint students with research projects carried out at the Faculty which will allow them to select research group, in which they will develop their scientific interests and realize their future Masters project.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[BIOTECHMU2_K01] The graduate consciously combines knowledge acquired in previous stages of education with knowledge acquired on an ongoing basis to solve problems in the field of biotechnology; consciously deepens and updates knowledge and improves qualifications related to biotechnology in the field of exact and natural sciences and medical and health sciences.	Knows limitations of his/her knowledge, is willing to constantly upgrade and update his/her knowledge and raise qualifications within the field of biotechnology and related scientific areas and disciplines.	[SK3] text preparation/written work
[BIOTECHMU2_K03] The graduate effectively plans and organizes own work, especially laboratory work; plans an individual professional career.	Effectively plans his/her work, professional career, organizes his/her work, in particular in the lab or concerning reviews in the field of biotechnology and related scientific areas and disciplines.	[SK3] text preparation/written work
[BIOTECHMU2_U08] The graduate is able to learn independently, effectively plan and organize work independently or as part of a team.	Learns independently, plans effectively and organises work independently or as part of a team.	[SU3] text preparation/written work
[BIOTECHMU2_W04] The graduate has in-depth knowledge of selected biotechnology problems currently discussed in the literature.	Has knowledge of selected problems in biotechnology currently discussed in the literature.	[SW3] text preparation/written work

<table>
<tr><td>Subject contents</td><td>- To deepen knowledge of the biochemistry and biotechnology of plant lipids. In particular, concerning the genes related to lipid metabolism; determining their expression, determining the biochemical and physiological function of the proteins they encode, determining the effect of their overexpression and exclusion, etc.

- To gain additional insights into the application of molecular biology tools in the diagnosis of human metabolic, cancer and infectious diseases, and projects related to the diagnosis and photodynamic therapy of bacterial infections and cancer.

- Developing research on the use of beneficial (antagonistic) bacteria or substances produced by them in the protection of plants against bacterial pathogens. Search for bacteria antagonistic to Dickey's and Pectobacterium pathogens and characterisation of the factors determining this antagonism.</td></tr>
<tr><td>Prerequisites and co-requisites</td><td></td></tr>
<tr><td>Assessment methods and criteria</td><td><table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>Attendance</td><td>0.0%</td><td>50.0%</td></tr>
<tr><td>Written jusification</td><td>0.0%</td><td>50.0%</td></tr>
</table></td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td>None</td></tr>
<tr><td>Supplementary literature</td><td>None</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td></td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
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