University of Gdańsk

Subject card

Subject name and code	Principles of of immunology, PG_00193173		
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	2	ECTS credits	2.0
Learning profile	academic	Assessment form	credit
Conducting unit			
Name and surname of lecturer (lecturers)	Subject supervisor	prof. dr hab. Marcin Okrój	
	Teachers	prof. dr hab. Marcin Okrój	

Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	15.0	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	5.0	30.0	50

Subject objectives	The aim of the course is to familiarize the student with basic laboratory techniques used for functional assessment of selected components of the immune system and for purification/production of molecular tools for the above tests. Additionally, the student receives knowledge on the safety of working with potentially infectious materials of human and animal origin.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[BIOTECHMU2_U05] The graduate has proficient knowledge of English to understand statements and read and understand literature and scientific studies in the fields of science and scientific disciplines relevant to biotechnology; is able to prepare a written study and an oral presentation in English.	The student uses the exercise instructions in English and completes the final test in English.	[SU4] test/exam - oral or written
[BIOTECHMU2_U02] The graduate is able to collect and interpret empirical data; use statistical methods and IT tools in data analysis; formulate conclusions based on empirical data	Student provides the interpretation of obtained results of functional asssays.	[SU4] test/exam - oral or written
[BIOTECHMU2_U01] The graduate possesses the skills necessary for laboratory work; is able to plan and conduct an experiment; documents activities and results; uses complex research techniques and tools in laboratory work under the supervision of a supervisor; has the ability to operate laboratory equipment; applies occupational health and safety principles; understands the risks associated with laboratory work.	Student performs functional assessment of selected components of the immune system	[SU4] test/exam - oral or written
[BIOTECHMU2_K05] The graduate complies with occupational health and safety rules, especially when working in the laboratory; is responsible for his/her own safety and the safety of others; is able to react to hazards.	Student respects the safety rules for working with potentially contagious material.	[SK4] test/exam - oral or written
[BIOTECHMU2_K02] The graduate possesses competences to collaborate in the implementation of research work and work in a team.	Student performs functional assays and purification of antibodies in the framework of team work with other students within the group.	[SK4] test/exam - oral or written

Subject contents

1. Safety rules for working with blood-derived matrial

2. Purification of antibodies by affinity chromatography

3. Immunoenzymatic assays ELISA

4. Cytotoxic CDC assays

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
single-choice final test	51.0%	100.0%

Recommended reading

Basic literature	Laboratory instructions provided to students before the class.
Supplementary literature	Manual for antibody purification
eResources addresses	

Example issues/ example questions/ tasks being completed

Work placement

Not applicable

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