

Subject card

Subject name and code	Fundamental cell and molecular immunology, PG_00207421						
Field of study	Biology						
Date of commencement of studies	October 2026		Academic year of realisation of subject		2027/2028		
Education level	Bachelor's studies		Subject group		Obligatory subject group in the field of study Subject group related to scientific research in the field of study		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		Polish		
Semester of study	4		ECTS credits		2.0		
Learning profile	academic		Assessment form		credit		
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Dorota Żurawa-Janicka				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	0.0	0.0	0.0	30
	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	30		2.0		18.0	50
Subject objectives	Understanding the mechanisms of the immune response at the molecular and cellular level						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[BIOLL3_U09] is able to learn independently and plan her/his own development in an organized and controlled manner						
	[BIOLL3_U03] is able to search for, select and critically analyze information from various sources, including scientific literature and electronic databases, as well as read and understand scientific texts in Polish and English						
	[BIOLL3_K01] is ready to critically evaluate her/his biological knowledge and continuously update and develop it, taking into account scientific advances and the needs of practice						
Subject contents	Introduction to immunology, including cells and tissues of the immune system, structure of antigens, structure of antibodies, passive and active immunization. Mechanisms of innate immunity. Presentation of antigens to lymphocytes. Antigen recognition. Rearrangement of immunoglobulin and TCR receptor genes. Activation of B and T lymphocytes. Effector phase of the immune response. Selected issues in immune disorders, including AIDS, autoimmune diseases, allergy, as well as cancer immunology and transplantology.						

Prerequisites and co-requisites	Completion of courses: General Biochemistry, Genetics.		
	Knowledge of the structure and properties of basic types of biological macromolecules, molecular mechanisms of the flow of genetic information and the regulation of its expression.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	final test	51.0%	100.0%
Recommended reading	Basic literature	Literature used during classes:	
		Abbas et al. Cellular and Molecular Immunology. 10th Ed. Elsevier Inc. 2022.	
		Male et al. Immunology. 9th Ed. Elsevier Inc. 2020.	
		Original and review articles from scientific journals	
		Literature for self-learning:	
		Abbas et al. Immunologia - funkcje i zaburzenia układu immunologicznego. Red. wyd. pol. J. Żeromski. Edra Urban & Partner. 2015.	
		Lydyard et al. Immunologia. Krótkie wykłady. Wydawnictwo Naukowe PWN. 2012.	
		Gołąb et al. Immunologia. Wydawnictwo Naukowe PWN. 2017.	
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	Supplementary literature	Review articles on basic immunology from scientific journals	
	eResources addresses		
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		

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