

Subject card

Subject name and code	Metabolism - clinical aspects, PG_00154545						
Field of study	Medical Biology						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2026/2027		
Education level	Bachelor's studies		Subject group		Obligatory subject group in the field of study Optional subject group		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		Polish		
Semester of study	3		ECTS credits		3.0		
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	0.0	30.0	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		5.0		40.0	75
Subject objectives	Expanding knowledge about cellular and whole-body metabolism and understanding its relationship with human health.						
	The ability to independently develop a selected issue in the field of metabolic diseases using online sources and present it; the ability to discuss issues raised in lectures and auditorium classes.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[BIOLMEDL3_W05] knows the structure, properties and functions of human cells, tissues and organs; human physiological and biochemical processes and mechanisms of disease pathophysiology	- knows and understands the biochemical processes taking place in the human body and mechanisms of disease pathophysiology (BM_W05)	[SW4] test/exam - oral or written
	[BIOLMEDL3_W07] has advanced knowledge of medical biology and is familiar with the health sciences terminology	- has extended knowledge of medical biology and knows the terminology of health sciences (BM_W07)	[SW4] test/exam - oral or written
	[BIOLMEDL3_U06] reads with understanding scientific texts in Polish and simple texts in English in the field of medical biology; independently searches and uses available sources of information, including electronic sources	- reads and understands scientific texts in Polish and simple texts in English in the field of medical biology; independently searches for and uses available information sources, including electronic sources (BM_U06)	[SU2] presentation/project/paper/report
	[BIOLMEDL3_K03] is aware of his/her own limitations and knows when to seek expert assistance	- is aware of his own limitations and knows when to turn to experts (BM_K03)	[SK1] oral statement/conversation/discussion [SK8] observation of student's independent or team work
	[BIOLMEDL3_W02] describes the structure and properties of basic types of biological macromolecules, molecular mechanisms of the pathways of basal metabolism and flow of genetic information, and sources of variation in organisms; explains the rules of inheritance	- describes the structure and properties of basic types of macromolecules, molecular mechanisms of basic metabolism pathways (BM_W02)	[SW4] test/exam - oral or written
	[BIOLMEDL3_U09] has the ability to give oral presentations in Polish or English on specific issues in medical biology	- has the ability to give oral presentations in Polish on specific issues in the field of medical biology (BM_U09)	[SU1] oral statement/conversation/discussion [SU2] presentation/project/paper/report
	[BIOLMEDL3_U11] is able to use language specialized for medical biology in a way that is clear and accessible to both specialists and non-specialists alike	- can use the language specialized in medical biology in a way that is understandable and accessible to both specialists and non-specialists (BM_U11)	[SU1] oral statement/conversation/discussion [SU2] presentation/project/paper/report
	[BIOLMEDL3_K01] understands the need for lifelong learning and to update his/her knowledge of medical biology and related disciplines	- understands the need for lifelong learning and updating knowledge in the field of medical biology and related disciplines (BM_K01)	[SK1] oral statement/conversation/discussion [SK8] observation of student's independent or team work
Subject contents	Independently solving a problem indicated by the lecturer, consisting in preparing a presentation on selected metabolic diseases based on the material presented at the lecture, materials indicated by the lecturer and Internet sources. Analysis of diagnostic patterns covering issues related to metabolic disorders.		
Prerequisites and co-requisites	Completion of the following courses: Biochemistry, Animal and human physiology. Knowledge of structure and function macromolecules and small-molecule compounds occurring in the human body, understanding basic biochemical processes, knowledge of the basics of human physiology		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	discussion of issues in the field of metabolic defects with a multimedia presentation	51.0%	30.0%
	tests	51.0%	70.0%
Recommended reading	Basic literature Lieberman & Peet. Mark's Basic Biochemistry: A Clinical Approach. 6th Ed. Wolters Kluwer. 2022. Janson & Tischler. The Big Picture: Medical Biochemistry. The McGraw-Hill Companies, Inc. 2012. Rodwell et al. Harper's Illustrated Biochemistry. 30th Ed. McGraw-Hill Education. 2015. B. Ferrier. Biochemia (Lippincott Illustrated Reviews. 7th Ed.). Red. wyd. pol. D. Chlubek. Edra Urban & Partner. 2021		

	Supplementary literature	Literature for self-study: Ferrier. Biochemia (Lippincott Illustrated Reviews. 7th Ed. Wolters Kluwer Health. 2017
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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