University of Gdańsk

Subject card

Subject name and code	Metabolism - clinical aspects, PG_00154545		
Field of study	Medical 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 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_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
[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_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_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_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_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_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_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

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
tests	51.0%	70.0%
discussion of issues in the field of metabolic defects with a mulimedial presentation	51.0%	30.0%

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 McGrew-Hill Companies, Inc. 2012.

Rodwell et al. Harper's Illusterted 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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