University of Gdańsk

Subject card

Subject name and code	Basic epidemiology, PG_00203396						
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 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	1.0			
Learning profile	academic		Assessment form	credit			
Conducting unit	Department of General and Medical Biochemistry -> Faculty of Biology -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Dorota Gregorowicz-Warpas				
	Teachers						
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		2.0		8.0	25
Subject objectives	The aim of the course is to familiarize students with basic issues in epidemiology and infectious diseases.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[BIOLMEDL3_U06] is able to identify problems corresponding to the needs of an individual and a social group and to undertake diagnostic, preventive and educational activities appropriate to the profession of medical biologist	The student is able to identify problems corresponding to the needs of an individual or a social group, and to undertake basic diagnostic, preventive, and educational activities appropriate to the profession of a medical biologist.	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report [SU4] test/exam - oral or written
[BIOLMEDL3_K02] is aware of their own limitations and knows when to turn to experts who have the resources, technologies and knowledge to provide certainty on a given topic, save time and avoid mistakes	The student is aware of their own limitations and knows when to turn to experts.	[SK8] observation of student's independent or team work
[BIOLMEDL3_K03] is ready to form opinions about individuals, social groups, and the organization of individual and team work; independently undertakes and initiates simple research activities	The student is able to formulate opinions regarding individuals and social groups in a context related to the practice of a profession.	[SK8] observation of student's independent or team work
[BIOLMEDL3_U12] in Polish or English, prepares written, well-documented studies of selected problems in medical biology	The student prepares well-documented written analyses of selected problems in medical biology, in either Polish or English.	[SU1] oral statement/conversation/ discussion [SU4] test/exam - oral or written
[BIOLMEDL3_U10] learns independently and in a focused manner, and is able to set priorities and organise the work of a small team, as well as work effectively within a team	The student learns independently, in a directed manner.	[SU1] oral statement/conversation/ discussion [SU4] test/exam - oral or written
[BIOLMEDL3_W08] has an advanced understanding of the development and current state of knowledge and the latest trends in medical biology; indicates their relationship with other disciplines of natural or medical sciences	The student is versed in the development and current state of knowledge and the latest trends in medical biology. Is able to indicate their relationship with other disciplines of natural or medical sciences.	[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion
[BIOLMEDL3_W04] has advanced knowledge of medical biology and its latest developments, and is familiar with and understands issues related to the role of medical biology in human health care	The student has advanced knowledge of medical biology and knows the terminology of health sciences.	[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion
[BIOLMEDL3_K01] is aware of the importance of lifelong learning and keeping up to date with developments in medical biology and related disciplines, and applies this knowledge to the planning and design of professional activities	The student understands the need for lifelong learning and updating knowledge in the field of medical biology and related disciplines.	[SK8] observation of student's independent or team work
[BIOLMEDL3_W07] has advanced knowledge of methods for assessing health status, as well as the symptoms and causes of selected disorders and pathological changes; understands the basics of a healthy lifestyle and is able to explain and promote them	The student has advanced knowledge of methods for assessing health status and the symptoms and causes of selected disorders and lesions, and knows the basics of a healthy lifestyle, and is able to justify and promote them.	[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion

Subject contents	1. Introduction to epidemiology classes. Definition, goals, tasks, division and applications of epidemiology. The development of epidemiology and the modern concept of the field.2. General and specific epidemiology. Epidemiology and clinical medicine.3. The role of epidemiology in describing the health status of populations, tracing the natural history of diseases, identifying the causative factors of health disorders, and evaluating clinical and population interventions.4. Methodology of epidemiological research. Demographic phenomena. Health metrics.5. Elements of epidemiological statistics. Principles of epidemiological analysis and planning of epidemiological studies.6. Environmental epidemiology. Types of epidemiological studies. Causal inference. Risk measures and risk assessment methods. Standardization.7. Clinical and social epidemiology. New applications of epidemiology (genetic and molecular epidemiology).8. Application of epidemiology in planning and assessing the effectiveness of population-based preventive programs. 9. Epidemiology of non-communicable diseases in the world and in Poland. Environmental factors and the epidemiology of infectious and non-communicable diseases. Socially important non-communicable diseases. 10. Lifestyle diseases.11. Principles of investigating an infectious disease outbreak.12. Health problems of old age and disability problems.	
Prerequisites and co-requisites		
Assessment methods and criteria	Subject passing criteria: final test Passing threshold: 51.0% Percentage of the final grade: 100.0%	
Recommended reading	Basic literature	1. Paradowska- Stankiewicz I., Rosińska M., Wojtyniak B., Zieliński A.: Epidemiology from theory to practice, PZWL, Warsaw 20212.Webb P., Bain C., Page E.: Epidemiologia, Ed. Scholar, Warsaw 20213. Boroń-Kaczmarska A., Wiercińska- Drapało A.: Infectious and parasitic diseases, PZWL, Warsaw 20194. Bulanda M., Wójkowska-Mach J.: Nosocomial infections in health care units, PZWL, Warsaw 20165. Bzdęga J., Gębska- Kuczerowska A.: Epidemiology in public health, PZWL, Warsaw 20106. Cianciara J., Juszczyk J.: Infectious and parasitic diseases, Volume I, II, Ed. II, Czelej, Lublin 20127. Denys A.: Hospital infections. Selected issues, ABC and Wolters Kluwer business, Warsaw 20128. Denys A.: Hospital infections in selected departments, Vol. II, ABC and Wolters Kluwer business, Warsaw 20139. Dziubek Z.: Infectious and parasitic diseases, Ed. II, PZWL, Warsaw 201010. Pawińska A.: Prevention of nosocomial infections - safety of the hospital environment, Ed. -medica press, Warsaw 201111. Sygit M.: Public health, Ed. Wolters Kluwer Polska 201012. Dzierżanowska D.: Hospital infections, Ed. -medica press, Bielsko-Biała 2008
	Supplementary literature	1. Jabłoński L., Karwat I.D.: Basics of general epidemiology, epidemiology of infectious diseases, Ed. Czelej, Lublin 2002
	eResources addresses	
Example issues/ example questions/ tasks being completed	Final work in the form of a multimedia presentation, final test. In case of failure to pass the final test - oral examination.	
Work placement	Not applicable	

Document generated electronically. Does not require a seal or signature.