

Subject card

Subject name and code	Specialization laboratory III, PG_00211032						
Field of study	Medical Biology						
Date of commencement of studies	October 2026		Academic year of realisation of subject			2027/2028	
Education level	Master'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	3		ECTS credits			13.0	
Learning profile	academic		Assessment form			credit	
Conducting unit	Department of Medical Biology and Genetics -> Faculty of Biology -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		prof. dr hab. Anna Herman-Antosiewicz				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	150.0	0.0	0.0	150
	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	150		40.0		135.0	325
Subject objectives	Acquiring the ability to use research techniques in scientific work; planning and conducting experiments in the laboratory or collecting materials in the field, recording and interpreting data; describing the goals and assumptions of the research project, analyzing the results of the conducted experiments and their discussions.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[BIOLMEDMU2_W05] knows in-depth understanding the principles of practice based on scientific arguments	Knows the principles of practice based on scientific arguments	[SW1] oral statement/ conversation/discussion [SW2] presentation/project/paper/ report
	[BIOLMEDMU2_W06] knows ethical and legal considerations related to scientific, teaching and implementation activities	Knows the basic ethical and legal conditions related to scientific, teaching and implementation activities	[SW1] oral statement/ conversation/discussion [SW2] presentation/project/paper/ report
	[BIOLMEDMU2_K02] is ready to recognize the importance of knowledge in solving cognitive and practical problems and to seek expert advice when having difficulty solving a problem on his own	Recognizes the importance of knowledge in solving cognitive and practical problems and seeks the opinion of experts in case of difficulties in solving the problem independently	[SK1] oral statement/conversation/ discussion [SK8] observation of student's independent or team work
	[BIOLMEDMU2_U07] is able to show initiative and lead teamwork and cooperate in the planning and implementation of research tasks	Can show initiative and cooperate in planning and implementing research tasks in a team	[SU5] implementation of a problem task [SU8] observation of student's independent or team work
	[BIOLMEDMU2_U03] is able to formulate and solve problems on the basis of the known laws and methods, including - using computer tools and statistical methods	Is able to formulate and solve problems based on known laws and methods, including using IT tools and statistical methods	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report [SU5] implementation of a problem task [SU8] observation of student's independent or team work
	[BIOLMEDMU2_U04] is able to identify errors and omissions in the practice of the medical biologist's profession and is capable of carrying out complex tasks and working in unforeseen circumstances	Can identify errors and omissions in practice	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report [SU8] observation of student's independent or team work
	[BIOLMEDMU2_U08] can independently plan and implement his own lifelong learning and guide others in doing so	Can independently plan and implement his lifelong learning and guide others in this area	[SU1] oral statement/conversation/ discussion [SU8] observation of student's independent or team work
	[BIOLMEDMU2_W04] knows in-depth understanding the principles of planning research based on the achievements of biological and medical sciences, the principles of operation of equipment and apparatus used in medical biology research, and the principle of interpreting biological phenomena and processes based on empirical data in research work and practical activities	Knows the principles of research planning based on the achievements of biological and medical sciences, the principles of operation of equipment and apparatus used in medical biology research and the principle of interpreting phenomena and processes of biological sciences based on empirical data in research and practical activities	[SW1] oral statement/ conversation/discussion [SW2] presentation/project/paper/ report
	[BIOLMEDMU2_U06] knows and applies English-language specialized vocabulary (level B2+) of biological and medical sciences in daily professional/scientific activities	Knows and uses English-language specialist vocabulary in the field of biological and medical sciences in everyday professional/scientific activities	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report [SU8] observation of student's independent or team work
	[BIOLMEDMU2_U02] is able to plan and conduct experiments and measurements based on advanced research techniques and tools, is able to interpret the obtained results and draw conclusions, communicate on specialized topics with diverse audiences and engage in debate	Can plan and carry out experiments and measurements based on advanced techniques and research tools, can interpret the obtained results and draw conclusions	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report [SU5] implementation of a problem task [SU8] observation of student's independent or team work
	[BIOLMEDMU2_K04] cares about safety in the workplace, as well as their own safety and that of their coworkers	Cares about his/her own, surroundings and coworkers' safety	[SK8] observation of student's independent or team work
Subject contents	The content is related to the master's thesis topic and is individually selected. It addresses the issues and methodology of research conducted at the department		
Prerequisites and co-requisites			

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	The basis for grading is the completion of a final project: conducting research and properly processing the results (in the form of a report). Laboratory work (the student's systematic approach and commitment to the research) is also assessed.	51.0%	100.0%
Recommended reading	Basic literature	The literature is selected individually depending on the topic of the work and takes into account the scientific achievements of the supervisor and the team with which the student cooperates.	
	Supplementary literature	Additional literature is independently searched by the student in literature databases (including PubMed, BIOSIS, Science Direct, Scirrus).	
	eResources addresses		
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		

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