

Subject card

Subject name and code	, PG_00118038						
Field of study	Genetics and Experimental Biology						
Date of commencement of studies	October 2023	Academic year of realisation of subject			2025/2026		
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	3	Language of instruction			Polish		
Semester of study	5	ECTS credits			4.0		
Learning profile	academic	Assessment form			credit		
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Marcin Górnjak				
	Teachers		dr hab. Marcin Górnjak				
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	6.0	90.0	0.0	0.0	96
	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	96		0.0		0.0	96
Subject objectives	<p>1. Understanding the specifics of work in various positions,</p> <p>2. Developing specific professional skills directly related to the place of internship,</p> <p>3. Improving skills in organizing one's own work, teamwork, effective time management, diligence, and responsibility for assigned tasks,</p> <p>4. Discovering one's own potential in the job market, establishing professional contacts to be utilized when seeking employment.</p>						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[GBEL3_K03] The graduate is prepared to; think and act in an entrepreneurial manner.	The student is ready to adhere to the principles of workplace safety.	[SK7] entries and opinions in the internship diary
	[GBEL3_U04] The graduate is able to: read scientific texts in English and Polish with comprehension, synthesise the knowledge they contain, prepare well-documented papers on biological problems and on the commercialisation of research	The student is able to read and comprehend scientific texts in both English and Polish, synthesize the knowledge contained within them, and prepare well-documented studies on biological issues as well as on the commercialization of research.	[SU2] presentation/project/paper/report [SU7] entries and opinions in the internship diary
	[GBEL3_K01] The graduate is prepared to: use of theoretical knowledge in laboratory and production practice	The student is ready to apply theoretical knowledge in laboratory and production practice.	[SK7] entries and opinions in the internship diary
	[GBEL3_K08] The graduate is prepared to: takes responsibility for equipment/materials entrusted to it and respects the work of others	The student is ready to take responsibility for the entrusted equipment/materials.	[SK7] entries and opinions in the internship diary
	[GBEL3_K06] The graduate is prepared to: honesty and integrity in scientific and professional work	The student is ready to demonstrate honesty, integrity, and adhere to the principles of etiquette in their professional work.	[SK7] entries and opinions in the internship diary
	[GBEL3_K05] The graduate is prepared to: responsibility for their own and others' safety at work	The student is ready to comply with the principles of occupational safety.	[SK7] entries and opinions in the internship diary
[GBEL3_U07] The graduate is able to: work as part of a team and organise work in accordance with the principles of occupational health and safety and ergonomics	The student is able to work in a team and organize work while adhering to health and safety regulations and ergonomics principles.	[SU7] entries and opinions in the internship diary	
Subject contents	<p>Laboratory analysis and medical diagnostics: Physical and chemical methods for analyzing the natural environment, food, water, and living organisms. Biochemical, genetic, and immunological methods for studying organisms, their life parameters, and disease substrates, such as quantitative and qualitative chemical analysis, parameters of aqueous solutions, ionizing radiation, spectroscopic, chromatographic, electroanalytical methods, blood morphology, urine analysis, metabolic tests, hormone levels, immunological and genetic tests, interpretation of obtained results, etc. Genetics, molecular biology, biotechnology, microbiology, and physiology: Gene isolations, transplantations, and transformations, molecular markers, genetic engineering, genome sequencing, in vitro cultures, micromanipulation techniques, immunological techniques and tests, microorganism identification, DNA resistance and mutations, viral infections, ecotoxicology, microbial utilization in biotechnology, interpretation of obtained results, etc. Ecology, environmental protection, and conservation genetics: Methods for studying biodiversity, evolutionary processes, species and environmental protection, such as studies on levels of biological diversity, interactions between organisms in ecological formations, dynamics of population changes, molecular identification of organisms, introduction and invasive organisms and their impact on native ecosystems, toxins, herbal resources, active nature protection methods, population and conservation genetics methods, indicator organisms, applied bioassays, indicators of soil and environmental degradation, waste utilization methods, production of environmentally friendly fuels and energy, water and air purification, etc.</p>		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Multimedia presentation	51.0%	25.0%
	Evaluation of professional internships at the workplace.	51.0%	75.0%
Recommended reading	Basic literature	Literature recommended by the internship supervisor at the workplace.	
	Supplementary literature	None	
	eResources addresses		
Example issues/ example questions/ tasks being completed	None		
Work placement	Not applicable		