

**Subject card**

Subject name and code	Phytopathology - plant medicine, PG_00145063						
Field of study	Biology						
Date of commencement of studies	October 2024	Academic year of realisation of subject			2026/2027		
Education level	undergraduate studies	Subject group			Optional subject group		
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			1.0		
Learning profile	academic	Assessment form					
Conducting unit	Katedra Biologii Eksperymentalnej i Biotechnologii Roślin -> Faculty of Biology						
Name and surname of lecturer (lecturers)	Subject supervisor		mgr Martyna Zalewska				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	15.0	0.0	0.0	0.0	15
	E-learning hours included: 0.0						
	Additional information: Discussion - preparation of presentations by students on general topics in the field of phytopathology and selected disease units						
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	Introduction of the student to contemporary issues in phytopathology. Presentation of the most common plant diseases, methods of their diagnosis, and plant protection.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[BIOLL3_U07] The graduate should be able to independently search for and use available sources of biological information, including electronic sources		The graduate independently searches for and uses available biological information sources in the field of phytopathology.		[SU2] presentation/project/paper/report		
	[BIOLL3_K01] The graduate is prepared to evaluate their own knowledge, understand the need for continuous learning and development, and is open to new ideas		The graduate is aware of the limitations of their own knowledge and skills, demonstrates a readiness for continuous learning and development, and is open to new ideas.		[SK8] observation of student's independent or team work		
	[BIOLL3_W16] The graduate knows and understands the relationship between the achievements of the chosen field of science and discipline of natural sciences and the possibilities of their use in socio-economic life, taking into account the sustainable use of biodiversity		The graduate explains the relationships between the achievements of phytopathology and the possibilities of their application in socio-economic life, considering the sustainable use of biological diversity.		[SW2] presentation/project/paper/report [SW3] text preparation/written work		
Subject contents	Plant diseases in human life and economy. Phytopathological problems resulting from human interference with the natural environment. Factors causing diseases and disease symptoms. Plant pathogens. Plant responses to pathogens. Stages of the disease process. Elements of epidemiology sources of infection, methods of spread, mono- and polycyclic epidemics. Plant protection prevention and treatment. Molecular methods in plant disease diagnostics. Plant pathogens and food safety. Overview of selected disease units and plant pathogens.						

Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	preparation and presentation of a multimedia presentation, as well as a written assessment of knowledge covering the presented topics	51.0%	100.0%
Recommended reading	Basic literature	Kryczyński S., Weber Z. (red.). 2010. Fitopatologia. Powszechne Wydawnictwo Rolnicze i Leśne. Herman, M., Williams, M.E. 2012. Fighting for their lives: Plants and pathogens. Teaching Tools in Plant Biology: Lecture Notes. The Plant Cell (online), doi/10.1105/tpc.112.tt0612. Articles from scientific journals.	
	Supplementary literature	Mańka K. 2005. Fitopatologia leśna. Powszechne Wydawnictwo Rolnicze i Leśne. Paduch-Cichal E. 2011. Choroby roślin sadowniczych. PWRiL Research of plant-microorganism relationships chapter from: Chincinska, Izabela Anna. "Leaf infiltration in plant science: old method, new possibilities." Plant Methods 17.1 (2021): 1-21.	
	eResources addresses	Adresy na platformie eNauczenie:	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		

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