

Subject card

Subject name and code	Disclosure of traces and evidence of crime - biology - lecture, PG_00132523						
Field of study	Criminology						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2025/2026		
Education level	Master's studies		Subject group		Obligatory subject group in the field of study		
Mode of study	part-time studies		Mode of delivery		at the university		
Year of study	1		Language of instruction		Polish		
Semester of study	2		ECTS credits		2.0		
Learning profile	academic		Assessment form		exam		
Conducting unit	Faculty of Law and Administration -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Monika Badura				
	Teachers		dr hab. Monika Badura				
			prof. dr hab. Joanna Izdebska				
			dr hab. Marcin Górniak				
			dr Marcelina Malinowska				
		dr Marta Zakrzewska					
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	10.0	0.0	0.0	0.0	0.0	10
	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	10		0.0		40.0	50
Subject objectives	To learn the principles and methods of detecting and preserving biological evidence.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[KRYMMU2_K05] Is able to independently and critically complement knowledge and skills, extended by the interdisciplinary dimension		The student is able to acquire knowledge and skills in an independent and critical way, extended by an interdisciplinary dimension (including natural sciences).		[SK1] oral statement/conversation/discussion [SK4] test/exam - oral or written		
	[KRYMMU2_WG05] Has an in-depth knowledge of methods and tools, including data and information extraction techniques, specific to criminology and forensic science		The student has an in-depth knowledge of methods and tools, including biological data and information extraction techniques, specific to criminology and forensic science		[SW4] test/exam - oral or written [SW1] oral statement/conversation/discussion		
	[KRYMMU2_WG02] Has an in-depth knowledge of the nature of natural sciences related to the studied major, their place in the system of sciences and their mutual relations		The student has an in-depth knowledge of the nature of the natural sciences (biology) in relation to the subject studied, their place in the system of sciences and their interrelationships.		[SW4] test/exam - oral or written [SW1] oral statement/conversation/discussion		

Subject contents	Definition and types of biological evidence. Basic methods of detection of the above traces. Micro-traces - disclosure, preservation, significance. Micro-traces most commonly found at crime scenes. Securing control material and collecting comparative material for examination - blood, hair, nails, secretions, saliva, semen, sweat. Examination of genetic material Genetic material - collection of comparison material, DNA testing methods. Botanical evidence - plants or plant fragments, pollen, wood, soil. Methods of collecting and securing material for botanical analysis from the crime scene and physical evidence. Methods of collecting and securing plant samples for DNA analysis. Methods of DNA analysis of traces of plant origin. Acaroentomological traces - methods of collecting, preserving and identifying mites, insects and other arthropods. Methods of visual inspection documentation and principles of protocol writing.		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	test - multiple choice, open questions	51.0%	100.0%
Recommended reading	Basic literature	Branicki W., Kupiec T., Wolańska-Nowak P. 2008. Badania DNA dla celów sądowych. Wydawnictwo IES, Kraków. Coyle H.M. 2005. Forensic botany. Principles and applications to criminal casework. CRC Press LLC, Boca Raton, London, New York, Washington D.C. Coyle H.M., Lee C.-L., Lin W.-Y., Lee H.C., Palmbach T.M. 2005. Forensic botany: using plant evidence to aid in forensic death investigation. Croat. Med. J. 46: 606-612. Izdebska J.N., Jankowski Z. 2006. Demodex brevis and D. folliculorum (Demodecidae): specific human parasites. A comparative study of the effectiveness of diagnostic methods involving autopsy. [W:] Postępy Akarologii Polskiej, Gabrys G., Ignatowicz S. (red.). SGGW, Warszawa: 128- 136. Kaczorowska E., Draber-Mońko A. 2009. Wprowadzenie do entomologii sądowej. Wydawnictwo UG. Mildenhall D.C., Wiltshire P.E.J., Bryant V.M. 2006. Forensic palynology: Why do it and how it works. Forensic Sci. Internat. 163: 163-172. Pawłowski R. 1997. Medyczno-sądowe badanie śladów biologicznych. Kraków Zakamycze. Perotti A.M., Lee Goff M., Baker A.S., Turner B.D., Braig H.R. 2009. Forensic acarology: an introduction. Exp. Appl. Acarol. 49: 3-13. Solarz K. 2009. Indoor mites and forensic acarology. Exp. Appl. Acarol. 49:135-142.	
	Supplementary literature	Krantz G., Walter D. 2008. Manual of Acarology. Texas A & M University Press.	
	eResources addresses		
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		

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