

**Subject card**

<b>Subject name and code</b>	Disclosure of traces and evidence of crime - biology - lecture, PG_00132753						
<b>Field of study</b>	Criminology						
<b>Date of commencement of studies</b>	October 2024	<b>Academic year of realisation of subject</b>	2024/2025				
<b>Education level</b>	Master's studies	<b>Subject group</b>	Obligatory subject group in the field of study				
<b>Mode of study</b>	full-time studies	<b>Mode of delivery</b>	at the university				
<b>Year of study</b>	1	<b>Language of instruction</b>	Polish				
<b>Semester of study</b>	2	<b>ECTS credits</b>	2.0				
<b>Learning profile</b>	academic	<b>Assessment form</b>	exam				
<b>Conducting unit</b>	Faculty of Law and Administration -> Rector						
<b>Name and surname of lecturer (lecturers)</b>	<b>Subject supervisor</b>	dr hab. Monika Badura					
	<b>Teachers</b>	dr hab. Monika Badura prof. dr hab. Joanna Izdebska dr hab. Marcin Górniak dr Marcelina Malinowska dr Marta Zakrzewska					
<b>Lesson types</b>	<b>Lesson type</b>	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	<b>Number of study hours</b>	15.0	0.0	0.0	0.0	0.0	15
	E-learning hours included: 0.0						
	Additional information: attendance of at least 80% of the course hours is a prerequisite for admission to the exam						
<b>Learning activity and number of study hours</b>	<b>Learning activity</b>	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM		
	<b>Number of study hours</b>	15	0.0	35.0	50		
<b>Subject objectives</b>	To learn the principles and methods of detecting and preserving biological evidence.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[KRYMMU2_WG02] He/she demonstrates deepened knowledge about the character of natural sciences connected with the field of stud, their place in the system of sciences and mutual relations	has an in-depth knowledge of the nature of natural sciences related to the studied major and their place in the system of sciences and mutual relations	[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion
	[KRYMMU2_UK02] He/she is prepared for active participation in groups, organizations and institutions connected with the problem of crime and other related phenomena. He/she is also able to communicate with specialists and non-specialists in criminology	is prepared to participate actively in groups, organisations and institutions related to criminology in its broadest sense, while being able to communicate with criminological and non-criminological specialists	[SK1] oral statement/conversation/ discussion [SK8] observation of student's independent or team work
	[KRYMMU2_UW02 ] He/she acquires knowledge independently and develops his/her professional skills using various sources (in native and foreign language) and modern technologies	is able to acquire knowledge and develop professional skills independently, using a variety of sources (mother and foreign language) and modern technologies	[SU1] oral statement/conversation/ discussion [SU4] test/exam - oral or written
	[KRYMMU2_KR08 ] He/ she is aware of the level of own knowledge and skills, and understands the need for lifelong learning	understands the need for lifelong learning and is aware of his/her level of knowledge and skills	[SK1] oral statement/conversation/ discussion [SK4] test/exam - oral or written
	[KRYMMU2_UU03] The graduate demonstrates deepened skills of observing, diagnosing, sensible assessing of complex psychological situations and analyzing motives and patterns of human behaviours	is able to observe, diagnose and rationally assess complex psychological situations and analyse motives and patterns of human behaviour	[SU1] oral statement/conversation/ discussion [SU8] observation of student's independent or team work
	[KRYMMU2_UW06 ] He/she is able to propose solutions of concrete problems and carry out procedures connected with solutions in this respect	is able to propose solutions to a specific problem and carry out a procedure to resolve it	[SU1] oral statement/conversation/ discussion [SU4] test/exam - oral or written
	[KRYMMU2_UW04 ] He/she can apply legal and professional principles and norms in taking up the activity of criminologist	is able to use legal as well as professional principles and norms in the the activities of a criminologist	[SU1] oral statement/conversation/ discussion [SU4] test/exam - oral or written [SU8] observation of student's independent or team work
[KRYMMU2_KK01 ] The graduate is aware of the level of his/her knowledge and skills, and also understands the need of lifelong learning	understands the need for lifelong learning and is aware of his/her level of knowledge and skills	[SK1] oral statement/conversation/ discussion [SK4] test/exam - oral or written	
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. Acarontomological 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	<p>Branicki W., Kupiec T., Wolańska-Nowak P. 2008. Badania DNA dla celów sądowych. Wydawnictwo IES, Kraków.</p> <p>Coyle H.M. 2005. Forensic botany. Principles and applications to criminal casework. CRC Press LLC, Boca Raton, London, New York, Washington D.C.</p> <p>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.</p> <p>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, Gabryś G., Ignatowicz S. (red.). SGGW, Warszawa: 128- 136.</p> <p>Kaczorowska E., Draber-Mońko A. 2009. Wprowadzenie do entomologii sądowej. Wydawnictwo UG.</p> <p>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.</p> <p>Pawłowski R. 1997. Medyczno-sądowe badanie śladów biologicznych. Kraków Zakamycze.</p> <p>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.</p> <p>Solarz K. 2009. Indoor mites and forensic acarology. Exp. Appl. Acarol. 49:135-142.</p>
	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.