University of Gdańsk

Subject card

Subject name and code	Examination of Traces and Evidence in Forensic Science, PG_00188312		
Field of study	Badania śladów i dowodów w kryminalistyce (Ćw.laboratoryjne)		
Date of commencement of studies	October 2026	Academic year of realisation of subject	2027/2028
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	2	Language of instruction	Polish
Semester of study	4	ECTS credits	2.0
Learning profile	academic	Assessment form	credit
Conducting unit	Department of Analytical Chemistry -> Faculty of Chemistry -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Paweł Niedziałkowski	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	30.0	0.0	0.0	30

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	30	5.0	15.0	50

Subject objectives

Acquaintance with basic legal concepts and definitions used in criminalistics. Acquisition of knowledge about basic physicochemical tests and chemical methods used in this field. Becoming familiar with fundamental analyses and techniques for revealing forensic evidence. Developing the ability to independently perform basic activities related to revealing and securing evidence.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[AKRL3_U04] The graduate is able to select appropriate equipment for experiments and prepare reports and expert opinions based on analytical results in compliance with legal and ethical standards.	Explains the principle of operation of basic equipment used in forensic laboratories. Recognizes physicochemical methods used in forensics.	[SU2] prezentacja/projekt/referat/ raport [SU4] test/egzamin - ustny lub pisemny
[AKRL3_K06] The graduate is ready to follow occupational health and safety regulations in the laboratory and care for the safety of themselves and others.	Acquaints themselves with the health and safety rules applicable in every research laboratory. Acquires knowledge about caring for their own health and that of their colleagues in the laboratory.	[SK2] prezentacja/projekt/referat/ raport [SK4] test/egzamin - ustny lub pisemny
[AKRL3_W03] The graduate knows and understands the structure and chemical properties of compounds relevant in forensic examinations.	Can explain how chemical compounds analyzed in the forensic sciences are constructed. Acquaints themselves with the basic principles of analyzing chemical compounds encountered in forensic analysis.	[SW4] test/egzamin - ustny lub pisemny [SW2] prezentacja/projekt/referat/ raport
[AKRL3_W07] The graduate knows and understands the principles of quality assurance in analytical and forensic laboratories.	Knows and understands the basic health and safety rules applicable in an analytical laboratory.	[SW4] test/egzamin - ustny lub pisemny [SW2] prezentacja/projekt/referat/ raport

Subject contents	Qualitative and quantitative analysis in forensics using chromatographic and spectroscopic techniques. Practical training in revealing fingerprint traces using mechanical and physicochemical methods, as well as the basics of identifying individuals based on fingerprints recorded on dactyloscopic cards and exercises in traceology.
Prerequisites and co-requisites	Prerequisites: application of safety rules in a chemical laboratory, use of laboratory glassware, knowledge of chemical reactions and their effects. Completed courses: Spectroscopic methods for determining chemical structures, Nomenclature of organic compounds, Chemistry of medicinal substances, Biochemistry.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Reports	51.0%	100.0%

Recommended reading

Basic literature	1. 5. E.Gruza, M. Goc, J. Moszczyński, Kryminalistyka,czyli o wspólczsnych metodach dpwpdzenia przestępstw, Wolters Kluwer Polska, Warszawa 2020. 2. Z. Ruszkowski, Fizykochemia kryminalistyczna, CLK KGP, Warszawa 1992. 3. J. Moszczyński, Ślady w kryminalistyce, Difin, Warszawa 2007. 4. J. Mazepa, Vademecum techniki kryminalistyki, Oficyna, Warszawa 2009. 5. B. Hołdys, Kryminalistyka, Lexis Nexis, Warszawa 2006.
Supplementary literature	1. R. Zieliński, Badania instalacji elektrycznej na miejscu pożaru, CLK KGP, Warszawa, 1992. 2. L. Rodowicz, Kryminalistyczne badanie śladów obuwia, CLK KGP, Warszawa, 2000.
eResources addresses	

Example issues/ example questions/ tasks being completed	1. How to perform chromatographic analysis using the GC method. 2. What is TLC analysis? 3. List the types of fingerprints.
Work placement	Not applicable

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