



Information about the subject

Degree: Bachelor of Science Degree in Criminology

Faculty: Faculty of Legal, Economic and Social Sciences

Code: 1300205 **Name:** Criminalistics Laboratory. Scientific Police

Credits: 6,00 **ECTS Year:** 2 **Semester:** 2

Module: Methodology. Scientific-technical.

Subject Matter: Criminalistics **Type:** Compulsory

Department: Criminology

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

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Module organization

Methodology. Scientific-technical.

Subject Matter	ECTS	Subject	ECTS	Year/semester
Social	6,00	Research Methodology and Techniques in Social Sciences	6,00	1/2
Criminalistics	18,00	Applied Criminalistics	6,00	3/2
		Criminalistics Laboratory. Scientific Police	6,00	2/2
		Documentoscopy and Graphology	6,00	4/1
Forensic Science	24,00	Forensic Psychiatry	6,00	3/1
		Human Anatomy and Physiology	6,00	1/2
		Legal Medicine	6,00	2/1
		Techniques of Forensic Analyses	6,00	2/2

Recommended knowledge

Not required.



Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

- R1 Knowing how to act as criminologists in criminal investigations, interpreting data, developing hypotheses and producing comprehensive reports on the topics and events studied.
- R2 The ability to write a criminalistic report.
- R3 Knowing how to present a forensic report at an oral trial, acting either by designation by a judge or by one of the parties involved in the trial.
- R4 Being able to advise on and interpret forensic reports.
- R5 Understanding and knowing how to apply the different techniques used in fingerprint testing, dermatoglyphics, toxicology, as well as other forensic techniques that allow you to collaborate with experts, suggest examinations and interpret the results.
- R6 Knowing and properly using the concepts and terms used in expert reports, in technical laboratories, and adjusting them to produce a specialized report.



Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

BASIC		Weighting			
		1	2	3	4
CB1	Showing a command and understanding of knowledge in an area of study that is based on the general secondary education and that is usually at a level that implies the support on advanced textbooks but also the inclusion of knowledge from the cutting edge of their field of study.				X
CB2	Being able to apply their knowledge to their jobs or vocational activities professionally and holding the competences that are demonstrated through the elaboration and defence of arguments as well as the solution of problems within their area of study.				X
CB3	The ability to gather and interpret relevant data (normally within their area of study) so as to make judgements that include a reflection on relevant social, scientific or ethical issues.	X			
CB4	Being able to convey information, ideas, problems and solutions to a specialised or non-specialised public.			X	
CB5	Having developed the learning abilities necessary to pursue postgraduate studies with a high degree of autonomy.				X
GENERAL		Weighting			
		1	2	3	4
CG1	Understanding and integrating the different theories and scientific knowledge developed by Social, Legal and Behavioural Sciences through a critical lens in order to understand the sociocultural and personal context of all the elements that integrate the crime sphere.				X
CG2	Being able to assess the complexity and diversity of the criminal phenomenon in a global context.				X



CG3	The capacity to apply the knowledge, skills and abilities acquired from an ethical and intellectually upright perspective with the aim of achieving a society whose fundamental pillars are Freedom, Justice, Pluralism and Equality.									X	
CG6	The capacity to establish explanatory hypotheses, using predictive and operative relationships that offer responses to the criminal phenomenon in a criminological context.										X
CG7	The capacity to take decisions and to design programs and strategies for both prevention and treatment of the criminal phenomenon.									X	
CG9	Knowing the key concepts and theoretical approaches developed about the criminal phenomenon, the victimisation and responses to crime and deviation									X	
CG12	The capacity to analyse and synthesize relevant data within the area of Criminology in order to make judgements that include a reflection on relevant social, scientific or ethical issues.							X			
CG16	Oral and written communication skills in the native language with regards to Criminological Science in order to present, circulate and validate the outcomes of criminological and criminalistic research both through scientific development and through the proposal of specific policies and lines of action.										X

SPECIFIC		Weighting			
		1	2	3	4
CE7	Study and elaboration of reports in the field of minors with regards to risk situations, measures applicable to the minor offender and other types of measures applicable to minors at serious risk.	X			
CE8	Design and analysis of measures and programs in the field of criminal policy.	X			
CE10	Explanatory management from a socio-anthropological perspective of the concepts of violence, inequality and difference, delinquency, crime, social control, stigmatisation, and social deviation.		X		
CE11	Understanding, from an integrating perspective, of the scientific nature of Criminology and its objective, as well as of the multidisciplinary complexity of criminological science.				X



CE13	The capacity to design an empirical research project that involves the application of quantitative and qualitative techniques, the use of published data sources, statistic analyses and interpretation of results obtained.				X
CE14	Understanding the basic principles of the criminal phenomenon, its spatial, cultural, social, economic, legal, political, labour, and anthropological dimensions.				X
CE16	Knowing and applying the suitable research techniques for the prosecution of crime in its various modalities, guaranteeing citizen security, fundamental rights, and the resolution of social conflicts.				X
CE17	The capacity to explain diversity and social inequality, victimisation and the responses to crime and social deviation and their interrelationships from an analytic perspective and developing programs and strategies to assess and predict deviant behaviour.		X		
CE18	Attention to victims of hatred, be it at individual, group or community levels, with particular sensibility towards those collective groups that are particularly victimised or at grave risk such as gender violence victims, minors or people with a disability.	X			
CE20	A command of the research methodology in social science, design of social integration plans, preventive urbanistic actions and comprehensive training of individuals, with special sensitivity to those groups at greatest risk of social exclusion, immigration, drug addiction and others.		X		
CE22	The capacity to understand and describe the fundamental concepts of psychology that are necessary to analyse both globally as well as specifically the criminal phenomenon and deviant behaviour.		X		
CE23	Knowledge and application of scientific research techniques in the medical-legal and criminalistic field, as well as the basis and preparation of various expert reports.				X
CE24	Training in the elaboration of criminologist expert reports as well as in expert intervention in the different phases of the procedures.				X



Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3, R4, R5, R6	50,00%	Analysis and resolution of case studies.
R1, R2, R3, R4, R5, R6	15,00%	Attendance and participation in class.
R1, R2, R3, R4, R5, R6	35,00%	Exam or objective test to measure obtained competences.

Observations

Será necesaria la obtención de un cinco (5) en el examen para que se puedan aplicar los porcentajes obtenidos de las notas de la parte práctica, así como la nota obtenida por la asistencia y participación en clase y, obtener así, la nota final de la asignatura, que, evidentemente, habrá de ser igual o superior a cinco (5).

Cuando al comienzo del semestre el estudiante sea conocedor, por sus circunstancias personales, de que no va a poder cumplir con el 80% del porcentaje de asistencia, podrá solicitar la **evaluación única** en el primer mes de impartición de la docencia del semestre. En este caso, la autorización compete a decanato, debiendo informar el alumno tanto al responsable de asignatura como al de titulación. Para la evaluación única se deberá realizar la práctica que se establezca al efecto y un examen, otorgándose un porcentaje del 50% para la práctica y otro tanto para el examen.



CLASS ATTENDANCE IN FACE-TO-FACE DEGREES

In accordance with the development guidelines of the General Regulations for the Evaluation and Qualification of Official Teachings and Own Degrees of the UCV, in face-to-face degrees, class attendance with a minimum of 80% of the sessions of each subject will be required as a requirement to be evaluated. This means that, if a student does not attend the sessions of each subject, in a percentage greater than 20%, he/she will not be able to be evaluated, neither in the first nor in the second call, unless the person responsible for the subject, with the approval of the person responsible for degree, in view of duly justified exceptional circumstances, exempt from the minimum attendance percentage. The same criterion will be applicable for hybrid or virtual degrees in which teachers must maintain the same percentage in the requirement of "presence" in the different training activities, if any, even if these are carried out in virtual environments.

MENTION OF DISTINCTION:

The mention of "Honors" may be awarded to students who have obtained a grade equal to or greater than 9.0. Their number may not exceed five percent of the students enrolled in a group in the corresponding academic year, unless the number of students enrolled is lower.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

- M1 Presentation of contents by the teacher, analysis of competencies, explanation and demonstration of abilities, skills and knowledge in the classroom.
- M2 Specific instructions about group and individual assignments for each topic.
- M3 Group work sessions supervised by the teacher. Study of legal cases, both real and fictitious, analysis, diagnosis, problems, field study, computer room, visits, data search, libraries, network, Internet, etc. Significant construction of knowledge through student interaction and activity. Critical analysis on values and social commitment.
- M4 Application of interdisciplinary knowledge.
- M5 Supervised monographic sessions with shared participation
- M6 Personalized attention and in small groups. Period of instruction and/or orientation carried out by a tutor with the objective of reviewing and discussing the materials and topics presented in the classes, seminars, readings, completion of assignments, etc.



- M7 Set of oral and/or written tests used in the initial, formative or summative evaluation of the student.
- M8 Group preparation of readings, assumptions and problem -olving to present, discuss or deliver in class or tutorial.
- M9 Student's study: Individual reading preparation, case studies, jurisprudence. Writings and papers to be presented or delivered in the classes or tutorials.

IN-CLASS LEARNING

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
In-person class M1, M2, M9	R1, R2, R3, R4, R5, R6	15,00	0,60
Practical class M1, M2, M9	R1, R2, R3, R4, R5, R6	30,00	1,20
Seminar M1, M2, M3, M9	R1, R2, R3, R4, R5, R6	2,50	0,10
Group work presentation M1, M2, M9	R1, R2, R3, R4, R5, R6	5,00	0,20
Tutorial M1	R1, R2, R3, R4, R5, R6	5,00	0,20
Evaluation M9	R1, R2, R3, R4, R5, R6	2,50	0,10
TOTAL		60,00	2,40

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
Group work M1, M2, M3, M9	R1, R2, R3, R4, R5, R6	30,00	1,20
Individual work M1, M2, M3, M9	R1, R2, R3, R4, R5, R6	60,00	2,40
TOTAL		90,00	3,60



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
TOPIC 1. CRIMINALISTICS. SCIENTIFIC POLICE	Introduction to criminalistics. Brief historical evolution and current situation.
TOPIC 2. BASIC LEGISLATIVE REGULATIONS. AREAS OF RESEARCH IN CRIMINALISTICS	Basic legislative regulations. Areas of research in criminalistics.
TOPIC 3. QUALITY MANAGEMENT IN FORENSIC TESTING LABORATORIES	The quality management system. Competence of forensic testing laboratories.
TOPIC 4. BALLISTICS	Weapons: definitions, regulated, prohibited and war weapons. Study of firearms. Introduction to forensic ballistics. Identification ballistics.
TOPIC 5. INSTRUMENTAL TRACES	Tool marks. Footwear and tire marks. Identification comparisons.
TOPIC 6. INVESTIGATION OF STRUCTURAL FIRES AND EXPLOSIONS	Definitions. Fire investigation. Methodology. Investigation planning. Origin and cause of the fire. Explosions.
TOPIC 7. FORENSIC ANALYSIS OF MOBILE DEVICES	Preservation, acquisition and analysis of mobile terminals. Forensic hardware and software.



Temporary organization of learning:

Block of content	Number of sessions	Hours
TOPIC 1. CRIMINALISTICS. SCIENTIFIC POLICE	1,00	2,00
TOPIC 2. BASIC LEGISLATIVE REGULATIONS. AREAS OF RESEARCH IN CRIMINALISTICS	3,00	6,00
TOPIC 3. QUALITY MANAGEMENT IN FORENSIC TESTING LABORATORIES	2,00	4,00
TOPIC 4. BALLISTICS	14,00	28,00
TOPIC 5. INSTRUMENTAL TRACES	2,00	4,00
TOPIC 6. INVESTIGATION OF STRUCTURAL FIRES AND EXPLOSIONS	7,00	14,00
TOPIC 7. FORENSIC ANALYSIS OF MOBILE DEVICES	1,00	2,00



References

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- CONSTITUCIÓN ESPAÑOLA.
- Enfsi.eu. *European Network of Science Institutes* (Red Europea de Institutos de Ciencias Forenses – ENFSI).
- NFPA 921. *Guía de Investigación de Incendios y Explosiones. National Fire Protection Association*. Ed. 2024.
- Ley Orgánica 6/1985, de 1 de julio, del Poder Judicial.
- Ley Orgánica 2/1986, de 13 de marzo, de Fuerzas y Cuerpos de Seguridad.
- LOCARD, Edmond. *Manual de Técnica Policiaca*. 1935. Ed. Maxtor, Valladolid, 2010.
- Orden JUS/1291/2010, de 13 de mayo, del Instituto Nacional de Toxicología y Ciencias Forenses (texto consolidado).
- Real Decreto de 14 de septiembre de 1882 por el que se aprueba la Ley de Enjuiciamiento Criminal (texto consolidado – 2023).
- Real Decreto 769/1987, de 19 de junio, sobre regulación de la Policía Judicial (texto consolidado).
- Real Decreto 137/1993, de 29 de enero, por el que se aprueba el Reglamento de Armas (texto consolidado – 2023).
- Real Decreto 130/2017, de 24 de febrero, por el que se aprueba el Reglamento de Explosivos (texto consolidado – 2022).
- UNE-EN ISO/IEC 17.025:2017. Requisitos generales para la competencia de los laboratorios de ensayo y calibración.
- UNE 71506:2013. Tecnologías de la Información (TI). Metodología para el análisis forense de las evidencias electrónicas.
- <https://www.cellebrite.com/es/ufed-ultimate-2/>. Análisis forense telefonía móvil.
- <https://www.guardiacivil.es/es/institucional/Conocenos/especialidades/InvestigacionCientifica/index.html>. Guardia Civil - Criminalística.
- <https://www.interpol.int/es>. Interpol.
- <https://www.msab.com/es/productos/xry/>. Análisis forense telefonía móvil.
- https://www.policia.es/_es/tupolicia_conocenos_estructura_dao_cgpoliciajcientifica.php#. Policía Nacional – Policía Científica.
- <https://www.ultra-forensictechnology.com/es/productos-y-servicios/identificacion-balistica-ibis/>. Sistema Integrado de Identificación Balística.
- <https://www.icoc.es/>. Ilustre Colegio Oficial de Criminólogos de la Comunidad Valenciana.