



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: -

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

In-class teaching

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 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 5.

Online teaching

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3, R4, R5, R6	35,00%	Final test and/or final work
R1, R2, R3, R4, R5, R6	15,00%	Participation in programmed activities
R1, R2, R3, R4, R5, R6	50,00%	Presentation of works and projects

Observations

Será necesaria la obtención de un 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 5.



MENTION OF DISTINCTION:

According to Article 22 of the Regulations governing the Evaluation and Qualification of UCV Courses, the mention of "Distinction of Honor" may be awarded by the professor responsible for the course to students who have obtained, at least, the qualification of 9 over 10 ("Sobresaliente"). The number of "Distinction of Honor" mentions that may be awarded may not exceed five percent of the number of students included in the same official record, unless this number is lower than 20, in which case only one "Distinction of Honor" may be awarded.

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.
- M17 Expository Method /Master Class



- M18 Exercise and problem solving
- M19 Case method
- M20 Course works and tasks
- M21 Project-oriented learning
- M22 Guided Practice through debates, resolution of problems and exercises in the virtual classroom.



IN-CLASS LEARNING

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
In-person class M1	R1, R2, R3, R4, R5, R6	15,00	0,60
Practical class M3	R1, R2, R3, R4, R5, R6	30,00	1,20
Seminar M5	R1, R2, R3, R4, R5, R6	2,50	0,10
Group work presentation M4	R1, R2, R3, R4, R5, R6	5,00	0,20
Tutorial M6	R1, R2, R3, R4, R5, R6	5,00	0,20
Evaluation M7	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 M8	R1, R2, R3, R4, R5, R6	30,00	1,20
Individual work M1, M2, M3, M4, M5, M6, M7, M8, M9	R1, R2, R3, R4, R5, R6	60,00	2,40
TOTAL		90,00	3,60



ON-LINE LEARNING

SYNCHRONOUS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Master Class M17, M18	R1, R2, R3, R4, R5, R6	15,00	0,60
Practical activity M18, M19, M20	R1, R2, R3, R4, R5, R6	25,00	1,00
Tutorial M17	R1, R2, R3, R4, R5, R6	10,00	0,40
TOTAL		50,00	2,00

ASYNCHRONOUS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Individual or group work of students M19	R1, R2, R3, R4, R5, R6	90,00	3,60
Activities through virtual resources M20	R1, R2, R3, R4, R5, R6	2,50	0,10
Access and research on complementary contents M21, M22	R1, R2, R3, R4, R5, R6	5,00	0,20
Individual study M19, M20	R1, R2, R3, R4, R5, R6	2,50	0,10
TOTAL		100,00	4,00



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
UNIT 1. CRIMINALISTICS. SCIENCE POLICE.	Introduction to criminalistics. Brief historical evolution and current situation.
UNIT 2. TYPOLOGY IN THE INVESTIGATION OF CRIMINAL CRIMES.	Basic legislative regulation. Typology in the investigation of crimes in criminalistics.
UNIT 3. QUALITY MANAGEMENT	The quality management system. Competence of testing laboratories.
UNIT 4. BALLISTICS	Weapons: definitions, regulated, prohibited and of war. Study of firearms. Introduction to forensic ballistics. Identifying ballistics.
UNIT 5. INSTRUMENTAL TRACES	Tool marks. Shoe and tire tracks. Comparison microscope.
UNIT 6. INVESTIGATION OF STRUCTURAL FIRES AND EXPLOSIONS	Definitions. Methodology. Research planning. Origin and cause of the fire. Explosions.
UNIT 7. FORENSIC ANALYSIS OF MOBILE DEVICES	Terms. Preservation, acquisition and analysis. Hardware and software.



Temporary organization of learning:

Block of content	Number of sessions	Hours
UNIT 1. CRIMINALISTICS. SCIENCE POLICE.	1,00	2,00
UNIT 2. TYPOLOGY IN THE INVESTIGATION OF CRIMINAL CRIMES.	3,00	6,00
UNIT 3. QUALITY MANAGEMENT	2,00	4,00
UNIT 4. BALLISTICS	14,00	28,00
UNIT 5. INSTRUMENTAL TRACES	2,00	4,00
UNIT 6. INVESTIGATION OF STRUCTURAL FIRES AND EXPLOSIONS	7,00	14,00
UNIT 7. FORENSIC ANALYSIS OF MOBILE DEVICES	1,00	2,00



References

BIBLIOGRAPHY

- ANTÓN, F. y TURÉGANO, J.V. *Policía Científica*. 2 volúmenes. Ed. Tirant Lo Blanch (52012)
- 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. 2021.
- 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 – 2022).
- 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.
- <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.
- <https://www.ultra-forensictechnology.com/es/es>. Sistema Integrado de Identificación Balística.
- <https://www.icoc.es/>. Ilustre Colegio Oficial de Criminólogos de la Comunidad Valenciana.



Addendum to the Course Guide of the Subject

Due to the exceptional situation caused by the health crisis of the COVID-19 and taking into account the security measures related to the development of the educational activity in the Higher Education Institution teaching area, the following changes have been made in the guide of the subject to ensure that Students achieve their learning outcomes of the Subject.

Situation 1: Teaching without limited capacity (when the number of enrolled students is lower than the allowed capacity in classroom, according to the security measures taken).

In this case, no changes are made in the guide of the subject.

Situation 2: Teaching with limited capacity (when the number of enrolled students is higher than the allowed capacity in classroom, according to the security measures taken).

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject will be made through a simultaneous teaching method combining onsite teaching in the classroom and synchronous online teaching. Students will be able to attend classes onsite or to attend them online through the telematic tools provided by the university (videoconferences). In any case, students who attend classes onsite and who attend them by videoconference will rotate periodically.

In the particular case of this subject, these videoconferences will be made through:

☒ Microsoft Teams

☐ Kaltura



Situation 3: Confinement due to a new State of Alarm.

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:

☒

Microsoft Teams

☐

Kaltura

Explanation about the practical sessions:



2. System for Assessing the Acquisition of the competences and Assessment System

ONSITE WORK

Regarding the Assessment Tools:

☒ The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.

☐ The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

Comments to the Assessment System:



And how will online participation be valued? In many different ways, such as the following:

- 1) Taking into account the interventions of the students in the online classes themselves, with the corresponding records or notes.
- 2) Considering virtual tutorials through the UCVnet virtual Campus or online sessions through Teams developed as a group or individual tutorial.
- 3) Taking into account the interventions in the forum created on the UCVnet platform to raise and answer questions on the agenda.
- 4) Considering the emails or messages received raising questions about the subject's agenda.



ONLINE WORK

Regarding the Assessment Tools:

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☐ The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used

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Comments to the Assessment System: