COURSE DATA

DATA SUBJECT

Code: 35091
Name: Accident investigation
Cycle: Undergraduate Studies
ECTS Credits: 4.5
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
1302 - Degree in Criminology	Facultat de Dret	4	Second quarter
1923 - Double Degree Programme Law-Criminology	Facultat de Dret	4	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1302 - Degree in Criminology	Public safety	ELECTIVES
1923 - Double Degree Programme Law-Criminology	Year 4 optional subjects	ELECTIVES

COORDINATION

PLANELLS GARCES JOSE FRANCISCO

SUMMARY

The Accident Investigation: it is an optional subject of 4,5 credits.
The content includes the description and introductory study of the methods and systems used in the analysis of the causes of accidents in their different environments, both for road safety, which will be the most widely addressed, as well as in other types of events that are usually qualify as accidents
With it, it is tried to complete the formation of the criminologist, in a field that is very often addressed in legal, social and judicial controversies. The contents are structured in seven topics, which cover the study and review of the scenario of the event and the description and application of the Techniques used, with special mention of their relationship with other subjects studied in the degree of Criminology and their variants of itinerary or double degrees. The objectives tend to know the aspects of the technical reports of claims, and eventual determination of objective causes and their legal consequences, as regards criminal and / or civil liability.
General objectives:
Know the principles of technical research and the need to establish objective bases for the foundation of rights and responsibilities in the claims for their classification as an accident or not.
Identify the elements that provide information to carry out the aforementioned qualification, and if they conform to the regulations of the activity sector.89 Distinguish and resolve ethical conflicts, separating

them from the legal responsibilities of those involved in a claim.
Develop the ability to generate solutions to serious problems and often subject to social pressure.
Apply the acquired knowledge and techniques learned, in the Degree, to the technical investigation of accidents.
Delimit the areas of professional activity with respect to other professionals of private security and public security.
Build a professional and business diagram, on the activity of the technical investigator of claims, as a natural outcome of the graduate in Criminology.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

It is important to have technical and legal knowledge to locate this subjet as a professional activity and apply what has been learned to a very coomplex activity.

COMPETENCES / LEARNING OUTCOMES

1302 - Degree in Criminology

Saber aplicar técnicas criminológicas y medidas de seguridad específicas para la protección de las personas, los bienes y el medio ambiente.

Saber hacer uso del método científico tanto en los ámbitos básicos como aplicados.

Ser capaz de trabajar en equipo con otros profesionales de la actividad criminológica.

Tener una conciencia crítica frente a la realidad social y los problemas sociales respetando los principios de igualdad, derechos humanos, paz, accesibilidad universal, solidaridad y protección medioambiental, todo ello desde una perspectiva de género.

DESCRIPTION OF CONTENTS

1. The Accident: Introduction
Legal classification of accidents or incidents. Recklessness in the Criminal Code.
Investigation methodology. Sources of information: types and main sources in police investigations.
2. Occupational Accidents

Definition of workplace accidents. Investigation of occupational accidents: the ¿tree of causes¿ method. Legal framework. Inter-institutional agreement between the General Council of the Judiciary, the Public Prosecutor¿s Office, the Ministry of the Interior, the Ministry of Justice, and the Ministry of Labour and Social Economy for the effective and prompt investigation of crimes against workers¿ life, health, and physical integrity, and the enforcement of convictions. Case studies.
3. Air, Maritime, and Railway Accidents (I)
Ministry of Transport and Sustainable Mobility (MITMS). National and international regulations on transport safety in rail, civil aviation, and maritime transport. Law 2/2024 of August 1st, establishing the Independent Administrative Authority for the Technical Investigation of Railway, Maritime, and Civil Aviation Accidents and Incidents. Data recording systems: flight data recorders, railway and maritime recorders.
4. Air, Maritime, and Railway Accidents (II)
Judicial intervention in accident investigations. Coordination between technical and judicial investigations. Royal Decree 32/2009 of January 16, approving the National Protocol for Forensic Medical and Scientific Police Action in Mass Casualty Events. Law 17/2015 of July 9, on the National Civil Protection System. Royal Decree 903/1997 of June 16 (emergency calls via 112). International cooperation: a real case study.
5. Fire-Related Incidents: Fire Protection Systems
Fire behavior: fuel, oxygen, heat, chain reaction, and propagation. Types of fires. Technical inspection of fires: general aspects. Vehicle fires. Fires in homes and industrial buildings. Introduction to forest fires. Fire safety regulations. Active and passive fire protection systems. Maintenance of fire protection systems.
6. Traffic Accidents: Concept, Classification, and Regulations
Definition and classification of traffic accidents. Legal references: Spanish Constitution, Organic Law 2/1986 on Security Forces, Traffic and Road Safety Law, Law 37/2015 on Roads, Criminal Code, and other relevant regulations. Role of the Guardia Civil Traffic Unit, Navarra Foral Police, Mossos d¿Esquadra, and Ertzaintza.
7. Traffic Accident Investigation (I): Human and Environmental Factors
Concept and types of traffic accident investigations. Human factor. Environmental factor: road and surroundings. Road type, ownership, geometric and structural characteristics. Weather and environmental conditions

8. Traffic Accident Investigation (II): The Vehicle Factor

Vehicle factor. Vehicle identification. Types and categories. Vehicle components.

Safety elements: active and passive safety. Wheels: structure, rims, tires (parts,

sidewall markings, types). Post-accident tire and skid mark analysis. Seat belts,

headrests, cargo restraints. Airbags. Windshields and other glass components.

9. Traffic Accident Investigation (III): Accident Dynamics

Development and sequence of the accident. Accident phases. Evasive maneuvers: simple and complex. Consequences of collisions, pedestrian impacts, and road departures. Kinetic energy. Accident reconstruction. Speed estimation prior to collision: braking analysis.

10. Alcohol and Drugs in Driving

Legal framework: General Traffic Regulations, Traffic Law, Criminal Procedure Law, and Criminal Code. Blood alcohol limits. Mandatory testing. Alcohol and drug testing procedures. Observation of external signs of intoxication. Breathalyzers and alcohol meters.

11. The Police Report, Scene Inspection, and Technical Report

Introduction. The police report. Scene inspection: phases and documentation. The technical report: structure and content

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theoretical and practical classes	45,00
Total hours	**45,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	4,00
Individual or group project	20,00
Independent study and work	15,50
Preparation of lessons	7,00
Preparation for assessment activities	10,00
Resolution of case studies	11,00

Total hours	**67,50**

TEACHING METHODOLOGY

The development of the subject is structured in relation to the theoretical and practical classes sessions, with periodic exercises and the completion of a final exercise based on a practical case.
Attendance class activities are mandatory for all students.
The present subject is taught in a face-to-face module and will also use the teaching platform of the UV, the Virtual Classroom (aulavirtual.uv.es). The program and the materials that the student must read and analyze will appear deposited in it. Through it, also, it will be necessary to get to the professor the opportune works that can go soliciting to each one of the students.

EVALUATION

The qualification of the subject will be determined based on the qualifications obtained from the continuous evaluation developed in each group, which corresponds to 30% of the final grade, and the completion of the final test on the dates set by the Faculty, which corresponds to 70% of the final grade.
It will be necessary to obtain a minimum mark of passed in the final test to pass the subject, regardless of the note obtained in the continuous evaluation.
The teacher's annex will detail the conditions of the continuous assessment and the oral or written nature of the final test, as well as whether a partial test, whether liberating or not, will be carried out on the dates set by the Faculty.
The students who do not carry out the continuous evaluation can be presented to the final test in the first call, and the mark obtained will be limited to the weighted value that this test has in the final grade (70%), so that, at most , you can get a 7 as a final grade.

In the case of suspending the first call, the qualification obtained in the continuous evaluation is retained for the second call. If the teacher's annex provides that any activity is recoverable, it will determine how to obtain the qualification of the same / s during the second call.

REFERENCES

- RDL 339/1990, de 2 de marzo - Ley de Seguridad vial
- Real Decreto 1428/2003, Reglamento General de Circulación,
- Reglamento General de Conductores modificado en 2012
- Reglamento de vehículos Decreto 2822/1998,
- Manual de Policía Científica: entre la teoría y la experiencia. Planells Garcés, José Francisco.

Tirant lo Blanch 2022.

- Accidentes de Tráfico. Problemática e investigación - Autor: Miguel López-Muñiz Goñi Editorial Colex

- J. Stannard Baker, Manual de investigación de accidentes de tráfico. DGT. 1970.