

Teaching guide

IDENTIFICATION DETAILS

Degree:	Criminology		
Scope	Law and legal specialties		
Faculty/School:	Law, Business and Government		
Course:	INTRODUCTION TO TOXICOLOGY		
Type:	Optional	ECTS credits:	3
Year:	4	Code:	6172
Teaching period:	Eighth semester		
Subject:	Legal and Forensic Medicine		
Module:	Health Sciences		
Teaching type:	Classroom-based		
Language:	Spanish		
Total number of student study hours:	75		

SUBJECT DESCRIPTION

It aims for the student to understand and apply the basic concepts of toxicology, to be able to identify and recognize the harmful effects of toxic substances, and to identify their participation in criminal acts.

In this course, you will acquire knowledge specific to a discipline such as Forensic Toxicology, differentiating two areas, the one that comprises the basic principles of General Toxicology and the one that refers strictly to Forensic Toxicology and its relationship with Criminalistics. The first will discuss concepts. general and introduction to toxicology, toxicokinetics, toxicodynamics, general toxicology treatment and autopsy in cases of death from poisoning and toxicological research. In the second, poisonings will be studied. specific, such as metal poisoning, pesticides,

caustics, alkaloids, drugs of abuse, medications and poisoning caused by fires or domestic accidents.

GOAL

That the student acquires specific knowledge in a branch of Toxicology such as Toxicology Forensic, to enable him to understand the effects of toxic substances and their subsequent investigation; from the outset, symptomatology of the most common poisonings, consequences and detection, down to the basic principles of treatment and its necropsy study. This will deepen our knowledge of the main toxins that can affect human beings and the environment, as well as their legal repercussions.

The specific aims of the subject are:

The specific purposes of the course are:

Approach to a specific discipline of Forensic Sciences, in order to be able to carry out the activity expertise in this area, without prejudice to those developed by medico-legal forensic experts

PRIOR KNOWLEDGE

It is necessary to have taken the first year course: Criminalistics; and second year: Scientific Police; where they will have acquired basic knowledge about the different disciplines that make up Forensic Sciences.

COURSE SYLLABUS

1. Introduction to Toxicology. Historical background. Areas of Toxicology. 2. Toxicokinetics. Toxicodynamics. Poisoning: types and effects. General treatment. 3. Toxicological research. Basic principles. 4. The Police Technical Inspectorate. Sampling protocol. Chain of custody. Toxicological analysis and interpretation of results. Casuistics. 5. Poisoning by drugs of abuse, drugs and ethyl alcohol. Toxicological research. Casuistics.

EDUCATION ACTIVITIES

MASTER CLASSES and PARTICIPATORY MASTER LESSONS: Unlike the master lesson classical, in which the burden of teaching falls on the teacher, in the participatory master lesson we seek that The student moves from a passive attitude to an active one, encouraging their participation from the start of preparation

Prior to the questions to be discussed and the questions for reflection proposed at the end of each lesson.

STUDY OF REAL CASES, with the active participation of students.

GAMIFICATION: simulation of criminal act scenarios, police technical inspections, location of hidden traces and sampling.

EXERCISES AND REPETITION OF SPECIFIC SKILLS, in which students will apply the different

specific techniques and procedures commonly used in each of the main police disciplines Scientist.

Training activities, as well as the distribution of working hours, can be modified and adapted according to the different scenarios established following the instructions of the authorities sanitary.

DISTRIBUTION OF WORK TIME

TEACHER-LED TRAINING ACTIVITIES	INDIVIDUAL WORK
30 Horas	45 Horas

SKILLS

Basic Skills

Students must have demonstrated knowledge and understanding in an area of study that is founded on general secondary education. Moreover, the area of study is typically at a level that includes certain aspects implying knowledge at the forefront of its field of study, albeit supported by advanced textbooks

Students must be able to apply their knowledge to their work or vocation in a professional manner and possess skills that can typically be demonstrated by coming up with and sustaining arguments and solving problems within their field of study.

Students must have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgments that include reflections on pertinent social, scientific or ethical issues

Students must be able to convey information, ideas, problems and solutions to both an expert and non-expert audience

Students must have developed the learning skills needed to undertake further study with a high degree of independence

To be familiar with and apply analytical techniques and procedures for research in problem-solving, decision-making and issue of reports concerning issues submitted for consideration in the field of criminology.

General Skills

To be familiar with and apply analytical techniques and procedures for research in problem-solving, decision-making and issue of reports concerning issues submitted for consideration in the field of criminology.

Specific skills

Use the basic knowledge of Legal Medicine and Forensic Sciences through a correct medical-legal language

LEARNING RESULTS

Know and apply analytical techniques and research procedures for problem solving, decision-making and issuing opinions on issues that are being considered at any given time in the criminological field

The student must be able to know the different types and classes of toxins that usually affect people and animals, as well as their effects on the body.

LEARNING APPRAISAL SYSTEM

The student will be evaluated according to the criteria of the continuous evaluation system. The final grade will consist of the evaluation and weighting of different activities, to which the following percentages will be assigned in the final grade of the subject: **ORDINARY CALL:** - 80% of the final grade of the subject: a written final exam, which will be carried out in person; the convenience of taking a liberating partial exam will be assessed, subject to the same conditions as the final exam, and which will average with this; - 20% of the final grade: class attendance and attitudinal assessment carried out by the teacher, tenor of the participation and interest shown by the student through their attendance at the individual or collective classes and activities carried out in them. To achieve this percentage, the student must have attended at least 90% of the classes. For the application of the percentages with which the subject is graded globally, it is essential to pass the final exam and, in the case of a partial release, both exams; It is the exclusive right of the teacher of this subject, in recognition of excellence, to grant or not the qualification of Honorary Enrollment, in accordance with the criteria of academic regulations and provided that the student has demonstrated a special proactivity and mastery of the subject. To qualify for the Honorary Enrollment qualification, the student must have obtained the highest score in the final face-to-face exam, practical exercises and work and active participation in class. **EXTRAORDINARY CALL:** - 80% of the final grade of the subject: a written final exam, to be carried out in person; - 20% of the final grade: the preparation of works proposed by the teacher. For this purpose, it will be the student who must contact the teacher via email. For the application of the percentages with which the subject is graded globally, it is essential to pass the final exam. **OFFICIAL ACADEMIC EXEMPTION FROM ATTENDANCE:** - 80% of the final grade of the subject: a written final exam, to be taken in person; - 20% of the final grade: the preparation of works proposed by the teacher. For this purpose, it will be the student who must contact the teacher via email. For the application of the percentages with which the subject is graded globally, it is essential to pass the final exam. **ERASMUS PROGRAM STUDENTS:** - 80% of the final grade of the subject: a written final exam, to be carried out in person; - 20% of the final grade: the preparation of works proposed by the teacher. For this purpose, it will be the student who must contact the teacher via email. For the application of the percentages with which the subject is graded globally, it is essential to pass the final exam.

ALTERNATIVE EVALUATION SYSTEM IN THE CASE OF REMOTE TEACHING BASED ON HEALTH

RECOMMENDATIONS In the event that health recommendations require a return to a scenario where teaching has to be taught exclusively remotely, the evaluation system and the weighting of all the activities described above will be maintained, taking the final exams and, where appropriate, partial release exams, in written form, both for the ordinary call and for the extraordinary call, student with academic dispensation or in the Erasmus program. Plagiarism, as well as the use of illegitimate means in evaluation tests, will be sanctioned in accordance with those established in the Evaluation Regulations and the University's Coexistence Regulations. All tests susceptible to evaluation will be subject to the provisions of the UFV Evaluation Regulations.

ETHICAL AND RESPONSIBLE USE OF ARTIFICIAL INTELLIGENCE

1.- The use of any Artificial Intelligence (AI) system or service shall be determined by the lecturer, and may only be used in the manner and under the conditions indicated by them. In all cases, its use must comply with the following principles:

- a) The use of AI systems or services must be accompanied by critical reflection on the part of the student regarding their impact and/or limitations in the development of the assigned task or project.
- b) The selection of AI systems or services must be justified, explaining their advantages over other tools or methods of obtaining information. The chosen model and the version of AI used must be described in as much detail as possible.
- c) The student must appropriately cite the use of AI systems or services, specifying the parts of the work where they were used and describing the creative process followed. The use of citation formats and usage examples may be consulted on the Library website(https://www.ufv.es/gestion-de-la-informacion_biblioteca/).
- d) The results obtained through AI systems or services must always be verified. As the author, the student is responsible for their work and for the legitimacy of the sources used.

2.- In all cases, the use of AI systems or services must always respect the principles of responsible and ethical use upheld by the university, as outlined in the [Guide for the Responsible Use of Artificial Intelligence in Studies at UFV](#). Additionally, the lecturer may request other types of individual commitments from the student when deemed necessary.

3.- Without prejudice to the above, in cases of doubt regarding the ethical and responsible use of any AI system or service, the lecturer may require an oral presentation of any assignment or partial submission. This oral evaluation shall take precedence over any other form of assessment outlined in the Teaching Guide. In this oral defense, the student must demonstrate knowledge of the subject, justify their decisions, and explain the development of their work.

BIBLIOGRAPHY AND OTHER RESOURCES

Basic

MANUEL REPETTO JIMENEZ; GUILLERMO REPETTO KUHN FUNDAMENTAL TOXICOLOGY 4th Edition, 2013

JUAN ANTONIO GISBERT CALABUIG Legal Medicine and Toxicology 2007