



## COURSE DATA

Data Subject	
<b>Code</b>	35084
<b>Name</b>	Applied Toxicology and Psycopharmacology
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	4.5
<b>Academic year</b>	2021 - 2022

## Study (s)

Degree	Center	Acad. Period	year
1302 - Degree in Criminology	Faculty of Law	4	Second term
1923 - D.D. in Law-Criminology	Faculty of Law	4	Second term

## Subject-matter

Degree	Subject-matter	Character
1302 - Degree in Criminology	19 - Applied criminology	Optional
1923 - D.D. in Law-Criminology	6 - Year 4 optional subjects	Optional

## SUMMARY

Applied Toxicology is an optative course that attends in the 4th year of the Degree in Criminology. It has a value of 4.5 credits and it is part of the itinerary "Applied Criminology".

The main objective is the formation Toxicological on the effects of toxic or mixtures of them in order to gain knowledge leading to the identification of the toxic agent used in a criminal action in all types of crimes both against life and bodily integrity, as against public health and the environment.

The course provides knowledge to work with an expert in expert reports in the field of toxicology to what it will be study the pathways, metabolism and mechanisms of action of toxic agents as well as it will be considered the analytical matrices more appropriate to each situation, methods of determination, interpretation of results and drafting of toxicology reports.

The subject provides knowledge about the neurobiological mechanisms and physiological and behavioral aspects of psychoactive drugs, which are considered essential for licensed professionals in Criminology. Within biological knowledge includes both the role of the biological basis for mental disorders, and the effects of psychoactive drugs on the brain and behavior, relating to interventions that allow the prevention and control of mental illness. It also offers the Diploma in Criminology knowledge of the sources of information you should go to expand and update their information over their work.



For this purpose, it begins under the conceptual delimitation and the history and methodology used in Psychopharmacology. After that it is analyzed the biological and psychopharmacological treatment of mood disorders and anxiety, psychotic and cognitive disorders. All with an integrated perspective focused on the consequences and implications for violent and criminal behavior.

## 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 recommended interest on toxicological studies as well as criminal psychology and neuroscience. It is also useful the knowledge and use of sources and databases in Toxicology, Criminology, Psychology, Psychiatry and Sociology. It is relevant English skills and statistics.

## OUTCOMES

### 1302 - Degree in Criminology

- Saber aplicar técnicas y procedimientos para la resolución de problemas y la toma de decisiones.
- Ser capaz de apreciar la complejidad y diversidad del fenómeno criminal.
- Saber trasladar a un informe criminológico los datos psicológicos, sociales y jurídicos de relevancia criminológica.
- Saber seleccionar los datos con relevancia criminológica que sean útiles para emitir una resolución judicial.
- Saber hacer estudios en barrios marginales o de acción social preferente, elaborando estrategias de prevención y/o intervención de la criminalidad.
- Saber asesorar en la interpretación y valoración de los informes forenses.
- Saber emplear términos criminológicos y de seguridad en lengua inglesa.
- Ser capaz de aplicar los conocimientos psicosociales al estudio y comprensión de las nuevas formas de criminalidad.
- Ser capaz de analizar el delito, el delincuente y la víctima, y diseñar estrategias de prevención e intervención, desde el respeto a los derechos humanos, la igualdad entre hombres y mujeres, la paz, sostenibilidad, accesibilidad universal y diseño para todos y valores democráticos.



## LEARNING OUTCOMES

The results of training will be:

1. To Acquire knowledge on toxics and processes occurring in the organisms, analytical techniques for the determination of toxics and ability to interpret toxicological results.
2. Place the subject Psychopharmacology both in the context of psychology and neurosciences.
- 3 - Understand the concept and history of psychopharmacology.
- 4 - Identify and interpret the main techniques applied in Psychopharmacology.
- 5- Understand the biological basis and different psychopharmacological treatments of mood disorders.
- 6- Understand the biological basis and main psychopharmacological treatments of anxiety disorders.
- 7- Understand the biological basis and different psychopharmacological treatments of psychotic disorders.
- 8- Know the biological basis and different psychopharmacological treatments of cognitive disorders.
- 9-Understand the relevance of therapeutic and side effects of psychopharmacological treatments, mainly focalized in criminal and violent behavior.

## DESCRIPTION OF CONTENTS

### **1. Basic Toxicology**

Basic Toxicology: Concepts and definitions. Process of toxics in the organism. Toxic effects of physical, chemical and biological agents.

### **2. Analytical Toxicology**

Analytical Toxicology: Samples for analysis. Phases of toxicological analysis. Identifying toxic agents. Interpretation of analytical results.

### **3. Psychopharmacology**

History, concept and methodology of psychopharmacology.  
Biological basis and psychopharmacological treatment of mood disorders.  
Biological basis and psychopharmacological treatment of anxiety disorders.  
Biological basis and psychopharmacological treatment of psychotic disorders.  
Biological basis and psychopharmacological treatment of cognitive disorders.



## WORKLOAD

ACTIVITY	Hours	% To be attended
Theoretical and practical classes	45,00	100
Attendance at events and external activities	3,50	0
Development of group work	9,00	0
Development of individual work	12,00	0
Study and independent work	10,00	0
Readings supplementary material	6,00	0
Preparation of evaluation activities	10,00	0
Preparation of practical classes and problem	7,00	0
Resolution of case studies	10,00	0
<b>TOTAL</b>	<b>112,50</b>	

## TEACHING METHODOLOGY

Lectures with resolution of questions. Cooperative learning. Using ICTs. Approach and resolution of practical cases.

Preparation and presentation of group work. Specialized seminars. And practical tasks. Visits to institutions.

Comprehensive reading of texts and materials. Ongoing of course and resolution of practical clinical cases.

Expression oral/written of knowledge.

## EVALUATION

The evaluation of the course is determined with reference to the following criteria and percentages:

1) Evaluating the tasks and activities carried out: 40%.

2) Final evaluation: 60%.



## REFERENCES

### Basic

- Repetto M. Toxicología Fundamental. 4 ed. Díaz de Santos, Madrid (2009).
- Bataller Sifre R Toxicología Clínica. Universitat de Valencia. Valencia (2004).
- Stahl S.M. (2010) Psicofarmacología esencial. Bases neurocientíficas. Grupo Aula Médica.
- Morant I et al. Toxicología Clínica. Difusión Jurídica y Temas de Actualidad, Madrid (2011).
- Stahl S.M. (2006) Psicofarmacología esencial. Bases neurocientíficas y aplicaciones Clínicas. Ariel. Barcelona.
- Carlson, NR. (2006). Fisiología de la conducta, 8<sup>a</sup> edición. Madrid: Pearson educación.

### Additional

- Salazar M. (2011) Manual de Psicofarmacología. Ed. Médica Panamericana.
- Puig, A., Prat i Vigué G. (2011). Psicofarmacología: de los mecanismos de acción a las estrategias terapéuticas. Ed. Merge.
- Fernández Teruel A. (2011) Psicofarmacología, terapias psicológicas y tratamientos combinados II: eficacia comparada en los trastornos mentales. Editorial UOC.

## ADDENDUM COVID-19

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

English version is not available

### DOCENCIA HÍBRIDA

Si la autoridad académica lo determina, esta asignatura se adaptará al modelo de docencia híbrida establecido por la Facultat de Dret, mediante el cual se impartirán clases teórico-prácticas presenciales en semanas discontinuas para el estudiante. A tal efecto, se procederá por la Secretaría de la Facultat a la división del grupo en tantos subgrupos como sea necesario, impariéndose docencia en el aula, en el horario establecido para la asignatura, a uno de los subgrupos en cada semana de acuerdo con el calendario establecido por la Facultat, previendo para los otros, prioritariamente, seguimiento de la clase a través de VIDEOCONFERENCIA síncrona. Los contenidos, volumen de trabajo y evaluación se mantienen en los términos previstos inicialmente en la guía académica.



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UNIVERSITAT DE VALÈNCIA

### DOCENCIA NO PRESENCIAL

Si la autoridad académica establece el cambio en docencia no presencial, esta asignatura pasará a impartirse para todo el alumnado en iguales condiciones a las indicadas para la parte de docencia no presencial del sistema híbrido. Los contenidos, volumen de trabajo y evaluación se mantienen en los términos previstos inicialmente en la guía académica.

