COURSE DATA

DATA SUBJECT

Code: 35084
Name: Applied Toxicology and Psycopharmacology
Cycle: Undergraduate Studies
ECTS Credits: 4.5
Academic year: 2025-26

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	Applied criminology	ELECTIVES
1923 - Double Degree Programme Law-Criminology	Year 4 optional subjects	ELECTIVES

COORDINATION

RUIZ LEAL MARIA JOSE

ROMERO MARTINEZ ANGEL

SUMMARY

Applied Toxicology is an optative course that is 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 is begin 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.

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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.

COMPETENCES / LEARNING OUTCOMES

1302 - Degree in Criminology

Saber aplicar técnicas y procedimientos para la resolución de problemas y la toma de decisiones.

Saber asesorar en la interpretación y valoración de los informes forenses.

Saber emplear términos criminológicos y de seguridad en lengua inglesa.

Saber hacer estudios en barrios marginales o de acción social preferente, elaborando estrategias de prevención y/o intervención de la criminalidad.

Saber seleccionar los datos con relevancia criminológica que sean útiles para emitir una resolución judicial.

Saber trasladar a un informe criminológico los datos psicológicos, sociales y jurídicos de relevancia criminológica.

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.

Ser capaz de aplicar los conocimientos psicosociales al estudio y comprensión de las nuevas formas de criminalidad.

Ser capaz de apreciar la complejidad y diversidad del fenómeno criminal.

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 of Psicopharmacology and fundamental concepts.
Neurobiology of mental disorders.
Mood disorders: antidepressants and stabilizers.
Anxiety Disorders: Ansiolitic and hypnotic.
Schizophrenia: antipsychotic.

WORKLOAD

PRESENCIAL ACTIVITIES

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

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	3,50
Individual or group project	21,00
Independent study and work	16,00
Preparation of lessons	7,00
Preparation for assessment activities	10,00
Resolution of case studies	10,00
Total hours	**67,50**

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%.

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REFERENCES

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