



## COURSE DATA

### DATA SUBJECT

**Code:** 42465

**Name:** Drug dependence in the social and health sphere

**Cycle:** Master's Degree

**ECTS Credits:** 15

**Academic year:** 2025-26

### STUDY (S)

Degree	Center	Acad. year	Period
2225 - Master's Degree in Research, Treatment and Associated Pathologies in Drug A	Facultat de Psicologia i Logopèdia	1	First quarter

### SUBJECT-MATTER

Degree	Subject-matter	Character
2225 - Master's Degree in Research, Treatment and Associated Pathologies in Drug A	Drug dependence in the social and health sphere	COMPULSORY

### COORDINATION

ARENAS FENOLLAR M CARMEN

## SUMMARY

The course "Drug Addiction in the field of social and health" describes the anatomy and physiology of the brain reward system and the interactions between structures involved in such circuits.

We will discuss the pharmacology and drug interactions of drugs of abuse, the biological basis of learning and motivational processes in drug use as well as psychosocial characteristics related to drug use.

Further epidemiological and sociological aspects of drug addiction and studied literature search.

## PREVIOUS KNOWLEDGE

### RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

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

### OTHER REQUIREMENTS



No restrictions

## COMPETENCES / LEARNING OUTCOMES

### 2096 -

Aplicar los conocimientos adquiridos y su capacidad de resolución de problemas en entornos nuevos o poco conocidos dentro de contextos más amplios (o multidisciplinares) relacionados con las drogodependencias.

Conocer los procesos biológicos que sustentan las conductas motivadas en relación con el consumo de drogas.

Conocer y saber los principios básicos de la organización funcional corporal y los fundamentos de la excitabilidad neuronal en relación a la acción de las drogas de abuso.

Demostrar una comprensión sistemática del campo de las drogodependencias y el dominio de las habilidades y métodos de investigación relacionados con dicho campo.

Poder relacionar las funciones del sistema nervioso central, endocrino y los procesos neurobiológicos que subyacen en estos procesos.

Saber capaz de desarrollar el conocimiento y la capacidad de trabajo sobre los aspectos cinéticos y el mecanismo de acción de las drogas en el organismo vivo y en relación con los fármacos de prescripción médica.

Saber identificar estructuras y circuitos del sistema nervioso central que constituyen la base de los diferentes sistemas funcionales, específicamente del sistema de recompensa cerebral.

Ser capaz de analizar con crítica, contrastando diversas hipótesis sociales acerca de los posibles mecanismo sociales que favorecen el consumo de drogas.

Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.

Students should demonstrate self-directed learning skills for continued academic growth.

## DESCRIPTION OF CONTENTS

- **General anatomy of the brain reward system:** mesolimbic-mesocortical circuits and system, extended amygdala circuit, neurobiological circuit of relapse.

- **Functional physiology of brain circuits involved in drug action:** interactions and dynamic functioning of structures involved in drug action in the central nervous system.



- **Specific pharmacology and pharmacological interactions with drugs of abuse:** Pharmacokinetics and pharmacodynamics of drugs of abuse and their interaction with other drugs.
- **Psychobiology and motivational processes in drug use:** frontal lobe and decision-making.
- **Neuroscience and its implication in drug addictive processes:** learning and synaptic plasticity in relation to drug use, potentiation and long-term depression.
- **Psychosocial evidence involved in addiction to drugs of abuse:** Social and group characteristics that identify increased risk in drug use.
- **Sociological and epidemiological aspects of drug dependence:** epidemiology and public health, epidemiology of drug use. Design of an epidemiological study.
- **Information search:** databases and bibliometric/bibliographic characteristics in relation to epidemiology and sociology of drug dependence.

## WORKLOAD

### PRESENCIAL ACTIVITIES

Activity	Hours
Theory	105,00
<b>Total hours</b>	<b>105,00</b>

### NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	15,00
Independent study and work	18,00
Preparation for assessment activities	237,00
<b>Total hours</b>	<b>270,00</b>

## TEACHING METHODOLOGY

Face-to-face sessions. They consist of the presentation of the corresponding theoretical topic. The lecture model allows the teacher to present the most relevant aspects of each topic. Participation will be encouraged, as knowledge is offered. Likewise, in these face-to-face sessions, the student who will have worked autonomously on different theoretical and practical aspects related to the topics studied, will be able to present and expose his work in the classroom. Also in these classroom sessions, the students will carry out practical activities related to the theoretical contents acquired.



Non-face-to-face sessions. They are intended to encourage the construction of knowledge by the student. The activity may consist of a search for specialized documentary information, a contrasted and justified reflection on a certain topic, or the application of classroom knowledge.

Tutorials. The student has a large number of hours of tutorials in which the professor guides the student individually or in small groups in the construction of his knowledge. He guides the student in the elaboration of the works, solves doubts or difficulties related to the subject. The Virtual Classroom forum is also available for consultation.

In addition, in this virtual space, students can find documents, information or relevant news about the subjects of the different modules.

In addition to these learning methods, Complementary Activities are carried out to complement the training of students with Conferences, Expert Panel, Seminars-workshops, Visits, Cineforum.

## EVALUATION

The knowledge, skills and competences acquired are continuously evaluated through the student's participation in the individual and group training activities of the subjects of the module, which corresponds to 20% (class activity) and 10% (individual activity) of the grade of the subject. In addition to the continuous evaluation of the student's theoretical and practical work in the different subjects of the module, at the end of the course the student takes a performance test on the level of the competences, their contents and training activities, which corresponds to 70% of the grade for the course.

The module is passed by obtaining a 5 in the total sum of the subjects. Each subject has a certain weight in the total grade according to the teaching hours assigned and averages from 4 points. A score lower than 4 in a subject will result in the failure of the whole module.

The syllabus of the different subjects included in the module specifies, if any, the differences in the evaluation between the first and the second call, as well as the sections that are or are not recoverable and the existence of the minimum requirements to pass the subject.

The awarding of an Honor's Degree in the module will be based on the regulations of the University of Valencia, which takes into account the number of Honor's Degrees per group. It will be granted only when the grade is 9 points or higher in the average of the module and will be awarded to the highest grade.

## REFERENCES



**BASIC REFERENCES**

- Arenas, M.C., Miñarro, J. (coordinadores) (2022). *Drogodependencias en el ámbito social y de la salud I: Neuroanatomía, Fisiología y Farmacología*. 2ª edición. Editorial: Ángeles Carrillo Baeza. ISBN: 978-84-125962-2-9
- Arenas, M.C., Miñarro, J. (coordinadores) (2022). *Drogodependencias en el ámbito social y de la salud II: Aspectos psicobiológicos, psicosociales y epidemiológicos*. 2ª edición. Editorial: Ángeles Carrillo Baeza. ISBN: 978-84-125962-3-6
- Carlson, N.R., Birkett M.A. (2018). *Fisiología de la conducta*. 12 edición. Pearson Educación SA, Madrid.
- Colado, M.I., Farré, M., Leza, J.C., Lizasoain, I. (coordinadores) (2023). *Drogodependencias*. 4ª edición. Editorial Médica Panamericana. ISBN: 978-84-9110-706-4
- Stahl, S.M. (2023). *Psicofarmacología Esencial de Stahl. Bases neurocientíficas y aplicaciones prácticas*. 5ª edición. Editorial Aula Médica formación en salud. Madrid.

**COMPLEMENTARY REFERENCES:**

- Bear, M.F., Connors, B.W., Paradiso, M.A. (2016). *Neurociencia. La exploración del cerebro*. 4ª edición. LWW Lippincott Wolters Kluwer, Madrid.
- Haines, D.E., Mihailoff, G.A. (2019). *Principios de Neurociencia: Aplicaciones básicas y clínicas*. 5ª edición. Elsevier, Barcelona, España.
- Miller, P.M. (Editor) (2013). *Biological Research on Addiction*. Academic Press, Elsevier, USA.
- Uhl, G.R., Koob, G.F., Cable, J. (2019). The neurobiology of addiction. *Annals of the New York Academy of Sciences*, 1451(1), 528. <https://doi.org/10.1111/nyas.13989>