COURSE DATA

DATA SUBJECT

Code: 44704
Name: Developments in the treatment of drug addiction and dual pathology
Cycle: Master's Degree
ECTS Credits: 15
Academic year: 2026-27

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	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
2225 - Master's Degree in Research, Treatment and Associated Pathologies in Drug A	Avances en el tratamiento de las drogodependencias y patología dual	COMPULSORY

COORDINATION

RODRIGUEZ ARIAS MARTA

SUMMARY

The hospital management of emergencies, evaluation and neuropsychological rehabilitation will be explained,

The neuroimaging techniques in drug addictions.

Brain structures related to drug use will be studied and identified the new therapeutic targets in addictive disorders and genetic factors, epigenetic and environmental in origin and evolution of addictive disorders.

Personality disorders and their relationship to the study drug dependency.

Developments will be studied in the psychosocial treatment of additions.

Also different neurobiological theories were related in connection with the explanation of theaddictive disorders.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

2225 - Master's Degree in Research, Treatment and Associated Pathologies in Drug A

Obligation to take the subject(s) simultaneously

42465 - Drug dependence in the social and health sphere
42466 - Neurobiology of drug dependence

OTHER REQUIREMENTS

The student must have completed the modules corresponding to the first semester.

COMPETENCES / LEARNING OUTCOMES

2225 - Master's Degree in Research, Treatment and Associated Pathologies in Drug A

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.

Be able to access the information required (databases, scientific articles, etc.) and to interpret and use it sensibly.

Be able to make quick and effective decisions in professional or research practice.

Comunicar sus conclusiones, y los conocimientos y razones últimas que las sustentan, a públicos especializados y no especializados de un modo claro y sin ambigüedades.

Concretar programas de intervención individual y comunitaria con el objetivo de reducir daños en aquellas personas con esta enfermedad.

Conocer los diferentes sistemas de atención sanitarios y sociales con el fin de promover el tratamiento, rehabilitación y reinserción de los drogodependientes.

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

Identificar trastornos de personalidad asociados con drogodependencias.

Integrar conocimientos y enfrentarse a la complejidad de formular juicios a partir de una información que, siendo incompleta o limitada, incluya reflexiones sobre las responsabilidades sociales y éticas vinculadas a la aplicación de sus conocimientos y
juicios.

Poder relacionar las diferentes teorías neurobiológicas que explicar la etiología y el desarrollo de la adicción a las drogas.

Poseer las habilidades de aprendizaje que les permitan continuar estudiando de un modo que habrá de ser en gran medida autodirigido o autónomo.

Saber en cada momento que tipo de patologías orgánicas podría estar asociada a una droga especifica y plantear actuaciones concretas de prevención y/o tratamiento.

Saber trabajar en equipo con eficacia y eficiencia.

Ser capaces de buscar, ordenar, analizar y sintetizar la información, seleccionando aquella que resulta pertinente para la toma de decisiones.

Ser capaces de tomar decisiones tanto individuales como colectivas en su labor profesional y/o investigadora.

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 communicate conclusions and underlying knowledge clearly and unambiguously to both specialized and non-specialized audiences.

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

To acquire basic skills to develop laboratory work in biomedical research.

DESCRIPTION OF CONTENTS

- Personality disorders and addictive disorders: dual pathology. Schizophrenia, Depression, Borderline Personality Disorder, Anxiety Disorder and Obsessive-Compulsive Disorder and their relationship with drug addictions.

- Toxicological emergencies: Hospital management of drug dependency emergencies. Intoxication and opiate, dopaminergic and anxiolytic antagonists.

- **Neuropsychological evaluation:** Neuroimaging techniques in drug addicts. Study of specific brain structures in relation to drug use. Neuropsychological rehabilitation.

- Identification of new therapeutic targets in addictive disorders: D3 dopaminergic receptors, cannabinoid agonists and antagonists, serotonergic and noradrenergic receptors, opioid system and its receptors as possible therapeutic targets.

- Study of genetic, epigenetic and environmental factors in the origin and evolution of addictive disorders: behavioral genetics, molecular genetics and pharmacogenomics.

- Neurobiological theories. Opponent process theory. Dopaminergic hypothesis of addiction. Incentive sensitization theory. Impulsivity-compulsive habit transition theory. Allostasis and stress

theory. New approaches to the study of the addictive process: neuroinflammation.

- New advances in psychosocial treatment in addictions: Addiction and food. Addiction and stress. Inflammation and alcohol. Neuromodulation and transcranial current stimulation.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	105,00
Total hours	**105,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	15,00
Independent study and work	18,00
Preparation for assessment activities	237,00
Resolution of case studies	0,00
Total hours	**270,00**

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 20% (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 60% 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

- Carlson, N.R., Birkett M.A. (2018). *Fisiología de la conducta.* 12 edición. Pearson Educación SA, Madrid.
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- Kalda A, Zharkovsky A (2015) Epigenetic Mechanisms of Psychostimulant- Induced Addiction. Int Rev Neurobiol, 120:85-105.
- Pérez de los Cobos J, Valderrama JC, Cervera G, Rubio G (2006) *Tratado SET de Trastornos Adictivos*. Médica Panamericana, Madrid.
- Verdejo García A (2019) *Cognition and Addiction*. Ed. Academic Press.

COMPLEMENTARY REFERENCES

- Forray A, Sofuoglu M (2014) Future pharmacological treatments for substance use disorders. *Br J Clin Pharmacol*, 77(2):382-400.
- Goldstein A (1995) *Adicción*. Ediciones en Neurociencias. Barcelona.
- Koob GF, Aarends MA, Le Moal M (2015) *Drugs, Addiction and the Brain*. Academic press.
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- Milton AL (2013) Drink, drugs and disruption: memory manipulation for the treatment of addiction. *Curr Opin Neurobiol*. 23(4): 706-12.
- Redolar Ripoll D (2008) *Cerebro y adicción*. Editorial UOC. Barcelona.
- Somogyi AA, Coller JK, Barratt DT (2015) Pharmacogenetics of opioid response. *Clin Pharmacol Ther*. 97(2):125-7.
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- Tanner JA, Chenoweth MJ, Tyndale RF (2015) Pharmacogenetics of nicotine and associated smoking behaviors. *Curr Top Behav Neurosci*. 23:37-86.