

**COURSE DATA****Data Subject**

<b>Code</b>	34498
<b>Name</b>	Drug dependencies
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	4.5
<b>Academic year</b>	2023 - 2024

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1204 - Degree in Medicine	Faculty of Medicine and Odontology	3	Second term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1204 - Degree in Medicine	18 - Optional subjects	Optional

**Coordination**

<b>Name</b>	<b>Department</b>
CONESA BURGUET, MARIA LLANOS	260 - Medicine
RINCON VELAZQUEZ, SANTIAGO	265 - Prev. Medicine, Public Health, Food Sc., Toxic. and For. Med.
SARRIA CHUST, BENJAMIN	135 - Pharmacology

**SUMMARY**

The objective of this subject is to develop the knowledge and the working and communication capacity in the field of the analysis of the actualized information in the different aspects of the drug dependency. The incorporation of the new technologies of the information, communication and bibliographical search will contribute to those objectives. Among the formative activities, aspects related with the knowledge of the different psychoactive substances subject to be used that trigger modifications of the behaviour and of the perception in the human being will be included. Study of the temporal evolution of the drug in the organism, of its mechanism of action, interactions with other drugs, interpretation of its effects, behavioral disorders, social disorders and pathologies associated with the use and abuse of these substances and of the associated medical-legal problems.



## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

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

### Other requirements

Se recomienda a los estudiantes que cursen esta asignatura en 4º o 5º además de tener superadas las siguientes asignaturas: bioquímica y biología molecular, anatomía general y anatomía de aparatos y sistemas, psicología médica, ética médica, fisiología, farmacología general de órganos y sistemas, patología general y semiología.

## OUTCOMES

### 1204 - Degree in Medicine

- Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.
- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.
- Understand and recognise source agents and risk factors which determine health status and the development of diseases.
- Proper organisation and planning of the workload and timing in professional activities.
- Team-working skills and engaging with other people in the same line of work or different.
- Criticism and self-criticism skills.
- Capacity for communicating with professional circles from other domains.
- Acknowledge diversity and multiculturality.
- Consideration of ethics as a fundamental value in the professional practise.
- Working capacity to function in an international context.

## LEARNING OUTCOMES

1. To know the scientific bases by which the drug addiction is founded.
2. To understand the pharmacological aspects of the different groups of drugs and their activity in the human being, reasoning their influence over the human activity.
3. To understand the bases of the drugs action in the physiopathology of the human being.



4. To know and understand the pathologies triggered by the use and abuse of drugs both at a behavioral and physical level.
5. To know the medical and psychiatric treatment used in the management of drug addictions.
6. To know the medical-legal aspects associated with the use and abuse of drugs.
7. To know the applicable law in relation with the use and abuse of drugs.

## DESCRIPTION OF CONTENTS

### 1. THEORETICAL TEACHING.

1. Drug dependence, general characteristics, pathways involved.
2. Drugs in national and international standards, medico-legal aspects of interest.
3. Addictions introduction. Opioid use disorders.
4. Pharmacology of opioids.
5. Alcohol and CNS depressant use disorders.
6. Medico-legal aspects of alcohol and opioid use.
7. Medico-legal aspects of benzodiazepine and inhalant intoxication.
8. Pharmacology of inhalants and nicotine.
9. Nicotine use disorders.
10. Pharmacology of cannabinoids.
11. Cannabinoid use disorders.
12. Medico-legal aspects of cannabinoid and hallucinogenic use.
13. Pharmacology of psychostimulants (cocaine, amphetamines, and others).
14. Psychostimulant use disorders.
15. Pharmacology of hallucinogens.
16. Behavioural addictions.

### 2. SEMINARS

1. History of drug use and abuse.
2. Pharmacogenetics and Epigenetics of drug use.
3. Alcohol and alcoholic kinetics brewing problems.
4. New synthetic drugs.
5. The patient with dual pathology.
6. Collection, submission of samples and interpretation of results.
7. Drugs and work: PAIME



## WORKLOAD

ACTIVITY	Hours	% To be attended
Seminars	26,00	100
Theory classes	19,00	100
Development of group work	10,00	0
Development of individual work	10,00	0
Study and independent work	20,00	0
Readings supplementary material	5,00	0
Preparation of evaluation activities	10,00	0
Preparing lectures	5,00	0
Preparation of practical classes and problem	5,00	0
Resolution of case studies	2,50	0
<b>TOTAL</b>	<b>112,50</b>	

## TEACHING METHODOLOGY

The **theoretical lessons** are based on the exposition, through the professor's master class, of the theoretical content of the subject from different angles: medical-legal, psychiatric and pharmacological. These lessons can be supported by audiovisual materials adapted to each unit. The students' participation will be encouraged.

In the **seminars**, the professor will set specialized topics in depth, case studies, bibliographical management, current topics... That will be linked to the different aspects related with the use of the different drugs, their historical use and the evolution of this use up to nowadays, the study of the drug kinetics with a concrete problems, concrete aspects of the psychiatric pathology and the study of the medical-legal problems related with the drugs abuse. The group work and the oral presentation will be encouraged.

The gender perspective and the Sustainable Development Goals (SDGs) will be incorporated into the development goals (SDGs) into teaching, whenever possible.

## EVALUATION

The theoretical-practical evaluation, the theoretical part represents 50% of the final grade of the course and the practical part the other 50%.

The evaluation of learning will be carried out in four sections (pharmacology, legal medicine, psychiatry and attendance to classes and seminars), each of these represents a percentage of 25% of the course.



The theoretical evaluation will be carried out by means of a theoretical exam of short questions and/or multiple-choice questions (test).

The practical evaluation will be carried out by means of a continuous evaluation through the attendance to seminars and the elaboration of individual works based on clinical problems and/or multiple-choice questions and/or short questions.

Students who do not pass the continuous evaluation, who do not participate or who have an attendance of less than 50% will have to take a final test (exam) that will consist of answering different development questions and/or multiple choice questions (test) in order to evaluate their acquisition of theoretical and practical knowledge.

In the multiple-choice exams, wrong answers and blank answers are not penalized.

It is a requirement for the student to have completed all the internships in order to be able to take the exams in advance.

Attendance will be compulsory (as indicated in the workload). Unjustified non-attendance to more than 20% of the classes will mean the impossibility to pass the course in the first call.

Students are reminded of the importance of carrying out the evaluation surveys to all the teachers of the subjects of the degree.

## REFERENCES

### Basic

- Lorenzo P, Laredo JM Leza, JC, Lizasoain J. Drogodependencias: farmacología, patología, psicología, legislación. Ed. Médica Panamericana, 2009.
- Escohotado A. Historia General de las Drogas. Espasa Calpe, 1998
- Rudgley R. Enciclopedia de las sustancias psicoactivas. Psiclos, 1999
- Preedy V. R. editor. Neuropathology of drug addictions and substance misuse. Volumen 1: Foundations of Understanding, Tobacco, Alcohol., Cannabinoids and Opioids. Elsevier Academic Press (2016)
- Preedy V. R. editor. Neuropathology of drug addictions and substance misuse. Volumen 2: Stimulants, club and dissociative drugs, hallucinogens, steroids, inhalants and international aspects. Elsevier Academic Press (2016)
- Preedy V. R. editor. Neuropathology of drug addictions and substance misuse. Volumen 3: General Processes and Mechanisms, Prescription Medications, Caffeine and Areca, Polydrug Misuse, Emerging Addictions and Non-drug Addictions. Elsevier Academic Press (2016)



- Koob G.F., Arends M.A., Le Moal M. Drugs, addictions, and the brain. Academic Press, Elsevier inc. (2015)
- Ahmed A. Moustafa. Cognitive, Clinical, and Neural Aspects of Drug Addiction. Academic Press (2020).
- Thombs D.L. Osborn C.J. Introduction to Addictive Behaviors. The Guilford Press 5ª ed. (2019).
- Mapua Filbey F. The Nueroscience of Addiction . Cambridge University Press. (2019).
- Diagnostic and Statistical Manual of Mental Disorders, 5th Edition: DMS-5, American Psychiatric Publishing (2013).
- Bobes J, Casas M y Gutiérrez M (Editores). Trastornos adictivos, 3ª edición. Madrid: I. Gofer.; 2020. (ISBN: 978-84-09-25077-6)
- Gisbert Calabuig, J.A. Medicina legal y Toxicología. Villanueva E editor. 7ª ed. Ed. ELSEVIER. Barcelona. 2018.
- MENÉNDEZ DE LUCAS, J.A. et al. Manual de Medicina Legal y Forense para estudiantes, 2ª ed. Ed. Elsevier Masson, S.L., Barcelona, 2020.
- Recursos-e Salut: ClilnicaKey Sudent. Elsevier (Scopus, ScienceDirect).  
[uv-es.libguides.com/RecursosSalut/BibliotecaSalut](http://uv-es.libguides.com/RecursosSalut/BibliotecaSalut)
- Miller WR., Rollnick. La entrevista motivacional 3ª ed., 2015 Ed. Paidos Ibérica.