



Universitat de Lleida

# DEGREE CURRICULUM **PSYCHOPHARMACOLOGY**

Coordination: MACIA ARMENGOL, ANNA

Academic year 2023-24

## Subject's general information

Subject name	PSYCHOPHARMACOLOGY			
Code	102921			
Semester	1st Q(SEMESTER) CONTINUED EVALUATION			
Typology	Degree	Course	Character	Modality
	Bachelor's Degree in Psychology	4	OPTIONAL	Attendance-based
Course number of credits (ECTS)	6			
Type of activity, credits, and groups	Activity type	PRAULA		TEORIA
	Number of credits	1.8		4.2
	Number of groups	1		1
Coordination	MACIA ARMENGOL, ANNA			
Department	EXPERIMENTAL MEDICINE			
Important information on data processing	Consult <a href="#">this link</a> for more information.			

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
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## Learning objectives

Pharmacology has a language and a body of general knowledge that are specific to it and that the student must acquire. In addition, the student must know the groups of psychotropic drugs and their use as medicines, toxins and addiction drugs. The reasoning of the pharmacokinetics and pharmacodynamics aspects is substantial to assimilate the clinical and social aspects that explain the use of psychotropic drugs. These general objectives translate into the following specific ones:

1. To acquire the basic notions of pharmacology (pharmacokinetics and pharmacodynamics) in order to understand the criteria that determine the medical prescription of psychotropic drugs.
2. To know how to position oneself professionally in the context of drug therapies for mental diseases.
3. To master a basic conceptual framework and language that allows the interpretation of the "prospectus" annexed to a psychotropic drug.
4. To master a basic conceptual framework and language that allows a fluent dialogue with the prescribing doctor of psychotropic drugs.
5. To know and identify groups of psychotropic drugs and their uses as drugs, toxins and addiction drugs.
6. To identify adverse reactions for psychotropic drugs.
7. To understand the biological basis of pharmacological dependency phenomena.
8. To understand the bio-psychosocial model in the phenomenon of drug addiction.
9. To know how to act professionally in situations of addiction.

## Competences

### Basic skills:

CB2 Apply their knowledge to their work or vocation in a professional way and possess the skills that are usually demonstrated by developing and defending arguments and solving problems within their area of study.

CB3 Ability to gather and interpret relevant data (usually within their area of study) to make judgements that include reflection on relevant social, scientific or ethical issues.

CB5 Ability to develop those learning skills necessary to undertake further study with a high degree of autonomy

### General Competencies:

CG1 Developing the ability to adapt to new situations and solve problems effectively.

CG8 Identify and evaluate own competencies, skills and knowledge according to the standards of the profession.

CG9 Recognizing diversity and difference as a structural element of the human being, while recognizing, understanding and respecting the cultural complexity of today's society.

CG10 Respecting the fundamental rights of equality between men and women, the promotion of human rights and the values of a culture of peace and democratic values.

### Specific Competencies:

CE1 Identifying and analysing the characteristics and needs of people, groups and organisations, as well as the relevant contexts for the service requested.

CE2 Plan the evaluation of programmes and/or psychological interventions, selecting the appropriate indicators and

techniques.

CE3 Apply the techniques for collecting information, obtaining relevant data for the evaluation of programs and/or psychological interventions.

SG4 Analyzing and interpreting the results of psychological evaluation.

CE5 Design and apply a psychological intervention strategy/plan, depending on the contexts or services demanded.

CE6 Respond and act in an appropriate and professional manner, taking into account the attitudes and values of the profession, as well as its code of ethics and deontology, in each and every one of the intervention processes.

CE7 Provide information to users and establish an adequate interpersonal relationship, taking into account the different contexts of professional relations.

CE8 To prepare technical reports, both oral and written, on the results of the evaluation process, of the research or of the services demanded, respecting the ethical commitment that the dissemination of psychological knowledge requires.

CE9 To use the different documentary sources in psychology, to show a mastery of the necessary strategies to access the information and to assess the need for documentary updating.

CE12 Disseminate the knowledge derived from theoretical reviews and from the results of psychological research.

## **Transversal competences:**

CT1 Acquire adequate oral and written comprehension and expression of Catalan and Spanish.

CT3 To acquire training in the use of new technologies and information and communication technologies.

CT5 To acquire essential notions of scientific thought.

## Subject contents

### Block 1: Generalities of Pharmacology

Topic 1: Pharmacology, Clinical Pharmacology and the world of drugs.

Topic 2: Descriptive and quantitative pharmacokinetics.

Topic 3: Pharmacodynamics and drug interactions.

### Block 2: Basic Psychopharmacology

Topic 4: Introduction to Psychopharmacology. Cholinergic pharmacology.

Topic 5: Monoaminergic agonist pharmacology.

Topic 6: Monoaminergic antagonist pharmacology.

Topic 7: Pharmacology of excitatory and inhibitory neurotransmitters.

Topic 8: Pharmacology of opiates and cannabinoids.

### Block 3: Clinical Psychopharmacology

Topic 9: Psychosis and antipsychotics.

Topic 10: Mood disorders: antidepressants and euthymizers.

Topic 11: Anxiety and sleep disorders: anxiolytic and hypnotic drugs.

Topic 12: Disorders for drug abuse: Tobacco, cannabinoids, alcohol, stimulants, hallucinogens, opiates and other drugs.

## Methodology

1. Regular lectures.
2. Discussion seminars based on the student analysis and autonomous work on drug summaries provided by

the professor.

3. Management of information (reading, searching, selection, etc.).
4. Performance of dossiers, memories or practical activities.

## Development plan

The official calendar / schedule of the course will be followed. This teaching guide assumes a face-to-face development of classes and evaluations. Despite the just mentioned, some classes will continue to be non-face-to-face. Finally, there may be unforeseen events that the teaching staff will try to resolve and announce as far in advance as possible through the virtual campus. The announcements/warning tool is particularly suitable in this regard. In the resources section, you will find all the teaching material suitable for personal and individual study. The virtual campus also allows non-face-to-face actions, which we hope will not be usually employed. In summary, the virtual campus will be crucial for the monitoring and proper development of the academic course.

## Evaluation

1. A first examination (test exam) will be carried out on the Generalities (topics 1-3, BLOCK1) (14 questions). It will generate the 28% of the final mark of the subject and, therefore, it will be only once performed.
2. An evaluation will be made based on the realization of practical activities based on clinical cases (BLOCK 2). This will generate the 22% of the final mark of the subject. It will be only once performed.
3. An examination (40 questions) based on the theory will be carried out (topics 4-12, BLOCK 2, 3). It will generate the 50% of the final mark of the subject. There will be a second chance to take and pass the exam, if initially failed.
4. The threshold to pass the subject is placed at a mark of 5. This means a 50%, adding up the three evaluations carried out. There is no minimum mark in any of the 3 evaluation acts that can be incompatible with passing the subject.
5. The student must perform the three exams mentioned before. In other words, being not present in any of the three assessments will imply a non-presentation for the whole academic course.
6. The exams will be face-to-face, objective and test type. Each question will display 4 options of which only one is correct. The blank answer adds 0 points. The wrong answer subtracts  $\frac{1}{4}$  of the value assigned to the question.
7. In the final mark, a correction coefficient can be added. The calculation of this coefficient will be explained on the first day of the course. This coefficient will be added only to students who surpass the mark of 6 (60%) in the theoretical exam. At the discretion of the professors, the coefficient can be modified or not added if aberrant results are obtained.
8. Alternative assessment: students who adhere to it will have to carry out an assessment of a clinical case (22%) that cannot be recovered and a test-type examination (54 questions; 78%) referring to the syllabus of BLOCK 1, 2 and 3 that it will be recoverable.

## Bibliography

### Books:

- Rang y Dale. Farmacología. (9ª ed.), Elsevier España, 2020
- Farmacología humana. Florez J. et al. (6ª ed.), Elsevier Masson, 2013
- Psicofarmacología Esencial de Stahl. Bases neurocientíficas y aplicaciones prácticas. (4ª ed.), 2014
- Prescribers Guide by Stephen M Stahl. 2017 (6ª ed.), 2017
- Nuevas Drogas Psicoactivas. Dolengevich, H., 2015

### Journals:

- Annual Review of Pharmacology and Toxicology (<http://arjournals.annualreviews.org/loi/pharmtox>)
- Trends in Pharmacological Sciences (TIPS), Cell press (<http://www.cell.com/trends/pharmacological-sciences/home>)

### Internet (Official Organizations):

- Agencia Española del Medicamento, Ministerio de Sanidad  
(<https://www.aemps.gob.es/>)
- European Medicines Agency  
(<http://www.ema.europa.eu/ema/>)
- U.S. Food and Drug Administration  
(<http://www.fda.gov/default.htm>)

## **Internet (Other addresses):**

- Medline plus  
(<http://medlineplus.gov/spanish/>)
- Rx List, the internet drug index  
(<http://www.rxlist.com/>)
- Vademecum online  
(<http://www.vademecum.es/>)
- Stahl online  
(<https://stahlonline.cambridge.org/>)