

1. BASIC INFORMATION

Course	Psychopharmacology
Degree program	Bachelor's Degree in Psychology
School	Biomedical and Health Sciences
Year	Fourth
ECTS	6
Credit type	Optional
Language(s)	English
Delivery mode	Campus-based
Semester	S1
Academic year	2025-2026
Coordinating professor	Elina L. Boycheva
Professor	Elina L. Boycheva, Paola García Rosano

2. PRESENTATION

“Psychopharmacology” is taught in the first semester of the fourth year of the Bachelors’ degree in Psychology. This course examines the history, rationale, pharmacology, and putative mechanism of action of drugs used in the treatment of disorders of the central nervous system (CNS). Specific drug classes to be considered include antidepressants, anxiolytics, and antipsychotic medications. Emphasis will be placed on neuroscientific processes underlying mental pathology, pharmacological treatment, as well as the neurobiological underpinnings of drug addiction.

3. LEARNING OUTCOMES

Knowledge

KN08: Characterize the different attentional networks, their neuroanatomical bases, the experimental paradigms responsible for their evaluation, and the different neuropsychological diagnoses associated with them.

- Describe the most commonly used active principles in the pharmacological treatment of mental and neurological disorders.
- Describe the alterations caused by substance abuse drugs.
- Identify the causes of the behavioral effects of pharmacological treatments in treated individuals.
- Describe the therapeutic effect of psychotropic drugs in the treatment of psychopathological disorders.
- Relate the effects on behavior resulting from drug consumption to the affected mechanisms.
- Identify the pharmacokinetic and pharmacodynamic principles of psychotropic drugs

Competences

COMP10: Ability to analyze the needs and demands of the recipients of the function in different contexts.

COMP11: Ability to establish the goals of psychological intervention in different contexts, proposing and negotiating the goals with the recipients and those affected.

COMP24: Ability to define the objectives and develop the intervention plan based on its purpose (prevention, treatment, rehabilitation, integration, support...).

COMP36: Knowledge and adherence to the ethical obligations of Psychology.

COMP37: Ability to practice the profession using the English and/or Spanish language, both with specialized and non-specialized audiences.

4. CONTENT

1. Introduction: history of psychopharmacology; structure and function of the nervous system
2. Research methods in neuropsychopharmacology
3. Principles of psychopharmacology, pharmacokinetics, and pharmacodynamics
4. Chemical signaling
5. Major neurotransmitter systems
6. Psychopharmacology of psychosis: antipsychotics
7. Psychopharmacology of anxiety and phobias: anxiolytics
8. Depression and psychotropic drugs: antidepressants
9. Drug abuse. Drug addiction and reward systems

5. TEACHING-LEARNING METHODOLOGIES

The types of teaching-learning methodologies used are indicated below:

- Lectures
- Problem solving
- Case studies
- Oral presentation

6. LEARNING ACTIVITIES

Listed below are the types of learning activities and the number of hours the student will spend on each one:

Learning activity	Number of hours
Lectures	30h
Self-study	50 h
Formative evaluation	5h
Problem solving	25 h
Tutorials	5 h
Research	15 h
Practical activities	20 h
TOTAL	150h

7. ASSESSMENT

Listed below are the assessment systems used and the weight each one carries towards the final course grade:

Assessment system	Weight
Test of knowledge: Students will complete two exams (Exam 1: 25% + Exam 2: 25%), with each exam containing 30 multiple-choice questions and 5 open-questions	50%
Case Study and problem-based learning Case Study (10%): clinical report based on the case from the simulation session + Written report of problem-based learning (20%): final group project. *Students must attend the simulation session to pass the course	30%
Oral presentation of final group project	10%
Portfolio Activity 1. History of psychopharmacology (2,5%) + Activity 2. Documentary The Power of Placebo (2,5%) + Activity 3. Clinical case (5%)	10%

Integrated Curriculum Activity: Additionally, the course includes an activity that requires coordination with courses from different years of the Psychology degree. Participation in this activity requires classroom attendance, and its content may be included in the exam material.

When you access the course on the *Campus Virtual*, you'll find a description of the assessment activities you have to complete, as well as the delivery deadline and assessment procedure for each one.

Attendance

According to Art. 1.4 of the Regulation for the Evaluation of Official Degree Degrees of the European University of Madrid (of the continuous evaluation): "The obligation to justify at least 50% attendance at classes is established as part of necessary for the evaluation process and to comply with the student's right to receive advice, assistance and academic follow-up from the teacher. For these purposes, students must use the technological system that the University puts at their disposal, to accredit their daily attendance to each of their classes. This system will also serve to guarantee objective information on the active role of the student in the classroom.

Those students who have not achieved a 50% attendance rate in the first exam period may be graded as failing and must pass the corresponding objective exams in the second exam period for the subject, where they must obtain a grade equal to or higher than 5.0 out of 10.

7.1. First examination period

To pass the course during the first examination period, students must achieve a minimum final grade of 5.0 out of 10.0 (calculated as a weighted average). Additionally, a minimum grade of 5.0/10.0 is required in

- Test of Knowledge*
- Case Study (clinical report based on the simulation sessions' case)
- Written report of problem-based learning (final group project)
- Oral presentation
- The average grade of Portfolio activities

Attendance at the oral presentations of the group project is mandatory for all group members. Furthermore, each member is required to actively participate in the delivery of the presentation.

*The final exam is divided into two parts: the first exam (November) will cover the first half of the course contents and the second exam (January) will cover the second half of the course contents. The structure of these two exams is the same: 30 multiple-choice questions and 5 open questions. Students do not have to pass each exam independently; a mean score will be calculated from both exam grades, which will represent the final exam grade. Thus, the mean score of both exams must be equal to or higher than 5 to pass the final exam. Those students whose mean score of both exams is lower than 5 will fail the subject in the first exam period and will be re-evaluated in the second exam period on those parts of the exam which they failed. Those students whose mean score of both exams is lower than 5 and have failed both exams will be re-evaluated in the second examination period on all course contents and will take a final exam with the following structure: 40 multiple-choice questions and 5 open questions.

PLAGIARISM AND USE OF AI

Any student who resorts to or uses illicit means during an evaluation test, or who improperly claims authorship of academic work required for assessment, will receive a failing grade ("0") in all evaluation tests for the exam period in said subject in which the violation occurred, and may also face disciplinary action following the opening of a disciplinary proceeding.

Artificial Intelligence Generated Content: Artificial Intelligence Generated Content (AIGC) tools, such as ChatGPT and other language models (LLMs), cannot be used to generate activities/essays/reports. These tools cannot be responsible in any case for the content written in the work. The use of AI must be authorized by the teacher in each activity. If a student has used these tools to develop any part of their

work, their use must be described in detail in the activity. The student is fully responsible for the accuracy of the information provided by the tool and for correctly referencing any supporting work. Tools used to improve spelling, grammar, and general editing are not included in these guidelines. The final decision on the appropriateness of the reported use of an artificial intelligence tool rests with the teacher, the academic coordination, and the direction of the degree.

Delayed submission of mandatory activities

Delayed submission of mandatory activities will not be allowed. Students must respect the deadline set by the professor, as the system in the virtual campus will not allow any delayed submission after the deadline. Failure to comply with the delivery deadlines for mandatory activities will result in non-evaluation of the activity, assigning a numerical grade of 0.

Simulation

Uniform Requirement for Simulation Sessions: Whenever simulation activities are conducted, students are required to wear the appropriate uniform (grey scrub top and trousers) in the simulated hospital. Students who do not attend with the complete uniform will not be allowed to participate in the simulation and will be marked as absent for that session.

Attendance at the simulation session is mandatory. If a student does not attend the simulation, he/she will fail the course in the first examination period and will be re-evaluated on this section during the second examination period.

7.2. Second examination period

To pass the course during the second examination period, students must achieve a minimum final grade of 5.0 out of 10.0 (calculated as a weighted average). Students are required to resubmit: (1) activities that were not successfully completed during the first examination period, after having received the corresponding feedback and corrections from the professor, and (2) any activities not submitted during the first period. All the activities will be assessed following the same criteria as in the first examination period, except for the simulation.

Additionally, a minimum grade of 5.0/10.0 is required in

- Test of Knowledge*
- Case Study (clinical report based on the simulation sessions' case)
- Written report of problem-based learning (final group project)
- Oral presentation
- the average grade of Portfolio activities

Simulations

During the second examination period, students must complete a Case Study involving the analysis of a clinical case. This assessment requires students to demonstrate comprehension of the key competencies that have been acquired and practiced during the course. A written report will be required.

8. SCHEDULE

This table shows the delivery deadline for each assessable activity in the course:

Assessable activities	Deadline
Portfolio Activity 1	Week 2
Portfolio Activity 2	Week 3
Exam 1	Week 10
Portfolio Activity 3	Week 11
Case study (Case Study and problem-based learning)	Week 13
PBL written report (Case Study and problem-based learning)	Week 14
PBL oral presentations (Oral presentations)	Week 15
Exam 2	Week 18

This schedule may be subject to changes for logistical reasons relating to the activities. The student will be notified of any change as and when appropriate.

9. BIBLIOGRAPHY

The main reference work for this subject is:

- Dziegielewski, S.F. (2006). *Psychopharmacology Handbook for the NonMedically Trained*. W W. Norton & Company.
- Ettinger, R.H. (2011). *Psychopharmacology*. Pearson
- Iversen, L., Iversen, S., Bloom, F.E., Roth, R.H. (2008). *Introduction to Neuropsychopharmacology*. Oxford University Press.
- Kelsey, J.E., Nemeroff, C.B., Newpor, D.J. (2006). *Principles of Psychopharmacology for Mental Health Professionals*. Wiley-Liss.
- Lichtblau, L. (2010). *Pharmacology Demystified*. Cengage Learning
- Meyer, J.S., Quenzer, L.F. (2013). *Psychopharmacology: Drugs, the Brain and Behavior*, 2nd ed. Sinauer Associates, Inc
- Muse, M., Moore, B.A. (2012). *Handbook of clinical Psychopharmacology for Psychologist*.
- O'Neal, J., Preston, J., Talaga, M.C. (2010). *Handbook of Clinical Psychopharmacology for Therapists*, 6th ed. New Harbinger Publications
- Preston, J.D., Johnson, J. (2011). *Clinical Psychopharmacology Made Ridiculously Simple*, 7th ed. MedMaster Inc.

- Salazar, M., Peralta, C., Pastor, J. (2004). *Tratado de Psicofarmacología. Bases y Aplicación Clínica*. Editorial Médica Panamericana.
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- Sinicola, R.S., Peters-Strickland, T.S. (2011). *Basic Psychopharmacology for Counselors and Psychotherapists*, 2nd ed. Pearson.
- Stahl, S. M. (2013). *Essential Psychopharmacology: Neuroscientific Basis and Practical Applications*. 4th ed. Cambridge University Press.
- Tylor, D., Paton, C., Kapur, S. (2012). *The Maudsley Prescribing Guidelines in Psychiatry*, 11th ed. Wiley-Blackwell.
- Usher, K., Foster, K., Bullock, S. (2008). *Psychopharmacology for Health Professionals*. Mosby.

9. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

From the Educational Guidance and Diversity Unit we offer support to our students throughout their university life to help them reach their academic achievements. Other main actions are the students' inclusions with specific educational needs, universal accessibility on the different campuses of the university and equal opportunities.

From this unit we offer to our students:

1. Accompaniment and follow-up by means of counselling and personalized plans for students who need to improve their academic performance.
2. In terms of attention to diversity, non-significant curricular adjustments are made in terms of methodology and assessment for those students with specific educational needs, pursuing an equal opportunities for all students.
3. We offer students different extracurricular resources to develop different competences that will encourage their personal and professional development.
4. Vocational guidance through the provision of tools and counselling to students with vocational doubts or who believe they have made a mistake in their choice of degree.

Students in need of educational support can write to us at:

orientacioneducativa@universidadeuropea.es

10. ONLINE SURVEYS

Your opinion matters!

The Universidad Europea encourages you to participate in several surveys which help identify the strengths and areas we need to improve regarding professors, degree programs and the teaching-learning process.

The surveys will be made available in the “surveys” section in virtual campus or via e-mail.

Your assessment is necessary for us to improve.

Thank you very much for your