

## 1. BASIC INFORMATION

<b>Course</b>	Memory and Learning Processes
<b>Degree program</b>	Psychology
<b>School</b>	Biomedical and Health Sciences
<b>Year</b>	1
<b>ECTS</b>	6 ECTS
<b>Credit type</b>	Basic
<b>Language(s)</b>	English
<b>Delivery mode</b>	Campus-based
<b>Semester</b>	S2
<b>Academic year</b>	2025-2026
<b>Coordinating professor</b>	Eduardo Polín
<b>Professors</b>	Víctor Estal, David Prada

## 2. PRESENTATION

This is a compulsory subject that is taught in the second semester of the first year of the Psychology degree. Through this subject, the student will know and understand the theoretical models of the psychology of memory and learning. In addition, the student will know and understand the biological bases of learning and memory. Finally, our students will know and understand the different methods of assessment, diagnosis and psychological intervention in the fields of Psychology of memory and learning.

## 3. LEARNING OUTCOMES

### Knowledge

KN0 8: Characterize the different attentional networks, their neuroanatomical bases, the experimental paradigms used for their assessment, and the different neuropsychological diagnoses associated with them.

- Describe the theoretical models of psychology related to memory and learning.
- Describe the biological foundations of learning and memory.
- Identify different methods of assessment, diagnosis, and psychological intervention in the applied areas of memory and learning psychology.
- Identify the most relevant disorders of basic psychological processes based on knowledge of their etiology and main characteristics.

### Skills

SK01: Effectively communicate the results of a scientific research (scientific publications, reports, scientific posters, etc.).

- Conduct small guided empirical studies.

- Interpret the results obtained in experiments on different types of memory.

#### **Competences**

COMP02: Understand the basic principles of different psychological processes in the field of Health Psychology.

COMP03: Understand the main processes and stages of psychological development throughout the life cycle, including aspects of normality and abnormality in the field of Health Psychology.

COMP04: Understand the biological foundations of human behavior and psychological functions.

COMP13: Be able to describe and measure variables (personality, intelligence, other aptitudes, attitudes, etc.) and cognitive, emotional, psychobiological, and behavioral processes.

COMP14: Be able to identify differences, problems, and needs.

## **4. CONTENT**

The subject is organized into two learning modules (Psychology of Learning and Psychology of Memory).

- Classical Theories of Learning
- Biological Bases of Learning
- Classical Conditioning and Instrumental Conditioning
- Other Types of Learning
- Basic Structures and Processes of Memory and Main Theoretical Models
- Biological Bases of Memory
- Short-Term and Long-Term Memory
- Amnesias and Memory Disorders

## **5. TEACHING-LEARNING METHODOLOGIES**

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

- Lectures
- Oral presentations
- Problem based learning (ABP).
- Practical exercises.

## **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	20h
Asynchronous lectures	10h
Formative assessment	8h
Test of knowledge	2h
Problem solving	15h
Tutorials	5h
Practical activities	10h
Research	10h
Conferences	20h
Self-study	50h
<b>TOTAL</b>	<b>150h</b>

## 7. ASSESSMENT

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

Assessment system	Weight
Formative assessment: 30 multiple-choice questions with 3 answer options each.	50%
Practical case study: Submission of a document answering some questions about a practical case of memory disorders	5%
Reports: Empirical research project with experimental methodology. Report submission with scientific article format and oral presentation *	25%
Lab memory report: Submission of a document consisting of 5 practical activities carried out throughout the semester	15%
Lab activities: Participation in an experiment related to the subject and attendance at a seminar in which the experiment's content and its relationship to the subject will be explained. Attendance at both the practical experiment and the theoretical seminar is mandatory. A related activity will then be submitted and assessed.	5%

(\*) This activity is done in coordination with the Statistics course as part of an integrated curriculum activity. The oral presentation of the research project is mandatory for grading. However, it does not count towards the assessment; in other words, no grade is awarded for the presentation (only the written document submitted at the end of the semester is assessed). After the presentation, the professor will provide feedback to the students to improve their written work for submission.

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 exam period

To pass the course in the first exam period, you must obtain a final course grade of at least 5.0 out of 10.0 (weighted average).

In any case, you will need to obtain a grade of at least 5.0 out of 10.0 in the following:

- Final exam
- The average of the active methodologies, and also within each of the following activity blocks independently:
  - o Lab memory report
  - o Research project (report). Oral presentation is a mandatory activity. It has no weight in the evaluation but is a fundamental requirement to pass the course. The student must do the oral presentation to proceed with the evaluation of the report (and, therefore, to pass the subject).

It is also mandatory to attend both the practical experiment and the theoretical seminar in person in order to pass the course (the specific activity, as well as its date, will be announced on the *Campus Virtual*).

### 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.

AI-GENERATED CONTENT: AI-Generated Content (AIGC) tools, such as ChatGPT and other large language models (LLMs), cannot be used to generate work. These tools cannot be responsible in any case for the content written in the assignment. The use of AI must be authorized by the instructor for 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 work. The student is entirely responsible for the accuracy of the information provided by the tool and for properly referencing any supporting work. Tools used for improving spelling, grammar, and general editing are not included in these guidelines. The final decision on the appropriateness of the reported use of an AI tool lies with the instructor, academic coordination, and program management.

### Delayed submission of mandatory activities

Late submissions of mandatory assignments will result in the activity not being graded, and a numerical grade of 0 will be assigned.

## 7.2. Second exam period

To pass the course in the extraordinary call, you must achieve a final grade of at least 5.0 out of 10.0 (weighted average) for the course. This will be evaluated according to the same guidelines as in the ordinary call.

You must submit any activities not passed in the ordinary call, after receiving the corresponding corrections from the professor, as well as any that were not submitted. To pass the course in the extraordinary session, you must obtain a grade of at least 5.0 out of 10 in the following:

- Final exam
- The average of the active methodologies, and also within each of the following activity blocks independently:
  - o Lab memory report
  - o Research project (report). Oral presentation is a mandatory activity. It has no weight in the evaluation but is a fundamental requirement to pass the course. The student must do the oral presentation to proceed with the evaluation of the report (and, therefore, to pass the subject).

In the extraordinary call, activities will be recovered with the same instructions as in the ordinary call, except for:

- the practical case study (which will have different instructions but the same learning objective) and,
- the lab activities (that will be recovered through reflective questions about the activities, for which the corresponding materials will be provided).

## 8. SCHEDULE

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

Assessable activities	Deadline
Lectures	Weeks 1-15
Activity 1 (Lab memory report)	Week 1-3
Activity 2 (Lab memory report)	Week 4-6
Activity 3 (Lab memory report)	Week 7-8
Activity 4 (Practical case study: Case study on memory disorders)	Week 8-9
Activity 5 (Lab memory report)	Week 10-12
Activity 6 (Lab memory report)	Week 13-15

Activity 7 (Lab activities): conducting experiments related to the subject. Mandatory attendance activity (theoretical seminar and practical experiment)	Week 10-15
Activity 8. Research project (report)	Weeks 3-15
Final exam	Week 16-18

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. BIBLIOGRAFÍA

The main reference work for this subject is:

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- Baddeley, A. (1999). *Essentials of Human Memory*. London: Psychology Press.

The recommended Bibliography is:

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## 10. 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 opportunity 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](mailto:orientacioneducativa@universidadeuropea.es)

## 11. 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 participation.