



# **COURSE SYLLABUS**

# PSYCHOLOGY OF MEMORY

Degree in Psychology C.U. Cardenal Cisneros University of Alcalá

Academic Year 2024/25 2<sup>nd</sup> Year – 1<sup>st</sup> Term





## **COURSE SYLLABUS**

Name of the subject:	Psychology of memory
Code:	562012
Studies:	Degree in Psychology
Department and Area of knowledge:	Department of Education/Psychology
Character:	Compulsory
ECTS credits:	6 ECTS
Year and Term:	Second year. First term
Lecturers:	Carmen Soria Martín Montserrat Giménez Hernández
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Language:	Spanish

## 1. INTRODUCTION

The main objective of the subject *Psychology of Memory* is to familiarise the student with the functioning of one of the psychological processes that is fundamentally cognitive in nature.

#### **Prerequisites y Recommendations**

No prerequisites have been established for this subject. However, for appropriate monitoring and academic progress, it is recommended to have basic English reading skills.

#### SUBJECT DESCRIPTION

This compulsory subject consists of 6 ECTS credits, and is taught in 1<sup>st</sup> term of the 2<sup>nd</sup> year of the Degree in Psychology.

In this subject, students will learn the basic concepts of human memory, its definition, classification and types. The most relevant results of the study of memory and their practical implications in the everyday life of people will be analysed in depth. Finally, the subject will address the topic of forgetfulness, focusing on its functions, causes and disorders. It is recom-





mended to have at least a B2 level of Spanish to take this course. The subject is associated with the Academic Skills Development program in the CUCC Undergraduate Degrees, specifically with the skills: "Research and Academic Papers" and "Reading Articles and Books." Therefore, it includes activities that will be subject to evaluation.

## 2. COMPETENCES

#### **Generic competences:**

GC1. To acquire the knowledge and understand the principles of Psychology as a scientific discipline, including theory, methods and application fields, with the support of advanced textbooks and documentation incorporating cutting-edge knowledge in this field of study.

GC5. To have developed the necessary skills to continue training in an independent manner, in order to follow Master studies, with the purpose to acquire an advanced training focused on academic, professional or research specialisation in the field of Psychology.

### **Specific competences:**

SC1	To know and understand the functioning, characteristics, contributions and limitations of different theoretical models in Psychology.
SC2	To know and understand the basic laws and principles of the different psychological processes.
SC7	To know and understand diverse methods of assessment, diagnosis and psychological treatment in different applied fields of Psychology.
SC12	<b>To identify, describe and measure</b> the relevant behavioural characteristics of individuals (personality, intelligence and other aptitudes, as well as cognitive, emotional, psychobiological and behavioural processes), groups, organisations (interaction processes, group dynamics, group and intergroup, as well as organisational and inter-organisational structures) and contexts, by using the methods, techniques and instruments of <b>psychological assessment.</b>

## 3. CONTENTS

UNIT	UNIT TITLE	
1	Concept and types of memory.	8
2	Sensory memory.	8
3	Short-term memory and working memory. Central executive system, phonological loop and visuo-spatial sketchpad	10
4	Long term memory: encoding and retrieval processes. Representation of knowledge. Declarative (semantic and episodic) and non-declarative (procedural) memory.	14





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5	Forgetting.	8
TOTAL		48

# 4. TEACHING-LEARNING METHODOLOGY. FORMATIVE ACTIVITIES.

#### **Organisation:**

The classes, corresponding to one third of ECTS credits, will be structured throughout the term in three different modalities: theoretical classes, practical classes and seminars.

- ✓ Theoretical classes. Different methodologies will be employed. Part of the theoretical contents will be provided and/or explained by the teacher, and other will be sought out and elaborated by the students. When requested by the teacher, students must attend class with the lesson prepared and the content will be commented on, debated or clarified in class. Some lessons will follow the cooperative learning methodology. Theoretical self-learning activities are included in this modality.
- ✓ Practical classes. These will be done individually or in groups and guided by the teacher. Such activities will include case-studies, problem solving, analysis and discussion of documentary and audio-visual information (articles, videos, scientific documents), as well as the presentation of academic and research work to the group. In addition, the guidelines for autonomous individual and group work will be provided in practical classes.
- ✓ **Seminars.** They consist of classes or didactic sessions where the teacher interacts with the students, concerning group work to disseminate knowledge or develop research. Seminars also may take the form of specialized meetings for the in depth study of a given topic. Learning is an active process, where the students must look for and prepare information in mutual collaboration with the teacher serving as a guide. In this subject, all students will attend and participate in monographic sessions supervised by the teacher.

Two thirds of the ECTS credits of the subject (102 hours) will be dedicated to **independent learning**. This includes the time needed to complete the tasks and activities that will be turned in or presented in class, to study and to prepare for exams. To pass, it is paramount that the student uses this time to achieve the desired learning outcomes.

The teacher will have office hours for personalised tutorials to supervise and guide the students in their training process.

## 4.1. Credit distribution

Total number of hours (6 ECTS): 150				
	30 hours of whole-group lessons			
	15 hours of practical lessons			
	3 hours of seminars			
	2 hours of assessment tasks			
Number of hours of independent learning 100:	100 hours			





## 4.2. Methodological strategies, materials and didactic resources

#### **Teaching-learning methodology:**

In class, the student will be engaged in an active and participative methodology.

The reading of books and academic articles will be included as a fundamental part of learning.

Some learning sessions of this subject will be approached in an interdisciplinary manner with other subjects of the term.

## **Materials y resources**

Besides the handbook, for this subject students will use several complementary materials and resources to gain an understanding of different units and to do practical activities. These materials include documentation provided by the teacher, scientific articles, audio-visual material, and book chapters with theoretical and practical content, assessment instruments, scenarios and case-studies.

The on-line platform of the virtual community of the university will give students a fast and efficient access to the material needed for the realization of the subject.

# 5. ASSESSMENT: assessment criteria, report criteria and assessment procedures

#### Assessment criteria:

For this subject, a series of learning outcomes as indicators of achievement of competencies are established. They are the following:

- The student understands the concept of psychological process and knows the different basic psychological processes such as learning, perception, memory, motivation, emotion, attention, thought and language.
- The student knows the methods and techniques used to study these psychological processes.
- The student understands and explains human behaviour by integrating different perspectives.
- The student analyses and interprets research and publications on the subject.
- The student looks for and uses documentary sources relevant for the discipline.
- The student knows how to carry out empirical studies and research activities on basic psychological processes.
- The student is able to understand and analyse texts on the subject in English and use them for his/her work.





• The student assumes individual responsibility within collective work and participates in an active and autonomous way in the construction of the knowledge associated with the subject.

## Report criteria:

Competences	Criteria	%
To know and understand the functioning, characteristics, contributions and limitations of the different	The student understands the concept of psychological process, specifically those processes related to memory.	30
theoretical models of Psychology.  To know and understand the basic	The student knows the methods and techniques used to study these psychological processes.	25
laws and principles of the different psychological processes.	The student understands and explains human behaviour by integrating different perspectives.	20
To know and understand diverse methods of assessment, diagnosis and psychological	The student analyses and interprets research and publications on the subject.	5
treatment in different applied fields of Psychology.	The student looks for and uses documentary sources relevant for the discipline.	5
To identify, describe and measure the relevant behavioural characteristics of individuals (personality, intelligence and other aptitudes,	The student assumes individual responsibility within collective work and participates in an active and autonomous way in the construction of the knowledge associated with the subject.	5
as well as cognitive, emotional, psychobiological and behavioural processes), groups, organisations	The student knows how to carry out empirical studies and research activities on basic psychological processes.	5
(interaction processes, group dynamics, group and intergroup, as well as organisational and interorganisational structures) and contexts, by using the methods, techniques and instruments of psychological assessment.	The student is able to understand and analyse texts on the subject in English and use them for his/her work.	5
	TOTAL	100





#### **Assessment procedure:**

The assessment procedure is based on the **Normativa reguladora de los procesos de evaluación de aprendizajes de la Universidad de Alcalá** (Regulatory policy of the learning assessment procedure of the University of Alcalá). This policy states, among others, the following rules:

- 1. This subject has **two assessment periods**: an ordinary one in **January** and an extraordinary one in **June**.
- 2. The ordinary assessment period will employ continuous assessment.
- 3. If a student cannot commit to the continuous assessment within the ordinary assessment, he/she should formally request the final assessment from the teacher of the subject. This request will be submitted no later than the second week of lessons, and it can be accepted or rejected by university management.
- 4. The **extraordinary assessment period** is intended for students who did not take part in or who failed the ordinary one.
- 5. The characteristics of the continuous and final assessment for this subject are detailed in this course syllabus.
- 6. For more information about the assessment procedures, please see the following document <a href="https://www.uah.es/export/shared/es/conoce-la-uah/organizacion-y-gobierno/.galleries/Secretaria-General/Normativa-Evaluacion-Aprendizajes.pdf">https://www.uah.es/export/shared/es/conoce-la-uah/organizacion-y-gobierno/.galleries/Secretaria-General/Normativa-Evaluacion-Aprendizajes.pdf</a>

#### Requirements for **continuous assessment** in the ordinary period:

- To complete and turn it the requested activities and assignments on time, taking into account that it is essential to attend lessons for some of them (for example, practical classes and seminars).
- To actively participate in the teaching-learning process.

If the student does not fulfil these requirements, <u>he/she cannot attend the exam</u> and will be treated as such. On his/her record, *no-show* will appear and he/she could attend the extraordinary period. In this case, the student needs to contact the teacher of the subject.

To pass the subject, the student must achieve all of the competences aforementioned learning outcomes in this course syllabus by means of the different instruments established to measure them. This means that the student should pass each one of the assessment tests used.

The exams are considered as a pass if the mark is 5 out of 10. For the rest of the activities (practical classes, seminars, and theoretical activities), the student must also obtain an average mark of at least 50% of the knowledge.

As a requirement, the student must complete all of the assessment tests described in the Table for both continuous, and final, modalities, either in the ordinary or extraordinary period.





#### The **attendance requirements** are described below:

- A student will be considered as not having fulfilled the requirements if any of the following are true:
  - o without a justification,
  - o he/she does not attend more than one of the three hours of seminars
  - o if he/she fails to turn in more than one practical class activity.
- If the absence is justified (such as illness with a doctor's note, an accident, a serious family problem, etc.), then the justification of non-attendance preserves the student's right to continuous assessment, but it does not mean that the teacher should allow him/her to redo the activity in any way or accept it after the deadline.

#### **Continuous Assessment Table**

Instruments  Assessment criteria	Seminars	Practical activities	Theoretical activities	Final exam	%
The student understands the concept of psychological process, specifically those related to memory.		Х	Х	Х	35 %
The student knows the methods and techniques used to study these psychological processes.		Х	Х	Х	25 %
The student understands and explains human behaviour by integrating different perspectives.	Х			Х	20 %
The student analyses and interprets research and publications on the subject.		Х	Х		5 %
The student looks for and uses documentary sources relevant for the discipline.		Х	Х		5 %
The student assumes individual responsibility within collective work and participates in an active and autonomous way in the construction of the knowledge associated with the subject.	х	х	х		5 %
The student knows how to carry out empirical studies and research activities on basic psychological processes.		Х	Х		5 %
TOTAL	15 %	25%	20%	40%	100%





## Final Assessment Table (Ordinary and extraordinary assessment periods)

Instruments Assessment criteria	Practical activities	Final exam	%
The student understands the concept of psychological process, specifically those related to memory.		X	30 %
The student knows the methods and techniques used to study these psychological processes.		Х	25 %
The student understands and explains human behaviour by integrating different perspectives.	Х	Х	20 %
The student analyses and interprets research and publications on the subject.	Х	Х	5 %
The student looks for and uses documentary sources relevant for the discipline.	Х		5 %
The student participates in an active and autonomous way in the construction of the knowledge associated with the subject.	X		5 %
The student knows how to carry out empirical studies and research activities on basic psychological processes.	Х		5 %
TOTAL	20%	80%	

## 6. BIBLIOGRAPHY

## **Basic Bibliography**

Anderson, J.R. (2001). Aprendizaje y memoria: Un enfoque integral. México: McGraw-Hill.

Learning and memory perspectives - Classic conditioning - Instrumental conditioning - Reinforcement and learning - Transitional memories - Acquisition of memories - Retention of memories - Retrieval of memories - Skills acquisition - Inductive learning - Applications to education.

Baddeley, A.D. (1997). *Memoria humana: Teoría y práctica*. Madrid: McGraw Hill. (Trad. castellano: 1999).

A classic handbook that can be used as a basic reference handbook for the subject because it covers all the topics of the subject in an exhaustive and clear manner.





# Gluck, M.A.; Mercado, E. y Myers, C.E. (2010). *Aprendizaje y memoria: Del cerebro al comportamiento.* McGraw-Hill.

This book reflects the convergence of brain and behaviour studies, incorporating the results of modern approaches about learning and memory research both in animals and humans. Each chapter integrates the coverage of memory and learning in humans and animals, with separate sections specifically dedicated to behavioural processes, brain systems, and clinical perspectives. The work specifically addresses the following topics: Focus on neuroscience, Focus on clinics, Focus on research, and Focus on the student.

# Manzanero, A. L. y Álvarez, M. A. (2015). La memoria humana: Aportaciones desde la neurociencia cognitiva. Madrid: Pirámide.

This work includes both the cognitive and neuroscientific aspects of memory: the relationship between structure and function. It addresses the historical backgrounds in the study of memory, highlighting emerging problems. It also approaches the most functional aspects of human memory in a practical way.

#### Ruiz Vargas, J.M. (2010). Psicología de la Memoria. Madrid: Síntesis.

This handbook aims to analyse how memory works both in the context of the laboratory research and in the real world. Written in a clear, understandable and pleasant style, it will be particularly useful for psychologists, memory researchers, students of Psychology and, in general, for all those interested in knowing the scientific foundations of human memory. José María Ruiz-Vargas is Professor of Psychology of Memory at the Universidad Autónoma de Madrid.

#### Schacter, D.L. (2003). Los siete pecados de la memoria. Barcelona: Ariel.

The author is another classical researcher and leader in the field of memory, who presents an ideal work as complementary reading for the student who wishes to study the subject in more depth.

# Tulving, E. y Craik, F.I.M. (2000). *The Oxford Handbook of Memory*. Nueva York: Oxford University Press.

A comprehensive and detailed handbook, edited by two prominent international experts in the field of memory, which addresses memory from the cognitive psychology, the psychology of development, the neuropsychology of mnestic disorders and the neurobiological substrate of memory. It is ideal for students who want to study the subject in more depth.

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