

## **Psychological Processes: Memory**

Code: 102604 ECTS Credits: 6

2024/2025

Degree	Туре	Year
2502443 Psychology	ОВ	2

#### Contact

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### **Teachers**

Alexis Perez Bellido Rocío Pina Ríos

## **Teaching groups languages**

You can view this information at the <u>end</u> of this document.

### **Prerequisites**

It is convenient to have some reading skills in English and to have passed the subjects on psychological processes from previous semesters.

## **Objectives and Contextualisation**

In previous semesters, different cognitive processes have been studied, including perception, attention, motivation, emotion and learning. In this subject, the systems, processes, and types of representation of human memory and their relationship with other cognitive processes are studied.

Therefore, the aim is that at the end of the subject the student will be able to:

- 1. To understand the functions of memory in human behaviour, its importance, the basic mechanisms of its functioning and the factors that can affect memory.
- 2. To recognize different systems, processes and forms of representation involved in memory.
- 3. To relate the functioning of memory with other psychological processes.
- 4. To identify the implications of memory mechanisms in some areas of daily life such as education, advertising, witness memory and aging.
- 5. To know some practical applications that can improve mnemonic processes: mnemonic rules and factors that improve the processes of coding, storage and retrieval of information.

## Competences

- Apply knowledge, skills and acquired values critically, reflexively and creatively.
- Distinguish and relate the different focuses and theoretical traditions that have contributed to the historical development of psychology as well as its influence on the production of knowledge and professional practice.
- Distinguish between the design of research, procedures and techniques to evaluate hypotheses, contrast them and interpret the results.
- Identify, describe and relate the structures and processes involved in basic psychological functions.
- Prepare and write technical reports on the results of the evaluation, research or services requested.
- Students must be capable of applying their knowledge to their work or vocation in a professional way
  and they should have building arguments and problem resolution skills within their area of study.
- Students must be capable of collecting and interpreting relevant data (usually within their area of study)
  in order to make statements that reflect social, scientific or ethical relevant issues.
- Take decisions in a critical manner about the different research methods in psychology, their application and the interpretation of the results deriving from them.
- Use different ICTs for different purposes.
- Work in a team.

## **Learning Outcomes**

- 1. Analyse and describe the processes for problem-solving and decision-making.
- 2. Analyse the results of experiments on human memory.
- 3. Apply knowledge, skills and acquired values critically, reflexively and creatively.
- 4. Clarify the processes that take place during the codification and recovery of information in memory.
- 5. Describe each of the different systems that make up human memory and the relationship between them.
- 6. Design experiments in human memory.
- 7. Identify the main characteristics of the theoretical focuses in the study of associative learning, memory and psycholinguistics and distinguish between texts by different authors in agreement with them.
- 8. Relate the results of experiments in learning, conditioning and human memory with theoretical concepts of each of these processes.
- 9. Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
- 10. Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- 11. Submit a report on the development of skills and abilities developed in solving specific problems.
- 12. Use different ICTs for different purposes.
- 13. Work in a team.
- 14. Write reports using the results of experiments on human memory.

### Content

- Unit 1. Introductory topics.
- Unit 2. Memory systems.
- Unit 3. Factors and variables that affect the mnemonic process.
- Unit 4. The processes of memory.
- Unit 5. Forgetting.

# **Activities and Methodology**

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
D1. Master classes	28.5	1.14	1, 4, 5, 7
D3. Practice work	16	0.64	3, 11, 8, 13, 12
Type: Supervised			
S1. Tutorials (in person / virtual)	7.5	0.3	1, 4, 5, 7, 8
Type: Autonomous			
A1. Autonomous work	94	3.76	1, 3, 4, 5, 7, 11, 8, 13, 12

#### **DIRECTED ACTIVITIES**

- -Theoretical sessions and practical sessions (30%).
- a) Lectures with multimedia support in large groups.
- b) Practical sessions that involve experiments, debates, participation in activities, and discussion of cases or articles in small groups.

### SUPERVISED ACTIVITIES

-Follow-up tutorials and tutorial work (individual or group) in person or virtual (5%).

### **AUTONOMOUS ACTIVITIES**

- -Search in databases, comprehensive reading and synthesis of documentation (16%).
- -Preparation of practice reports and preparation of public presentation of works (24%).
- -Study through elaboration of schemes, conceptual maps and summaries (25%).

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

#### Assessment

## **Continous Assessment Activities**

Title	Weighting	Hours	ECTS	Learning Outcomes
EV1. Written report from practice sessions	15%	0	0	2, 3, 6, 14, 11, 9, 8, 13, 12
EV2. Written multiple choice test	35%	2	0.08	1, 4, 5, 7, 8
EV3. Oral presentation of articles	15%	0	0	3, 10, 8, 13
EV4. Written multiple choice test	35%	2	0.08	2, 4, 7, 8

The competences of this subject will be evaluated through different evidences, weighted as follows:

1) Evidence 1: written report (practice TBD) (15% of the final grade).

- 2) Evidence 2: written multiple-choice test (1st partial) (35% of the final grade)
- 3) Evidence 3: oral presentation of articles (15% of the final grade).
- 4) Evidence 4: written multiple-choice test (2nd partial) (35% of the final grade).

#### TABLE OF EVIDENCES:

Code	Name	Weight	Format	Autorship	Way	Week
evidence			(oral, written or both)	(individual, group or both)	(in person, virtual or both)	
EV1	Written report 1	15%	written	group	in person	Before 1st assessment period
EV2	Multiple-choice test 1	35%	written	individual	in person	1st assessment period
EV3	Oral presentation of articles	15%	oral	group	in person	Before 2ond assessment period
EV4	Multiple-choice test 2	35%	written	individual	in person	2ond assessment period
REC	Resit		written	individual	in person	Resit examination period

Minimum compliance will be established from which the student will be able to pass the course (5.0 as a minimum grade).

The student who, at the end of the course, has not delivered 40% of the percentage of the evidences of evaluation will NOT BE ASSESSED.

Once the student has exceeded this 40% of the percentage in the presentation of the evidences of evaluation, they will be ASSESSED.

To pass it is necessary that: a) the mean of evidences 2 and 4 (written tests) give a minimum of 4 (range of 0 to 10). The grades obtained in evidences 1 and 3 (practices) will not compute if the student has not achieved a mean grade of at least 4 in the written tests (EV2 and EV4). If not reached, the final grade will be that mean value. And b) the calculation of percentages of the different evidences give a minimum of 5.

Resit will be available for students who: a) have delivered evidences with a weight equal to or greater than 2/3 of the total score, and b) have a final grade that is lower than 5 but equal to or greater than 3.5. In case of having to resit, the student can re-assess the exam (EV2 and/or EV4) in which they have not reached the minimum of 5. The grade of the reassessed evidence will replace the previous grade and the final grade will be recalculated with the aforementioned criteria, but it will not be higher than 6.9.

This subject does not offer a single synthesis test to students who enrol for a second time, however, these students can keep the grades of the practical evidences (EV1 and EV3), during one academic year. The UAB assessment regulations can be found on the following link:

https://www.uab.cat/web/estudiar/graus/graus/avaluacions-1345722525858.html

### Translation of exams

THE TRANSLATION OF THE ON-SITE ASSESSMENT TESTS WILL ONLY BE ISSUED IF THE REQUIREMENTS ESTABLISHED IN ARTICLE 263 ARE MET AND THE REQUEST IS MADE TELEMATICALLY (E-FORM) IN WEEK 4 (more information on the Faculty's website). Single assessment

The single assessment will be carried out on the same day and place as the test of the second assessment period of the subject and all the contents of the subject will be assessed. The two partial exams will be conducted with multiple choice questions and an oral communication consisting of a critical analysis of a scientific article published in English. The written practice report must also be submitted. Duration 2.5 hours. The final grade of the subject will be obtained as described for the continuous assessment. Resit will be on the same terms, as long as the grade of the single assessment is below 5 and above 3.5.

THE SINGLE ASSESSMENT MUST BE REQUESTED TELEMATICALLY (E-FORM) DURING THE SPECIFIC PERIOD (more information on the Faculty's website)

#### SUMMARY OF THE SINGLE ASSESSMENT

Name and description	Weight	Duration	Date
EV1. Written report from practice sessions	15%	2.5 hours	Second assessment
EV2. Written multiple choice test	35%	_	period
EV3. Oral communication of a scientific paper	15%	_	
EV4. Written multiple choice test	35%	_	

## **Bibliography**

Main Bibliography:

RUIZ-VARGAS, José Maria (2010). Manual de Psicología de la memoria. Madrid: Síntesis.

SAIZ, Dolors; SAIZ. Milagros & BAQUÉS, Josep (1996). Psicología de la memoria. Manual de Prácticas. Barcelona: Avesta.

Further reading:

Baddeley, A. (1982). Su memoria: Cómo conocerla y dominarla. Madrid: Debate, 1984.

Baddeley, A.D. (1998). Memoria Humana. Teoría y práctica. Madrid: McGraw Hill, 1999.

Baddeley, A.D., Eysenck, M.W. i Anderson, M.C. (2009). Memoria. Madrid: Alianza, 2010.

Ruiz Rodríguez, R. M. (2003). Las caras de la memoria. Madrid: Pearson Educación, S.A.

Ruiz-Vargas, J.M. (1991). Psicología de la memoria. Madrid: Alianza.

Ruiz-Vargas, J.M. (1994). La memoria humana. Función y estructura. Madrid: Alianza.

Ruiz-Vargas, J.M. (2002) Recordar y olvidar. Madrid: Trotta.

Schacter, D.L. (1996). En busca de la memoria. El cerebro, la mente y el pasado. Barcelona. Ediciones B, 1999.

Schacter, D. L. (2003) Los siete pecados de la memoria: la memoria es la clave de la inteligencia, ¿cómo puedes mejorarla?. Barcelona: Ariel, S.A.

Smith, E.E. & Kosslyn, S.M (2009) *Procesos cognitivos. Modelos y bases neurales.* Madrid: Pearson-Prentice Hall.

Further reading (English):

Baddeley, A. (2004). Your memory: A user's guide. Firefly Books Ltd.

Baddeley, A. (2009). Memory. Hove/New York: Psychology Press.

Baddley, A., Aggleton, J., Conway, M. (Eds) (2002). *Episodic Memory. New Directions in Research*. Oxford: Oxford Univ. Press.

Baddeley, A.D., Kopleman, M.D., Wilson, B. A. (2002). *The Handbookof Memory Disorders*. Second Edition. Chichester (UK): John Wiley and Sons. Ltd.

Berrios, G. E., Hodges, J. et al. (2000). *Memory disorders in psychiatric practice*. New York: Cambridge University Press.

Cowan, N. (2005). Working Memory Capacity. Psychology Press (UK).

Kandel, E. R. (2006). In Search of Memory: The Emergence of a New Science of Mind. W. W. Norton.

Miyake, A., Shah, P. (1999). *Models of working memory: Mechanisms of active maintenance and executive control.* Cambridge: Cambridge University Press.

Morris, P. & Gruneberg, M. (eds.) (1994). Theoretical aspects of memory. London: Routletge.

Parkin, A. (1999). Memory: a guide for professionals. Chichester: John Wiley & Sons.

Schacter, D.L. (1996). Searching for memory: the brain, the mind and the past. New York: Basic Books.

Schacter, D.L. (2001). The seven sins of memory: How the mind forgets and remembers. New York: Houghton Mifflin Co.

Schacter, D. L. & Scarry, E. (ed.) (2000). Memory, brain, and belief. Cambridge, US: Harvard University Press.

Schacter, D.L. & Tulving, E. (1994). Memory systems. Cambridge: MIT Press.

Saito, A. et al (ed.) (2000). *Bartlett, culture and cognition*. Philadelphia, PA, US: Psychology Press/Taylor & Francis.

Tulving, E. (ed) et al. (2000). *Memory, consciousness, and the brain: The Tallinn Conference*. Philadelphia, PA, US: Psychology Press/Taylor & Francis.

Tulving, E. & Craik, F. I. M. (eds.) (2000). *The Oxford handbook of memory.* New York: Oxford University Press.

### Software

Not required.

### Language list

Name	Group	Language	Semester	Turn
(PLAB) Practical laboratories	111	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	112	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	113	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	114	Catalan	second semester	morning-mixed

(PLAB) Practical laboratories	211	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	212	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	213	Catalan/Spanish	second semester	morning-mixed
(PLAB) Practical laboratories	214	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	311	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	312	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	313	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	314	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	411	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	412	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	413	Catalan/Spanish	second semester	morning-mixed
(PLAB) Practical laboratories	414	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	511	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	512	Catalan	second semester	morning-mixed
(TE) Theory	1	Catalan/Spanish	second semester	morning-mixed
(TE) Theory	3	Catalan/Spanish	second semester	morning-mixed
(TE) Theory	5	Catalan/Spanish	second semester	morning-mixed