

**Memory Psychology and its Applications in
Language**

Code: 101713
ECTS Credits: 6

Degree	Type	Year	Semester
2500893 Speech therapy	OT	4	1

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

Contact

Name: Josep Baqués Cardona
Email: Josep.Baques@uab.cat

Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: Yes
Some groups entirely in Spanish: No

Teachers

Oriol Granados Bartrons
Eva Brunat Parra

Prerequisites

There are no prerequisites but it is convenient to have some knowledge of reading in English and to have passed the subject "Introduction to the scientific methodology and basic psychological processes" from the first year.

Objectives and Contextualisation

By studying the different psychological processes in the first year you have seen the importance of memory in the construction of the identity of the person and its relationship with the other psychological processes. In this subject we will deepen into the structures, functions and processes of human memory and especially in its relation to language.

Thus, our aim is that at the end of the course the student will be able to:

1. Understand the role of memory in human behaviour, its importance, the basic mechanisms of its functioning and the factors that can affect memory.
2. Recognize the different structures, systems and processes involved in memory.
3. Understand the main relationships of memory with some linguistic skills: acquisition of vocabulary, reading and comprehension, learning foreign languages.
4. Identify the implications of memory mechanisms in some areas of daily life such as education, publicity, and the memory of witnesses.
5. Know some practical applications that improve mnemonic processes: mnemonic rules and factors that improve the processes of coding, storage and retrieval of information.

Competences

- Analyse and synthesise information.
- Demonstrate an understanding and correct use of the terminology and methodology of speech-therapy research.
- Evaluate the scientific production that supports speech therapists professional development.
- Express oneself fluently, coherently and suitably following established norms, both orally and in writing.
- Integrate the foundations of biology (anatomy and physiology), psychology (evolutionary processes and development), language and teaching as these relate to speech-therapy intervention in communication, language, speech, hearing, voice and non-verbal oral functions.
- Organise and plan with the aim of establishing a plan for development within a set period.
- Understand, integrate and relate new knowledge deriving from autonomous learning.
- Use the exploratory techniques and instruments pertaining to the profession, and register, synthesise and interpret the data provided by integrating this into an overall information set.

Learning Outcomes

1. Analyse and synthesise.
2. Consider designs that are suitable for practice on different processes and phenomena involved in memory and thinking.
3. Correctly use the terminology and methodology of research into higher cognitive functions in the field of speech therapy
4. Critically interpret the results of evaluations conducted, relating these to disorders of thought and memory and their effect on language.
5. Critically interpret the results of research into the processes involved in thought and memory.
6. Describe and apply different strategies for enhancing cognitive functions.
7. Describe the main processes and systems involved in memory and thinking.
8. Describe the main techniques and assessment tools of thought and memory.
9. Explain the effects of certain diseases or brain traumas on memory and thought processes.
10. Express oneself fluently, coherently and suitably following established norms, both orally and in writing.
11. Organise and plan with the aim of establishing a plan for development within a set period.
12. Prepare and write reports based on the results of experiments into thinking and memory.
13. Relate the processes of memory with language.
14. Understand, integrate and relate new knowledge deriving from autonomous learning.

Content

Memory functions. Structures and processes of memory. Memory factors. Theories about forgetting. Psychopathologies of memory. The representation of information in memory. Memory and language. Memory and vocabulary acquisition. Memory and reading. Memory and comprehension. Fields of application of the psychology of memory related to language.

1. MEMORY: DEFINITORY ASPECTS. Memory within cognitive processes. Psychological and sociocultural variables that affect the mnemonic process. The measure of memory.
2. FACTORS THAT AFFECT MEMORY. Individual factors. Temporary factors. Factors related to the material. Factors related to strategies. Contextual factors. Mnemonic strategies: mnemonics.
3. MEMORY SYSTEMS. The sensory memory. Short-term memory or working memory. Long-term memory (episodic memory versus semantic memory, procedural memory versus declarative memory, implicit memory versus explicit memory).
4. MEMORY PROCESSES. Organization and retrieval from long-term memory. Encoding and registration processes. Retrieval processes. Mnemonic strategies. Forgetting. Psychopathologies of memory.
5. REPRESENTATION OF INFORMATION IN MEMORY. Semantic memory and episodic memory. Concepts, schemes and categories. Semantic networks. The mental image.

6. MEMORY AND VOCABULARY ACQUISITION. Role of memory in the acquisition of vocabulary in the mother tongue and in foreign languages.
7. MEMORY AND READING. Role of memory in learning to read.
8. MEMORY AND COMPREHENSION. Importance of memory in the comprehension of texts.
9. OTHER FIELDS OF APPLICATION. Memory and advertising. Memory in everyday life (autobiographical memory). Witness memory. Memory and aging.

Methodology

DIRECTED ACTIVITIES

Theoretical classes, practices and seminars:

- a) Lectures with ICT support and debate in a large group
- b) Practical classes of discussion of basic concepts through small exercises.
- c) Seminars to discuss cases or articles in a small group

SUPERVISED ACTIVITIES

Tutorials:

Follow-up tutorials with the teacher in a small group

Writing and elaboration of works:

Tutorial of works (individual or group) in person or virtual

AUTONOMOUS ACTIVITIES

Search, reading and synthesis of documentation:

Definition of the search strategy in databases, comprehensive reading and preparation of synopsis of the read material.

Report writing and public presentation of works:

Practice reports, individual or group.

Study:

Elaboration of schemes, conceptual maps and summaries.

N.B. The proposed teaching and assessment methodologies may experience some modifications as a result of the restrictions on face-to-face learning imposed by the health authorities. The teaching staff will use the Moodle classroom or the usual communication channel to specify whether the different directed and assessment activities are to be carried out on site or online, as instructed by the Faculty.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Master classes	22	0.88	7, 6, 8, 3, 9, 4, 5, 13
Practice work	12	0.48	14, 8, 12, 3, 10, 4, 5, 11, 2
Reading discussion	2	0.08	3, 10, 4, 5
Type: Supervised			
Group tutorial	12	0.48	10, 4
Individual tutorial	4.5	0.18	14, 10, 11
Type: Autonomous			
Autonomous work	90.5	3.62	1, 14, 9, 11

Assessment

The competences of this subject will be evaluated through different procedures. For each of the evidences, its weight on the total is indicated:

- a) Two multiple-choice exams: 70% (EV3,35% + EV6,35%)
- b) Report and discussion of practices: 20% (EV1,15% + EV5,5%)
- c) Discussions of the readings: 10% (EV2,5% + EV4,5%)
- d) Optional work: EV7, To raise the grade (maximum 10%).

Timetable (weeks):

EV1 - Week 7/8

EV2 - Week 6

EV3 - Week 10

EV4 - Week 11

EV5 - Week 14/15

EV6 - Week 16

EV7 - Week 19

Minimum compliance will be established from which the student will be able to pass the subject: a minimum grade of 5 in the final weighted score. None of the evidences of evaluation is mandatory as long as the final grade obtained from the evidences a) b) and c) (ie not counting the optional work) is equal to or greater than 5. The student who has given evidence of learning with a weight below 4 points (40%) will be considered as "not evaluable".

A final reevaluation will be made for students who have failed (final grade below 5) as long as they have made evidence with a weight equal to or greater than 2/3 of the total score.

For these students the most adequate reevaluation activities will be carried out in each case to improve the aspects where a satisfactory performance during the course would not have been demonstrated.

The qualification of the optional work will only be added to the final grade (maximum 10% added) as long as this final grade is at least 5 and the optional work is approved.

The student of second degree enrollment (or more) may be evaluated in a single final synthesis test. This test will consist of 40 multiple-choice questions about all the contents of the subject. The student who is in these conditions and wants to be evaluated through the final synthesis test must inform the coordinator before the exam date of the first part (EV3).

Link to the evaluation guidelines of the faculty:

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

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
EV1. Practice report	15 %	0	0	1, 14, 8, 12, 3, 10, 4, 11, 2
EV2. Evaluated Discussion (Readings)	5 %	1	0.04	1, 3, 5
EV3. Midterm exam (first half)	35 %	2	0.08	14, 7, 6, 8, 3, 9
EV4. Evaluated Discussion 2 (Readings)	5 %	1	0.04	1, 3, 5
EV5. Discussion about experimental results	5 %	1	0.04	14, 8, 3, 10, 4, 2, 13

EV6. Final exam (second half)	35 %	2	0.08	14, 7, 6, 9, 13
EV7. Optional report	To be added to the final grade	0	0	14, 7, 6, 12, 9, 10, 5, 11

Bibliography

Main Bibliography:

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

SAIZ, D., SAIZ, M. i BAQUES, J. (1996). Psicología de la memoria. Manual de Prácticas. Barcelona: Avesta.

Further Reading:

ANDRADE, J. (Ed.) (2002). Working Memory in Perspective. Hove (UK): Psychology Press.

BADDELEY, A.D. (1998). Memoria humana. Teoría y práctica. Madrid: McGraw Hill.

BADDELEY, A. (2004). Your memory: A user's guide (New illustrated edition). London: Carlton Books.

BADDELEY, A.D., EYSENCK, M.W. & ANDERSON, M.C. (2009). Memoria. Madrid: Alianza, 2010.

BADDELEY, A.D.; KOPELMAN, M.D. & WILSON, B.A. (2002). The Handbook of memory disorders. Second Edition. Chichester, UK: John Wiley

HULME, C. & MACKENZIE, S. (1992). Dificultades graves en el aprendizaje: el papel de la memoria de trabajo. Barcelona: Ariel, 1994.

NEATH, I. & SURPRENANT, A. (2002). Human Memory (Second edition). New York: Wadsworth Publishing.

PAPAGNO, C. (2008). La arquitectura de los recuerdos: Cómo funciona la memoria. Barcelona: Paidós.

PICKERING, S. & PHYE, G.D. (Eds.) (2008). Working Memory and Education (Educational Psychology). London: Academic Press.

RUIZ-VARGAS, J.M. (1991). Psicología de la Memoria. Madrid: Alianza.

SÁNCHEZ CABACO, A. & BEATO, M. S. (Coord) (2001). Psicología de la memoria: Ámbitos aplicados. Madrid: Alianza.

SCHACTER, D. L. (2001) The seven sins of memory: How the mind forgets and remembers. New York: Houghton Mifflin Co. (Traducción a: SCHACTER, D.(2003). Los siete pecados de la memoria: la memoria es la clave de la inteligencia. Barcelona: Ariel.).

WEBS:

- Chapter from *Redes* (D. Schacter interview).

<https://www.youtube.com/watch?v=reZ4YrgjuRo>

- Video "El hombre con siete segundos de memoria", about Clive Wearing.

<https://www.youtube.com/watch?v=8suclojMp0k>