Memory and Representation

Brief description of course content (according to the programme's verification report)

Contents: Memory structures. Encoding, retrieval and forgetting processes. Mental representation: theories and models.

Learning outcomes

Cognitive: To know the different theoretical approaches about the functional architecture of human memory, considering both the structural and procedural dimensions. To be able to appreciate the scope and limitations of the different theoretical models studied. To be familiar with the main measurements of memory, differentiating the information each one can provide and its use, both in research and the different fields of application for Psychology. To relate knowledge from the field of memory to other areas such as Neuroscience, Artificial Intelligence, Neuropsychology, Educational Psychology, Legal Psychology, etc.

Procedural. To know how to identify the main memory processes involved in activities performed by human beings and in specific individual cases. To be able to design situations which allow aspects and mechanisms of memory to be isolated through the design of controlled research and study situations. To develop the ability of critical thinking in the setting of scientific research on memory: to define the problem, formulate and test a hypothesis, evaluate the scope of the data, etc. To be able to analyse and interpret quantitative and qualitative data from basic and applied experimental research on memory. To critically evaluate the information collected in these controlled studies in order to understand the function of memory. To learn to use relevant document sources in the research field of memory and to develop critical analysis and synthesis skills To be able to connect theoretical knowledge about memory to different professional environments of psychology.

Behavioural. To evaluate and value the contributions of scientific research to professional practice and knowledge. To promote the scientific style as a way of tackling psychological problems. To promote favourable attitudes to scientific research. To foster respect for theoretical diversity. To promote interest in keeping knowledge up-to-date. To promote interest in knowledge creation.

Planned learning activities
Theory Syllabus

- Topic 1: Introduction: concept, methodology and organisation.
- Topic 2: Working memory.

- Topic 3: Contents for Long-Term Memory (LTM).
- Topic 4: Encoding processes in LTM.
- Topic 5: Retrieval and forgetting processes in LTM.

Practical Syllabus

Possible practical exercises for the practical sessions:

- Explicit vs. implicit recovery
- Processing levels
- Memory vs. recognition
- Constructive memory
- Retrieval-induced forgetting
- Prospective memory

Note: Some practical exercises may be exchanged for others not listed here, depending on the progression of the course. These will always be closely related to the topic's contents.

Practical Activities:

- Empirical demonstrations
- Research work
- Questions on material preparation and other activities such as case analysis and experiments