Fecha de aprobación por la Comisión Académica: 28/06/2023

Guía docente de la asignatura

Memoria y Representación (M30/56/2/33)

Máster	Máster Universitario en Neurociencia Cognitiva y del Comportamiento

MÓDULO	Neurociencia Cognitiva y del Comportamiento

RAMA	Ciencias de la Salud

CENTRO RESPONSABLE DEL TÍTULO	Escuela Internacional de Posgrado

Semestre	Primero	**Créditos**	4	**Tipo**	Optativa	**Tipo de enseñanza**	Presencial

BREVE DESCRIPCIÓN DE CONTENIDOS (Según memoria de verificación del Máster)

Memory systems, functions and processes.

COMPETENCIAS

COMPETENCIAS BÁSICAS

- CB6 - Poseer y comprender conocimientos que aporten una base u oportunidad de ser originales en desarrollo y/o aplicación de ideas, a menudo en un contexto de investigación.
- CB7 - Que los estudiantes sepan aplicar los conocimientos adquiridos y su capacidad de resolución de problemas en entornos nuevos o poco conocidos dentro de contextos más amplios (o multidisciplinares) relacionados con su área de estudio.
- CB8 - Que los estudiantes sean capaces de integrar conocimientos y enfrentarse a la complejidad de formular juicios a partir de una información que, siendo incompleta o limitada, incluya reflexiones sobre las responsabilidades sociales y éticas vinculadas a la aplicación de sus conocimientos y juicios.
- CB9 - Que los estudiantes sepan comunicar sus conclusiones y los conocimientos y razones últimas que las sustentan a públicos especializados y no especializados de un modo claro y sin ambigüedades.
- CB10 - Que los estudiantes posean las habilidades de aprendizaje que les permitan

continuar estudiando de un modo que habrá de ser en gran medida autodirigido o autónomo.

RESULTADOS DE APRENDIZAJE (Objetivos)

The student will know:

- Memory structures and processes, their properties, neural bases and deficit.
- Relevant research on encoding and retrieval processes
- Relevant research on forgetting mechanisms and their neural bases

The student will know and will be able to:

- Read, understand and integrate information from recent papers published in top-tier journals in the field of memory
- Identify research problems and design research plans to address questions in the field of memory
- Be able to perform critical analyses of research articles in the field of memory and discuss them in group
- Acquire strategies to assess different memory systems and processes

PROGRAMA DE CONTENIDOS TEÓRICOS Y PRÁCTICOS

TEÓRICO

1.The neuroscience of memory - history

- Procedures and methods

2. Memory systems and neural bases:

- Working memory
- Perceptual representation system - procedural memory
- Episodic and semantic memory
- Autobiographic memory

3. Memory processes and neural bases:

- Working memory and executive processes
- Memory encoding: explicit and implicit learning processes
- Retrieval processes: Implicit, familiarity, recollection, reconstructive processes
- Forgetting: Interference and inhibition
- Forgetting, memory errors and false memory

For each topic, we will discuss the normal functioning of the memory system/process, the neural bases of this system/process, and its possible dysfunctions.

PRÁCTICO

Reading and discussion of scientific articles.

BIBLIOGRAFÍA

BIBLIOGRAFÍA FUNDAMENTAL

- Baddeley, Alan, Eysenck, Michael W. & Anderson, Michael C. (2020). Memory (3rd ed.). Routledge (Spanish Translation 2020).
- Bjork, Elizabeth L. & Bjork, Robert, A. (2002). Memory. Handbook of Perception and Cognition San Diego, CA.: Academic Press
- Kahana, Michael J. (2012). Foundations of human memory. Oxford University Press.
- MacPherson, Sarah E., & Della Sala, Sergio (Eds.). (2019). Cases of Amnesia: Contributions to Understanding Memory and the Brain. Routledge.
- Neath, Ian. & Suprenant, Aimee (2003). Human Memory. Belmont, C.C.: Wadsworth
- Parker, Amanda, Bussey Timothy J. & Wilding, Edward L. (2002). The Cognitive Neuroscience of Memory. New York: Psychology Press.
- Radvansky, Gabriel (2010). Human Memory. Boston, MA. Pearlson Education Group, Inc.
- Tulving, Endel & Craik, Fergus Ian Muirden (2000). The Oxford handbook of memory. Nueva York: Oxford University Press.

BIBLIOGRAFÍA COMPLEMENTARIA

It will be provided for each content session.

EVALUACIÓN (instrumentos de evaluación, criterios de evaluación y porcentaje sobre la calificación final)

EVALUACIÓN ORDINARIA

Article 18 of the UGR assessment policy and regulations establishes that the ordinary assessment session (convocatoria ordinaria) will preferably be based on the continuous assessment of students, except for those who have been granted the right to a single final assessment (evaluación única final), which is an assessment method that only takes a final exam into account.

In-class sessions (4 hours a week) will be dedicated to:

- Lecture where an overview of a broad topic will be offered by the professor
- Reading and discussion of scientific articles on the topic
- Spoken presentations from the students

Assessment will be based on:

- Active participation in class discussions (25%)
- Oral presentation and in group discussion (35%)
- Question on the contents covered during the course (40%)

EVALUACIÓN EXTRAORDINARIA

Article 19 of the UGR assessment policy and regulations establishes that students who have not passed a course in the ordinary assessment session (convocatoria ordinaria) will have access to an extraordinary assessment session (convocatoria extraordinaria). All students may take part in this extraordinary assessment session, regardless of whether or not they have followed continuous assessment activities. In this way, students who have not carried out continuous assessment activities will have the opportunity to obtain 100% of their mark by means of an exam and/or assignment.

In this case, the assessment will comprise: an exam with open-ended question on the contents covered during the course (100%) available in Prado platform.

EVALUACIÓN ÚNICA FINAL

Article 8 of the UGR assessment policy and regulations establishes that students who are unable to follow continuous assessment methods due to justifiable reasons shall have recourse to a single final assessment (evaluación única final), which is an assessment method that only takes a final exam into account. In order to opt for a single final assessment (evaluación única final), students must send a request, using the corresponding online procedure, to the coordinator of the master's programme, in the first two weeks of the course or in the two weeks following their enrolment (if the enrolment has taken place after the classes have already begun).
The coordinator will communicate this information to the relevant teaching staff members, citing and verifying the reasons why the student is unable to follow the continuous assessment system.

In this case, the assessment will comprise: An exam with open-ended question on the contents covered during the course (100%) available in the PRADO platform

INFORMACIÓN ADICIONAL

The teaching methodology and evaluation will be adapted to students with specific needs (NEAE), in accordance with article 11 of the regulations for the evaluation and qualification of students of the University of Granada.

Timing distribution of training activities and teacher methodology:

Face-to-face Classes: 32 hours

- Theoretical Classes (lectures by the professor on the topic, methodology and evaluation): 20 h
- Practical classes (discussion and debate sessions): 6 h
- Oral presentations by the student: 6 h

Written Exam: 4 hours

Autonomous Learning: 64 hours

- Critical reading of scientific articles, elaboration of contents, synthesis, evaluation

questions: 60 h
- Follow-up, advice and feedback on oral presentations: 4 h

Información de interés para estudiantado con discapacidad y/o Necesidades Específicas de Apoyo Educativo (NEAE): Gestión de servicios y apoyos (https://ve.ugr.es/servicios/atencion-social/estudiantes-con-discapacidad).