Universidad Zaragoza

Academic Year/course: 2024/25

31206 - Fundamentals of Neuroscience

Syllabus Information

Academic year: 2024/25
Subject: 31206 - Fundamentals of Neuroscience
Faculty / School: 301 - Facultad de Ciencias Sociales y Humanas
Degree: 613 - Degree in Psychology
ECTS: 6.0
Year: 1
Semester: Second semester
Subject type: Basic Education
Module:

1. General information

The subject Fundamentals of Neuroscience is a basic subject that focuses mainly on the principles of neuroscience, the mechanisms of neural plasticity, the neurobiological basis of perception and movement, and the anatomofunctional principles of the limbic system, diencephalon and cerebral cortex.

2. Learning results

-Discriminate the field of study of Biopsychology and its disciplines; identifying the research interests common to Psychology and Neurosciences.

-Identify and differentiate the main methods and techniques of biopsychology.

-Interpret the results of the application of methods and techniques in biopsychology in psychological studies and argue their advantages.

-Identify the location and functioning mechanisms of the main macro and microstructures of the nervous system relevant to the explanation of behaviour in psychology.

-Identify, differentiate and argue the relationship between the structural and functional elements of the nervous system and healthy and pathological behaviour.

-Select the main documentary sources of biopsychology to complete and update knowledge in psychology.

-Discriminate and adequately use the terminology of biopsychology in the explanation of behaviours.

3. Syllabus

Neurosciences, methods and techniques

Plasticity

Neurosciences of the senses

Movement circuits

The role of the diencephalon in sensory integration and regulation of behaviours

The limbic system, main functions and relationships with other systems

The importance of cortical function

4. Academic activities

Lectures: sessions with the teacher in which the subject syllabus will be explained. 30 hours

Laboratory practices: 30 hours

5. Assessment system

The student demonstrates that they has achieved the learning results through the following assessment activities that refer to theoretical and practical contents:

Two tests during academic activities in class (the average of the grade of both questionnaires will represent 40% of the final grade, up to 4 points out of 10). They will consist of an objective test of multiple-choice answers (2 or 3 alternatives) with

randomized answer control. The score will be obtained by applying the following formula:(C-(E/n-1))

Final test (up to 60% of the grade, up to 6 points out of 10) that will be held on the date of the official final call for final exams. It will consist of an objective test with 3 multiple-choice answers, with randomized answer control. The score will be obtained by applying the following formula:(C-(E/n-1))

For the final grade to be the sum of the grades obtained by the average of the two questionnaires (40%) and the final test (60%), the grade must be equal to or higher than 5 points out of 10 in the final test.

If there is any activity related to the subject on the campus, its realization may be proposed and a report on it may be requested and evaluated with up to 0.5 points out of 10. In case this activity exists, it will be reported to the students as one of the activities performed in class.

Final numerical grade: The final grade will be the higher of the two possible numerical grades (questionnaires + final test (40%+60%) or final test (100%)). The numerical grading scale shall be as provided in the regulations:

0- 4.9 Fail (SS).

5.0 To 6.9: Pass (AP).

7.0 to 8.9: Notable (NT).

9.0 to 10 : Outstanding (SB)

6. Sustainable Development Goals

3 - Good Health & Well-Being
4 - Quality Education
10 - Reduction of Inequalities