

26767 - Neuroanatomy

Syllabus Information

Academic year: 2024/25

Subject: 26767 - Neuroanatomy

Faculty / School: 104 - Facultad de Medicina

229 - Facultad de Ciencias de la Salud y del Deporte

Degree: 304 - Degree in Medicine

305 - Degree in Medicine

ECTS: 9.0

Year: 2

Semester: Second semester

Subject type: Compulsory

Module:

1. General information

The Neuroanatomy subject is taught in the second semester of the second year after completing the basic training in Cell Biology, Biochemistry, Physiology, Embryology, Anatomy and Histology.. The objectives of this subject and its expected results are as follows:

- To know the structure and organization of the sense organs
- To know the structure and organization of the nervous system
- To integrate the anatomical-functional relationship of all the elements that make up this regulatory system with the rest of the organism.

These objectives are aligned with the following Sustainable Development Goals (SDGs) number 3, 4 and 5 of the United Nations 2030 Agenda, which seeks to ensure healthy lives and promote well-being, achieve quality education and gender equality in education

2. Learning results

To observe, recognize and describe the anatomy of the central nervous system, peripheral nervous system, supporting structures and senses, using macroscopic methods and imaging techniques.

To know the sensory, integrative and motor functions of the nervous system, including cognition and the higher functions of the human nervous system. To know the divisions in charge of each of these functions, and the supporting structures.

In order to pass this subject, the students shall demonstrate they has acquired the following results:

1. To know the morphology and location of sensory nerve endings, skin, internal organs, eyeball, ear, olfactory mucosa and taste corpuscles
2. To Know the morphology and location of the peripheral nerve fibres, sensory ganglia and vegetative organs, the spinal cord, the brainstem, the cerebellum, the diencephalon and the telencephalon.
3. To identify with macroscopic methods, and imaging techniques, the morphology, structure and location of the sense organs and components of the central and peripheral nervous system.

3. Syllabus

The program of the Neuroanatomy subject will consist of a theoretical program composed of 47 topics organized in 6 different blocks: stesiology, spinal cord, brainstem, cerebellum, diencephalon and telencephalon

The practical program will consist of the same blocks with the study of the organs of the senses and the central nervous system using natural pieces, models, reconstructions by planes, macroscopic coronal, sagittal and horizontal cuts of each of the levels of the central nervous system.

4. Academic activities

The program of the Neuroanatomy subject includes a series of training activities:

- Theoretical face-to-face classes: 60 h
- Practical face-to-face classes 23 h
- Tutorials 5 h
- Seminars 15 h
- Evaluation 2h

During these academic activities, the teaching methodologies will include lectures, laboratory practices, individual and/or group interviews, personal study based on the different sources of information, tests to verify the acquisition of knowledge and

competences, individual and/or group work, discussion of scientific articles and practice in the dissection room.

5. Assessment system

The student must demonstrate that they have achieved the intended learning results by means of the following assessment activities

- Theoretical and practical examinations
 - A partial examination of the senses, medulla, brainstem and cerebellum.
 - A final examination with diencephalon and telencephalon. In case of failure to pass the midterm exam, the final exam will contain a comprehensive exam.

Both parts and both exams must be passed independently. They do not compensate each other. Each evaluation or exam will consist of a theoretical written test, a practical part and a part of participatory work.

- The theoretical part: 60% of the total grade: 30 multiple-choice questions, with 5 alternatives: 1 true and 4 false (0.2 points for each correct answer). Failures do not subtract)
- The practical part: 30% of the total grade: 30 questions of recognition of structures studied in the practical classes.

It is necessary to obtain 60% of the theoretical part (18 correct questions) and 60% of the practical part (18 correct questions) to pass the different tests.

- Participatory work: 10% of the total grade: Supervised practical work, attendance and participation in theoretical classes, face-to-face seminars and/or the completion of continuous evaluation activities.