Universidad Zaragoza

Academic Year/course: 2024/25

26761 - Histology I (General Histology)

Syllabus Information

Academic year: 2024/25
Subject: 26761 - Histology I (General Histology)
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: 6.0
Year: 1
Semester: Second semester
Subject type: Basic Education
Module:

1. General information

1. Introduce students to the basic knowledge of current techniques for the microscopic study of cell types, tissues and organs
2. Familiarize students with the concept of tissue as an integrated system of cells and extracellular material and their functional correlation
3. Identify the various elements that form the tissues and that allow distinguishing some tissues from others
4. Know the structural organization of the central nervous system and the skin. These approaches and objectives are aligned with the following Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda Goal 3: Health and wellness

The **subject** takes advantage of knowledge acquired in subjects previously studied in the degree*(Biology* and *Biochemistry*) to learn how cells and extracellular matrix molecules are organized in tissues.

2. Learning results

The student, in order to pass this subject, must demonstrate the following results...

To know the fundamentals of the basic techniques for the study of histological samples and the proper use of the optical microscope

To recognize the different components of the various tissues

To establish the relationship between the microscopic organization of tissues and their function To know the microscopic organization of the central nervous system and the skin and identify the tissues that form them

The knowledge obtained in Histology I (General Histology) is fundamental for the study of Histology II (Special Histology) and Diagnostic and *anatomical-pathological therapeutic* procedures.

3. Syllabus

1. INTRODUCTION HISTOLOGY

2. INTRODUCTION EPITHELIA

3.- LINING EPITHELIA

4.- EXOCRINE GLANDS

5.- ENDOCRINE GLANDS

6.- INTRODUCTION CONNECTIVE TISSUES

7.- EXTRACELLULAR MATRIX

8.- CONJUNCTIVAL CELLS

9.- VARIETIES OF THE CONJUNCTIVA

10.- ADIPOSE TISSUE

11.- CARTILAGINOUS TISSUE

12.- BONE TISSUE

13.- INTRODUCTION BLOOD

14.- BLOOD CELLS

15.- HEMATOPOIESIS

16.- INTRODUCTION TO MUSCLE
17.- SMOOTH MUSCLE
18.- STRIATED SKELETAL MUSCLE
19.- STRIATED CARDIAC MUSCLE
20.- OTHER CONTRACTILE CELLS
21.- NERVOUS INTRODUCTION
22.- NEURONE
23.- INTERNEURONAL SYNAPSE
24.- NEUROGLIA
25.- NERVE FIBER/PERIPHERAL NERVE
26.- PERIPHERAL NERVE ENDINGS
27.- SPINAL CORD
28.- CEREBELLAR CORTEX
29.- CEREBRAL CORTEX
30.- SKIN
31.- SKIN APPENDAGES

4. Academic activities

This subject corresponds to an extinct plan and has no equivalence in the new plan.

The theoretical and practical classes of the new plan do not correspond to those taught in the previous plan.

5. Assessment system

1.1. Written exam

The written exam will consist of:

- multiple choice questions. Each question will have four answers and only one of them will be valid. Incorrect questions will deduct 1/3 of the grade. *This part will be worth 30 points. At least 15 points are required to pass the exam.*
- There will be a part in which students will point out the histological details of various microphotographs. *In this part, 70 points can be obtained.* At least *35 points are required to pass the exam*.

In order to pass the exam, it will be necessary to obtain 50 points, which will correspond to a pass (5).

Students will take only one final exam.

EVALUATION CRITERIA AND LEVELS OF DEMAND

The final grade will be obtained from the written exam grade