

26761 - Histology I (General Histology)

Syllabus Information

Academic year: 2023/24

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

Schedule of classroom sessions and presentation of papers

The detailed calendar, including the days and times of lectures, practical classes and seminars, as well as the dates and times of the exams, will be available at the ADD (Anillo Digital Docente).

The subject is organized in 30 lectures, 15 hours of practical classes, 15 hours of seminars, 15 hours of directed work and 2 hours of evaluation.

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.

1.2.- Seminars

Seminars will be graded from 0 to 10. Students will be given short surveys related to the seminars that will be used to evaluate their progress in the subject

1.3.- Audiovisual works

The audiovisual work will be evaluated from 0 to 10, following the criteria defined in a rubric that will be given to the students on the day of the assignment

EVALUATION CRITERIA AND LEVELS OF DEMAND

The final grade will be obtained from the sum of:

- 90% of the written exam grade
- 10% of the grade of the paper