

26717 - Diagnostic and Therapeutic Procedures: Anatomical-Pathological

Syllabus Information

Academic year: 2024/25

Subject: 26717 - Diagnostic and Therapeutic Procedures: Anatomical-Pathological

Faculty / School: 104 - Facultad de Medicina

Degree: 304 - Degree in Medicine

ECTS: 6.0

Year: 3

Semester: First semester

Subject type: Compulsory

Module:

1. General information

This subject is the essential link between clinical medicine and the basic sciences and will enable the student to understand the pathological processes in order to detect and diagnose the disease in an efficient, competent and rigorous manner, to be able to treat it in the most appropriate way according to the knowledge in the field at a given time.

These approaches and objectives are aligned with the following Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 (<https://www.un.org/sustainabledevelopment/es/>), so that the acquisition of the subject learning results provides training and competency to contribute to some extent to the achievement of goals specified in point 6 of this guide.

2. Learning results

1. Describe the different anatomopathological diagnostic techniques and tests.
2. To know how to obtain and process a biological sample for its anatomopathological study, by means of the different diagnostic procedures.
3. To evaluate the indication of special staining techniques, including immunohistochemical techniques, required for the microscopic anatomopathological diagnosis of certain pathologies.
4. To assess the most important cytogenetic and molecular pathology applications in pathologic diagnosis.
5. To describe the most important anatomopathological characteristics of molecular, cytological, tissue and organic lesions, after theoretical and practical learning of the anatomopathological lesions caused by degeneration, inflammation, repair-scarring, infection, adaptation and neoplasia, in the different apparatuses and systems of the human body, and being able to distinguish, in these lesions, their different nature, types and degrees based on anatomopathological criteria, after interpreting the most significant lesions, through microscopic study, and correlating them with macroscopic alterations.
6. To raise the differential diagnosis in the different situations of degenerative, inflammatory, infectious, adaptive and neoplastic lesion and disease.
7. To solve problems presented as clinicopathological cases, with data from the clinical history and anatomopathological findings, which are examples of the use of the anatomoclinical method, based on the fact that the identification of organic, tissue, cellular and molecular morphological alterations allows to assess the symptoms and signs of the disease and its evolution.

3. Syllabus

1. Cellular pathology. Adaptive changes, cell injury and cell death.
2. Injuries due to metabolic disorders.
3. Circulatory alterations.
4. Inflammation and repair.
5. Immunopathology.
6. Neoplastic growth and molecular basis of cancer.
7. Benign and malignant epithelial tumours.
8. Mesenchymal tumours.
9. Skin pathology.
10. Pathology of blood vessels and heart.
11. Respiratory pathology.
12. Nephrourothelial Pathology.
- 13- CNS pathology.
- 14- Pathology of the digestive system.

- 15- Hepatic pathology.
- 16- Endocrine pathology.
- 17- Pathology of the Lymphoid and hematopoietic system.
- 18- Breast pathology.
- 19- Gynaecologic Pathology.
- 20- Osteoarticular Pathology.

4. Academic activities

Master class. 33 hours

Laboratory practices: 13 hours

Seminars: 9 hours

Workshops: 4 hours

Hospital practice: 2 hours

Academic assignment

On-demand tutoring by appointment with the teacher, directly or by e-mail

Personal study and work and evaluation tests: 90 hours

5. Assessment system

The final grade will be the sum of the exam score (maximum of 9 points out of 10) and two activities proposed in workshops (0.25 points each) and the academic assignment (0.5 points) (a maximum of 1 point in total out of 10).

The exam will consist of a multiple-choice test with 80 questions. This exam will assess theoretical concepts (60 questions) and practical concepts (20 questions), including questions based on macro and/or microscopic images. Each question will have 4 possible options. Incorrect answers will be penalized by subtracting 0.33 points. No points will be deducted for unanswered questions.

The tasks related to the workshops and the project will be evaluated according to a rubric that will be published on the course's Moodle.

To pass the course, it is necessary to pass the exam with a grade of 5 or higher. If this score is not achieved, the course will be considered not passed, and the average grade will not include the grades of the tasks and the project.

Students who do not pass the exam on the first attempt must retake the exam in the second session, including the entire syllabus. The grades of the tasks and the project will be retained.

6. Sustainable Development Goals

3 - Good Health & Well-Being

4 - Quality Education

5 - Gender Equality