

## 26712 - Semiotics and basic principles of physiopathology

### Syllabus Information

**Academic year:** 2023/24

**Subject:** 26712 - Semiotics and basic principles of physiopathology

**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:** 2

**Semester:** Second semester

**Subject type:** Compulsory

**Module:**

### 1. General information

It is the first contact of the student with the human clinic to acquire the knowledge for the later learning of the rest of the subjects. This subject provides the student with the necessary medical language to perform the medical act, the resources to acquire the skills for the collection of signs and symptoms and to develop clinical reasoning.

The objectives are: the study of the causes and mechanisms that produce the disease (etiopathogenesis) and of the functional alterations that occur in the different organs and systems as a consequence of the action of the pathogenic agent and the organic response (physiopathology); the acquisition of skills for the collection of signs and symptoms (propaedeutics); learning to assess the meaning of the symptoms and signs (semiology); and introduction to clinical reasoning. These objectives are aligned with the following Sustainable Development Goals

(ODS): Health and Well-being (Goal 3) and Quality Education (Goal 4)

### 2. Learning results

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

- 1: Be able to interpret the main signs and symptoms that make up the major clinical syndromes. 2: Be able to identify the main mechanisms of disease production, the fundamental alterations it induces in the subject's physiology and how they show up.
- 3: Be able to know the main contents of a physical examination by devices and systems, interpreting their meaning.
- 4: Be able to assess and link in a reasoned way the basic analytical modifications and the alterations of the basic ECG.
- 5: Be able to integrate the semiological interpretation of signs and symptoms through clinical reasoning in an appropriate syndromic context.
- 6: Be able to establish a syndromic diagnosis from the patient's signs and symptoms.

The learning results obtained in this subject are important because they enable the student to face the study of the rest of the subjects included in the Human Clinical Training and the performance of the professional profiles, which the students will be able to practice from the medical point of view both in Primary and Specialized Care. On the other hand, teamwork will contribute to the strengthening of interpersonal relationships necessary for the integral formation of future physicians.

### 3. Syllabus

**Theory:** - Introduction to Pathology: General ethology. Nutritional disorders.

Obesity. General malignant syndrome. Paraneoplastic syndrome. Physiopathology of the circulatory, respiratory, digestive, nervous system, endocrinological, haematological and renal systems. Pathophysiology of acid-base balance and of sodium, potassium and calcium metabolism.

**Seminars:** fever, weight loss, heart murmur, dyspnoea, chest pain, haemoptysis, decreased level of consciousness, loss of strength, melena, jaundice, ascites, adenopathy, polyuria and oedema.

**Workshops:** clinical history, general, chest, abdominal and neurological examination, eCG alterations.

### 4. Academic activities

The program offered to the student to help them achieve the expected results includes the following activities :

Classroom teaching 45% 2.70 ECTS (67.50 hours):

- Large groups: 1,22 ECTS (30,5 hours) 30 theoretical classes for the development of the theoretical agenda.
- Small groups: 1.22 ECTS (30.5 hours) for the development and discussion of the seminars
- Workshops: 15 hours, in which the student learns propaedeutics: clinical history, physical examination and interpretation of normal and pathological electrocardiogram.

- Tutoring: There will be 5 joint tutorials during the semester and each teacher will tutor the students in their assigned Seminar group.
- Non-face-to-face teaching 55% 3.30 ECTS (82.50 hours)

## 5. Assessment system

The student must demonstrate:

1: The knowledge of the causes, the mechanisms that produce the disease, its physio pathological alterations and the way it manifests itself. They will be evaluated in writing in a final exam in the exam calls established by the Centre according to the academic calendar, through questions to develop the theoretical agenda, the interpretation of ECG and tracings and analytics. The grade will be given from 0 to 10 and will represent 45% of the final grade of the subject.

2: The ability to make a syndromic diagnosis from the clinical history and complementary tests is evaluated by solving practical cases. The joint qualification will be graded from 0 to 10 and will account for 45% of the final grade.

3: Clinical reasoning skills will be assessed through active participation and spontaneous or at the request of the teacher, in the Seminars and Workshops of the subject. The joint evaluation will be graded from 0 to 10 and will represent 10% of the final grade. The assessment will be made through the teachers' registry. Attendance to small group activities (workshops and seminars) is mandatory. At least 80% attendance is required to pass the subject.