

Academic Year/course: 2021/22

## 29313 - General Physiopathology

### Syllabus Information

**Academic Year:** 2021/22

**Subject:** 29313 - General Physiopathology

**Faculty / School:** 229 - Facultad de Ciencias de la Salud y del Deporte

**Degree:** 442 - Degree in Odontology

**ECTS:** 6.0

**Year:** 2

**Semester:** First semester

**Subject Type:** Basic Education

**Module:**

### 1. General information

### 2. Learning goals

### 3. Assessment (1st and 2nd call)

### 4. Methodology, learning tasks, syllabus and resources

#### 4.1. Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as lectures, problem-solving, workshops, tutorials, and autonomous work and study.

#### 4.2. Learning tasks

This course is organized as follows:

- **Lectures** (45 hours). One-hour sessions. The content of the lectures will be based on a text or manual previously recommended and adapted to the level of student knowledge
- **Problem-solving** (10 hours). Students work on topics related to the course and must solve problems posed by personal and teamwork cases.
- **Workshops** (5 hours). The teacher will present the basic knowledge for the development of a clinical history with knowledge of basic physical examination and major signs of disease using audiovisual methods.
- **Tutorials:** The teacher of practical classes students will supervise group that has been assigned Seminars.
- **Autonomous work and study.** In addition, activities are complemented by autonomous student work devoted to the study and preparation of case studies for presentation. A teacher will help the students of the group which has been assigned.

#### 4.3. Syllabus

This course will address the following topics:

Lectures with the following program:

1. Introduction to pathology: the concept of disease. General etiology of diseases
2. Pathophysiology of diseases triggered by environmental causes

3. Pathophysiology of the immune response
4. General study of pathological inheritance. Concept of molecular diseases
5. Neoplasms. Concept, etiology and biological characteristics
6. Pathophysiology of the inflammatory response.
7. Alterations in nutrition
8. Pathophysiology of cardiac contraction. Pathophysiology of cardiac output. Heart failure
9. Valvular disorders and arrhythmia
10. Pathophysiology of the coronary circulation. Coronary insufficiency.
11. Pathophysiology of blood pressure regulation. Arterial hypotension. High blood pressure.
12. Protective mechanisms of the respiratory tract. Respiratory failure.
13. Main symptoms of the respiratory system
14. Pulmonary syndromes. Pleura. Mediastinum.
- 15 Pathophysiology of the motor unit and the sensitivity.
16. Pathophysiology of the spinal cord, Brainstem, and cerebellum.
17. Physiopathology of the cerebral cortex and the extrapyramidal system.
18. Pathophysiology of cerebral circulation. Intracranial hypertension syndrome. Meningeal syndrome
19. Pathophysiology of the peripheral nervous system. and vegetative nervous system
20. Pathophysiology of the hypothalamus. Pathophysiology of the pituitary gland
21. Pathophysiology of the adrenal gland.
22. Pathophysiology of the thyroid and parathyroid.
23. Pathophysiology of carbohydrates.
24. Pathophysiology of lipids and proteins
25. Pathophysiology of the erythrocyte
26. Pathophysiology of leukocytes. The lymphoid system.
27. Pathophysiology of haemostasis
28. Pathophysiology of swallowing, I pathology of esophagus and stomach
29. Pathophysiology of intestinal function
30. Jaundice. Liver failure. Pathophysiology of bile duct
31. Fluid and electrolyte balance, acid-base homeostasis.
32. Acute and chronic renal insufficiency. Etiology and pathophysiology
33. Renal syndromes and diseases of urinary tract
34. Pathophysiology of muscle, bone, and joints.

Seminars with the following program:

1. Fever
2. Loss of weight.
3. Dyspnea
4. Chest pain.
5. Cough, expectorating cough, hemoptysis.
6. Headache.
7. Melena, rectal bleeding
8. Jaundice.
- 9 Polyuria
10. Edema, ankle swelling

Workshops with the following program:

1. Clinical history. Basic analytic interpretation
2. Semiology and Exploration of the Cardiovascular System. ECG. Basic interpretation. Basic alterations of the electrophysiology
3. Semiology and respiratory exploration. Pulmonary Pathology in Dentistry.
4. Nervous System Semiology
5. Specific aspects of digestive pathology in Dentistry.

#### **4.4. Course planning and calendar**

Further information concerning the timetable, classroom, office hours, assessment dates (

<https://fccsyd.unizar.es/academico/horarios-y- Calendarios>) and other details regarding this course will be provided on the first day of class or please refer to the Faculty of Health and Sports Sciences website and Moodle.

#### **4.5. Bibliography and recommended resources**

To consult the bibliography and recommended resources, you must access the *Recommended Bibliography* link.