

Academic Year/course: 2022/23

29313 - General Physiopathology

Syllabus Information

Academic Year: 2022/23

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 learning process that has been designed for this subject is based on the following:

The subject is structured in:

- 45 hours of theoretical master classes. The content of the theoretical classes will be supported by a text or manual previously recommended and adapted to the student's level of knowledge.
- 10 hours of case resolution classes and thematic seminars. Students will work on cases related to the topic and must solve problems raised through personal and team work.
- 5 hours of workshops. The teacher will present the basic knowledge for the development of a clinical history with the knowledge of the basic physical examination and of the main signs of disease using methods audiovisual.

4.2. Learning tasks

The program offered to the student to achieve the expected results includes teaching activities face-to-face in the classroom with theoretical classes, workshops and seminars with cases prepared by the students.

- Face-to-face teaching: 2.40 ECTS (60 hours)
- Theoretical classes: 1.80 ECTS (45 hours)
- Seminars: 0.4 ECTS (10 hours)
- Workshops: 0.2 ECTS (5 hours)

These activities are complemented by autonomous student work dedicated to the study and preparation of cases practical for presentation: 3.6 ECTS (90 hours)

Tutorials: The professor of practical classes will tutor the students of the group of Seminars assigned to him.

4.3. Syllabus

The program offered to the student to achieve the expected results includes:

Theoretical classes:

- Topic 1. Introduction to pathology: concept of disease. General etiology of diseases
- Topic 2. Physiopathology of diseases triggered by the environment
- Topic 3. Pathophysiology of the immune response
- Topic 4. General study of pathological inheritance and genetics. Concept of molecular diseases
- Topic 5. Neoplasms. Concept, aetiology and biological characteristics of neoplastic disorders
- Topic 6. Physiopathology of the inflammatory response. Thermoregulation. Fever and Hyperthermia. Fever of unknown origin
- Topic 7. Diseases caused by inadequate nutrition. Malnutrition. Obesity.
- Topic 8. Physiopathology of cardiac contraction. Pathophysiology of cardiac output. Heart failure and cor pulmonale.
- Topic 9. Valvular heart diseases and Arrhythmias
- Topic 10. Physiopathology of the coronary circulation. Coronary insufficiency. Ischemic heart disease.
- Item 11. Physiopathology of tension regulation. Arterial hypertension. Arterial hypotension.
- Topic 12. Protective mechanisms of the respiratory tract. Respiratory failure.
- Topic 13. Main symptoms triggered by alterations of the respiratory system. Dyspnea, cough, cyanosis and hypoxia.
- Topic 14. Pulmonary Syndromes. Pleura and mediastinum disorders.
- Topic 15. Physiopathology of the motor unit and sensitivity.
- Topic 16. Physiopathology of the spinal cord, cerebrovascular and cerebellum disorders.
- Topic 17. Physiopathology of the cerebral cortex and the extrapyramidal system.
- Topic 18. Physiopathology of the cerebral circulation. Intracranial hypertension. Meningeal syndrome.
- Topic 19. Physiopathology of the peripheral nervous system and the autonomic nervous system.
- Topic 20. Physiopathology of the hypothalamus. Pituitary pathophysiology
- Topic 21. Physiopathology of the adrenal gland.
- Topic 22. Physiopathology of the thyroid and parathyroid.
- Topic 23. Physiopathology of carbohydrates.
- Topic 24. Physiopathology of lipids and proteins
- Topic 25. Physiopathology of the Red Blood Cell. Anaemias. Polycytemias
- Topic 26. Physiopathology of leukocytes and myeloproliferative disorders. Lymphoid disorders
- Topic 27. Pathophysiology of coagulation and thrombosis disorders
- Topic 28. Physiopathology of swallowing and gastric disorders. Nausea, vomiting and indigestion.
- Topic 29. Pathophysiology of intestinal function. Disorders of absorption. Diarrhoea and constipation
- Topic 30. Jaundice. Liver failure. Physiopathology of the biliary tract
- Topic 31. Alterations of the hydric balance and eq. acid base. Acidosis and alkalosis
- Topic 32. Acute and chronic renal failure. Causes and pathophysiology
- Topic 33. Syndromes of kidney and urinary tract disorders
- Topic 34. Physiopathology of muscle, bone and joints.

Seminars:

- 1.- Fever
- 2.- Circulatory weight loss
- 3.- Dyspnoea
- 4.- Respiratory chest pain
- 5.- Cough, expectoration, haemoptysis
- 6.- Headache
- 7.- Gastrointestinal bleeding
- 8.- Jaundice
- 9.- Polyuria
- 10.- Edema

Workshops:

- S1. Clinical history and basic analytical interpretation
- S2. Semiology and exploration of the cardiovascular System. ECG. Basic interpretation. Basic alterations of electrophysiology.
- S3. Semiology and respiratory examination. Pulmonary pathology in Dentistry.

S4. Semiology of the nervous system

S5. Specific aspects of digestive pathology in Dentistry.

4.4. Course planning and calendar

Calendar of face-to-face sessions and presentation of works

The school calendar, the timetable of the subject and the date of the global evaluation of the subject can be found in the faculty website:

<https://fccsyd.unizar.es/es/horarios-y-calendarios-odontologia>

The teaching activity for large and small groups will be taught from September to February of the academic year, dates corresponding to the 3rd semester of the Degree:

- Master classes: 3 classes a week until the program is completed
- Cases and Seminars: 1 hour per week until the program is completed
- Workshops: 5 hours to be carried out throughout the course.

4.5. Bibliography and recommended resources

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