

#### Información del Plan Docente

2018/19
29214 - Physiopathology
229 - Facultad de Ciencias de la Salud y del Deporte
441 - Degree in Human Nutrition and Dietetics
6.0
2
Half-yearly
Compulsory

### **1.General information**

- 1.1.Aims of the course
- 1.2.Context and importance of this course in the degree
- 1.3.Recommendations to take this course
- 2.Learning goals
- 2.1.Competences
- 2.2.Learning goals
- 2.3.Importance of learning goals
- 3.Assessment (1st and 2nd call)

## 3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

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

### 4.1. Methodological overview

#### The learning process that has been designed for this course is based on the following:

The subject is divided into 35 theoretical lectures of one hour, and 10 thematic seminars of one hour and 5 workshops of two hours. The content of the lectures will be based on a book or manual recommended previously and adapted to the level of knowledge of the student. In the Seminar students work on cases related to the subject and must resolve problems through personal effort and teamwork. In Workshops the teacher will present the basic knowledge for the development of a medical history with the knowledge of the basic physical examination and the main signs of the disease using audiovisual methods.



As teaching support will be provided in the web: literature recommendations, program of the course, guide teaching, hours of theoretical and practical classes, as well as summaries of theoretical subjects or supplementary material of the practices in some cases, if necessary. The address where this material will appear is: http://www.unizar.es/dvirtual.htm (Teaching Digital Ring).

## 4.2.Learning tasks

The course includes ECTS organized according to:

Lectures 45% 2.70 ECTS (67,50 hours)

Large groups: (50%) 1.40 ECTS (35 hours)

Small groups (40%) 1,04 ECTS (26 hours)

Tutorials 0.7 ECTS

Seminars: 10

Workshops: 5

1 ECTS= 10 onsite hours

The Professor will make tutorials to students in the Group's seminars assigned

In addition activities are complemented with autonomous student work dedicated to the study and preparation of case studies for presentation 55% 3,30 ECTS (82,50 hours)

## 4.3.Syllabus

PHYSIOPATHOLOGY.

The program offers to the student to achieve the expected results includes the following activities:

45% face-to-face instruction 2.70 ECTS (67,50 hours) : (50%) 1.40 ECTS (35 hours) 35 lectures with the following program:

1 Introduction to pathology: concept of disease. General etiology of diseases

2 Pathophysiology of diseases triggered by environmental causes

3 Pathophysiology of 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 Thermoregulation. Febrile syndrom. Fever of unknown origin
- 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 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 peripheral nervous system.and vegetative nervous system
- 20 Pathophysiology of the hypothalamus. Pathophysiology pof 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 esopaus and stomach
- 29 Pathophysiology of intestinal function
- 30 Jaundice. Liver failure. Pathophysiology of bile duct
- 31 Alterations in nutrition
- 32 Fluid and electrolyte balance , acid-base homeostasis.
- 33 Acute and chronic renal insufficiency. Etiology and pathophysiology
- 34 Renal syndromes and diseases of urinary tract
- 35 Pathophysiology of muscle, bone and joints.
- (40%) 1.04 ECTS (26 hours)
- 10 Seminars with the following program:
- 1 Fever
- 2. Loss of weight.
- 3 Dyspnea
- 4. Chest pain.
- 5 Cough, expectorating cough, hemoptysis.
- 6 Headache.



- 7 Steatorrhea
- 8. Jaundice.

9 Polyuria

- 10 Edema, ankle swelling
- 5 Workshops with the following program
- 1. Clinical history
- 2. General examination of the patient
- 3. Digital ring. Sources of information on human pathology.
- 4 Medical images medical. Signs of disease.
- 5. Basic analytic interpretation

Tutorials: A teacher will be the guardian of the students of the group which has assigned

### 4.4.Course planning and calendar

Calendar of sessions and presentations during the 3th semester of the degree (from September to January). Lectures: 2-3 classes a week (14 weeks). Workshops: the first 5 weeks. Seminars: weekly, after the workshops. Calls for examination on dates designated by the Centre (June).

For further details concerning the timetable, classroom and further information regarding this course please refer to https://fccsyd.unizar.es/

#### 4.5.Bibliography and recommended resources

- Laso Guzmán, F. Javier. Patología general : Introducción a la medicina clínica / F. Javier Laso Guzmán . 1ª ed., reimp. Barcelona : Masson, 2005
- García-Conde Bru, Javier. Patología general : semiología clínica y fisiopatología / J. García-Conde, J. Merino Sánchez, J. González Macías ; [colaboradores, V. Alberola ... et al.] . 2a ed., [reimp.] Madrid [etc.] : McGraw-Hill Interamericana de España, D.L. 2010
- Pérez Arellano, José Luis. Manual de patología general / José Luis Pérez Arellano. . 6ª ed. Amsterdam ; Barcelona [etc.] : Elsevier Masson, D.L. 2010.
- Fisiopatología aplicada a la nutrición / coordinadores del libro Mercè Planas, Cleofé Pérez-Portabella . 2ª Barcelona



: Mayo, 2006

- Fundamentos de fisiopatología / coordinadores, A. Esteller Pérez, M. Cordero Sánchez . 1a. ed., 2a. reimpr. Madrid [etc.] : McGraw-Hill Interamericana, D.L. 2002
- Medicina interna [17<sup>a</sup> ed.] / fundado por A. von Domarus ; continuado por P. Farreras Valentí ; director (desde 1968)
  C. Rozman ; subdirector (desde 2003), F. Cardellach López . 17<sup>a</sup> ed. Ámsterdam ; Barcelona ; Madrid [etc.] : Elsevier, 201
- Castro S. Manual de Patología General. Ed. Masson.
- Smith LH y Thier SO. Fisiopatología. Panamericana.
- Planas M, Perez C. Fisiopatología Aplicada a la nutrición. Ed Mayo
- Esteller A y Cordero M. "Fundamentos de Fisiopatología", McGraw-Hill. Interamericana, Madrid, España, 1998.

Farreras P & Rozman C. "Medicina Interna".

#### **RECURSOS EN INTERNET**

- www.imagenmed.es
- http://diagnosticoporimagenmi.blogspot.com/
- Enciclopedia de términos médicos: http://www.iqb.es/mapa.htm