

**COURSE DATA****Data Subject**

<b>Code</b>	34469
<b>Name</b>	General pathology and semiology
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	6.0
<b>Academic year</b>	2021 - 2022

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1204 - Degree in Medicine	Faculty of Medicine and Odontology	3	First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1204 - Degree in Medicine	12 - Human clinical training I	Obligatory

**Coordination**

<b>Name</b>	<b>Department</b>
FORNER GINER, MARIA JOSE	260 - Medicine

**SUMMARY**

The subject “General pathology and semiology” has as the basic objective to lay the foundations of the patient approach in order to obtain the maximum amount of information both subjective, through the careful anamnesis, and objective, through the physical exploration, to establish the bases of the diagnostic process. From the symptoms and signs, the students will be able to build in the future the diagnosis and the treatment of the nosologic entities.

The learning is based both in the physiopathological understanding of the symptoms and signs and in the learning of skills to obtain them with the highest precision.

**PREVIOUS KNOWLEDGE**



### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

### Other requirements

#### 1204 - Degree in Medicine

- Understand and recognise the effects, mechanisms and manifestations of diseases over the structure and function of the human body.
- Understand and recognise source agents and risk factors which determine health status and the development of diseases.
- Understand the foundations of action, indications and efficacy of therapeutic interventions, based on available scientific evidence.
- Obtain and elaborate a clinical history with relevant information.
- Perform a physical examination and a mental health assessment.
- Have the capacity to make an initial diagnosis and establish a reasonable strategy of diagnosis.
- Establish the diagnosis, prognosis and treatment, applying principles based on the best information available and on conditions of clinical safety.
- Know how to use the sources of clinical and biomedical information available, and value them critically in order to obtain, organise, interpret and communicate scientific and sanitary information.
- Know how to use IT in clinical, therapeutic and preventive activities, and those of research.
- Be able to formulate hypothesis, gather information and evaluate it critically in order to solve problems by following the scientific method.
- Organizar y planificar adecuadamente la carga de trabajo y el tiempo en las actividades profesionales.
- Capacidad para trabajar en equipo y para relacionarse con otras personas del mismo o distinto ámbito profesional.
- Criticism and self-criticism skills.
- Capacity for communicating with professional circles from other domains.
- Acknowledge diversity and multiculturality.
- Consideration of ethics as a fundamental value in the professional practise.
- Working capacity to function in an international context.
- Knows how to perform a complete anamnesis, focused on the patient and orientated to various pathologies, interpreting its meaning.



- Knows how to evaluate modifications in clinical parameters at different ages.

1. Knowledge of the mechanisms of being ill.
2. Knowledge of the organism responses when being ill.
3. Knowledge of the major syndromes
4. Acquisition of clinical attitudes and skills that qualify to deal with the learning of the medical-surgical pathology.
5. Acquisition of the skill of keeping a critical analysis of the knowledge.

## DESCRIPTION OF CONTENTS

### **1. The sick man and the disease. Concept of etiology, pathogenesis, nosology, physiopathology, semiology, semiology techniques and nosotaxy.**

Concept and general characteristics of the disease, its mechanisms of diffusion and its dynamic structure, concepts of functional and organic disorder, and the personal and constitutional aspects of the morbid function. On this basis, to establish the reasoned content and the general objectives of the subject. Causes and mechanisms by which the disease is developed, its Evolutive periods and the modifications that can be produced in them, the disorders of physiology that take place in the disease, its objective and subjective manifestations, its achievement technique, its reunion in syndromes, the classification of the diseases and the criteria used for it.

### **2. The medical act and its content: anamnesis, physical examination and complementary examinations. Clinical judgment: syndrome, diagnosis and prognosis of the disease.**

Doctor performance with the patient and approach to the patient. General theory of the recognition of the disease, methods by which we can have access to the diagnosis and its types, the prediction of the disease evolution, its scope and its types.

-Clinical history: to define the clinical history, its necessity, types and parts, as well as its teaching, auditory and medical-legal value.

-The anamnesis: current disease and antecedents: general theory of interrogation, its methods and system of collection, the reason of the consulting, los prodromes, the real begin of the symptomatology and its chronological evolution, the current discomforts, the familiar antecedents, physiological personal antecedents, toxic habits and pathologic antecedents of the patient. The anamnesis: anamnesis by systems: concept and system of collection of the anamnesis by systems.



### 3. Complementary examinations

Types. Normality and biological signification criteria. Concept of sensitiveness, specificity, positive and negative prognosis value.

### 4. Part I. GENERAL CLINICAL MANIFESTATIONS

4. Unspecific manifestations of the disease. Constitutional syndrome and disorders of the thermoregulation. Fever: mechanisms, consequences and types of fever. Asthenia, anorexia and weight change.

5. Pain.

Mechanisms, types and characteristics.

6. Cardiovascular semiology I.

7. Cardiovascular semiology II.

Symptoms. Inspection, Palpation, Auscultation. Pulses.

8. Respiratory semiology I y II.

Symptoms. Inspection. Palpation, Auscultation.

9. Semiology of the digestive system I.

10. Semiology of the digestive system II.

Symptoms. Inspection. Palpation, Auscultation.

11. Semiology of the nervous system I.

12. Semiology of the nervous system II.

Symptoms. Inspection. Exploration.

13. Semiology of the muscle-skeletal system and the diseases of the hematopoietic organs I.

14. Semiology of the muscle-skeletal system and the diseases of the hematopoietic organs II

Symptoms. Inspection. Exploration.

15. Semiology of the endocrine diseases and of the nephron-urological system I

Symptoms. Inspection. Exploration.



## 5. Part II: ETIOLOGICAL FACTORS

### 16. Physical agents:

Pathogenic actions of the gravity and weightlessness. Changes in the atmospheric pressure. Disorders produced by electricity, radiations, photosensitivity, and climate changes. Thermal agents: hot and cold with their local and systemic effects.

### 17. Chemical agents:

Common toxic syndrome. Poisoning. Drugs abuse and dependency. Pathogenic action of the tobacco and alcohol.

### 18. Living agents:

Infection and infectious diseases.

### 19. Environmental agents:

Demography, aging. Disorders of nutrition and deficiencies.

### 20. Heritage:

Types of inherited transmission, its morphological or biological phenotypic expression, its difference with the concept of congenital disease, as well as the current possibilities of its early diagnosis.

## 6. Part III: MECHANISMS OF DISEASE PRODUCTION

### 21. Unspecific reactions to stress:

Sympathetic-adrenal syndrome and adaptation general syndrome. Systemic response to the trauma aggression.

### 22. Tumors:

Mechanisms Etiological factors

Tumor general syndrome. Paraneoplastic syndromes. Tumor markers.

### 23. Vascularization disorders:

Acute and chronic ischemia. Arteriosclerosis. Mechanisms.

## 7. THEMATIC UNIT

### CLINICAL PRACTICAL SESSIONS

1 Cardiovascular semiology I

2 Respiratory semiology

3 Respiratory semiology I

4 Respiratory semiology II

5 Digestive system semiology I

6 Digestive system semiology II

7 Nervous system semiology



8 Muscle-skeletal system semiology.

9 Semiology of the diseases of the hematopoietic organs

10 Semiology of the endocrine diseases and of the nephron-urologic system.

#### SEMINARS

Content: Great syndromes.

1. Cardiac insufficiency
2. Respiratory insufficiency
3. Blood count and disorders: Anemic syndrome
4. Hepatic-cellular insufficiency
5. Renal insufficiency
6. Abdominal pain
7. Arthritis
8. Conscience alteration

#### SKILLS LABORATORY

1. Physical exploration of the respiratory system
2. Physical exploration of the circulatory system

#### CLINICAL PRACTICES

Content:

1. The physical exploration.
2. The general inspection I: general data.
3. The general inspection II: static and dynamic ectoscopy. Palpation, percussion and auscultation.
4. The complementary explorations. The topographical explorations.

## WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	26,00	100
Seminars	20,00	100
Laboratory practices	9,00	100
Clinical practice	20,01	100
Development of individual work	10,00	0
Study and independent work	45,00	0
Readings supplementary material	10,00	0
Preparation of practical classes and problem	10,00	0
<b>TOTAL</b>	<b>150,01</b>	



## TEACHING METHODOLOGY

- **Theory.** Master classes where the teacher exposes the foundations of the symptoms and signs, from their physiopathology to their recognition with the use of the physical exploration or basic exploratory methods.
- **Seminars.** Several clinical cases are exposed in which the realization of anamnesis and physical exploration data are applied. The semiologic value of each of the symptoms and signs are analyzed, as well as the construction of syndromes that will help to the patient guidance.
- **Laboratory Practices.** Performed in the clinical skills classroom, they are focused in the learning of cardio-respiratory auscultation in the available phantoms.
- **Clinical Sessions.** Based on the exposition and commentary of normal exploratory videos and about the main clinical signs.
- **Clinical Practices-** 1 week of duration. Patients visit or attending to primary health care consultations where the students will collect data about the anamnesis and explorations tutored by a medical care professor.

## EVALUATION

In this subject, the assessment of knowledge and skills will be made by the following elements:

**Theoretical Assessment:** 50% of the final mark. It will be made by a written test that will be about the content of the program and will have as the main objective to assess the knowledge acquisition. Written final exam, multiple-choice, two hours of duration, about the units of the subject, that will have 50 multiple-choice questions, right answers will have a value of 1 point, the wrong ones, 0,333 and the non-answered, 0 points. The valuation will be of the 50%. The content of the test will be the same for each group of the same subject.

**Practical Assessment:** 50% of the final mark. It will be made by the continuous assessment of the participation in the different activities and with the fulfillment of a written test that assesses the acquisition of skills related with the general and specific competencies. Written final exam, multiple-choice, about the practical content of the subject, that will have 50 multiple-choice questions, right questions will have a value of 1 point, the wrong ones, 0,333 and the non-answered, 0 points. The valuation will be of the 50%.

If the student does not achieve IN BOTH TESTS a >55% of the right answers, the score of the subject will be FAIL.

An oral test will be made additionally in the established circumstances and conditions.



Attendance to practical sessions is mandatory. Unjustified non-attendance to more than 20% of the sessions will make it impossible to pass the course.

## REFERENCES

### Basic

- MACLEOD'S. Clinical Examination [Paperback]. Elsevier.
- LASO. Patología General: Introducción a La Medicina Clínica. Editorial Masson.
- HARRISON. Principios de Medicina Interna. 18ª Edición McGraw Hill.
- LS Bickley. Guía de exploración física e historia clínica. 10ª Edición Wolters Kluwer. 2010.
- F.J. LASO. Introducción a La Medicina Clínica. 2ª Edición. Masson. 2010.

## ADDENDUM COVID-19

**This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council**

Seguendo las recomendaciones del Ministerio, la Consellería y el Rectorado de nuestra Universidad, para el período de la "nueva normalidad", la organización de la docencia para el primer cuatrimestre del curso 2021-22, seguirá un modelo híbrido, donde tanto la docencia teórica como práctica se ajustará a los horarios aprobados por la CAT pero siguiendo un modelo de Presencialidad / No presencialidad en la medida en que las circunstancias sanitarias y la normativa lo permitan y teniendo en cuenta el aforo de las aulas y laboratorios docentes. Se procurará la máxima presencialidad posible y la modalidad no presencial se podrá realizar mediante videoconferencia cuando el número de estudiantes supere el coeficiente de ocupación requerido por las medidas sanitarias. De manera rotatoria y equilibrada los estudiantes que no puedan entrar en las aulas por las limitaciones de aforo asistirán a las clases de manera no presencial mediante la transmisión de las mismas de manera síncrona/asíncrona via "on line".