

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

<b>Code</b>	33962
<b>Name</b>	Pathophysiology
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	4.5
<b>Academic year</b>	2022 - 2023

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. Period</b>	<b>year</b>
1205 - Degree in Human Nutrition and Dietetics	Faculty of Pharmacy and Food Sciences	3	First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1205 - Degree in Human Nutrition and Dietetics	21 - Molecular pathology and physiopathology	Obligatory

**Coordination**

<b>Name</b>	<b>Department</b>
CENTENO GUIL, JOSE M	190 - Physiology

**SUMMARY**

This subject consists of a basic part that addresses the general study of the pathophysiology of the organism. Later studying the pathophysiology of organs and systems giving special importance to those that relate or disorders that affect directly on metabolic and nutritional aspects

**PREVIOUS KNOWLEDGE****Relationship to other subjects of the same degree**

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



### Other requirements

It is recommended to have completed General Physiology and Physiology of Apparatus and Systems

## COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

### 1205 - Degree in Human Nutrition and Dietetics

- Apply scientific knowledge of physiology, physiopathology, nutrition and food to offer dietary planning and advice to both healthy and sick individuals and communities throughout their life cycle.
- Skills in analysis and synthesis.
- Saber cómo plantearse problemas y utilizar los métodos adecuados para su resolución, siendo capaz de llevar a cabo un razonamiento crítico.
- Ser capaz de trabajar en equipo y de organizar y planificar actividades.
- Ser capaz de llevar a cabo una comunicación oral o escrita.
- Know the basic pathophysiology of the human body at the various stages of life.
- Know the influence of nutrition on pathological states and vice versa.
- Understand and interpret how an organ or systemic failure affects the lack of constancy of the internal environment.
- Assess and calculate nutritional requirements in situations of health and illness at any stage of the life cycle.
- Conocer los aspectos fisiopatológicos de las enfermedades relacionadas con la nutrición.
- Identificar los problemas dietético-nutricionales del paciente, así como los factores de riesgo y las prácticas inadecuadas.
- Understand and use clinical and biochemical data in the nutritional assessment of patients and in their dietary-nutritional treatment.
- Manejar las herramientas básicas en TIC utilizadas en el campo de la Alimentación, Nutrición y la Dietética.

## LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)

Understand the basic pathophysiology of the organism.

Understand how nutrition influences the pathological states.

Understand the importance of each organ and the influence of organ failure on the entire system.

Knowing how to approach problems and use appropriate methods for their resolution



## DESCRIPTION OF CONTENTS

### 1. Introduction to Physiopathology

Introduction to Pathophysiology. Cellular pathology. Pathology of homeostatic balance (pH, electrolyte balance, etc ...)

### 2. Gastrointestinal pathophysiology

General study of the digestive pathology. General expression of the pathology of the digestive tract. Pathology of the exocrine pancreas. Liver pathology. Pathology of carbohydrates, lipids, proteins and trace elements

### 3. Pathophysiology of the endocrine system.

Endocrine pathophysiology. Pathology of the hypothalamus, pituitary and accessory glands. Pathophysiology of the thyroid, adrenal gland, parathyroid

### 4. Pathophysiology of organs and systems

Study of the Pathophysiology of other organs and systems of the human body. Respiratory, cardiocirculatory and renal pathophysiology, etc ...

## WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	38,00	100
Tutorials	2,00	100
Seminars	2,00	100
Development of group work	3,00	0
Development of individual work	3,00	0
Study and independent work	61,50	0
<b>TOTAL</b>	<b>109,50</b>	

## TEACHING METHODOLOGY

This subject is addressed through lectures.

In addition, establish a series of tutorials for students to solve the doubts that may arise in each of the thematic units.



In addition, students must carry out and present a theoretical work.

During the activities, both theoretical and practical, examples of how the subject should be applied in relation to the Sustainable Development Goals (SDGs) will be given. The SDGs will also be taken into account in the proposals of topics for the coordinated seminars. This will provide students with knowledge, skills and motivation to understand and manage these SDGs, while promoting reflection and criticism.

## EVALUATION

Teamwork (coordinated seminar: 10% of the final grade). The personal participation of each student and the quality of the work presented will be evaluated according to the regulations for coordinated seminar work that appear on the website of the Faculty of Pharmacy. Written work, presentation, defense, and proposed activities will be taken into account for their assessment according to the guidelines on coordinated seminars available at the web page of the Degree. The level of understanding of the contents as well as the skills for its presentation and discussion will be assessed.

The assessment of the assimilated knowledge will be made from a written test that will correspond to 90% of the final grade, and that will include the theoretical contents of the entire subject, which will be done according to the official calendar of the center.

In this exercise a minimum of 40% of the maximum score of the test must be achieved. In the event that the exam has two parts, each of them must be passed with a score of 20% of the maximum score of the complete exam, and the final mark must, therefore, reach 40% of the total mark. .

To pass the subject, the exam grade added to that of the coordinated seminar must be at least 5 points.

Students who do not achieve the passing grade in the first call must take an examination of all the theoretical material of the course in the second call. In the evaluation of this second call, the teamwork presented will be taken into account.

## REFERENCES

### Basic

- Laso FJ. Patología General. Introducción a la Medicina Clínica. Masson. 2004

Sisinio de Castro. Manual de Patología General. Elsevier Masson. 2006