

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

<b>Code</b>	33007
<b>Name</b>	General pathology
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	6.0
<b>Academic year</b>	2024 - 2025

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. Period year</b>
1202 - Degree in Physiotherapy	Faculty of Physiotherapy	2 First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1202 - Degree in Physiotherapy	7 - Medical conditions and surgical conditions and their treatments	Basic Training

**Coordination**

<b>Name</b>	<b>Department</b>
CASAÑA GRANELL, JOSÉ	191 - Physiotherapy
SUCH MIQUEL, LUIS	191 - Physiotherapy

**SUMMARY**

- Causes and mechanisms of disease in general.
- Recognition and evaluation of symptoms of disease.
- Recognition of the time course of the disease.

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

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



Other requirements

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

1202 - Degree in Physiotherapy

- Students must have acquired knowledge and understanding in a specific field of study, on the basis of general secondary education and at a level that includes mainly knowledge drawn from advanced textbooks, but also some cutting-edge knowledge in their field of study.
- Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.
- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.
- Students must be able to communicate information, ideas, problems and solutions to both expert and lay audiences.
- Students must have developed the learning skills needed to undertake further study with a high degree of autonomy.
- Know and understand people's morphology, physiology, pathology and behaviour under health and sickness in the natural and social environments
- Recognise vital risk situations and be able to execute basic and advanced life support manoeuvres.
- Respect fundamental rights and equality between men and women.
- Recognise diversity, multiculturalism, democratic values and peace culture.
- Work in teams.
- Have the ability to organise and plan work.
- Know the general aspects of the endogenous and exogenous aetiology pathology of the locomotor, respiratory, cardiovascular and nervous systems.
- Know the structural, physiologic and functional changes that occur as a consequence of physiotherapy intervention.
- Know how to recognise and assess the symptoms of the diseases.
- Recognise the evolution momentum of the learnt diseases.
- Know the diverse medical and surgical treatments of the studied diseases.
- Promote the participation of the users and their families in the recovering process.



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

The student will know the characteristic aspects of syndrome and the time course of the same.

## DESCRIPTION OF CONTENTS

### 1. THEORETICAL PROGRAM 1

- Unit 1 .- Concept of health. History.
- Unit 2 .- Types of diseases due to genetic alterations.
- Unit 3 .- Febrile syndrome. Alterations resulting from climate change: hyperthermia and hypothermia. Physical and environmental agents as a cause of disease.
- Unit 4 .- Radiation and high-voltage electricity to cause disease.
- Unit 5 .- Toxic agents to cause disease and infectious diseases.
- Unit 6 .- Changes of the internal environment: Acidosis, alkalosis and variations of hydrosaline metabolism.
- Unit 7 .- Pathophysiology of cerebrospinal fluid.
- Unit 8 .- General pathology of tumors.
- Unit 9 .- General defense mechanism: inflammation.
- Unit 10 .- Specific defense mechanism: immunity.
- Unit 11 .- Changes in erythrocytes and leukocytes.
- Unit 12 .- Changes in platelets and blood clotting.
- Unit 13 .- Pathophysiology of carbohydrate metabolism.
- Unit 14 .- Pathophysiology of motor function I.
- Unit 15 .- Pathophysiology of motor function II.
- Unit 16 .- Vestibular and cerebellar syndromes.
- Unit 17 .- Extrapyrarnidal syndrome.
- Unit 18 .- Pathophysiology of the special senses I: sensitivity and pain.
- Unit 19 .- Pathophysiology of the special senses II: sight, hearing and taste.
- Unit 20 .- Pathophysiology of consciousness.

### 2. THEORETICAL PROGRAM 2

- Unit 21 .- Calcium and phosphorus metabolism.
- Unit 22 .- Bone tissue pathophysiology.
- Unit 23 .- Joint Pathophysiology. Arthritis.
- Unit 24 .- Pathophysiology of muscle disorders.
- Unit 25 .- Lymph Pathophysiology of the joints.
- Unit 26 .- Pathophysiology of coronary circulation.
- Unit 27 .- Pathophysiology of coronary circulation II.
- Unit 28 .- Pathophysiology of blood pressure.
- Unit 29 .- Pathophysiology of heart failure.
- Unit 30 .- Pathophysiology of artery and vein I.
- Unit 31 .- Pathophysiology of artery and vein II.



Unit 32 .- Respiratory insufficiency.

Unit 33 .- Manifestations of respiratory failure.

Unit 34 .- Digestive Pathophysiology.

Unit 35 .- Jaundice, bile ducts, pancreas and liver.Pathophysiology.

### 3. PRACTICAL PROGRAM

Activity 1: Work 1 .- Radiation.

Activity 2: Work 2 .- General defense mechanism: inflammation.

Activity 3: Work 3 .- Specific defense mechanism: immunity.

Activity 4: Work 4 .- Changes in platelets and blood clotting.

Activity 5: Work 5 .- Diabetes.

Activity 6: Work 6 .- Syndrome upper motor neuron.

Activity 7: Work 7 .- Syndrome lower motor neuron.

Activity 8: Working 8 .- Vestibular and cerebellar syndromes.

Activity 9: Work 9 .- Extrapyrarnidal syndrome.

Activity 10: Work 10 .- Osteoarthritis and arthritis.

Activity 11: Work 11 .- Pathophysiology of muscle disorders.

Activity 12: Work 12 .- Pathophysiology of lymphatic vessels.

Activity 13: Work 13 .- Pathophysiology of blood pressure.

Activity 14: Work 14 .- Acute and chronic heart failure.

Activity 15: Work 15 .- Venous circulatory failure.

Activity 16: Work 16 .- Fibrosis and emphysema.

Activity 17: Work 17 .- Symptoms of bronchopulmonary problems.

Activity 18: Work 18 .- Respiratory failure due to decrease in vital capacity (anatomical problems and obesity).

### WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	40,00	100
Classroom practices	20,00	100
Development of individual work	25,00	0
Study and independent work	10,00	0
Preparation of evaluation activities	29,00	0
Preparing lectures	26,00	0
<b>TOTAL</b>	<b>150,00</b>	



## TEACHING METHODOLOGY

During the lectures will be taught master classes at most of the period and to a lesser extent, current research seminars.

As for practical classes, work will be presented by groups of 2 to 4 students to choose between the practical program proposed. Throughout the written test will be penalized incorrect spelling.

**“The teaching program may be modified during the development of the course if the teacher under teacher quality criteria and assimilation of knowledge by the student, it deems appropriate”.**

## EVALUATION

**Theoretical program (75%)**

**Practical program (25%)**

Practical program evaluation will be conducted by carrying out a mandatory statement of work that students will have performed in groups.

**Summary of the evaluation**

Type of test	Explanation	Percentage of the final
Objective (multiple choice)	<p>⇒ 40 questions</p> <p>⇒ 4 options, 1 right</p> <p>⇒ SCORE = [Successes - (failures/options - 1)] x (highest score/number of questions)</p>	75%
Work	Exhibition of work required to be made the students into groups.	25%



TOTAL=		100%
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All written tests will be penalized if there is spelling impropriety.

Each one of the tests will be assessed on exposed 10, and then get the percentage for each.

The final course grade will be averaged, provided the student has earned at least 5 out of 10 in each of the program: theoretical and practical.

## REFERENCES

### Basic

- Pérez Arellano J. L. Sisinio de Castro Manual de Patología General. Elsevier-Masson. 8ª Edición. 2019.
- Laso F.J. Patología general, introducción a la medicina clínica. Masson. 7ª edición. 2013.
- S. de Castro del Pozo. Manual de Patología General. Masson. 5ª Edición. 1993.

### Additional

- Guyton y Hall. Tratado De Fisiología Médica. McGraw Hill. 13ª Edición. 2016.
- Buja L.M.& Krueger G.R.F. Anatomía patológica Netter. Masson. 1ª edición. 2006
- Harrison. Principios de medicina interna. 16ª edición. 2018.