

Degree	Type	Year
2500892 Physiotherapy	FB	1

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Teaching groups languages

You can view this information at the [end](#) of this document.

Prerequisites

No official prerequisites are defined for this subject. However, it is recommended that the student has acquired the basic knowledge and competences of the subjects corresponding to Cell Biology and Biochemistry and Molecular Biology.

Objectives and Contextualisation

The Function of the Human Body subject is programmed during the first course of the Degree of Physiotherapy and develops the knowledge of the basic principles of the function of systems of the human organism. The acquisition of the competences of this subject will allow the student to understand the function of normal systems and be well prepared to confront the mechanisms of the pathologies that affect these systems, and the therapeutic strategies that could improved it.

The general training objectives of the subject are:

- To know the basic concepts of the Physiology of the different functional systems of the healthy human organism.
- To acquire an integrated vision of the interrelations of the different systems of the organism

- To integrate the Physiology knowledge with concepts learned in other basic subjects, that deal with the structure and the cellular and molecular aspects of the organism.
- To train the student to apply the physiological knowledge in deducing the consequences of the diseases.
- To acquire practical skills for performing the most frequent functional tests in the biomedical and physiotherapy field.
- To acquire attitudes aimed at the promotion of health and the prevention of disease, oriented towards health medicine, and appropriate for a medical practice based on scientific evidence.

Competences

- Analyse and synthesise.
- Display knowledge of the morphology, physiology, pathology and conduct of both healthy and sick people, in the natural and social environment.
- Display knowledge of the sciences, models, techniques and instruments around which physiotherapy is structured and developed.
- Make changes to methods and processes in the area of knowledge in order to provide innovative responses to society's needs and demands.
- Solve problems.
- Take sex- or gender-based inequalities into consideration when operating within one's own area of knowledge.

Learning Outcomes

1. Analyse a situation and identify its points for improvement.
2. Analyse and synthesise.
3. Communicate using language that is not sexist.
4. Explain the functioning of the the human body in health in order to have a sound basis for understanding the processes that induce disease.
5. Explain the fundamental biochemical principles of the functioning of the human body.
6. Identify life-threatening situations and perform basic and advanced life support manoeuvres.
7. Identify physiological and structural changes that can take place as a result of the injury and/or disease process in the different systems.
8. Identify situations in which a change or improvement is needed.
9. Propose new methods or well-founded alternative solutions.
10. Propose new ways to measure success or failure when implementing innovative proposals or ideas.
11. Solve problems.
12. Weigh up the risks and opportunities of suggestions for improvement: one's own and those of others.

Content

General and Cellular Physiology

Physiology of blood and haematopoietic organs

Physiology of the cardiovascular system

Physiology of the respiratory system

Physiology of the renal system and body liquids

Physiology of the digestive system and nutrition

Physiology of the endocrine and reproductive system
 Adaptation of the organism to environmental changes
 Neurophysiology and physiology of the special senses

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
LAB PRACTICE	14.5	0.58	2, 4, 5, 6, 7, 11
THEORY	64	2.56	2, 4, 5, 6
Type: Supervised			
SUPERVISED	22.5	0.9	2, 4, 5, 6, 7, 11
Type: Autonomous			
SELF STUDY	114	4.56	2, 4, 5, 7, 11

Theoretical classes:

Systematized presentation of the subject, relevance giving the most important concepts. The student acquires the basic knowledge of the subject in theory classes, which are complemented by personal study of the topics of the assignment program.

Laboratory practices:

Practice sessions for the observation and performance of procedures, the practical learning of physiological techniques and their application. It promotes group work and active self-learning.

Case work:

Work on cases or problems of relevance for the learning of the subject. The knowledge acquired in theory classes, practices and personal study is applied to the resolution of practical cases that are posed in a way applicable to the environment of the subject.

Tutored teaching:

Availability of support tutorials for the study and independent development of physiological concepts and application to case resolution throughout the course.

Directed activities (35%=74,5h)

Theoretical classes with audiovisual support

Laboratori Practicals

Supervised activities (10%=22,5h)

Resolution of clinical cases

Autonomous activities (55%= 114 hores)

Research and treatment of complementary information to the theoretical knowledgments of the directed activities

Preparation of the clinical cases and practicals

Study of the contents and realization of schemes, conceptual maps, reviews...

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Assessment of the preparation and resolution of cases or problems and their integration into theoretical-practical knowledge through short written questions and / or multiple choice questions	30%	3	0.12	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Assessment of knowledge and skills acquired in relation to laboratory practices using Moodle questionnaires and / or written tests in situ	10%	1	0.04	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Assessment of theoretical knowledge through objective tests of multiple answers	60%	6	0.24	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

The competences of this subject will be evaluated by means of objective written tests of the subject and cases and on-site evaluation and / or by means of objective tests of the laboratory practices. The different functional systems detailed in the program will be assessed.

During the course, three blocks will be evaluated individually that will include the following contents:

BLOCK 1 (General and cellular physiology, Physiology of the blood and hematopoietic organs, Physiology of the cardiovascular system)

BLOCK 2 (Physiology of the respiratory system, Physiology of the excretory system and body fluids, Physiology of the digestive system and nutrition, Physiology of the endocrine and reproductive systems)

BLOCK 3 (Physiology of the nervous system, Adaptation of the organism to environmental changes)

To pass the subject the student must take a minimum of 5,0 in each block.

Continued assessment

There will be three partial exams during the course with the same format. The continuous evaluation of each BLOCK will consist of:

AC1. Partial examination of each block, which will include:

- multiple choice items to assess the THEORETICAL KNOWLEDGE of the subject
(60% of the overall grade of the block)

- written questions to evaluate the concepts related to CASE WORK
(30% of the overall grade of the block)

The grade of the partial exam will account for 90% of the overall grade of the block

AC2. Tests throughout the course on the knowledge gained in laboratory practices.

Evaluations of the laboratory practices that will be carried out through

The average of the evaluations obtained in the laboratory practices will account for 10% of the overall grade.

To pass each block you will need a minimum of 5.0 (out of 10) in the partial exam (AC1) and a minimum of 5.0 in

To pass the subject you must have passed each of the blocks with a minimum of 5.0, and that the overall average

Unique assessment

Students can take advantage of the single assessment system, according to the Faculty's regulations. The single assessment will be carried out on a single assessment date a For the evaluation of each block, an exam will be carried out that will consist of:

AU1. Examination of theoretical concepts and case work of each block:

- multiple choice questions to assess the THEORETICAL KNOWLEDGE
(60% of the overall mark for each block)

- written questions to evaluate the concepts related to CASE WORK
(30% of the overall grade of the block)

The grade of the partial exam will account for 90% of the overall grade of the block.

AU2. written questions related to LABORATORY PRACTICES

(10% of the overall mark for each block)

The grade of the laboratory practice exam will account for 10% of the overall grade for each block.

To pass each block, a minimum of 5.0 must be obtained from the AU1 part of each block and a minimum of 5.0 in

To pass the subject you must have passed each of the blocks with a minimum of 5.0, and that the overall average

Final recovery exam

The final recovery exam will be shared by continuous assessment and single assessment. In the event that the student does not meet the requirements (average of

The students who, having passed the continuous assessment or the single assessment of the subject, wish to take

The final recovery exam for each block will consist of the following sections:

(60% of the overall grade for each block)

- multiple choice questions to assess the THEORETICAL KNOWLEDGE

(30% of the overall grade for each block)

- written questions to assess the concepts related to CASE WORK

(10% of the overall grade for each block)

- multiple choice questions referring to LABORATORY PRACTICES

To pass each block it will be necessary to obtain a minimum of 5.0 in the recovery exam

To pass the subject it will be necessary to have passed the three blocks with a minimum of 5.0. In this case, the final

If one of the blocks in the recovery is not exceeded, the maximum global grade will be 5.0.

General considerations regarding evaluations

Anyone who does not take one of the expressly scheduled exams during the course will be considered as having failed the subject.

Subsequent to the publication of the grades for each block and the final grades, a review will be called so that the student can request a re-evaluation of the grades.

In no case will the mark of any partial block of one course be kept by another.

Bibliography

Relevant bibliography:

- Tortora GJ, Derrickson B. *Principios de Anatomía y Fisiología*. (15ª ed). Editorial Médica Panamericana, 2018. Digital access UAB.

- Constanzo LS, *Fisiología* (6a Ed). Elsevier-Saunders, 2018

- Tresguerres AF, Villanúa MA, López-Calderón A. *Anatomía y fisiología del cuerpo humano*. Mc Graw Hill, 2009

To consult

- Thibodeau GA, Patton KT. *Anatomía y Fisiología* (6ª ed). Elsevier, 2007.
- Paulev PE, Zubieta G. *New Human Physiology*, 2nd ed. <https://www.zuniv.net/physiology/book/>
- Koepfen B and Stanson B. *Berne and Levy physiology* (7th ed). Elsevier 2017.
- Guyton AC, Hall JE. *Tratado de Fisiología Médica* (13ª ed.). Elsevier-Saunders, 2016.
- Tresguerres JAF. *Fisiología Humana* (4ª ed.). Mc Graw Hill-Interamericana, 2010.

Software

- MENTIMETER: <https://www.mentimeter.com>
- SOCRATIVE: <https://www.socrative.com>

Language list

Name	Group	Language	Semester	Turn
(PLAB) Practical laboratories	101	Catalan	annual	morning-mixed
(PLAB) Practical laboratories	102	Catalan	annual	morning-mixed
(PLAB) Practical laboratories	103	Catalan	annual	morning-mixed
(PLAB) Practical laboratories	104	Catalan	annual	morning-mixed
(TE) Theory	101	Catalan	annual	morning-mixed