

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

<b>Code</b>	33932
<b>Name</b>	General Physiology
<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. Period</b>
1205 - Degree in Human Nutrition and Dietetics	Faculty of Pharmacy and Food Sciences	1 First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1205 - Degree in Human Nutrition and Dietetics	3 - Physiology	Basic Training

**Coordination**

<b>Name</b>	<b>Department</b>
BURGUETE LOPEZ, MARIA CONSUELO	190 - Physiology
CENTENO GUIL, JOSE M	190 - Physiology
JOVER MENGUAL, TERESA	190 - Physiology

**SUMMARY**

Theoretical and practical basic knowledge of the function of the human body, enabling it to understand the development and overall functioning of the tissues and organs that compose it, giving special attention to the complexity of the interaction of all corporal systems.

**PREVIOUS KNOWLEDGE**



### Relationship to other subjects of the same degree

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

### Other requirements

## OUTCOMES

### 1205 - Degree in Human Nutrition and Dietetics

- Know, judge and know how to use and apply the sources of information related to nutrition, food, lifestyles and health.
- Develop the capacity to gather and convey information in English at a level equivalent to the B1 level in the Common European Framework of Reference for Languages.
- Adquirir la formación básica para la actividad investigadora, siendo capaces de formular hipótesis, recoger e interpretar la información para la resolución de problemas siguiendo el método científico, y comprendiendo la importancia y las limitaciones del pensamiento científico en materia sanitaria y nutricional.
- Know the basic physiology of the human body from the molecular level to the full body, at the various stages of life.
- Learn to understand the body as a whole.
- Understand and interpret how each organ is involved in the maintenance of the constancy of the internal environment.
- Know how to set out problems and use the appropriate methods for their resolution, being able to apply critical reasoning.
- Learn the fundamentals for using the scientific equipment directly related to their professional activity.
- Skills in analysis and synthesis.
- Ser capaz de trabajar en equipo y de organizar y planificar actividades.
- Know the structure and function of the human body at the various stages of life, from the molecular level to the full body.

## LEARNING OUTCOMES

- To understand that the different organs and systems are functioning all together as a biological complete organism.
- To know how participates every organ in the maintenance of the constancy of the "internal environment".
- To know how every living element of the organism participates in the organic function.
- To know how problems arise and use the appropriate methods for its resolution.
- To learn the minimal managing of scientist material directly related to his professional task.



## DESCRIPTION OF CONTENTS

### 1. Introduction to Physiology

Introduction to the Physiology. Evolution. Cell membrane and transport mechanisms. Homeostasia and regulatory systems. Liquid body compartments. Excitability and conduction of impulses.

### 2. Tissues

Study of the role of the main body tissues: muscle, epithelial, nervous and connective (and its amendments).

### 3. Blood

Study of the blood and of his importance in the maintenance of the corporal homeostasia, as well as other functions: transport of nutrients and gases, temperature, immunity, etc.

### 4. Introduction to Physiology of Apparatus and Systems

A general introduction to the Physiology of the different apparatus and systems of the human body (digestive, circulatory, nervous, excretory, endocrine, respiratory). This part is an introduction to the following subject.

## WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	38,00	100
Laboratory practices	14,00	100
Seminars	2,00	100
Tutorials	2,00	100
Development of group work	25,00	0
Study and independent work	65,00	0
<b>TOTAL</b>	<b>146,00</b>	

## TEACHING METHODOLOGY

- This subject is approached by means of lectures and laboratory practice.
- In addition, establishes a number of hours of tutoring so that students can resolve the doubts that may arise in each of the thematic units.
- On the other hand, students must perform and exhibit 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 working rules of Coordinated Seminar that appears on the website of the Facultat de Farmàcia. It will not be possible to pass the subject without the participation in the Coordinated Seminar.

The assessment of the knowledge of the program contents imparted during the course, will be based on a written test that will correspond to 90% of the final grade, which will include theoretical and practical contents of the entire subject. This test will be done on the date indicated in the official calendar of the school. This exercise may include test questions, short questions, and development questions. It will be necessary to obtain at least 4.5 points in the written test and after adding the score of the Coordinated Seminar the final score needs to be at least 5 points to pass the subject.

In addition, if the examination consists of several parts (test, short questions, development questions ...), it will be necessary to obtain a minimum score in all parts. In this case, the complete qualification needs to be at least 4.5 points.

Students who do not pass the subject on the first call, will need to attend a second written test which include theoretical and practical contents of the entire program of the subject in the second call. In the evaluation of this second call, the teamwork presented score (10% of the final grade) will be taken into account.

## REFERENCES

### Basic

- Thibodeau, G. A. y Patton, K.T. Anatomía y Fisiología. Ed. Harcourt. 8 Ed.
- Tortora- Derrickson. Principios de Anatomía y Fisiología. Ed. Panamericana. 15 Ed. 2018

### Additional

- Fox, S.I.: Fisiología Humana. Ed. McGraw-Hill Interamericana. 2003
- Guyton A.C. and Hall J., S.I.: Fisiología Humana. Ed. McGraw-Hill Interamericana. 14 Ed.
- M. González-Gross. Nutrición Deportiva. Desde la Fisiología a la práctica. Editorial Médica Panamericana.



## **ADDENDUM COVID-19**

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

### **1. Contents**

The contents initially included in the teaching guide are maintained.

### **2. Volume of work and temporary planning of teaching.**

The same teaching planning is maintained. Schedules of theoretical classes, practices, tutorials and seminars are respected.

### **3. Teaching methodology**

The planning of the face-to-face theoretical classes is maintained.

Each week additional documents, images or videos may be available to students to facilitate study. If necessary, theoretical classes can be established by videoconference.

The practices are maintained with the original schedule, but with a capacity that complies with the health safety measures, so it will be reduced if necessary.

The coordinated tutorials and seminars will be carried out in person or by videoconference, depending on the needs. Maintaining the established schedules.

### **4. Evaluation**

- Individual exercises proposed online or in the classroom: 20% of the total grade for the course.
- Coordinated Seminar Work: 10% of the total grade for the course. Coordinated seminars may be carried out by videoconference.
- Final exam: 70% of the total grade for the course. There will be an examination of all the contents, both theoretical and practical, in person. The exam will present test or true / false questions. To pass the course it will be necessary to obtain at least 4.5 points in the exam grade and that when adding the notes of the individual exercises and the Coordinated Seminar, the score is at least 5 points. This examination may also be carried out electronically if necessary.

Students who do not achieve the passing grade in the first call must complete an exam of all the theoretical and practical contents of the course in a second call, which will have the same characteristics as the first and will also consider the Coordinated Seminar and individual exercises.





## ***5. Bibliography***

The recommended bibliography is kept as it is accessible. The teacher will also provide information through the Virtual Classroom.