

**COURSE DATA****DATA SUBJECT**

Code: 33933
Name: Physiology of organ systems
Cycle: Undergraduate Studies
ECTS Credits: 6
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1205 - Degree in Human Nutrition and Dietetics	Facultat de Farmàcia i Ciències de L'alimentació	1	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1205 - Degree in Human Nutrition and Dietetics	Physiology	BASIC

COORDINATION

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SUMMARY

This subject aims to study, separately, the different apparatus and systems as part of the human body, but always bearing in mind the concept that the body is a unit of function, so it also addressed the study of the interrelationship between them

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 passed the subject General Physiology

COMPETENCES / LEARNING OUTCOMES

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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.

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.

Know, judge and know how to use and apply the sources of information related to nutrition, food, lifestyles and health.

Know how to set out problems and use the appropriate methods for their resolution, being able to apply critical reasoning.

Know the structure and function of the human body at the various stages of life, from the molecular level to the full body.

Learn the fundamentals for using the scientific equipment directly related to their professional activity.

Learn to understand the body as a whole.

Ser capaz de trabajar en equipo y de organizar y planificar actividades.

Skills in analysis and synthesis.

Understand and interpret how each organ is involved in the maintenance of the constancy of the internal environment.

DESCRIPTION OF CONTENTS

1. Cardiovascular

Explains the structure and circulatory function and components that allow the electro-mechanical processes that determine the heart function. Also studies the General and local characteristics of the circulation and the circulatory regulation.

2. Respiratory

Defines concepts and explains the structure and respiratory function and components that enable it. It also studies the regulation of breath.

3. Digestive

Studies more broadly the motor, secretory, absorptive and chemical processes that occur in the digestive tract



4. Renal function

Are particularly studied the excretory function of the kidney and its mechanisms; also the transport and disposal of urine. Also refers to the rest of the kidney functions. Maintenance of the physiological pH and electrolytic and water balance

5.

6. Endocrine

Concepts (hormone, recipient, etc.) are defined and studied in an integrated manner the processes regulated by the hormones (intermediary metabolism, fosfocàlcico, sugars, growth and reproduction).

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Tutorials	2,00
Theory	38,00
Seminar	2,00
Laboratory	14,00
Total hours	56,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	25,00
Independent study and work	65,00
Preparation of lessons	0,00
Preparation for assessment activities	0,00
Resolution of case studies	0,00
Total hours	90,00

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 Facultad de Farmacia.

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.

The activities of continuous assessment, which in this subject are practices, tutorials and seminars, are of **MANDATORY ATTENDANCE** and, therefore, **NOT RECOVERABLE**, in accordance with the provisions of Article 6.5 of the Regulation of Evaluation and Qualification of the UV for Bachelor and Master degrees. If it is not possible to attend any of these activities for justified reasons, it must be communicated in advance. In this way, the person in charge of the subject may assign the student a session in another group.

Evidence of copying or plagiarism in any of the assessable tasks will result in failure to pass the subject and in appropriate disciplinary action being taken. Please note that, in accordance with article 13. d) of the Statute of the University Student (RD 1791/2010, of 30 December), it is the duty of students to refrain from using or participating in dishonest means in assessment tests, assignments or university official documents.

In the event of fraudulent practices, the "**Action Protocol for fraudulent practices at the University of Valencia**" will be applied (ACGUV 123/2020): <https://www.uv.es/sgeneral/Protocols/C83sp.pdf>

REFERENCES



- Thibodeau, G. A. y Patton, K.T. Anatomía y Fisiología. Ed. Harcourt. 2007
- Pocock-Richards. Fisiología Humana. Ed. Masson.2005
- Fox, S.I.: Fisiología Humana. Ed. McGraw-Hill Interamericana. 2003
- Guyton A.C. and Hall J., S.I.: Fisiología Humana. Ed. McGraw-Hill Interamericana. 2003
- Tortora- Derrickson. Principios de Anatomía y Fisiología. Ed. Panamericana. 15 Ed. 2018
- M. González-Gross. Nutrición Deportiva. Desde la Fisiología a la práctica. Editorial Médica Panamericana