

**COURSE DATA****DATA SUBJECT****Code:** 34097**Name:** Pharmacotherapy**Cycle:** Undergraduate Studies**ECTS Credits:** 4.5**Academic year:** 2026-27**STUDY (S)**

Degree	Center	Acad. year	Period
1201 - Degree in Pharmacy	Facultat de Farmàcia i Ciències de l'alimentació	5	First quarter

**SUBJECT-MATTER**

Degree	Subject-matter	Character
1201 - Degree in Pharmacy	Pharmacotherapy	ELECTIVES

**COORDINATION**

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**SUMMARY**

This subject is designed to give students an overview of how to apply principles of rational drug use in clinical practice. This is a very practical course that will enable students to become familiar with using the drug in the pharmaceutical environment, so it is a practical complement to the training acquired in the different core subjects included in the pharmacological sciences.

Objectives:

- To know the appropriate use of medicines in clinical practice.
- To develop the skills necessary to perform an efficient resource management in the health care pharmacotherapy.

**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 studied the subjects: Pathophysiology, Biochemistry, Pharmacology and Biopharmaceutics and Pharmacokinetics.

## COMPETENCES / LEARNING OUTCOMES

### 1201 - Degree in Pharmacy

Acquire the ability to detect and solve patients' lack of information regarding health problems and/or the use of medicines.

Act with autonomy in learning, making informed decisions in different contexts, issuing judgements based on experimentation and analysis, and transferring knowledge to new situations.

Apply knowledge in clinical situations to give therapeutic advice and take part in decision-making in hospital, community and home care settings.

Collaborate effectively in work teams, assuming responsibilities and leadership roles and contributing to collective improvement and development.

Contribute to the design, development and implementation of solutions that respond to social demands, taking into account the Sustainable Development Goals as a reference.

Demonstrate critical and self-critical thinking in the field of the degree programme, considering aspects such as professional ethics, moral values and the social implications of the different activities carried out.

Develop communication and information skills, both oral and written, to deal with patients and other health professionals in the centre where professional activity is carried out. Promote teamwork and collaboration skills in multidisciplinary teams and with

Develop skills to update knowledge and undertake further studies, including pharmaceutical specialisation, scientific research, technological development and teaching.

Interpret relevant data.

Intervene in health promotion and disease prevention activities in the individual, family and community spheres, with a comprehensive and multiprofessional vision of the health-disease process.

Know and understand, within the field of the degree programme, gender inequalities in society; integrate different needs and preferences based on sex and gender into the design of solutions and problem solving.

Know how to communicate effectively, both orally and in writing, adapting to the characteristics of the situation and the audience.

Know how to formalise the pharmacist's healthcare service in order to ensure the effective and safe use of



medicines.

Know how to interpret, evaluate and communicate relevant data in the different areas of pharmaceutical activity, using information and communication technologies.

Know how to locate and evaluate clinical data on medicines in order to provide adequate information to both healthcare professionals and patients.

Know the most appropriate pharmacotherapy for each clinical situation, applying clinical guidelines with maximum scientific evidence.

Module: Medicine and Pharmacology. Acquire the necessary skills to provide therapeutic advice in pharmacotherapy and diet therapy, as well as nutritional and dietary advice to users of the establishments where service is provided.

Possess and understand knowledge in the different areas of study included in pharmacist training.

Promote the rational use of medicines and health products.

Propose creative and innovative solutions to complex situations or problems within the field of knowledge, to respond to diverse professional and social needs.

Recognise one's own limitations and the need to maintain and update professional competence, placing particular emphasis on self-learning of new knowledge based on available scientific evidence.

Reinforce the acquisition of the general competences of the curriculum.

Transmit ideas, analyse problems and solve them with critical spirit, acquiring teamwork skills and assuming leadership when appropriate.

Transmit ideas, problems and solutions.

## DESCRIPTION OF CONTENTS

### 1. Basic Principles of Pharmacotherapy

Chapter 1. Introduction. Background. Bioethics.

Chapter 2. Rational drug use.

Chapter 3. Sociological aspects of drug use.

Chapter 4. Evidence-Based Medicine. Information and drug selection.

Chapter 5. Pharmacotherapeutic guidelines. Clinical Practice Guidelines

Seminar 1. Pharmacotherapeutic strategies for inflammatory and painful processes.

Seminar 2. Pharmacotherapy of respiratory diseases.

Seminar 3. Pharmacotherapy of gastrointestinal problems.



## 2. Pharmacotherapeutic strategies

Seminar 1. Pharmacotherapeutic strategies for inflammatory and painful processes.

Seminar 2. Pharmacotherapy of respiratory diseases. Seminar 4. Pharmacotherapy of obesity and diabetes.

Seminar 5. Pharmacotherapy of cardiovascular disorders.

Seminar 6. Pharmacotherapy for thyroid disorders.

Seminar 7. Pharmacotherapy of osteoporosis and other hormonal changes.

Seminar 8. Drug therapy of neurodegenerative and motors disorders.

Seminar 9. Pharmacotherapy of behavioral disturbances and sleep disorders.

Seminar 10. Recommendations for the use of anti-infectives.

## 3. Tools to interpret pharmacotherapeutic strategies

Practice 1. Critical reading of information on drugs.

Practice 2. Interpretation of clinical guidelines for different diseases.

Practice 3. Criteria for the development of pharmacotherapeutic guidelines.

Practice 4. Case Studies

## WORKLOAD

### PRESENCIAL ACTIVITIES

Activity	Hours
Tutorials	2,00
Theory	9,00
Seminar	25,00
Laboratory	9,00
<b>Total hours</b>	<b>45,00</b>

### NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	10,00
Independent study and work	15,00
Preparation of lessons	12,50
Preparation for assessment activities	10,00
Resolution of case studies	20,00
<b>Total hours</b>	<b>67,50</b>

## TEACHING METHODOLOGY



**Lectures** (Thematic unit I). To obtain the basic knowledge of Therapy and Rational Use of Medicines (Skills: 1, 7, 9-11). Dogmatic method is used in combination with heuristic method for the presentation of the fundamental concepts and the relevant contents of the course, using audiovisual equipment to develop them. Previous to the lectures teachers will provide students the bibliographic information and audiovisual material in the teaching support platform "Aula Virtual". There will be a total of 5 one-hour sessions.

**Seminars clinical care problems** (thematic unit II). We apply the method of "problem-based learning" in the pharmacotherapy teaching oriented to professional activity of pharmacists in the field of pharmaceutical care (Skills: 1-12). The student has the educational material provided by the teacher in the Platform "Aula Virtual" (Pharmacotherapy of different pathologies and clinical guidelines). Different problems / case studies, representative of the pharmacotherapy of various diseases described in the syllabus, are proposed to be solved by students and then discussed in classroom sessions under teacher supervision, which will imply active student participation. A total of 25 one-hour sessions will be carried out.

**Practical classes in computer classroom** (Thematic unit III) in which students undertake a study on drug use in clinical practice. The study will be performed by students in groups of 5-6, through surveys of drug use, analysis and evaluation of pharmacotherapeutic data from these surveys and oral presentation of the work at the end of practice. (Skills: 1-12). In total there were 3 sessions of 3 hours.

**Tutorials:** The tutorials are organized in reduced student groups according to the established calendar. In them the teacher may ask individually or collectively specific questions, which will be more complex than the ones solved in normal seminars, according to the students' needs. Moreover, the tutorials will help solve any doubts derived from the theory classes and will assess students on strategies to overcome any difficulty that may appear. A total of 2 one-hour session will be carried out.

It is noteworthy that the competencies and learning outcomes to be achieved in this subject, as well as the teaching methodology used, especially in seminars and practicals, are part of the Sustainable Development Goals (SDGs) promoted by the United Nations (Agenda 2030). Among them, it is important to highlight the Rational Drug and the promotion of Community Health (Objective 3: Health and Well-being) and Quality Education (Objective 4).

ive 4).

## EVALUATION

In the students' learning evaluation all the aspects exposed in the teaching methodology section of this



guide will be taken into account:

**20% of the mark:** will come from the evaluation of the questions realized during the development of the seminars.

**20% of the mark:** will come from the mark of the practical sessions. It will assess through questionnaires completed during the practical sessions and the presentation of the final report. If the student does not pass the exam, this mark will only be kept until the following year.

**15% of the mark:** will come from the continuous assessment based on the resolution of questions individually in the classroom (10%) and evaluation of tutorials (5%).

**45% of the mark:** will come from the final exam, which includes:

-Test objective based on short questions or multiple response (10%)

-Analysis and resolution of a problem of pharmacotherapy (35%)

In order to pass the subject it is necessary to have done and passed the practical sessions and the theoretical exam.

It is necessary to remember that the PRACTICES are MANDATORY ATTENDANCE and therefore, NON-RECOVERABLE,

in accordance with the article 6.5 of the Evaluation and Qualification Regulations of the UV for Bachelor's and Master's

degrees. If, for justified reasons, the student cannot attend, the student must notify us with sufficient advance notice.

In this way, the person responsible for the subject will be able to assign the student a session in another group.

In accordance with the guidelines of the CAT of Pharmacy (May 14, 2012), those students who do not take the theory exam but have performed and have pass in some of the teaching activities carried out (seminars, laboratory, computer room, tutorials, etc.) will be classified as NOT PRESENTED in the first call, but if they still do not perform the theory exam, the final grade that will appear in the second call will take into account the grades obtained in the other activities and, consequently, may appear as a FAIL.

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>

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