

**COURSE DATA****DATA SUBJECT****Code:** 34074**Name:** Clinical Pharmacy and Pharmaceutical Care**Cycle:** Undergraduate Studies**ECTS Credits:** 6**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
1211 - Double Degree in Pharmacy and Human Nutrition and Dietetics	Facultat de Farmàcia i Ciències de l'alimentació	5	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1201 - Degree in Pharmacy	Clinical pharmacy and pharmaceutical care	COMPULSORY
1211 - Double Degree in Pharmacy and Human Nutrition and Dietetics	Asignaturas obligatorias del PDG Farmacia-Nutrición Humana y Dietética	COMPULSORY

COORDINATION

MERINO SANJUAN MATILDE

SUMMARY

Clinical Pharmacy and Pharmaceutical Care represent the paradigm of the pharmaceutical profession in relation to the rational use of medicines.

The **future clinical pharmacist** must acquire the skills and ability to identify, integrate and apply the information in the medical and pharmaceutical sciences to detect actual or potential related problems with drugs and resolved through communication, information and education to the patient (or caregiver) an integrated and co-responsible with other health professionals.

It should be noted that the focus of the subject and the competencies to be achieved by the students integrates the sustainable development goals (SDG) promoted by the United Nations (2030 agenda). Among them, it is worth highlighting, due to its direct relationship with the Clinical Pharmacy and Pharmaceutical Care, promoting responsible health management to guarantee the sustainability of the health system, the rational use of medicine and the promotion of community health (goal 3: good health and well-being, goal 10: reduced inequality) and quality education (goal 4). In addition, partnerships to



achive the goal is promoted in the subject (goal 17).

The **program** of the course presents the basic tools that will be necessary to the pharmacist to practice in the setting of care (patient care process and management system to perform both primary and specialized care). The **objectives** of this course are:

1. Promote pharmaceutical care practice, that is, patient-centered to provide drug therapy
2. To know the methodological bases for promoting rational drug use

To get outcomes that improve or maintain the quality of life of patients

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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 subjects:
Biopharmaceutics and Pharmacokinetics,



Pharmacology and Toxicology

COMPETENCES / LEARNING OUTCOMES

1201 - Degree in Pharmacy

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 the scientific method and acquire skills in handling legislation, information sources, bibliography, drafting of protocols and other aspects considered necessary for the design and critical evaluation of preclinical and clinical trials.

Assess the therapeutic and toxic effects of pharmacologically active substances.

Carry out activities of clinical and social pharmacy, following the pharmaceutical care cycle.

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

Identify, evaluate and assess drug and medicine-related problems and participate in pharmacovigilance activities.

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

Know oral and written communication techniques and acquire skills to inform users of pharmacy establishments in intelligible terms appropriate to diverse cultural levels and social contexts.

Know pharmaceutical care and pharmacovigilance protocols.

Module: Medicine and Pharmacology. Know and understand the management and specific characteristics of pharmaceutical care in Primary Care and Specialised Care structures within the Health System.

Module: Medicine and Pharmacology. Know and understand the management and specific characteristics



of pharmaceutical care in the pharmacy setting and pharmaceutical industry.

Module: Medicine and Pharmacology. Know and understand the techniques used in the design and evaluation of preclinical and clinical trials.

Module: Medicine and Pharmacology. Use medicines safely, taking into account their physical and chemical properties, including any risk associated with their use.

Promote the rational use of medicines and health products and acquire basic knowledge in clinical management, health economics and efficient use of health resources.

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

Provide therapeutic advice in pharmacotherapy and diet therapy.

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.

Select and dispense medicines and other healthcare products appropriately, using criteria of efficacy, safety, pharmacokinetic suitability and cost-effectiveness.

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

Understand the process of acquiring, storing, preserving, dispensing and invoicing of medicines and pharmaceutical products.

DESCRIPTION OF CONTENTS

1. Clinical Pharmacy and Pharmaceutical Care: introduction and clinical activities

Introduction to the Pharmaceutical Health and Welfare clinical Trials.

Pharmacovigilance

Pharmacotherapeutic management

Information and Communication Technologies (Electronic Health Records)

2. Clinical Pharmacy and Pharmaceutical Care: processes and procedures



Drug Prescription

Dispensing

Pharmaceutical indication

Communication Skills

Quality of care: safety and effectiveness of drugs

Individualized pharmacotherapy follow up

Quality of care in the context of Clinical Pharmacy

Systems pharmacotherapeutic quality management

Patient outcomes

3. Clinical Pharmacy and Pharmaceutical care in special population groups

Active dispensation and indication in community pharmacy

Pharmaceutical care in minor symptoms related with respiratory system and pain

Pharmaceutical care in minor symptoms related with digestive system and skin

Pharmaceutical care in pregnancy, lactation and pediatric

Pharmaceutical care in geriatrics

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Tutorials	2,00
Theory	32,00
Seminar	6,00
Laboratory	20,00
Total hours	60,00

**NON PRESENCIAL ACTIVITIES**

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

TEACHING METHODOLOGY

The teaching methods used in this subject make it easier for the student to know the SDGs and work online with them. In particular, highlight the activities proposed in practices and seminars.

- **Lectures.** In the lectures the teacher will make a presentation of the concepts and content of each topic, highlight the fundamentals for understanding. Teacher will solve any questions or issues that arise in the classroom.

- **Practical classes.** Practical classes will be held in the Clinical Pharmacy classroom, in the CESIS or in a computer lab and will be distributed in 5 sessions of 4 hours each. The objective is that the student will be able: to provide patients with the information required to optimize the use of drugs, to obtain and analyse information related to treatment and clinical condition of patients; in order to identify opportunities for improvement and participate in patient monitoring. In the session, the teacher will indicate relevant issues and will guide the student in the use of technology of information in health for communication and registration of the activities.

- **Seminars.** Will be devoted to apply and deepen on various aspects of the subject. The teacher will provide the materials required and will propose a series of activities to promote learning. Students will work in groups the selected topics. Students will deliver a report and will present and discuss it in the classroom. Problem based learnig (PBL) and service learning will be used.

- **Tutorials.** Students will come to them in groups. In them, the teacher will guide the students about the elements of the learning process, general statements as well as specific issues.

EVALUATION

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>

The assessment of student learning will take into consideration all sections exposed in teaching methodology section of this guide. For this, the course is divided into three parts: theory, practice and seminars:

The rating theory block constitutes 55% of the final grade. It will be evaluated through a written exam consisting of conceptual questions and multiple choice questions that allow the student to demonstrate the degree of assimilation of fundamental concepts. They may also include topics to be developed that allow the student to demonstrate the ability of synthesis and exposure. The minimum score that is to be obtained in theory block to average with other activities of the course is 5.

To evaluate the block of practices the student must attend all practice sessions. For this reason, if a student is unable to attend a practice session, if properly justified, the teacher will register him/her in another later group. A written exam will be carried out on the issues discussed in the practice sessions, together with the theory exam (1st conv or 2nd conv). The mark obtained will represent 30% of the final grade. The minimum score required to pass this block is 5. If a student fails to pass the course, the grade obtained in the block of practices may be maintained for two subsequent courses.

The evaluation of the block of seminars represents 15% of the final grade. It will be mandatory to deliver the tasks requested by the teacher, which will represent 70% of the grade for this activity. The remaining 30% of the qualification will correspond to the score obtained in the active participation in the preparation of the activities in the classroom.

According to the guidelines of the CAT of Pharmacy (May 14, 2012), students who do not show the theory exam but have participated and note any / s of the teaching activities carried out (seminars,, computer room, tutoria, etc..) will be assessed as not shown in the first round, but still not submitted for consideration by theory, the final grade on the second call will take into account the marks obtained in the various activities and thus may appear as SUSPENSE.

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