

**COURSE DATA****DATA SUBJECT****Code:** 34499**Name:** Pharmacoepidemiology**Cycle:** Undergraduate Studies**ECTS Credits:** 4.5**Academic year:** 2025-26**STUDY (S)**

| Degree | Center | Acad. year | Period |
|---------------------------|------------------------------------|------------|----------------|
| 1204 - Degree in Medicine | Facultat de Medicina i Odontologia | 3 | Second quarter |

SUBJECT-MATTER

| Degree | Subject-matter | Character |
|---------------------------|-------------------|-----------|
| 1204 - Degree in Medicine | Optional subjects | ELECTIVES |

COORDINATION

MARTI CABRERA MIGUEL

SUMMARY

The objective in this subject is to review pharmacology from the point of view of its therapeutic application and the approach of clinical and epidemiological studies about the use of drugs, in the development and the therapeutic use of such drugs, in the population which is affected by different pathologies.

PREVIOUS KNOWLEDGE**RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**

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

OTHER REQUIREMENTS**COMPETENCES / LEARNING OUTCOMES****1204 - Degree in Medicine**

Acknowledge diversity and multiculturality.



Capacity for communicating with professional circles from other domains.

Consideration of ethics as a fundamental value in the professional practise.

Criticism and self-criticism skills.

Proper organisation and planning of the workload and timing in professional activities.

Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.

Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.

Team-working skills and engaging with other people in the same line of work or different.

Understand the foundations of action, indications and efficacy of therapeutic interventions, based on available scientific evidence.

Working capacity to function in an international context.

DESCRIPTION OF CONTENTS

1. THEORETICAL CLASSES

Unit 1.- General concepts of pharmacological therapy.

Unit 2.- Pharmacological therapy in cardiovascular processes.

Unit 3.- Pharmacological therapy in respiratory pathologies.

Unit 4.- Pharmacological therapy in gastrointestinal pathologies.

Unit 5.- Pharmacological therapy in endocrinological pathologies.

Unit 6.- Pharmacological therapy in gynaecological pathologies.

Unit 7.- Pharmacological therapy in neurological pathologies.

Unit 8.- Pharmacological therapy in psychiatric disorders.

Unit 9.- Pharmacological therapy in inflammatory and rheumatic pathologies.

Unit 10.- Pharmacological therapy in infectious pathologies.

Unit 11.- Pharmacological therapy in tumour processes.



2. PRACTICAL CLASSES

Seminaries:

1. Elaboration of pharmacological solutions for possible medical problems.
2. Evaluation and interpretation of possible disorders as reactions to drug intake.
3. Consider possible drug interaction.
4. Questionnaires related to pharmacotherapy.

WORKLOAD

PRESENCIAL ACTIVITIES

| Activity | Hours |
|--------------------|--------------|
| Theory | 19,00 |
| Seminar | 26,00 |
| Total hours | 45,00 |

NON PRESENCIAL ACTIVITIES

| Activity | Hours |
|---------------------------------------|--------------|
| Attendance at other activities | 0,00 |
| Individual or group project | 17,50 |
| Independent study and work | 20,00 |
| Preparation of lessons | 20,00 |
| Preparation for assessment activities | 10,00 |
| Resolution of case studies | 0,00 |
| Total hours | 67,50 |

TEACHING METHODOLOGY

In theoretical lessons, professors will present the most important concepts and content through master classes in a structured way, in order to help students develop several skills and meet the objectives. Students' participation in the class should be encouraged and they will have access to the didactic material professors may have used through the electronic platform *Aula Virtual*, if they consider it to be appropriate.

Practise in the classroom: seminars. In small groups, professors will present deeply specialised themes, case studies, management of bibliography, current issues... Team work is encouraged, as well as oral presentation skills, which could be interpreted as 'cooperative learning'.

The gender perspective, the respect for diversity, and the sustainable development goals (SDGs) will be incorporated into teaching, whenever possible.



EVALUATION

The learning assessment will be joint (theoretical-practical), in which the theoretical part represents 50% of the final grade for the course and the practical part the other 50%. Throughout the course, students will be continuously evaluated taking into account their participation in the different activities proposed and the knowledge, skills and abilities related to general competences that they acquire. This continuous evaluation will be through the realization of previously suggested works and/or tests, that may include short questions, multiple choice questions and/or problems. Students who do not pass this continuous assessment may take a final test of the same type that assesses the aspects mentioned above.

Attendance at practical activities is mandatory. The student is considered to meet this requirement if he or she has attended a minimum of 80% of these activities and has adequately justified the impossibility of attending the remaining sessions due to the occurrence of a cause of force majeure. It will be essential to comply with this requirement to pass the subject.

In order to access to an advance on the call of this subject, it is a requirement that the student has coursed all his/her practices.

Students are reminded of the importance of carrying out evaluation surveys on all the teaching staff of the degree subjects.

REFERENCES

- Brunton LL. et al. Goodman and Gilman. Las bases farmacológicas de la terapéutica. 14ª ed. (2023) México DF. McGraw-Hill Interamericana.
- Florez J, Armijo JA, Mediavilla A. Farmacología humana. 6ª ed. (2013). Elsevier-Masson (Eds).
- Katzung, B.G.. Farmacología básica y clínica. 14ª ed. (2019) México DF. McGraw-Hill Interamericana Editores.
- Lorenzo P, Moreno A, Leza JC, Lizasoain I, Moro MA, Portolés A. Velázquez. Farmacología básica y clínica. 19ª ed. (2018). Madrid. Editorial Médica Panamericana.
- Ritter JM, Flower RJ, Henderson G, Loke YK, MacEwan D, Rang HP. Rang y Dale. Farmacología. 9ª ed. (2020). Barcelona. Elsevier (Ed).
- Strom BL, Kimmel SE, Hennessy S. Pharmacoepidemiology. 5ª ed. (2012). Oxford (UK). John Wiley and Sons, Ltd. (Eds).
- RECURSOS e-Salut:
 - ClinicalKey Student Medicina, Odontología y Enfermería [<https://uv-es.libguides.com/RecursosSalut>]
 - Acces Medicina [https://uv-es.libguides.com/Access_Medicina]
 - Médica Panamericana [https://uv-es.libguides.com/Medica_Panamericana]