

## 29350 - Pharmacology for the Odontology Clinic

### Syllabus Information

**Academic year:** 2023/24

**Subject:** 29350 - Pharmacology for the Odontology Clinic

**Faculty / School:** 229 - Facultad de Ciencias de la Salud y del Deporte

**Degree:** 442 - Degree in Odontology

**ECTS:** 6.0

**Year:**

**Semester:** First semester

**Subject type:** Optional

**Module:**

### 1. General information

#### Objectives

1<sup>o</sup>) To provide the student with the necessary knowledge to understand the scientific bases that explain the actions/effects of the drugs involved in dental treatment (rational use of drugs)

2<sup>o</sup>) To acquire the ability to assess different therapeutic strategies more appropriate to each patient, in their professional career.

Objectives aligned with the following Sustainable Development Goals (SDGs): Health and wellness; Quality education.

#### Context

Elective subject related to Pharmacology, which is taught in the 4th semester of the Degree. It allows to complete the training in topics related to pharmacological action and its use in the dental clinic, taking into account the pathophysiological situation of the patients. The aim is to provide the student with the methodological, ethical and legal tools for the reasoned use of drugs.

### 2. Learning results

**The student, in order to pass this subject, must demonstrate the following results...**

- Reinforce the general principles of pharmacology
- Know and handle the most frequently prescribed pharmacological groups in dentistry
- Know the methodology of clinical trials and other pharmacological research studies
- Assess the variability in the pharmacological response in certain physiological situations
- Adequately evaluate the circulating pharmacological information, particularly in the field of pharmacology applied to clinical dentistry

### 3. Syllabus

#### THEORY

##### THEMATIC BLOCK 1: GENERAL PRINCIPLES

Topic 1: Absorption, Distribution, Metabolism and Excretion (LADME)

Topic 2: Pharmacodynamics: molecular mechanisms of action of drugs

##### THEMATIC BLOCK 2: SNC PHARMACOLOGY

Topic 3: Anxiolytic and hypnotic drugs

Topic 4: Antidepressant and antimanic drugs

Topic 5: Drugs in Parkinson's disease and other movement disorders

Topic 6. Antiepileptic drugs

##### THEMATIC BLOCK 3: CARDIOVASCULAR PHARMACOLOGY

Topic 7. Antianginal drugs

Topic 8. Pharmacology of heart failure

Topic 9. Pharmacology of arterial hypertension

##### THEMATIC BLOCK 4: VARIABILITY OF PHARMACOLOGICAL RESPONSE

Topic 10. Pharmacogenetics

Topic 11. Physiological situations that modify the response I: pregnancy and lactation, child

Topic 12. Use of drugs in geriatrics

##### THEMATIC BLOCK 5: EVALUATION OF THE EFFECTS OF DRUGS

Topic 13: Development of new drugs. Clinical trial methodology

Topic 14: Pharmacovigilance and Pharmacoepidemiology

## **PRACTICES**

- Design of an emergency kit in the dental clinic
- Problem-based learning
- Mini-cases
- Personalized Vademecum
- Teamwork
- Seminars

## **4. Academic activities**

PARTICIPATORY MASTER CLASS (the topics of which are detailed in the program)

PRACTICAL CLASSES:

Group work

1. -Design of an emergency kit in the dental clinic
2. -Problem-based learning. At the end of each of the practical sessions, the student, in an autonomous and individual manner,, will write a report analysing the proposed case, mainly from the pharmacological point of view.
3. -Mini-cases. Study and resolution of different clinical cases applied to the dental clinic
4. -Reasoned drug selection: Personalized Vademecum
5. -Realization, presentation and defence of monographic works carried out by the students in small groups before their peers

## **5. Assessment system**

**FACE-TO-FACE MODEL:** Continuous assessment

*Theoretical part:* Objective test (multiple choice or short answer) that will be announced at the beginning of the term and will account for 60% of the final grade ( )

*Practical part:* Percentage in the final grade 40%.

1. -Emergency kit in the dental clinic
2. -Elaboration of a personal portfolio containing reports related to: learning exercises based on problem solving and mini-cases
3. -Personalized Vademecum assessment
4. -Performance, presentation and defence of a revision work carried out in small groups. During their realization, the students will have the guidance and support of the teachers.
5. -Attendance and active participation in the different activities that will be presented in the subject will be valued.

Students who follow this model must accept and comply with its conditions and pass each of the parts separately with a minimum of 5 points

Global evaluation test: students who have not passed any of the parts reflected in the continuous evaluation, as well as students who want to improve their grade, prevailing in any case, the best of the grades obtained. It consists of:

*Theoretical part:* Objective test (multiple choice or short answer) to be announced at the beginning of the term (60% of the final grade).

*Practical part:* Performance, presentation and debate, before a teaching team, of one or more of the activities reflected in the practical part of the subject(40% of the final grade).

Each of these parts must achieve a grade of 5 points in order to pass and average.

**NON-FACE-TO-FACE MODEL:** The student must take a global evaluation test consisting of a written or multiple-choice test in which theoretical and practical knowledge will be assessed, as indicated above.

**GRADING SYSTEM:** according to art. 5.2 of Royal Decree 1125/2003 of September 5 (BOE September 18): From 0 to 4.9: Fail (S); 5.0 to 6.9: Pass (A); 7.0 to 8.9: Notable (N); from 9.0 to 10: Outstanding (SB). Honour: grade equal to or higher than 9.0.