

## 29351 - Implantology

### Syllabus Information

**Academic year:** 2024/25

**Subject:** 29351 - Implantology

**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

The subject will allow the student to obtain basic knowledge about Oral Implantology, Tissue Regeneration and Implant-supported Prosthesis, being able to define a correct diagnosis and an adequate surgical treatment related to the placement of implants in the jaws.

**The subject and its expected results respond to the following approaches and goals:**

- Understand and perform the basic oral implantology manoeuvres necessary for the dental treatment of patients
- Plan and carry out correctly the indications for implant treatment. Correctly interpret the diagnostic tests used in implantology.

These approaches are aligned with the following Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda (<https://www.un.org/sustainabledevelopment/es/>).

#### **Recommendations for taking the subject**

It is advisable to have taken all the subjects of the previous semesters, especially those related to Periodontics and Oral Surgery .

### 2. Learning results

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

- Understand and perform the basic oral implantology manoeuvres necessary for treatment.
- Plan and carry out correctly the indications for implant treatment.
- Correctly interpret diagnostic tests used in implant dentistry.

**The subject will allow the student:**

- To provide basic knowledge on Osseointegration and Oral Implantology.
- To identify the different types of materials and implants to be used.
- To plan the surgical treatment for implant placement.
- To correctly select the patient who is a candidate for implant treatment.
- To formulate the prognosis regarding the placement of implants in the jaws.
- To know the complementary techniques necessary for an integral treatment with implants
- To apply the criteria of success and failure for a successful therapy in implant dentistry

### 3. Syllabus

Theoretical program

- 1: Introduction to oral implantology.
- 2: Osseointegration. Criteria for success in implant dentistry.
- 3: Anatomy applied to implantology.
- 4: Medical record. Indications and contraindications of implants.
- 5: Diagnosis and patient selection.
- 6: Surgical planning of the partially and totally edentulous patient.
- 7: Materials in implantology.
- 8: Macroscopic and microscopic design of the implants.
- 9: Surgical field. Instruments and sterilization.

- 10: Basic surgical technique.
- 11: Post extraction implants: indications and contraindications.
- 12: Treatment of maxillary atrophies. Types of grafts and materials.
- 13: Complementary surgical techniques.
- 14: Guided bone regeneration.
- 15- Mucogingival plastic surgery.
- 16: Aesthetics in implantology.
- 17: Complications in implantology. Peri-implant maintenance.
- 18: Types and designs of implant prostheses.
- 19: Loading in implantology.
- 20: Computer Guided Surgery.

#### Practical program

- I: Exploration and diagnosis in implantology.
- II: Diagnosis and treatment planning in partial and total edentulous patients.
- III: Instruments, material and surgical equipment in implantology.
- IV: Surgical technique of implants on models.

## 4. Academic activities

Theoretical classes. The participatory master class will be used. During the presentation, dialogue will be encouraged by means of , questioning, problem-based learning, doubt resolution, etc. The thematic presentations will be supported by diagrams and illustrations using Power Point presentations. In addition, seminars will be held in the form of theoretical-practical workshops given by the teacher or guest speakers to explore topics of special interest.

Practical classes. Integrated by a series of activities that combine individual and cooperative work. Depending on the proposed exercise, they will be carried out in the pre-clinic classroom or in the Dental Clinic. At the end of the term, the student must present a portfolio produced during the realization of the different activities proposed. Attendance to practices and the presentation of the portfolio will be mandatory.

Tutoring. Dedicated to solve doubts or provide specific bibliography of a specific topic in relation to the theoretical or practical contents of the subject.

## 5. Assessment system

**The student must demonstrate that they have achieved the intended learning results through the following assessment activities:**

1. Practical test. Preclinical and clinical practices. It represents 30% of the final grade.
2. Reports of preclinical and clinical work (portfolio). It represents 20% of the final grade.
3. Objective test of theoretical knowledge. Written exam divided in 2 parts: 30 multiple-choice questions with 5 items of which only one is correct (6 points); 1 essay question with an answer of one side of a sheet of paper (4 points).

A minimum of 21 correct multiple-choice answers and more than 2 points on the essay question are required to pass (21 correct multiple-choice answers equals 3/6; 30 correct multiple-choice answers equals 6/6). It represents 50% of the final grade.

In order to pass the subject, the student must pass the theoretical test and the practical test independently.

## 6. Sustainable Development Goals

- 3 - Good Health & Well-Being
- 4 - Quality Education
- 5 - Gender Equality