

1. BASIC INFORMATION

Course	Basic Periodontology
Degree program	Bachelor´s Degree in Dentistry
School	Health Science Department
Year	Second
ECTS	6 ECTS
Credit type	Mandatory
Language(s)	Spanish and English
Delivery mode	In-Person
Semester	Second Semester
Academic year	2024/2025
Coordinating professor	Itziar Alonso Andreu

2. PRESENTATION

Basic periodontology is a second course subject of the Dentistry degree that takes place in the second semester of the course, with a value of 6 ECTS. This subject, which is compulsory within the Degree, provides basic and specific training on the concept of the patient's periodontium. Its anatomy is basic to know the types of disease that can be found in the oral cavity, as well as the histology, type of diseases, treatments, medication and instruments used to carry out the different treatments in patients. Knowledge is provided when making a correct diagnosis in the patient and being able to carry out the appropriate treatment in each case.

The course schedule combines the online activities that are carried out, the theory taught in the classroom, as well as the practices carried out in the laboratory, to allow integrative knowledge and skills. It also respects a chronological order that allows the student to gradually acquire knowledge and skills. The basic periodontics course curriculum clearly defines the appropriate general and specific skills to develop the different levels of learning in the subject. The course is taught in Spanish and English given the marked international character of the European University of Madrid, providing students with enough tools to achieve a level of knowledge that allows them to carry out their professional work internationally. Within the ECTS of this subject, hours of teacher work in theory classrooms (master classes, tutorials, clinical cases and resolution of practical exercises) and hours of practical work in the laboratory in a traditional simulation environment with practical practices are included. preclinical and skills assessment tests.

3. COMPETENCIES AND LEARNING OUTCOMES

Core competencies:

- CB2: that students know how to apply their knowledge to their work or vocation in a professional way and possess the competencies that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study.
- CB3: that students have the ability to collect and interpret relevant data (usually within their area of study) to make judgments that include reflection on relevant issues of a social, scientific and ethical nature.
- CB5: that the students have developed those learning skills necessary to undertake further studies with a high degree of autonomy.

Cross-curricular competencies:

- CT1: Autonomous learning: Process that allows the person to be the author of their own development, choosing the paths, strategies, tools and moments that they consider most effective to learn and independently implement what they have learned. The independent student, in short, selects the best strategies to achieve their learning objectives.
- CT3: Ability to adapt to new situations: being able to work under different conditions, different people and in varied groups. It involves assessing and understanding different positions, adapting your own approach as the situation requires.
- CT7 - Awareness of ethical values: Ability to think and act according to universal principles based on the value of the person that are aimed at their full development and that involves commitment to certain social values.
- CT8 - Information management: Ability to search, select, analyze and integrate information from various sources.

Specific competencies:

- CE9. Understand the importance of maintaining and using records with patient information for subsequent analysis, preserving the confidentiality of the data.
- CE12. Understand and recognize the normal structure and function of the stomatognathic apparatus, at the molecular, cellular, tissue and organic levels, at different stages of life.
- CE13. Understand and recognize the biomaterial sciences essential for dental practice as well as the immediate management of possible allergies to them.
- CE14. Learn about general disease processes, including infection, inflammation, immune system abnormalities, degeneration, neoplasia, metabolic abnormalities, and genetic disorders.
- CE15. Be familiar with the general pathological characteristics of diseases and disorders that affect the organic systems, specifically those that have oral repercussions
- CE16. Understand the fundamentals of action, indications and efficacy of drugs and other therapeutic interventions, knowing their contraindications, interactions, systemic effects and interactions on other organs, based on the available scientific evidence
- CE20. Obtain and prepare a medical record that contains all the relevant information.
- CE21. Know how to carry out a complete oral examination, including the appropriate complementary radiographic and exploration tests, as well as obtaining adequate clinical references.
- CE22. Have the ability to prepare an initial diagnostic judgment and establish a reasoned diagnostic strategy, being competent in recognizing situations that require urgent dental care.
- CE23. Establish the diagnosis, prognosis and adequate therapeutic planning in all the clinical areas of Dentistry, being competent in the diagnosis, prognosis and preparation of the dental treatment plan for the patient that requires special care, including medically compromised patients (such as diabetics, hypertensive patients, immunosuppressed, anticoagulated, among others) and patients with disabilities. BOE no. 174 Saturday July 19, 2008 31689.
- CE27. Propose and propose preventive measures appropriate to each clinical situation.
- CE30. Recognize the role of the dentist in the actions of prevention and protection against oral diseases, as well as in the maintenance and promotion of health, both individually and at the community level.

Learning outcomes:

- LO1: Knowledge of the anatomy, physiology and histology of the periodontium of periodontal diseases.
- LO2: Necessary knowledge for Periodontal diagnosis: Complete periodontal study, periodontogram, radiographic series and index.
- LO3: Knowledge about the classification of periodontal diseases and treatment.

The following table shows the relationship between the competencies developed during the course and the learning outcomes pursued:

Competencies	Learning outcomes
CB1, CB2, CB4, CT1, CT4, CT7, CT8, CT9, CE3, CE12, CE14, CE15, CE16, CE17, CE20, CE27, CE30	LO1
CB1, CB2, CB4, CB5, CT1, CT3, CT7, CT8, CT9, CE1, CE3, CE9, CE13, CE17, CE20, CE21, CE22, CE23	LO2
CB2, CB3, CT1, CT8, CE9, CE14, CE15, CE16, CE20, CE21, CE22, CE23, CE27, CE30	LO3

- ☐ To develop the competences and achieve the indicated learning results, you must carry out the activities indicated in the table below

Learning Results	Learning Activity	training activity type	Content
LO1 Knowledge of the anatomy of the periodontium, histology and physiology	LA1	Masterclass Activity 1 Online Tutorial	UA 1 Introduction to Periodontology Lesson 1 Lesson 2 Lesson 3 Lesson 4 Risk Factors
LO2 Knowledge of Diagnosis in Periodontology: complete periodontal study and indices	LA2	Masterclass Tutorials Practical Classes Practices Evaluation	UA 2 Periodontal Diagnosis Lesson 5 Lesson 6 Lesson 7 Clinical History Periodontogram Periodical Series Periodontal Index System
LO3 Knowledge about the classification and treatment of periodontal diseases	LA3	Masterclass Tutorials Activity 2 online Practical Classes Evaluation of Practical Ability and Knowledge	UA 3 Classification of the Periodontal Diseases Lesson 8 Lesson 9 Lesson 10 Lesson 11 Lesson 12 Lesson 13 Lesson 14 Clinical Cases Oral Hygiene Instructions Scaling and Root Planing

RA1, RA2 Y RA3		Evaluation of Ability and Knowledge	Evaluation of Practical Ability and theory Knowledge
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4. CONTENT

1. Theory Content of the Subject:

Lesson 1. Periodontal Anatomy

Elements and constituent units of the periodontium in the oral cavity. Anatomical position and structures.

Lesson 2. The Mucosa in teethed and peri-implant areas

Anatomical and functional concepts of the mucosa in the oral cavity, both around the teeth and implants.

Lesson 3. Bone

The alveolar bone that makes up the jaws. Bone anatomy and functions.

Lesson 4. Epidemiology of the Periodontal Diseases

The alveolar bone that makes up the jaws. Bone anatomy and functions.

Lesson 5. Biofilm and Dental Calculus

Bacterial plaque formation and later dental calculus.

Lesson 6. Periodontal Infections

Infection process of periodontal structures. Pathogenic bacteria that make up periodontal diseases.

Lesson 7. Pathogenesis of the periodontal disease

Phases of bacterial plaque formation and gingival lesions. Periodontal lesion formation phase. Cells involved in inflammation. Microorganisms related to specific periodontal diseases.

Lesson 8. Non-plaque induced gingival lesions

Inflammatory lesions not induced by bacterial plaque: lesions of bacterial, viral, fungal, genetic, traumatic and systemic origin

Lesson 9. Plaque-induced gingival lesions

Clinical signs of gingivitis. Classification of gingival diseases.
Plaque-induced gingivitis. Lacquer-induced gingivitis and modified by hormonal, systemic factors, medication and malnutrition.

Lesson 10. Chronic Periodontitis

Characteristics of chronic periodontitis. Prevalence and progression of chronic periodontitis. Risk factors of chronic periodontitis.

Lesson 11. Aggressive Periodontitis

Classification of aggressive periodontitis, characteristics.
Etiology, diagnosis and treatment.

Lesson 12. Necrotizing Periodontitis

Types. GN and PN clinical characteristics. Diagnosis and microbiology. Treatment

Lesson 13. Mechanical Plaque Control

Brushing techniques, frequency and duration. Interdental cleaning resources. Auxiliary and mouthwash resources. Importance of teaching oral hygiene and motivation to the patient.

Lesson 14. Non-surgical Periodontal Treatment

Goals of periodontal treatment. Non-surgical periodontal treatment techniques. Reevaluation of the patient and periodontal maintenance.

2. Practical Content:

Practice 1: Medical History

Practice 2: Periodontal Study. Periodontogram

Practice 3: Periodontal Study. Periapical Series

Practice 4: Oral Hygiene

Practice 5: Periodontal Index System

Practice 6: Periodontal Treatment. Scaling and Root Planing Presentation

Practice 7: Periodontal Treatment. Scaling and Root Planing 1st quadrant

Practice 8: Periodontal Treatment. Scaling and Root Planing 2nd quadrant

Practice 9: Periodontal Treatment. Scaling and Root Planing 3rd quadrant

Practice 10: Periodontal Treatment. Scaling and Root Planing 4th quadrant

3. Online Activities:

Activity 1 online: Review Lesson 4 and respond to a questionnaire online

Activity 2 online: Review Lessons 8-12 and diagnose 10 Clinical Cases

5. TEACHING-LEARNING METHODOLOGIES

The types of teaching-learning methodologies used are indicated below:

- Masterclasses
- Lab practices

6. LEARNING ACTIVITIES

Listed below are the types of learning activities and the number of hours the student will spend on each one:

Campus-based mode:

Learning activity	Number of hours
Masterclasses	22h
Lab Practices	28h
Tutorials	12h
Linguistic Import	12h
Activities Online	8h
Self study and work	60h
Ability and knowledge Test	8h
TOTAL	150h

7. ASSESSMENT

Listed below are the assessment systems used and the weight each one carries towards the final course grade:

Campus-based mode:

Assessment system	Weight
Linguistic Import	10%
Online Activities	10%
Lab Practices	50%
Ability and knowledge Test	30%
Total	100%

When you access the course on the *Campus Virtual*, you'll find a description of the assessment activities you have to complete, as well as the delivery deadline and assessment procedure for each one.

7.1. First exam period

In order to assess the knowledge acquired by students and achieve competencies in the area of basic periodontics, various methods will be used, including:

1^o.- Assessment of theoretical knowledge (30% of the grade)

There will be a single part in which the theoretical concepts that the student has acquired during the course will be evaluated.

The partial comprises the 14 theoretical topics taught in class.

This theoretical part will count 30% of the final grade of the subject, having to be approved the exam with a grade of 5 or higher so that it does average with the rest of the parts of the subject.

The student who does not pass the exam in the ordinary call, will have the opportunity to retake it in extraordinary call.

2nd Assessment of the development and results of teaching activities (active methodologies) carried out online (10% of the grade)

3rd Assessment of practical knowledge (50%)

- Assessment of practical knowledge, through practices carried out in the laboratory (30%).

4th Result of the Spanish support Lessons carried out by the Language center teachers

There will be 2 online activities during the semester. The first online activity will be carried out by reviewing theoretical topic 4 and answering a test with a series of questions on that topic.

The second online activity is about clinical cases. It will evaluate what the student has learned during the course and studying the different types of periodontal diseases that we will study during the course.

These online activities will average, having to be passed separately with a rating of 5 or higher. This average will count 10% of the total grade for the course.

The student who has not passed any of these activities will be able to retake them at the end of the semester on a day established to do it, which appears on the schedule of each class. If you still have not passed it in an ordinary call, you can recover it in an extraordinary call.

3rd Assessment of practical knowledge:

Students will carry out various practices in the laboratory throughout the semester. These practices are carried out with the aim of preparing the student for practice in the clinic and in working life, simulating how to carry out the treatment in the laboratory. We will carry out the remaining practices online with presentations, videos and practical examinations.

The evaluation of the practices will be divided into three blocks:

- The first block is comprised of the practices of: clinical history, periodontogram and periapical series.
- The second block is comprised of the practices of: oral hygiene and periodontal indices.
- The third block is comprised of the practices of scaling and root planing of the four quadrants.

At the end of each block, each student will be given an oral assessment test individually, being able to solve some theoretical questions and practice on the laboratory typodont. Each evaluation at the end of the block must be passed with a grade of 5 or higher.

Each block has to be passed with a grade of 5 or higher. Failure to pass any of the blocks means not passing the practical part of the subject, being able to retake it at the end of the semester in ordinary session on the established day (schedule of each group).

These three blocks must average (as long as the three with a grade of 5 or higher have been passed) and said average will count 50% of the final grade of the basic periodontics course.

A student who has not passed any of the blocks, or all the practical part in ordinary call, will then be able to recover it in the extraordinary call.

You can only have two absences during the semester and practices. Those students who have a fault will be able to recover on a day established in the schedule of each group. **The student who has more than two absences will recover the practical part in the follow-up period in an extraordinary call.**

Those students who do not pass the practice in ordinary call, may retake it in the extraordinary call.

FINAL SCORE

The final grade for the course will be obtained with the sum of the different parts that we have evaluated throughout the semester:

- Theoretical part: a multiple choice test that must be passed with a grade of 5 or higher so that it makes an average with the rest of the sections of the subject. This theoretical part will represent 30% of the total grade for the course.
- Part online activities: the student must pass individually the activities that we will carry out during the semester with a grade of 5 or higher. These activities average each other and will account for 10% of the final grade for the course.

- Practical part: The student must pass the oral and practical evaluation of the three blocks individually with a grade of 5 or higher. The three blocks that comprise the subject will average each other and this average will represent 50% of the final grade for the course.

-Spanish Support classes: will count 10% of the final grade

In case of not passing any of the parts that make up the subject, the whole subject will be failed in the ordinary call and the failed parts can be recovered in the extraordinary call.

7.2. Second exam period

The student will be presented in extraordinary call for tests / activities and practices not passed with a grade greater than or equal to 5 points during the course.

The practical part of the subject will be recovered during the follow-up period of the subject, where the student will be able to go to the laboratory to retrieve the missed or failed practices. There will also be tutorials on the theoretical part of the subject and you can consult all kinds of questions about the theory content. Online activities that have not been completed or have not been passed in ordinary call will be recovered.