

1. BASIC DATA

Course	Preventive dentistry
Degree program	Degree in Dentistry
School	Biomedical and Health Sciences
Year	Fifth
ECTS	6 ECTS
Credit type	Obligatory
Language(s)	English
Delivery mode	Face-to-face
Semester	S8
Academic year	2025-2026
Coordinating professor	Julia Sánchez Ituarte

2. PRESENTATION

The subject "**Preventive Dentistry**" is mandatory within the academic planning of the Degree in Dentistry at the European University of Madrid. It is part of one of the traditional guiding axes in the training process of the future graduate, who acquires a solid preparation in the field of prevention.

In this context, the main objective of the subject is the analysis of the prevention and promotion of oral health at the individual level, focused on patient care in the dental office as part of daily practice.

Throughout the course, the student will acquire fundamental knowledge about the health-disease process in the oral cavity and its relevance in maintaining the general health of the individual. Subsequently, the necessary elements to preserve and promote oral health are addressed, both from the perspective of the patient in their home environment and the professional in the office. Finally, the student will incorporate the essential knowledge to practice dentistry safely, correctly applying the disinfection and sterilization processes, in order to reduce the risk of transmission of infectious and contagious diseases.

The subject allows the student to analyze and resolve possible clinical cases that may arise in their professional practice, with the purpose of offering answers or alternatives from the health approach, also considering the socioeconomic and cultural situation of the patients.

"Preventive Dentistry" is conceived from a theoretical-practical perspective, which places the student in real scenarios, allowing them to apply the knowledge and skills acquired for their resolution.

The Hy-Flex learning model has been implemented, which allows 20% of teaching to be delivered online and asynchronously. This component is integrated into the digital block.

3. LEARNING OUTCOMES

Knowledge

KN01 Know the essential elements of the dental profession, including ethical principles and legal responsibilities.

KN05 Promote autonomous learning of new knowledge and techniques, as well as the motivation for quality.

KN06 Understand the importance of maintaining and using patient information records for further analysis, preserving the confidentiality of the data.

KN12 Be familiar with the general pathological characteristics of diseases and disorders affecting the organ systems, specifically those with oral repercussions.

KN14 Understand and recognize the principles of ergonomics and safety at work (including cross-infection control, radiation protection, and occupational and biological diseases).

KN15 Recognize the role of the dentist in the prevention and protection against oral diseases, as well as in the maintenance and promotion of health, both at the individual and community level.

KN23 Understand the scientific principles of sterilization, disinfection and antisepsis necessary to prevent cross-infections in dental practice.

KN28 Know the effects of tobacco on oral health and participate in measures that help patients who wish to quit smoking.

KN38 Have appropriate knowledge of human nutrition, in particular, the relationship of nutritional habits and diet with the maintenance of health and the prevention of oral-dental diseases.

Subject-specific knowledge

- To know the role of the dentist in the prevention and protection against oral diseases, as well as in the maintenance and promotion of health at an individual level.

Skills

SK01 Be able to identify the patient's concerns and expectations, as well as communicate effectively and clearly, both orally and in writing, with patients, relatives, the media and other professionals.

SK03 Be able to share information with other health professionals and work in a team.

SK05 Know the scientific method and have the critical capacity to evaluate established knowledge and new information. Be able to formulate hypotheses, collect and critically evaluate information to solve problems, following the scientific method.

SK09 Establish the diagnosis, prognosis and adequate therapeutic planning in all clinical areas of Dentistry, being competent in the diagnosis, prognosis and elaboration of the dental treatment plan for patients requiring special care, including medically compromised patients (such as diabetics, hypertensive, immunosuppressed, anticoagulated, among others) and patients with disabilities.

SK17 Solve clinical cases in a simulated environment.

Subject-specific skills

- Manage the different preventive dental procedures that must be specific and individualized according to the patient's risk.
- Apply disinfection and sterilization methods in the dental office.
- Manage the different methods and techniques in the maintenance of oral hygiene.
- Apply a saliva measurement method to a simulated patient.

Competences

CP06 Provide a global approach to oral care and apply the principles of health promotion and prevention of oral diseases.

CP07 Educate and motivate patients in the prevention of oral diseases, control pathogenic oral habits, instruct them on correct oral hygiene, on dietary and nutritional measures and, in short, on all methods of maintaining oral health.

CP41 Responsibly use information and communication technologies to facilitate data search, management and analysis, research, communication and learning, as required.

CP42 Influence others to guide and direct them towards specific objectives and goals, taking into account their points of view, especially in professional situations arising from volatile, uncertain, complex and ambiguous environments (VUCA) in today's world.

CP46 Show ethical behavior and social commitment in the performance of the activities of a profession, as well as sensitivity to inequality and diversity.

4. CONTENT

- Introduction to Preventive Dentistry.
- Study of the oral environment.
 - Oral biofilms.
 - Mechanical control of oral biofilms.
 - Chemical control of oral biofilms.
 - Dental calculus.
 - Fluoride. Introduction and mechanism of action.
 - Fluoride for professional application and self-application.
 - Pit and fissure sealants. Silver diamine fluoride.
- Dentifrices.
- Dietary measures in the prevention of caries.
- Dental caries. Minimally invasive dentistry (MID).
- Identification of caries risk.
- Disinfection and sterilization

5. TEACHING-LEARNING METHODOLOGIES

The following are the types of teaching-learning methodologies that will be applied:

- MD1 Masterclass
- MD2 Case Method
- MD3 Cooperative Learning
- MD8 Simulation environments.
- MD9 Service-Learning.

6. LEARNING ACTIVITIES

The types of training activities that will be carried out and the student's dedication in hours to each of them are identified below:

Training activity	Number of hours
AF1 Masterclasses	22

AF2 Practical Application Seminars	4
AF3 Case Analysis	3
AF5 Oral presentations of papers	6
AF8 Activities in workshops and/or laboratories	3
AF10 Self-employment	60
AF12 Face-to-face assessment tests	2
TOTAL	100

7. EVALUATION

The evaluation systems are listed below, as well as their weight on the total grade of the subject:

Evaluation system	Weight
SE1 Face-to-face assessment tests	40%
SE4 Case/Problem	30%
SE7 Systematic observation	30%

On the Virtual Campus, when you access the subject, you will be able to consult in detail the evaluation activities you must carry out, as well as the delivery dates and evaluation procedures for each of them.

7.1. Ordinary call

To pass the subject in the ordinary call, you must obtain a grade greater than or equal to 5.0 out of 10.0 in the final grade (weighted average) of the subject. However, this grade will only be valid if the minimum requirements established for each of the assessable blocks have been met, as indicated in the learning guide. This means that, even if the weighted average is equal to or greater than 5.0, the subject will not be passed if any of the parties has not reached the minimum grade required.

In any case, it will be necessary for you to obtain a grade greater than or equal to 5.0 in the final test, so that it can average with the rest of the assessable activities that have been passed in accordance with the criteria established in the learning guide.

Likewise, in order to take the final exam, you must have attended at least 50% of the scheduled classes and activities, as established in the course guide. This requirement applies regardless of whether the absences are justified or not. If the percentage of absences exceeds this limit, they cannot be justified in any case and this will imply the impossibility of passing the subject in that call.

If a student does not carry out an activity, submit an assignment or does not attend any of the objective tests on the dates determined by the teacher, for clearly justified reasons, he or she will have a grade of "Not presented: NP". You must make the recovery on the date determined by the teacher. In the ordinary call, only 2 synchronous individual activities and 4 from the Digital Block can be recovered, with the maximum grade being pass.

7.2. Extraordinary call

In order to pass the subject in the extraordinary call, you must obtain a grade greater than or equal to 5.0 out of 10.0 in the final grade (weighted average) of the subject.

In any case, it will be necessary to obtain a grade greater than or equal to 5.0 in the final exam, so that it can be averaged with the rest of the assessable activities.

Depending on the parts not passed in the ordinary exam, you will have to recover those that have not reached the minimum grade required:

- If you have not passed the theoretical exam, you will have to repeat this test in the extraordinary call.
- If you have not passed the practical part of the subject (practical exam), you will have to retake it, according to the instructions of the course teachers.
- If any of the continuous assessment activities (theoretical or practical) have not been passed or were not presented in the ordinary exam, they must be carried out in person during the monitoring period, at the established times. These activities may coincide with the original ones or be replaced by others, at the discretion of the teachers.

8. SCHEDULE

This section indicates the schedule with delivery dates of assessable activities of the subject:

Assessable activities	Date
Exercise 1: Caries indices.	Week 2
Exercise 2: Gingival and plaque index. Exercise 3: Community periodontal index.	Week 3
Seminar 1: Utensils for the mechanized removal of oral biofilm	Week 4
Workshop 1: Professional Application of Fluoride and Pit and Fissure Sealants	Week 4-5
Ejercicio 4: Flipped classroom.	Week 6-8
Exercise 5: Educational pamphlet on preventive measures.	Week 9-11
Seminar 2: Saliva test	Week 12
Spanish and English activity	Week 13
Workshop 2: Disinfection and sterilization. Hand washing.	Week 14-15
Problem 1: Clinical cases of patients.	Week 13
Recovery of pending activities	Week 15
Final Test and Review	Week 16-18

This schedule may be modified for logistical reasons of the activities. Any modification will be notified to the student in a timely manner. Week by week, students will have content in the Digital Block. The activities are available on the virtual campus.

9. BIBLIOGRAPHY

The reference work for the follow-up of the subject is:

- Rioboo R. Preventive dentistry and community dentistry. Madrid: Advances in Medicine-Dental; 2002.
- Cuenca Sala E, Baca García P. Preventive and community dentistry: principles, methods and applications. 4th ed. Barcelona: Masson; 2013.
- Cuenca Sala E, Baca García P. Preventive and community dentistry: principles, methods and applications. 3rd ed. Barcelona: Masson; 2005.
- Harris N, García Godoy F. Primary Preventive Dentistry.
- 7th Ed. Pearson. New Jersey 2004.
- Woodall I. Treatise on Dental Hygiene. Woodall. Salvat. Barcelona 1992.
- Murray J J. Prevention of Oral Disease. 4th Ed. Oxford University Press. New York 2003.
- Axelsson P. An introduction to Risk Prediction and Preventive Dentistry. Quintessence Books. Germany 1999.
- Axelsson P. Diagnosis and Risk Prediction of Dental Caries. QuintessenceBooks. Germany 2000.
- Axelsson P. Diagnosis and Risk Prediction of Periodontal Diseases.
- Quintessence Books. Slovakia 2002.
- Higashida B. Preventive Dentistry. McGraw Hill Inter-American. Mexico 2000.
- Katz S. Preventive Dentistry in Action. Editorial Panamericana. Buenos Aires 1986.
- Garza Garza A M. Infection control and safety in dentistry. Ed. Manual Moderno 2007.
- Seif T. Cariology. Latin American Medical and Dental Updates, C.A.Amolca 1st Ed 1998.
- Clinical practice guidelines for the prevention and non-invasive treatment of dental caries. RCOE; 2014; 19: 189-249.
- Guidelines on the use of fluoride in children: an EAPD policy document. European archives of pediatric dentistry. 10 (3). 2009.

10. EDUCATIONAL GUIDANCE, DIVERSITY AND INCLUSION UNIT

From the Educational Guidance, Diversity and Inclusion Unit (ODI) we offer support to our students throughout their university life to help them achieve their academic achievements. Other pillars of our action are the inclusion of students with specific educational support needs, universal accessibility on the different campuses of the university and equal opportunities.

This Unit offers students:

1. Accompaniment and follow-up through the realization of personalized counseling and plans for students who need to improve their academic performance.
2. In terms of attention to diversity, non-significant curricular adjustments are made, that is, at the level of methodology and evaluation, in those students with specific educational support needs, thus pursuing equality of opportunities for all students.
3. We offer students different extracurricular training resources to develop various skills that will enrich them in their personal and professional development.

4. Vocational guidance through the provision of tools and advice to students with vocational doubts or who believe that they have made a mistake in the choice of degree.

Students who need educational support can write to us at:

orientacioneducativa@universidadeuropea.es

11. ONLINE SURVEYS

Your opinion matters!

The European University encourages you to participate in satisfaction surveys to detect strengths and areas for improvement in the teaching staff, the degree and the teaching-learning process.

The surveys will be available in the survey space of your virtual campus or through your email.

Your assessment is necessary to improve the quality of the degree.

Thank you very much for your participation.