

1. BASIC INFORMATION

Course	Primary preventive dentistry
Degree program	Dentistry
School	Ciencias Biomédicas y de la Salud
Year	Forth
ECTS	4 ECTS
Credit type	Mandatory
Language(s)	English
Delivery mode	Campus-based mode - Hyflex
Semester	Second semester
Academic year	2024/2025
Coordinating professor	Julia Sánchez Ituarte

2. PRESENTATION

The subject "Primary Preventive Dentistry" is a mandatory subject in the planning of the teaching of the Degree in Dentistry of the Universidad Europea de Madrid. This subject is part of one of the traditional guiding axes in the formative process of the future graduated in dentistry that acquires a solid training in prevention.

In this context, this subject sets as its ultimate objective the analysis of prevention and promotion of oral health at the individual level with patients in the dental cabinet, within daily practice.

In this way, throughout the course, the student will acquire the basic knowledge about the health-disease process in the oral cavity and its importance in maintaining the general health of the individual. Subsequently, the necessary elements for the maintenance and promotion of oral health that both the patient in his home and the professional in the dental office must perform are analysed. Finally, the student will learn the necessary knowledge to carry out dental practice safely, putting into practice the correct disinfection and sterilization processes to reduce the risk of transmission of infectious-contagious diseases.

The subject allows the student to analyse and solve the possible clinical cases that may arise in their clinical practice, in order to offer answers or alternative solutions from the point of view of health, taking into account the socio-economic and cultural situation of the patients.

The subject "Primary Preventive Dentistry" is conceived in this way from a theoretical-practical point of view, which places the student before real assumptions being the student able to solve them by applying the knowledge and skills acquired.

3. COMPETENCIES AND LEARNING OUTCOMES

Basic competences:

- CB1. Students must prove they have knowledge on a specific field, based on the secondary general education. This knowledge is at a level that, apart from being supported by advanced textbooks, includes aspects that imply knowledge coming from the forefront of its field of study.
- CB3. Students are able to bring together and perform important facts (usually on their study area), and issue a sentence that includes social, scientific or ethical reflections.
- CB4. Students are able to transmit information, ideas, problems and solutions to a specialised and non-specialised public.
- CB5. Students develop the learning skills needed to carry out works with a high level of personal autonomy.

Cross-curricular competences:

- CCC3. Ability to adapt to new situations: Being able to work under different conditions, different people and various groups. Valuing and understanding different positions, adapting their own approach as the situation demands.
- CCC4. Analysis and synthesis ability: Analysis is the reasoning methods that allow us to split up complicated situations into their components; also assesses other alternatives and perspectives to find out optimal solutions. Synthesis aims to reduce the complexity in order to have a better understanding and problem-solving capacity.
- CCC5. Ability to apply knowledge into practice: Ability to use the acquired knowledge in the academic field in situations, which are similar to the reality of the profession for which they are formed. For example, by relating theoretical foundations with their application to real problems of everyday life, addressing problems and situations close to the professional activity or resolve issues and / or actual problems.
- CCC6. Oral Communication / Written Communication: Communication is the process by which we transmit and receive data, ideas, opinions and attitudes to achieve understanding and action; being oral the one that is performed by words and gestures and written the one done by writing and / or graphics support.
- CCC7. Ethical value awareness: Ability to think and act according to the universal principles based on the personal values aimed at his full development related to the commitment of determined social values.
- CCC9. Personal relationship values: Positive relationship with others verbally and non-verbally by assertive communication, understanding by this, the ability to express or transmit what is wanted, thought or felt without causing discomfort, attacking or hurting someone's feelings.

General competences:

- GC1. Recognise the basic elements of the dental profession, including the ethical principles and legal responsibilities.
- GC3. Identify the patient's concerns and expectancies, as well as having the ability to have an efficient and clear oral and written communication with the patients, their family, the social media and other professionals.
- GC7. Promote autonomous learning of new concepts, techniques and also motivation in order to obtain quality.
- GC8. Learn to share information with other health professionals and learn teamwork skills.
- GC9. Understand the importance of maintaining and using records information of patient for later analysis, preserving the confidentiality of data.
- GC15. Be familiar with the general pathological features of diseases and disorders affecting organ systems, specifically those with oral impact.

- GC17. Ethical value awareness: Ability to think and act according to the universal principles based on the personal values aimed at his full development related to the commitment of determined social values.
- GC19. Knowledge of the scientific method and critical capacity to assess the established knowledge and new information. Be able to formulate hypotheses, collect and critically evaluate information for problem solving, using the scientific method.
- GC23. To establish the diagnosis, prognosis and an appropriate treatment plan in all clinical areas of dentistry, being competent in the diagnosis, prognosis and treatment plan in patients requiring special care, including medically compromised patients (such as diabetic, hypertense, immunosuppressed, anticoagulated, among others) and disabled patients. BOE no. 174 Saturday 19 July 2008 31689.
- GC25. To know and apply the basic treatment of the most common oral and dental diseases in patients of all ages. Therapeutic procedures must be based on the concept of minimally invasive dentistry and in a comprehensive and integrated approach to the dental treatment.
- GC27. Ask and propose appropriate preventive measurements in every clinical situation.
- GC30. Recognize the role of the dentist in prevention and protection against oral diseases and also in maintaining and promoting health, at the individual and the community level.

Specific competences:

- SC6. Know the scientific principles of sterilization, disinfection, and antisepsis necessary to prevent cross-infections in dental practice.
- SC18. Provide a comprehensive approach to oral care and apply the principles of health promotion and prevention of oral diseases.
- SC19. Educate and motivate patients in the prevention of oral diseases, control pathogenic oral habits, instruct them on proper oral hygiene, on dietary and nutritional measures and, in resume, on all methods of maintaining oral health.
- SC20. Know the effects of tobacco on oral health and participate in measures that help the patient who wants to stop smoking.
- SC33. Have appropriate knowledge of human nutrition, the relationship of nutritional habits and diet with the maintenance of health and the prevention of oral and dental diseases.

Learning outcomes:

- LO1. Acquire clinical capacitation in the management of the different preventive dental procedures. Students must be able to be specific and individualize according to the patient's risk.
- LO2. Know and apply the basic treatment of the most common oral pathologies in patients of all ages. Therapeutic procedures should be based on the concept of minimal invasion and a comprehensive and integrated approach to oral treatment.
- LO3. 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 at the individual level.
- LO4. Propose and implement the appropriate preventive measures for each clinical situation, as well as the levels of prevention and levels of application of preventive measures.
- LO5. Educate and motivate patients in the prevention of oral diseases, control pathogenic oral habits, instruct them on proper oral hygiene, on dietary and nutritional measures and, in resume, on all methods of maintaining oral health.
- LO6. Assess and treat the patient with caries or other non-carious dental pathology and be able to use all materials aimed at restoring the shape, function, and aesthetics of the tooth in patients of all ages.
- LO7. Manage the different methods and techniques in the maintenance of oral hygiene. Explain and perform the main methods for the control and prevention of oral diseases.
- LO8. Describe and apply disinfection and sterilization methods in the dental office.

The table below shows the relation between the competencies developed during the course and the envisaged learning outcomes:

Competences	Learning outcomes
BC3, CCC3, CCC5, CCC7, GC3, GC7, GC19, GC23, GC25, GC27	<p>LO1. Acquire clinical capacitation in the management of the different preventive dental procedures. Students must be able to be specific and individualize according to the patient's risk.</p> <p>LO6. Assess and treat the patient with caries or other non-carious dental pathology and be able to use all materials aimed at restoring the shape, function, and aesthetics of the tooth in patients of all ages.</p> <p>LO7. Manage the different methods and techniques in the maintenance of oral hygiene. Explain and perform the main methods for the control and prevention of oral diseases.</p>
BC1, CCC3, CCC4, GC1, GC7, GC8, GC9, GC15, GC25, GC30, SC18, SC19,	<p>LO2. Know and apply the basic treatment of the most common oral pathologies in patients of all ages. Therapeutic procedures should be based on the concept of minimal invasion and a comprehensive and integrated approach to oral treatment.</p> <p>LO3. 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 at the individual level.</p> <p>LO4. Propose and implement the appropriate preventive measures for each clinical situation, as well as the levels of prevention and levels of application of preventive measures.</p>
CB5, CT3, CT6, CT7, CT9, CB4, CG3, CG8, CG19, CG23, CG25, CG27, CE20, SC33	<p>LO5. Educate and motivate patients in the prevention of oral diseases, control pathogenic oral habits, instruct them on proper oral hygiene, on dietary and nutritional measures and, in resume, on all methods of maintaining oral health.</p>
CB1, CT5, CB5, CG1, CG15, CG30, SC6	<p>LO8. Describe and apply disinfection and sterilization methods in the dental office.</p>

4. CONTENTS

The subject is organized into eight learning units, which, in turn, are divided into themes:

Unit 1. Introduction and basic concepts in Preventive Dentistry

- Topic 1. Introduction to Primary Preventive Dentistry.
- Topic 2. Study of the oral environment.
- Topic 3. Oral biofilms.

Unit 2. Preventive measures of oral health

- Topic 4. Mechanical control of oral biofilms.
- Topic 5. Chemical control of oral biofilms.
- Topic 6. Dental calculus.
- Topic 7. Fluoride. Introduction and mechanism of action.
- Topic 8. Systemic and topical fluoride.
- Topic 9. Pit and fissure sealants. Silver Diamine Fluoride.
- Topic 10. Dentifrices.
- Topic 11. Dietary measures in caries prevention.

Unit 3. Dental caries and caries risk

- Topic 12. Dental caries. Minimally Invasive Dentistry (MID).
- Topic 13. Identification of caries risk.

Unit 4. Disinfection and sterilization processes

- Topic 14. Disinfection and sterilization.

5. METODOLOGÍAS DE ENSEÑANZA-APRENDIZAJE

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

- Case method.
- Cooperative learning.
- Problem-based learning.
- Master class.

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
Master classes	19 h
Practical exercises	11 h
Problem solving	10 h

Seminars	4 h
Tutorial	4 h
Knowledge tests	2 h
Study and autonomous work	46 h
Virtual asynchronous master class	2 h
TOTAL	100 h

7. EVALUATION

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

Assessment system	Weight
Knowledge test	40%
Clinical case	30%
Group activities	15%
Individual activities	15%

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 pass the course in the first exam period you have to

- Pass a test of 30 questions (incorrect answers will be deducted 0.33).
- Solve a clinical case of a patient.
- Carry out the individual and group methodologies developed during the class time.
- Come/connect to at least to 50% of the classes.
- Develop the activities in the Digital Block.

To pass the subject the student must obtain a minimum grade of 5 / 10. All the evaluation activities (the previous sections) must be passed individually with a minimum grade of 5. Although the average of the subject is higher than 5, if in one of the sections the grade is less than 5, the student will suspend the subject until he/she recovers that part.

If a student does not perform an activity, delivery of work or does not attend any of the objective tests on the dates determined by the teacher, for clearly justified reasons, it will have a grade of "Not Submitted: NP". You must perform the recovery on the date determined by the teacher. **In the ordinary call only 2 synchronous individual activities and 4 of the Digital Block can be recovered, being the maximum qualification of approved.**

Attendance to class is mandatory assuming a suspension in the ordinary call of the subject if the attendance is less than 50%.

7.2. Second exam period

In order to pass the course in the second exam period you must recover the suspended sections as follows:

- The recovery of the practical part will be done during the follow-up period:
 - **Day 1: only individuales activities and doubts for the exam.**
 - **Day 2: only group activities and doubts for the exam.**
- The recovery of the theoretical part and the clinical case will be done in the extraordinary call of July.
- The student must only recover the parts that have not been approved.

REGULATIONS FOR THE ASSESSMENT OF ACCREDITED UNDERGRADUATE DEGREES AT UNIVERSIDAD EUROPEA DE MADRID

CHAPTER I. COURSE ASSESSMENT SYSTEM FOR ACCREDITED UNDERGRADUATE DEGREES

Article 1 - 4. Continuous assessment

Students taking campus-based studies are required to demonstrate that they have attended at least 50% of their classes. Such attendance forms an essential part of the assessment process and is necessary to give the student the right to receive guidance, assistance and academic supervision from the professor. For such purposes, students must use the technological system put in place by the University to accredit their daily attendance at each of their classes. This system shall furthermore ensure that objective information is gathered regarding the active role of the student in the classroom. The failure to use the methods proposed by the University to demonstrate 50% attendance will give the professor the right to grade the course as a fail under the ordinary exam period. The foregoing does not affect other requirements of higher attendance percentages that each school may establish in their teaching guides or internal regulations.

Therefore, it is the authority of the professor that students who have not fulfilled the 50% of attendance in the ordinary call must pass all the evaluation tests in the extraordinary call, for which they must obtain a grade greater than or equal to 5.0 out of 10.0 in all of them (Faculty Board 11-07-23).

Article 6 - 12. Final grades

Any student that uses or benefits from unlawful means during an evaluation test or that unduly attributes the author of the academic work required for the assessment will be graded as a "fail" (0) and may similarly be the object of a sanction, subject to the opening of disciplinary proceedings. In the case of the Final Graduation Project, the plagiarism or the lack of originality of the project, will automatically be graded as a "fail" (0) in the corresponding course in both ordinary and extraordinary periods. Likewise, the student will lose their status as a student during six months according with the General Standards for Graduation Projects and Master's Thesis in its Article 5.

8. SCHEDULE

This table shows the delivery deadline for each assessable activity in the course:

Actividades evaluables	Fecha
Exercise 1: Caries indexes.	Week 2
Exercise 2: Gingival and plaque index. Exercise 3: Community periodontal index.	Week 3
Seminar 1: Tools for mechanical removal of oral biofilm	Week 4
Task Training 1: Professional application of fluoride and pits and fissures sealants.	Week 4-5
Exercise 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
Task Training 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

- Activities listed above will be performed face to face during classes. Any modification will be notified to the student in a timely manner.
- The final schedule will be available on each group's virtual campus.
- Weekly, students will carry out activities in the **DIGITAL BLOCK**. The activities are available on virtual campus.

9. BIBLIOGRAPHY

The following is the recommended bibliography:

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- Guidelines on the use of fluoride in children: an EAPD policy document. European archives of paediatric dentistry. 10 (3). 2009.

10. DIVERSITY MANAGEMENT UNIT

Students with specific learning support needs:

From the Educational Guidance and Diversity Unit we offer support to our students throughout their university life to help them reach their academic achievements. Other main actions are the students inclusions with specific educational needs, universal accessibility on the different campuses of the university and equal opportunities.

From this unit we offer to our students:

1. Accompaniment and follow-up by means of counselling and personalized plans for students who need to improve their academic performance.
2. In terms of attention to diversity, non-significant curricular adjustments are made in terms of methodology and assessment for those students with specific educational needs, pursuing an equal opportunities for all students.
3. We offer students different extracurricular resources to develop different competences that will encourage their personal and professional development.
4. Vocational guidance through the provision of tools and counselling to students with vocational doubts or who believe they have made a mistake in their choice of degree.

Students in need of educational support can write to us at:
orientacioneducativa@universidadeuropea.es

11. ONLINE SURVEYS

Your opinion matters!

The Universidad Europea encourages you to participate in several surveys which help identify the strengths and areas we need to improve regarding professors, degree programs and the teaching-learning process.

The surveys will be made available in the “surveys” section in virtual campus or via e-mail.

Your assessment is necessary for us to improve.

Thank you very much for your participation.