



COURSE DATA

DATA SUBJECT

Code: 34706
Name: Preventative and community dentistry I
Cycle: Undergraduate Studies
ECTS Credits: 6
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
1206 - Degree in Dentistry	Facultat de Medicina i Odontologia	3	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1206 - Degree in Dentistry	Preventive and community dentistry	COMPULSORY

COORDINATION

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 ALMERICH TORRES TERESA

SUMMARY

The course addresses the current concept of preventive dentistry and explains the role of different risk factors in dental caries (plaque, diet, susceptible hosts, preventive strategies available individually such as fluoride, fissure sealants; mechanical and chemical control of plaque). The initial caries lesion is explained together with histopathology and caries risk assessment and information is given about the disease, periodontal and preventive approaches, health education, and prevention of occupational hazards.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

1206 - Degree in Dentistry	34696 - Human anatomy
	34697 - Biology
Obligation to have previously passed the subject(s)	34698 - Human physiology
	34699 - Biochemistry
	34702 - Psychology and communication



OTHER REQUIREMENTS

COMPETENCES / LEARNING OUTCOMES

1206 - Degree in Dentistry

Comprender la importancia de desarrollar una práctica profesional con respeto a la autonomía del paciente, a sus creencias y cultura.

Comprender la importancia de mantener y utilizar los registros con información del paciente para su posterior análisis, preservando la confidencialidad de los datos.

Comprender y reconocer los aspectos sociales y psicológicos relevantes al tratamiento de pacientes.

Comprender y reconocer los principios de ergonomía y seguridad en el trabajo (incluyendo control de infecciones cruzadas, protección radiológica y enfermedades ocupacionales y biológicas).

Conocer e identificar los problemas psicológicos y físicos derivados de la violencia de género para capacitar a los estudiantes en la prevención, la detección precoz, la asistencia, y la rehabilitación de las víctimas de esta forma de violencia.

Conocer el Sistema Nacional de Salud, así como los aspectos básicos de la legislación sanitaria, gestión clínica y utilización adecuada de los recursos sanitarios, comprendiendo la importancia del papel del dentista en el ámbito de la Atención Primaria de Salud.

Conocer el Sistema Nacional de Salud así como los aspectos básicos de la legislación sanitaria, gestión clínica y utilización adecuada de los recursos sanitarios, comprendiendo la importancia del papel del dentista en el ámbito de la Atención Primaria de Salud.

Conocer la organización y de la provisión de la asistencia en salud oral en la comunidad, tanto a nivel privado como público, así como de la asistencia sanitaria general y del papel del dentista en dichos ámbitos.

Conocer las repercusiones de las tendencias demográficas y epidemiológicas en la práctica de la odontología.

Conocer los procedimientos encaminados a efectuar el diagnóstico de salud oral en la comunidad y saber interpretar los resultados.

Conocer los procedimientos y pruebas diagnósticas clínicas y de laboratorio, conocer su fiabilidad y validez diagnóstica y ser competente en la interpretación de sus resultados.

Educar y motivar a los pacientes en materia de prevención de las enfermedades buco-dentarias, controlar los hábitos bucales patogénicos, instruirlos sobre una correcta higiene bucal, sobre medidas dietéticas y nutricionales y, en resumen, sobre todos los métodos de mantenimiento de la salud bucodental.

Elaborar y ejecutar programas de salud oral y conocer de la coordinación inter-institucional e inter-profesional necesaria para su ejecución.

Establecer el diagnóstico, pronóstico y una adecuada planificación terapéutica en todas las áreas clínicas



de la Odontología, siendo competente en el diagnóstico, pronóstico y elaboración del plan de tratamiento odontológico del paciente que requiera cuidados especiales, incluidos los pacientes médicamente comprometidos (como diabéticos, hipertensos, inmunodeprimidos, anticoagulados, entre otros) y pacientes con discapacidad.

Identificar el principal motivo de consulta y la historia de la enfermedad actual. Realizar una historia clínica general del paciente y una ficha clínica que refleje fielmente los registros del paciente.

Obtain and elaborate a clinical history with relevant information.

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Realizar las radiografías necesarias en la práctica odontológica, interpretar las imágenes obtenidas y conocer otras técnicas de diagnóstico por imagen que tengan relevancia.

Reconocer el papel del dentista en las acciones de prevención y protección ante enfermedades bucales, así como en el mantenimiento y promoción de la salud, tanto a nivel individual como comunitario.

Reconocer la normalidad y la patología bucal, así como la evaluación de los datos semiológicos.

Reconocer los determinantes de la salud bucal en la población, tanto los genéticos como los dependientes del estilo de vida, demográficos, ambientales, sociales, económicos, psicológicos y culturales.

Saber identificar las inquietudes y expectativas del paciente, así como comunicarse de forma efectiva y clara, tanto de forma oral como escrita, con los pacientes, los familiares, los medios de comunicación y otros profesionales.

Saber realizar un examen bucal completo, incluyendo las oportunas pruebas radiográficas y de exploración complementarias, así como la obtención de adecuadas referencias clínicas.

Tener capacidad para elaborar un juicio diagnóstico inicial y establecer una estrategia diagnóstica razonada, siendo competente en el reconocimiento de las situaciones que requieran una atención odontológica urgente.

Tener conocimientos apropiados de nutrición humana, en particular, la relación de los hábitos nutricionales y de la dieta con el mantenimiento de la salud y la prevención de las enfermedades buco-dentales.

DESCRIPTION OF CONTENTS

THEORETICAL PROGRAM

1) History and conceptual evolution of prevention. Current concept of Preventive and Community Dentistry.



Levels of prevention in dentistry.

2) Dental Biofilm. Microbiology. Metabolism. Implications for the development of dental diseases: caries and periodontal disease.

3) Control of dental plaque: mechanical and chemical control. Importance of individualized health education and its impact on the dental health of individuals.

4) Dental calculus. Scaling types: manual and ultrasonic dental cleaning. Ultrasound: advantages, disadvantages and contraindications. Importance of polishing. Baking equipment: uses and contraindications.

5) Pathogenesis of caries. As dental caries disease. etiological factors and their control. clinical forms. immunological factors. Demineralization and remineralization.

6) initial lesion of caries. experimental decay. Demineralization-remineralization in the enamel surface. Caries risk. Factors involved. Assessment of individual risk of caries. salivary tests in identifying the risk of caries.

7) Nutritional Influences on tooth development. Sugar-caries relationship: epidemiological, experimental and clinical studies. dietary measures in the prevention and control of caries.

8) Fluoride and caries. Historical background. Fluoride content in the intake. Fluorine metabolism: absorption, distribution and excretion. Cariostatic mechanisms: systemic and topical.

9) Professional topical fluoride application and self-application: types of preparation, composition and treatment guidelines. Fluoride toxicity: acute and chronic.

10) Toothpastes: objectives, functions and composition. Therapeutic agents in dentifrices. Mouthwashes.

11) Fissure Sealants: historical background and objectives. Selection criteria. Sealants types: classifications. Application technique. Periodic recalls.

12) Periodontal diseases. Current concept. pathogenetic factors. Scientific basis for prevention of periodontal diseases. Individual susceptibility. Risk factors.

13) Prevention of occupational hazards in the dental office.

14) Prevention of malocclusions. Nature of the malocclusion. Control of habits. early dysfunctions.



PRACTICAL PROGRAM

Preclinical simulation practices will be conducted at the Interdisciplinary Center for Healthcare Simulation (CESIS-UV) in the dental laboratory, as well as clinical practices with real patients.

The practical training will include the following activities:

- General examination of the stomatognathic system. Examination of soft and hard tissues. Palpation. Extraoral and intraoral inspection.
- Plaque control. Plaque development. Plaque and oral hygiene indices. Plaque control program: resources for patient motivation.
- Caries examination. Clinical and epidemiological criteria in the caries registry (WHO and ICDAS II).
- Periodontal examination. Gingivitis indices. Periodontal indices for individual and community use.
- Detection and removal of dental calculus (scaling).
- Diet and caries. Dietary surveys. Preparation, implementation, and evaluation of the dietary diary.
- Additional salivary tests for caries risk assessment: Streptococcus mutans, lactobacillus, buffer capacity, and salivary secretion volume.
- Topical application of fluorides: mouthwashes, solutions, gels, and varnishes.
- Special techniques for at-risk groups.
- Application of fissure sealants. Selection criteria.
- Epidemiological management of rates.
- Health education: information for schoolchildren, family members, and patients.

**WORKLOAD****PRESENCIAL ACTIVITIES**

Activity	Hours
Theory	27,00
Odontology practices	30,00
Laboratory	14,00
Classroom practices	19,00
Total hours	90,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	10,00
Independent study and work	41,00
Preparation of lessons	5,00
Preparation for assessment activities	2,00
Resolution of case studies	2,00
Total hours	60,00

TEACHING METHODOLOGY

- The theoretical classes will be presented with a masterful lesson. The seminararians will develop the topics of the theoretical syllabus that will be taught by professors or students and presented in class, with a total number of 10, throughout the course, each lasting 2 hours. Preclinical simulation practices will be carried out at the Interdisciplinary Health Simulation Center (CESIS-UV), in the dental laboratory, together with clinical practices with real patients.

- Both in theoretical sessions and in practical sessions it is necessary to respect the perspective of gender and diversity without distinguishing between students.

- The teaching methodology includes contingencies and activities intended to work different Objectives of Sustainable Development (SDG), more sustainable practices and learning for services (APS)

- At the end of the practices, the students will have to hand in the practical report in which they will explain, in a detailed manner, the methodologies and treatments that have been carried out in each of the practical sessions, along with the treatments that have been completed on patients during the course of these practices.



- The tools or AI generating applications will not be included in the Practical Report, which must be written individually, explaining the personal experiences that the student has experienced during the practical sessions. Yes, the use of AI generator hardware is allowed to support the implementation of the seminars. The contents generated by these tools or applications must not exceed 25% of the total work and must always be declared at the beginning of the work, both in the written work and in the digital presentation, appropriately mentioning those sections of the work that have been inspired or generated through these tools. Citation recommendations here: <https://normasapa.pro/como-citar-contenido-generado-por-chatgpt-usando-normas-apa-7ma-edicion/>.

- The gender perspective, respect for diversity and the objectives of sustainable development (SDG) will be incorporated into teaching, as long as it remains possible.

EVALUATION

The evaluation of student learning will be carried out based on the following elements:

a) Theory evaluation: multiple-choice theoretical exam with 50 single-choice multiple-response questions (for every 4 questions answered incorrectly, one correctly answered will be subtracted for the calculation of the theoretical grade). It will correspond to the evaluation of the theoretical contents taught in class and face-to-face seminars (40%). Evaluation of questionnaires and other participation tasks in theoretical classes (10%). In total this part will account for 50% of the evaluation of the subject.

b) Evaluation of the practical part: practical exam with multiple choice questions, a simulation clinical case and images about the content of the practices (40%). Assessment of attendance, attitude, skills acquired in the development of practices and delivery of practice tasks (10%). In total, this part will represent the other 50% of the evaluation of the subject.

To pass the subject, the theoretical part and the practical part must be passed independently. In the case of having passed each of these parts with 5 points out of 10, the final grade will be obtained by the arithmetic average of both. It is a requirement to access the advance call for this subject that the student has successfully completed all practices and has presented the continuous evaluation activities proposed during the development of the subject.



Attendance at practical sessions is mandatory. The student is considered to meet this requirement if he or she has attended a minimum of 80% of these activities and has adequately justified the impossibility of attending the remaining sessions due to the occurrence of a cause of force majeure. It will be essential to comply with this requirement to pass the subject.

Students are reminded of the importance of carrying out evaluation surveys to all teaching staff of the degree subjects.

Plagiarism and lack of ethical integrity in the completion of the course work, making improper use of these applications or tools, will be considered a very serious offense in accordance with the Draft Code of Coexistence and Good Practices of the University of València (<https://webges.uv.es/uvTaeWeb/MuestraInformacionEdictoPublicoFrontAction.do?idEdictoSelecizado=55433>) and will be penalized with failure in said work or activity, whether individual work, in pairs or in groups, assuming a failure in the activity for all the signatories of the work, and the failure in the part of the grade that this activity entails, without the possibility of being able to resubmit a new activity in the same call.

REFERENCES

REFÈNCIES BÀSIQUES / REFERENCIAS BÁSICAS / BASIC REFERENCES:

- CUENCA SALA E, BACA GARCIA P (2013). Odontología Preventiva y Comunitaria: Principios, Métodos y Aplicaciones. 4ª ed. Barcelona. Elsevier Masson.
- RIOBOO, R. (2002) Odontología Preventiva y odontología comunitaria. 1ª Edición. Madrid. Ediciones avances médico-dentales. Odontología preventiva y comunitaria.

Referències Complementàries / Referencias Complementarias / Complementary References:

- KATZ, S. (1982) Odontología Preventiva en acción. Buenos Aires. Interamericana.
- NIKIFORUK, G. (1986). Caries dental. Aspectos básicos y clínicos. Buenos Aires. Mundi.
- SESPO. Lesión Incipiente de caries: Criterios actuales de Diagnóstico, Prevención y Tratamiento. Promolibro. Valencia. 1996.



- SESPO. Saliva y Salud Oral. Promolibro. Valencia, 1998.

RECURSOS e-Salut:

- ClinicalKey Student Medicina, Odontologia y Enfermería

[<https://uv-es.libguides.com/RecursosSalut>]

- Accés Medicina

[https://uv-es.libguides.com/Access_Medicina]

- Médica Panamericana

[https://uv-es.libguides.com/Medica_Panamericana]