

**COURSE DATA****DATA SUBJECT****Code:** 34726**Name:** Gerodontology**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	5	Second quarter

**SUBJECT-MATTER**

Degree	Subject-matter	Character
1206 - Degree in Dentistry	Geriatric dentistry	COMPULSORY

**COORDINATION**

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**SUMMARY**

The Gerodontology aims to raise awareness of future professionals of Dentistry which are the main features of aging of the oral cavity and the clinical management of older people with their various pathological loads. Until a few years ago, most of the elders were carriers of complete dentures, the result of a time where extraction was the main treatment of dental pain, either by problems economic nature either by the little scientific knowledge of different pathologies available. Both social and economic improvements have occurred in our society during the recent decades, with scientific advances in oral health, have led to we're facing a new generation of older people who keep large numbers of teeth in the mouth, thanks to previous treatments have resisted various attacks of oral diseases and the patient now wants to keep under both functional and aesthetic as possible. All this forces us to continue our research in this area as well as training the future professionals the knowledge to deal with this type of demand.

To this should be added that the patient who will treat your oral health problems, as well each day has more prone to systemic disease, which in one way or another will influence oral health, either by the disease itself or as a result of the various medications to which it is submitted. Therefore, we consider it necessary to maximize this knowledge, the aging, various systemic diseases and the various oral diseases in the elderly patient, so that in the future to ensure better quality of care for this group growing and better quality of life to years, since so trends continue demographic, will mean in the short run more than 25% of the Spanish



population.

Students are reminded of the great importance of carrying out evaluation surveys of all the teaching teachers of this subject.

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## PREVIOUS KNOWLEDGE

### RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

#### 1206 - Degree in Dentistry

Obligation to have previously passed the subject(s)

34714 - Oral medicine

34715 - Oral surgery

34717 - Dental prosthesis II

34719 - Dental pathology, conservative dentistry and endodontology II

34723 - Periodontics

### OTHER REQUIREMENTS

It is recommended that in reaching this course, students have basic knowledge of disciplines as Pharmacology.

## COMPETENCES / LEARNING OUTCOMES

#### 1206 - Degree in Dentistry

Adquirir experiencia clínica bajo la adecuada supervisión.

Aplicar técnicas de anestesia loco-regional.

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.

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 y aplicar el tratamiento básico de la patología bucodentaria más habitual en pacientes de todas las edades. Los procedimientos terapéuticos deberán basarse en el concepto de invasión mínima y en un enfoque global e integrado del tratamiento bucodental.

Determinar e identificar los requisitos estéticos del paciente y de las posibilidades de satisfacer sus inquietudes.



Diagnosticar, planificar y realizar, con carácter general, un tratamiento multidisciplinar, secuencial e integrado de complejidad limitada en pacientes de todas las edades y condiciones y en pacientes con necesidades especiales (diabéticos, hipertensos, oncológicos, transplantados, inmunodeprimidos, anticoagulados, entre otros) o discapacitados. Específicamente, el dentista debe ser competente en el establecimiento de un diagnóstico, de un pronóstico y el desarrollo de una adecuada planificación terapéutica

Diseñar, preparar los dientes, prescribir, registrar, realizar pruebas clínicas y colocar y poner en servicio restauraciones indirectas: incrustaciones, carillas o frentes laminados estéticos y coronas unitarias,

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, valorar y atender emergencias y urgencias médicas que puedan presentarse durante la práctica clínica odontológica y aplicar técnicas de resucitación cardio-pulmonar.

Identificar y atender cualquier urgencia odontológica.

Manejar infecciones agudas, incluyendo al prescripción farmacológica y los aspectos quirúrgicos sencillos.

Obtain and elaborate a clinical history with relevant information.

Para el establecimiento de un adecuado tratamiento el dentista debe ser competente en:

Plan and propose appropriate preventive measures for each clinical situation.

Preparar y aislar el campo operatorio.

Prescripción apropiada de fármacos, conociendo sus contraindicaciones, interacciones, efectos sistémicos y repercusiones sobre otros órganos.

Realizar modelos diagnósticos, montarlos y tomar registros inter-oclusales.

Realizar procedimientos estéticos convencionales desde una perspectiva multidisciplinar.

Realizar procedimientos quirúrgicos sencillos: extracción de dientes temporales.

Realizar tratamiento médico de las enfermedades comunes de los tejidos blandos bucales.

Realizar tratamientos endodóncicos y aplicar procedimientos para preservar la vitalidad pulpar.

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.

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.



Tomar e interpretar radiografías y otros procedimientos basados en la imagen, relevantes en la práctica odontológica.

Tratar el edentulismo tanto parcial como total, incluidos el diseño biológico (características específicas de diseño), preparación dentaria, obtención de registros, pruebas clínicas y adaptación a los pacientes de prótesis removibles parciales y completas, puentes sencillos dento-soportados y prótesis sencillas sobre implantes, tanto removibles como fijas, incluyendo su «colocación» y «puesta en servicio»,

Tratar operatoriamente los procesos destructivos y las lesiones traumáticas dento-alveolares.

Tratar tanto farmacológica, como quirúrgicamente los procesos inflamatorios de los tejidos periodontales y/o peri-implantarios incluyendo las técnicas de instrumentación periodontal supra y subgingival,

Tratar traumatismos dento-alveolares en denticiones temporal y permanente.

Valorar la función motora y sensorial de la boca, los maxilares y anejos.

Valorar y tratar al paciente con caries su otra patología dentaria no cariosa y ser capaz de utilizar todos los materiales encaminados a restaurar la forma, función y la estética del diente en pacientes de todas las edades.

## DESCRIPTION OF CONTENTS

**1. Gerodontology within the framework of Dentistry of the third millennium. Epidemiological changes in the population. The new demographic trends, their social, economic and demographic influence.**

**2. The oral health of older people. Epidemiological studies and main oral health indices used in elderly people.**

**3. Theories of aging Changes and biological bases of aging. Physiology of aging. Changes in each of the organs and systems of the economy.**



**4. Aging of the oral area. Main changes in the teeth, mucous membranes, periodontium and salivary glands. Changes in the skin, muscle, bone tissue, sense organs and TMJ. Physiological and pathological oral aging.**

**5. Communication with the elderly patient Psychology of the elderly. The intellectual functions. Changes in personality and ability to adapt. Memory and learning.**

**6. Pharmacology in the elderly. Drug consumption in older people. Kinetic and dynamic changes. Undesirable effects of medication in relation to oral health. Prescription for older patients.**

**7. Nutrition in the elderly. Nutritional requirements. Relationship between oral health and nutrition. Psychological, social and public health aspects.**

**8. Medical pathology in the elderly Generic aspects of pathologies in the elderly. Main pathologies by systems. Geriatric psychiatry. Main organic syndromes in the elderly. Dementia. Classification of dementias. Dental treatment in patients with dementia.**

**9. The diagnosis in Gerodontology The clinical history. The socio-health and family environment. Subjective (felt) and objective needs. Decision making.**



**10. Prevention in Gerodontology Teaching oral hygiene in elderly people: personalization of techniques based on limitations. The use of fluorides and chemotherapy drugs. Hygiene and conservation of prostheses. Early detection of oral mucosa lesions.**

**11. Cavities in the elderly. Development of the caries lesion. Active, inactive, remineralized and recurrent caries. Root caries: clinical forms and diagnosis. Treatment of cavities in the elderly. Restorative materials for coronal and root caries: recommendations.**

**12. Pulp disease in the elderly patient. Root canal treatment in elderly people: general considerations.**

**13. Periodontal disease in the elderly patient. Natural history of disease. Periodontal treatment and maintenance in the elderly patient. Forecast.**

**14. Pathology of the oral mucosa in the elderly. Pathology associated with the use of removable prostheses. Other traumatic injuries. Main benign, premalignant and malignant lesions. infectious pathology. Diseases of the tongue.**

**15. Saliva and salivary gland pathology. Salivary flow alterations. Xerostomia: its etiopathogenesis, clinic, diagnosis and treatment. TMJ pathology in the elderly.**



**16. Principles of prosthetic restoration in the elderly. The totally toothless patient: his problem. Treatment of partial edentulousness: removable partial dentures and their different alternatives. Indications and contraindications. Mixed prostheses. Fixed prostheses: indications and contraindications. Maintenance and care of prostheses.**

**17. Osseointegrated implants. Osseointegration in the elderly patient. Unitary, partial and complete implant-supported prostheses. Removable implant-retained and implant-supported prostheses. Implant-retained and mucosa-supported removable prostheses. Importance of design and maintenance.**

**18. Dental care for functionally dependent geriatric patients. The institutionalized patient. Health care in the fragile patient. Interdisciplinary approach to patients with advanced psychological deterioration: the different degrees of dementia and its implications for oral health. Cancer patients, immunosuppressed patients, hospitalized patients and terminally ill patients. Dental palliative care.**

**19. Seminar 1.- Detection of the risk of caries in the elderly patient. Clinical approach to the elderly patient at high risk of caries. Identification of caries risk. Xerostomia: diagnosis. Salivary bacteriological tests.**

**20. Seminar 2.- Importance of maintaining removable prostheses. Removable prostheses as bacteriological reservoir. Hygiene, control and disinfection of removable prostheses. Its influence on the appearance of hard and soft tissue injuries.**



**21. Seminar 3.- The elderly patient receiving anticoagulation and antiplatelet therapy. Clinical management and care protocols.**

**22. Seminar 4.- Pathophysiology of phospho-calcium metabolism and bone remodeling. The management of the elderly patient undergoing treatments with antiresorptive medications for osteoporosis.**

### 23. PRACTICES

The student will become familiar with the management and treatment of elderly patients over 65 years of age. Oral examination, diagnosis and treatment of different oral diseases, both hard and soft tissues. In addition, adequate communication with elderly patients will be insisted on, adapting to their needs. In the comprehensive treatment of the elderly, the student must apply all the knowledge acquired in different subjects taken and passed, from hygiene measures, scaling, scaling and root planing, fillings, endodontics, dental extractions, preparation of removable prostheses in their different variants as fixed. Diagnose patients at high risk of caries and design personalized preventive protocols based on the individual needs and limitations of each case. Diagnosis of soft tissue injuries and their treatment. Administer necessary pharmacological treatments (management of antibiotic therapy, analgesia, etc...). Special attention will be paid to those patients with polypharmacy, so the student must be aware of possible drug interactions before prescribing any treatment.

## WORKLOAD

### PRESENCIAL ACTIVITIES

Activity	Hours
Theory	27,00
Odontology practices	45,00
Classroom practices	18,00
<b>Total hours</b>	<b>90,00</b>

### NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	0,00
Independent study and work	50,00
Preparation of lessons	10,00



Preparation for assessment activities	0,00
Resolution of case studies	0,00
<b>Total hours</b>	<b>60,00</b>

## TEACHING METHODOLOGY

The teaching methodology of this course of Gerodontology, is based on the master class where the teacher presents the topics with the help of audio-visual media.

Students collaborate with questions during the development of exhibitions, always trying enter a participatory dynamic.

The gender perspective, respect for diversity and the sustainable development goals (SDGs) will be incorporated into teaching, whenever possible.

## EVALUATION

*Evaluation of the theoretical part: 60% of the final grade. Evaluation of the practical part: 40% of the final grade. To evaluate the theoretical part, two written tests will be used: an exam of multiple choice questions that will account for 60% of the theoretical grade and another test to resolve two clinical cases in which the student must be able to present the treatment plan. in writing in the space available and in a way that is as clear and concise as possible, demonstrate that you have mastered the question that is asked, which will represent the other 40% of the theoretical exam. Clinical cases may be accompanied by supporting images. The sum of these two theoretical evaluations will account for 60% of the final grade.*

*The assessment of mandatory practical classes together with the voluntary complementary practices will account for 40% of the final grade. Each practice teacher will assess the student according to his or her attitude with patients, with his work teammates, and his manual and deductive skills for resolving treatments. The grade will be based on a maximum of 10 points and a minimum of 0.*

*Attendance at practical activities 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 a cause of force majeure.*

*Failure to exceed 50% of one of the two parts (either the theoretical or the practical) will lead to the average not being possible, failing the test. The part that has been passed will retain its grade for the second call (July).*

*Finally, students are reminded of the importance of carrying out evaluation surveys to all teaching staff of degree subjects.*

It is a requirement to access the advance of the call for this subject, that the student has taken full advantage of their practices.



## REFERENCES

### BASIC

- GERODONTOLOGÍA CLINICA 2ª Edi. Editado por la Sociedad Española de Gerodontología.2023
- TEXTBOOK OF GERIATRIC DENTISTRY. Ed. Munksgaard.Copenhagen
- Oral Healthcare and The Frail Elder. Ed. Wiley-Blackwell. Vancouver. Canada
- RECURSOS e-Salut:
- - ClinicalKey Student Medicina, Odontologia y Enfermería [ <https://uv-es.libguides.com/RecursosSalut> ]
- - Acces Medicina [ [https://uv-es.libguides.com/Access\\_Medicina](https://uv-es.libguides.com/Access_Medicina) ]
- - Médica Panamericana [ [https://uv-es.libguides.com/Medica\\_Panamericana](https://uv-es.libguides.com/Medica_Panamericana) ]

### SUPPLEMENTARY

- Prosthodontics for the Elderly. Diagnosis and Treatment. Ed. Quintessence
- GERODONTOLOGY. The journal of dental Geriatrics. Ed. Gerodontology Association. John Wiley & Sons Ltd