

1. Basic data

Subject	Patología Médico Quirúrgica Bucal I
Degree	Dentistry
School / Faculty	Faculty of health and Science. Universidad Europea Valencia
Course	Degree
ECTS	6 ECTS
Type	Compulsory
Languages	English and Spanish
Modality	Presence
Semestre	First semestre
Academic course	2021/2022
Teach coordinator	Dr. José María Díaz Fernández

2. PRESENTACIÓN

Contextualization of the contents

It represents the most medical subject of Dentistry. The diseases of the oral mucosa, the salivary glands and the maxillary bones, as well as the oro-facial nervous pathology, will be studied. The students will acquire the knowledge of the different pathologies and systemic diseases and those that from the mouth can give some manifestation in another organ or body system.

Contextualization of the competences.

The intention of this subject is to know the pathology of the oral mucosa, maxillary bones and adnexal tissues so that the student can know the ethology, recognize the symptoms, interpret the results obtained through complementary tests and be able to reach a diagnosis and formulate a treatment and a prognosis of patients.

3. COMPETENCIES AND LEARNING OUTCOMES

Basic skills:

- CB2: Students will know how to apply their knowledge to their work or vocation in a professional manner and possess the skills that are usually demonstrated through the elaboration and defend the arguments and the resolution of problems within their area of study.
- CB3: Students will have the ability to gather and interpret relevant data (usually within their area of study) to make judgments that include a reflection on relevant social, scientific or ethical issues.
- CB5: Students be able to develop the necessary learning skills to undertake subsequent studies with a high degree of autonomy.

General competences:

- CG14: Knowledge of the general processes of the disease, including infection, inflammation, alterations of the immune system, degradation, neoplasia, metabolic disorders and genetic disorders.
- CG25: Ability to know and apply the basic treatment of the most common oral pathology in patients of all ages. Therapeutic procedures should be based on the concept of minimal invasion and on a global and integrated approach to oral treatment.
- CG26: Ability to know how to plan and perform multidisciplinary, sequential and integrated dental treatments of limited complexity in patients of all ages and conditions and patients requiring special care.
- GC27: Ability to propose and propose appropriate preventive measures for each clinical situation.
- CG30: Ability to recognize the role of the dentist in prevention and protection actions against oral diseases, as well as in the maintenance and promotion of health, both at the individual and community level.

- CG4: Understand and recognize the social and psychological aspects relevant to the treatment of patients.

Cross-disciplinary competences:

- CT1: Responsibility: That the student can assume the consequences of the actions to be performed and respond to their own actions.
- CT3: Awareness of ethical values: The student's ability to feel, judge, argue and act according to moral values in a coherent, persistent and autonomous way.
- CT7: Teamwork: That the student can participate in an active way in the achievement of a common goal, listening, respecting and valuing the ideas and proposals of the rest of the members of his team.
- CT8: Initiative: That the student is able to anticipate proactively proposing solutions or alternatives to the situations presented.

Specific competences:

- CE34: Perform basic treatments of the oral and dental pathology in patients of all ages. Therapeutic procedures should be based on the concept of minimal invasion and on a global and integrated approach to the oral-dental treatment.
- CE35: Diagnose, plan and perform, in general, a multidisciplinary, sequential and integrated treatment of limited complexity in patients of all ages and conditions and in patients with special needs (diabetic, hypertensive, oncological, transplanted) / as, immunosuppressed, anticoagulated, among others) or disabled. Specifically, the dentist must be competent in the establishment of a diagnosis, a prognosis and the development of adequate therapeutic planning, and particularly in orofacial pain, temporo-mandibular disorders, bruxism and other parafunctional habits; dental and periapical pathology; bucco-dental trauma; Periodontal pathology and peri-implant tissues; bone pathology of the jaws, buccal soft tissues and attached glands; stages of partial or total edentation and in the planning of their rehabilitation treatment through dento and mucosal-supported prostheses, or through dental implants, malpositions and / or dental malocclusions and other anatomical or functional alterations of the face or

stomatognathic system and their possible corrections orthodontic, orthopaedic or surgical.

- CE36: Take and interpret radiographs and other procedures based on the image, relevant in dental practice.
- CE40: Assess the motor and sensory function of the mouth, jaws and annexes.
- CE41: Perform limited procedures of invasive diagnostic techniques in soft tissues (biopsies).
- CE42: Be competent in the appropriate prescription of drugs, knowing their contraindications, interactions, systemic effects and repercussions on other organs.
- CE43: Apply locoregional anaesthesia techniques.
- CE48: Perform simple surgical procedures: removal of erupted temporary and permanent teeth, fractured or retained roots and uncomplicated surgical removal of unerupted teeth and simple pre-prosthetic surgery procedures.

Learning outcomes:

- RA1: Make a clinical history that allows the student to identify systemic problems (cardiovascular, haemorrhagic, allergic, etc.) that can modify the dental treatment and may endanger the patient's life.
- RA2: Acquire knowledge and experience in all clinical methods of exploration.
- RA3: Diagnose diseases with medical treatment of the oral mucosa, maxillary bones, salivary glands and other adjoining tissues.
- RA4: Know in depth the systemic diseases with oral repercussion.
- RA5: Perform the early and preventive diagnosis of general diseases with orofacial repercussion.
- RA6: Lists the stages of the surgical act and the factors that condition it.
- RA7: Recognized clinically and radiographically the different oral pathologies in relation to surgery. Recognize the error's consequences in the taking of x-rays and ways of correction.
- RA8: Practice correctly incisions and basic sutures in animal models.
- RA9: Argue the different diagnostic choices and surgical techniques.

- RA10: Practice extractions of different degrees of complexity and apicectomies in inorganic models.
- RA11: Argue the different surgical treatment plans in patients with various underlying pathologies regarding the content of the theoretical classes.

The table below shows the relationship between the competences developed in the subject and the learning outcomes that are pursued:

Competences	Learning outcomes
CE35, CE42, CE40, CE35	RA1
CE40, CE36, CE35, CE34	RA2
CE41, CE40, CE35, CE34	RA3
CE42, CE35	RA4
CE36, CE35	RA5
CE48, CE43	RA6
CE36, CE35	RA7
CE41, CE34	RA8
CE48, CE42, CE41, CE36, CE35, CE34	RA9
CE48, CE43, CE35	RA10
CE43, CE42, CE35	RA11

4. CONTENTS

The subject is organized into six learning units (L.U.), which, are divided into topics (depending on the sub-units).

TOPIC UNIT 1: EXPLORATION AND DIAGNOSIS.

TOPIC Q1:

- 1.1. Clinical history and exploration.
- 1.2. Supplementary tests.
- 1.3. Radiological examination: History and importance of dento-bucco-facial techniques.

TOPIC Q2:

- 2.1. Radiographic anatomy:
 - 2.1.1. Anatomical images.
 - 2.1.2. Interpretation.
- 2.2. Extrabuccal radiographic techniques.
- 2.3. Intraoral radiographic techniques:
 - 2.3.1. Panoramic radiography.
 - 2.3.2. Other: Waters, C.A.T., Dentascan, other techniques.

TOPIC UNIT 2: ANAESTHESIA

TOPIC Q3:

- 3.1. Pharmacological recall of local anaesthetics
- 3.2. Vasoconstrictor and other additives.
- 3.3. Indications.

TOPIC Q4:

- 4.1. Instrumental
- 4.2. Local anaesthesia techniques in Dentistry.
- 4.3. Anatomical memory of the innervation of the maxilla.
- 4.4. Local anaesthetic techniques in upper jaw.

TOPIC Q5:

- 5.1. Anatomical memory of the mandibular innervation.
- 5.2. Local anaesthetic techniques mandibular
- 5.3. Accidents and complications of local anaesthesia.
- 5.4. Other anaesthesia techniques:
 - 5.4.1. General anaesthesia in Oral Surgery
 - 5.4.2. Sedation in Oral Surgery
 - 5.4.3. Local anaesthesia in Children's Oral Surgery

TOPIC UNIT 3: EXODONTIA

- 6.1. Tooth extraction Concept. Indications and contraindications.
- 6.2. Anatomy applied to the exodontia.
- 6.3. Exodontia Instruments:
 - 6.3.1. Material description.
 - 6.3.2. Characteristics of forceps and elevators: Maxilla.
 - 6.3.3. Characteristics of forceps and elevators: Mandible.

TOPIC Q7:

- 7.1. Exodontia techniques in permanent and temporary teeth.
- 7.2. Handling the opposite hand in each situation.

TOPIC Q8:

- 8.1. Accidents and complications in exodontia: immediate complications. Prophylaxis and treatment.
- 8.2. Accidents and complications in exodontia: mediate complications. Prophylaxis and treatment.

TOPIC UNIT 4: SURGICAL ACT

- 9.1. The Surgical Act.
- 9.2. Equipment, instruments and materials in Oral Surgery.
- 9.3. Sterilization and maintenance of sterile instruments.
- 9.4. Phases of the surgical act:
 - 9.4.1. Pre-operative
 - 9.4.2. Pre-operative: behaviour in the surgery room.
 - 9.4.3. Post-operative: care of the operated patient.
- 9.5. Incisions and flaps.
- 9.6. Sutures Materials and techniques
- 9.7. Scar process

TOPIC Q10:

- 10.1. Surgical or complicated extractions: Ostectomy, Odontosection.
- 10.2. Root extraction.
- 10.3. Biopsy. Concept.
 - 10.3.1. Types and techniques.
 - 10.3.2. Indications.
 - 10.3.3. Communication with the pathologist.

TOPIC Q11:

- 11.1. Oral Surgery in special patients.
- 11.2. Complications in Oral Surgery:
 - 11.2.1. Local complications Prevention and treatment
 - 11.2.2. General complications Prevention and treatment
- 11.3. Advanced Techniques in Oral Surgery. General concepts.
 - 11.3.1. Piezoelectric Surgery and Oral Surgery
 - 11.3.2. Laser and Oral Surgery

TOPIC UNIT 5: DENTAL RETENTION

TOPIC Q12:

12.1. Dental retention: Concept, epidemiology and factors that influence tooth retention.

12.2. Pathology of the third molar. Concept.

12.1.1. Anatomico-embryological considerations.

12.2.1. Clinical phenomenology.

TOPIC Q13:

13.1. Pathology of the lower third molar:

13.1.1. Diagnosis.

13.1.2. Therapeutic approach

13.1.3. Surgical technique.

13.1.4. Complications

13.2. Pathology of the upper third molar:

13.2.1. Diagnosis.

13.2.2. Therapeutic approach

13.2.3. Surgical technique.

13.2.4. Complications.

TOPIC Q14:

14.1. Included Canines.

14.1.1. Etiopathogenetic

14.1.2. Clinic.

14.1.3. Diagnosis.

14.1.4. Therapeutic possibilities and complications.

14.2. Other included teeth:

14.2.1. Diagnosis.

14.2.2. Treatment.

14.2.3. Surgical-orthodontic treatment

TOPIC UNIT 6: INFECTIONS OF THE BUCCO-FACIAL TERRITORY

TOPIC Q15:

15.1. Odontogenic infections

15.1.1. Generalities General concepts

15.1.2. Anatomical memory of the cervicofacial cell spaces

15.1.3. Etiopathogenesis

15.1.4. Bacteriology.

15.1.5. Cellulitis and abscesses of dental origin

15.1.6. Factors that influence the odontogenic infection

TOPIC Q16:

16.1. Cellulitis:

16.1.1. Classification of cellulite.

16.1.2. Circumscribed acute and chronic cellulitis. Clinical charts and topographic forms.

16.1.3. Diffuse cellulitis:

16.1.3.1. Concept.

16.1.3.2. Pathological anatomy

16.1.3.3. Clinical charts and prognosis.

16.1.4. Treatment:

16.1.4.1. Medical treatment: antibiotic therapy.

16.1.4.2. Surgical treatment: drainages.

16.1.4.3. Etiological and symptomatic treatment.

16.2. Periapical and radicular surgery.

16.2.1. Apicectomy and periapical curettage. Indications and techniques
Complications.

16.2.2. Radicular hemisecting.

TOPIC Q17:

17.1. Infections of the jaws: Osteitis and osteomyelitis: concept, etiopathogenesis, diagnosis, clinic and treatment.

17.2. Osteoradionecrosis: concept, etiopathogenesis, treatment and prophylaxis.

17.3. Odontogenic sinusitis:

17.3.1. Anatomical memory of the maxillary sinus.

17.3.2. Etiopathogenesis, clinical diagnosis and treatment.

17.4. Communications and fistulas: buccal and bucconasal communications:

17.4.1. Aetiology, clinic, diagnosis and treatment.

17.4.2. Classification and diagnosis.

5. TEACHING-LEARNING METHODOLOGIES

The types of teaching-learning methodologies that will be applied are indicated below:

- Master class
- Case method
- Cooperative learning
- Problem-based learning (PBL)
- Project-based learning
- Simulation environments.

5. TRAINING ACTIVITIES

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

Type of training activity	Number of hours
Master Classes	51
Portfolio	12
Group work	5
Formative assessment	5
Practical exercises	10
Case analysis	12
Laboratory practices	40
Tutorials	5
Research	10

* Within these training modalities, activities will be carried out remotely, the virtual modality constituting 5% of the training activities

6. EVALUATION

The table below shows the evaluable activities, the evaluation criteria of each of them, as well as their weight on the total grade of the subject:

Evaluable activity	Percentage
<i>Theoretical Knowledge Evaluation</i>	30%
<i>Preclinical practices</i>	20%
Debates	10%
Portfolio	10%
Practical exercises	10%
Case/Problem	20%

In Black Board, when accessing the subject, you will be able to consult in detail the activities that you must perform, as well as the delivery dates and the evaluation procedures of each of them.

7.1. Ordinary call

To pass the subject in ordinary call the student must ...

- Pass each part of the subject independently, except for discussion activities, with a grade greater than or equal to 5'0 over 10'0.
- Attend and record the attendance of 75% of the theoretical sessions and 90% of the practical activities. If the absences of attendance occur in theory, it will be considered that the student has not reached the necessary competences to overcome the subject and will have in the ordinary call suspension the subject, having to go to the examination in the extraordinary session. If the absences occur in practices, then the student will have to suspend the subject in ordinary convocation and will have to present to the SAI (Intensive Academic Follow-up) and present in this session as many activities as the teacher to recover this part.

a. Extraordinaria call

To pass the subject in an extraordinary call you must:

- Activities not passed in the ordinary call must be delivered or evaluated, after having received the corresponding corrections from the teacher, or those that were not delivered.

- To pass the extraordinary call, it will be necessary to obtain a grade greater than or equal to 5'0 out of 10'0 in the qualification.

7. SCHEDULE

En este apartado se indica el cronograma con fechas de entrega de actividades evaluables de la asignatura:

Actividades evaluables	Fecha
1rst Activity 1: Theoretical knowledge evaluation	* Pending confirmation
2nd Activity: Pre-Clinical Practices	* Pending confirmation
3rd Activity: Debates	* Pending confirmation
4rth Activity: Portfolio	* Pending confirmation
5th Activity: Practical exercises	* Pending confirmation
6th Activity: Case/Problem	* Pending confirmation

This schedule may be modified for logistical reasons of the activities. Any modification will be notified to the student in a timely manner.

8. BIBLIOGRAPHY

The essential recommended bibliography is listed below:

- Donado Rodríguez, M. (2019). **Cirugía bucal: patología y técnica**. Barcelona: Elsevier Masson.
- Gay, C. (2015). **Tratado de Cirugía Bucal**. Madrid: Ergon.
- Siervo, S. (2009). **Técnicas de sutura en cirugía oral**. Barcelona: Quintessence.
- Berini, L. (2001). **Anestesia odontológica**. Madrid: Avances Médico-Dentales.
- Bagán Sebastian, JV. (2010). **Medicina Bucal**. Valencia: Medicina Oral.
- Norton, N S. (2018). **Anatomía de cabeza y cuello para odontólogos**. Barcelona: Elsevier Masson.
- Hupp, J R. (2014). **Contemporary oral and maxillofacial surgery**. Saint Louis: Mosby Elsevier.

The following is the supplementary recommended bibliography:

- Peñarrocha, M. (2000). **Cirugía Bucal**. Valencia: Promolibro.
- Bullón Fernández, P. (2004). **Tratamiento odontológico en pacientes especiales**. Madrid: Laboratorios Normon.
- Martínez González, J M. (2011). **Anestésicos y técnicas loco-regionales en Odontología**. Madrid: Laboratorios Normon.
- Horch, HH. (1995). **Cirugía oral y maxilofacial. Tomos I y II**. Barcelona: Masson.
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- Pifarré, E. (1993). **Patología Quirúrgica Oral y Maxilofacial**. Barcelona: Ed Jims.
- García Marín, F. (2006). **Protocolos clínicos de la Sociedad Española de Cirugía Oral y Maxilofacial**. Madrid: Sociedad Española de Cirugía Oral y Maxilofacial.
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- Stübinger, S. (2020). **Lasers in Oral and Maxillofacial Surgery**. Cham: Springer International Publishing: Impring: Spriger.
- Ferneini, E. (2019). **Office-Baed Maxillofacial Surgical Procedures. A step-by-step approach**. Cham: Springer International Publishing: Impring: Spriger.
- Cawon, R.A. (2009). **Fundamentos de medicina y patología oral**. Ámsterdam: Barcelona: Elsevier.

9. UNIT OF ATTENTION TO DIVERSITY

Students with specific educational support needs:

Curricular adaptations or adjustments for students with specific educational support needs, in order to guarantee equal opportunities, will be guided by the Unit for Attention to Diversity (UAD).

The issuance of a report of curricular adaptations / adjustments by said Unit will be an essential requirement, so students with specific needs for educational support should contact: unidad.diversidad@universidadeuropea.es at the beginning of each semester.

9. SATISFACTION SURVEYS

Your opinion matters!

The Universidad Europea encourages you to participate in satisfaction surveys to detect strengths and areas for improvement regarding 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.