

**COURSE DATA****DATA SUBJECT****Code:** 34711**Name:** Surgical pathology**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	2	First quarter
1206 - Degree in Dentistry	Facultat de Medicina i Odontologia	2	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1206 - Degree in Dentistry	Surgical pathology	COMPULSORY
1206 - Degree in Dentistry	Surgical pathology	COMPULSORY

COORDINATION

GARCIA BOTELLO STEPHANIE ANNE

SUMMARY

Surgical pathology is a discipline in the undergraduate training of Medicine and Dentistry, which mainly includes the study of pathological processes that require surgical therapy, and the complications that may arise as a result of this therapy as well.

The course is taught in the first semester of the second degree course of Dentistry, and includes an essential and extensive study of the fundamentals of surgical pathology, which can be generalized to any area of specialty, and therefore gather the basics of Surgery in the core curriculum. It is therefore a discipline indispensable in the formation of the dentist because his activity continually address specific problems to the surgical field, and knowledge of the scientific and technical aspects of handling them is crucial for professional dealing with an adequate scientific basis.

It is required for a good education a sufficient knowledge of the morphological and physiological sciences, enabling the necessary understanding of the pathogenic and pathophysiological mechanisms, as well as the establishment of the diagnostic process and therapeutic indications.



It also includes finally a limited knowledge in some specific aspects of two specialities, which occasionally may be of interest in the field of dentistry, which are the otorhinolaryngology and ophthalmology. Without the aim of developing a full training in any of them, it is intended to give basic information about both specialties and some specific topics of interest to the dentist.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

It must have passed the basic subjects of Health Sciences

COMPETENCES / LEARNING OUTCOMES

1206 - Degree in Dentistry

Conocer, valorar críticamente y saber utilizar las fuentes de información clínica y biomédica para obtener, organizar, interpretar y comunicar la información científica y sanitaria.

Conocer del método científico y tener capacidad crítica para valorar los conocimientos establecidos y la información novedosa. Ser capaz de formular hipótesis, recolectar y valorar de forma crítica la información para la resolución de problemas, siguiendo el método científico.

Conocer de los procesos generales de la enfermedad, entre los que se incluyen la infección, la inflamación, las alteraciones del sistema inmune, la degeneración, la neoplasia, las alteraciones metabólicas y los desórdenes genéticos.

Conocer la morfología y función del aparato estomatognático, incluyéndose contenidos apropiados de embriología, anatomía, histología y fisiología específicos.

Conocer las ciencias biomédicas en las que se fundamenta la Odontología para asegurar una correcta asistencia buco-dentaria. Entre estas ciencias deben incluirse contenidos apropiados de:

Embriología, anatomía, histología y fisiología del cuerpo humano.

Genética, Bioquímica, Biología celular y molecular

Microbiología e inmunología

Estar familiarizado con las características patológicas generales de las enfermedades y trastornos que afectan a los sistemas orgánicos, específicamente aquellas que tienen repercusión bucal.

DESCRIPTION OF CONTENTS



A. LECTURES

1. Fundamentals of surgery

- 1.-Initial approach and care of the trauma patient
- 2.-The process of wound healing
- 3.-Assessment and treatment of wounds and contusions.
- 4.-Pathological wound healing. Grafts and skin flaps.
- 5.- Endocrine and metabolic response to traumatic injury.
- 6.- Malnutrition and nutrition in surgery.
- 7.- Traumatic Shock: Definition, aetiology and pathophysiology.
- 8.- Traumatic Shock: Diagnosis and treatment.
- 9.- Surgical infection: classification and antibiotic prophylaxis.
- 10.- Local infection: Abscess and phlegmon. Regional infection: lymphadenitis and adenitis.
- 11.-Severe soft tissue infections. Tetanus.
- 12.-Sepsis and septic shock.
- 13.-Asepsis and antisepsis.
- 14.- Fundamentals of transplant surgery.
- 15.- Fundamentals of oncologic surgery.



2. Ear nose and throat disease with particular repercussion in the oral area.

16.- Pathology of the maxillary sinus.

17. -Snoring and sleep apnoea.

18.-Vertigo in dentistry.

3. Fundamentals of traumatology and orthopedics

19. Bases of joint and bone pathology.

20. Bone and joint infection.

21. Bone tumors.

22. General study of fractures.

23. Bone consolidation and pseudoarthrosis.

4. Fundamentals of maxillofacial surgery

24. Temporomandibular joint pathology.

25. Dental infections.

26. Tumors in maxillofacial surgery.

27. Maxillofacial Trauma I - Fractures (Classification and mechanisms, diagnosis, and presentation).

28. Maxillofacial Trauma II- Fractures (Closed and open treatment).



5. Ophthalmic pathology with special repercussion in the oral area.

29.-The red and painful eye.

30.- Loss of vision.

B. SEMINARS

1. Concept and development of surgery.
2. Interactive study-review through clinical cases of the endocrine-metabolic response to trauma, shock and surgical wounds.
3. Interactive study-review through clinical cases of local, regional and general infection, asepsis and antiseptic techniques, oncology and transplant surgery.
4. Interactive study-review through clinical cases of Otorhinolaryngology.
5. Interactive study-review through clinical cases of Maxilofacial surgery. Surgical techniques.
6. Basic ophthalmic examination
7. Basic surgical procedures in Ophthalmology

C. DRY LAB PRACTICALS

1. Basic surgical techniques I: instruments, materials and surgical knots.
2. Basic surgical techniques II: sutures.
3. Fundamentals of surgical history taking and diagnosis.
4. Basic surgical examination with particular attention to the oral-dental area.

WORKLOAD

**PRESENCIAL ACTIVITIES**

Activity	Hours
Theory	33,00
Laboratory	12,00
Classroom practices	15,00
Total hours	60,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	5,00
Independent study and work	55,00
Preparation of lessons	15,00
Preparation for assessment activities	15,00
Resolution of case studies	0,00
Total hours	90,00

TEACHING METHODOLOGY

50% of the classroom hours will be devoted to theoretical teaching through the provision of lectures. It will provide students with the scheme, basic summary of the class, and the teacher also will try to estimate the active participation of the students with frequent introduction of concrete examples of the issues.

45% of classroom time will be devoted to practical training. The activities will be distributed in large group seminars and also in small group laboratory practice.

Large group seminars will be devoted primarily to addressing specific problems and surgical cases, as well as the discussion of practical and technical aspects of surgery and the two specialties included, while the laboratory practices, developed in the form of workshops, will address the basic technical maneuvers of surgery. The staff will encourage student activity and contact with surgical tools and materials.

It will require personal work or group work of students in some specific aspects of the program, and for the implementation of these activities the use of *e-learning* systems and other ICT will be encouraged.

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

EVALUATION

The assessment will be carried out according to the following criteria

1. Evaluation of practical activities.



THE EVALUATION OF PRACTICAL ACTIVITIES COMPRISES 30% OF THE OVERALL GRADE AND IS DISTRIBUTED IN THE FOLLOWING MODULES:

- Dry-lab and seminar attendance. Weight 50% (15% of the final grade).
- Individual coursework and group projects. Oral presentation in seminars or case presentation in the virtual classroom: Weight 45% (13,5% of the final grade).
- Attitude and participation in practical activities, adequate use of e-learning systems and other ICTs: Weight 5% (1,5% of the final grade).
- 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 the occurrence of a cause of force majeure. It will be essential to comply with this requirement to pass the subject.

2. Final exam.

- Final objective test to evaluate the knowledge acquired and solve specific questions, which will represent 70% of the global evaluation and is divided into the following blocks:
 - 60 multiple-choice questions, in which every three failures will mean the loss of a correct answer: Weighting of 60% (42% of the overall evaluation).
 - Two short answer questions to choose between three options: Weighting of 40% (28% of the overall evaluation).
- It is an essential requirement to pass the final objective test to be able to add the grade of the practical activities.

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

REFERENCES

BASIC

GENERAL SURGERY



- Parrilla P., García-Granero E., Martín-Pérez E., Morales S., Navarro S., Targarona E., AEC (Asociación Española De Cirujanos). Cirugía AEC. Manual de la Asociación Española de Cirujanos 3ª Edición Marzo 2022 Editorial Médica Panamericana S.A. ISBN 9788491101048.

COMPLEMENTARY

A. Scientific Foundations of Surgery

- Charles Brunicaudi F. Schwartzs Principles of Surgery. Mc Graw Hill Education. Edición 112019. ISBN-10/13: 1259835359 ISBN-13: 978-1259835353.
- Williams NS, OConnell PR, McCaskie AW. Bailey & Loves Short Practice of Surgery. **CRC** Press. Edición 27: 2018. ISBN-10/13: 1138031666/978-1138031661.

B. Otorhinolaryngologic Pathology with Special Impact on the Orofacial Region

- Roland N., McRaeD., McCombe AW. Key Topics in Otolaryngology. Thieme; Edición 3 2019. ASIN: B07MVMBJ62.

C. Traumatological and Maxillofacial Pathology

- Protocolos clínicos de la SECOM-CyC: <https://www.secomcyc.org/area-profesional/protocolosclinicos-de-la-secom/>
- Oral and Maxillofacial Surgery. Oxford Specialist Handbooks in Surgery. Third edition. Edited by Carrie Newlands. Oxford University Press. 2020

e-Health RESOURCES:

- ClinicalKey Student Medicina, Odontología y Enfermería <https://uv-es.libguides.com/RecursosSalut>
- Acces Medicina https://uv-es.libguides.com/Access_Medicina
- Médica Panamericana https://uv-es.libguides.com/Medica_Panamericana