

**COURSE DATA****DATA SUBJECT****Code:** 34713**Name:** Pathological anatomy**Cycle:** Undergraduate Studies**ECTS Credits:** 6**Academic year:** 2025-26**STUDY (S)**

Degree	Center	Acad. year	Period
1206 - Degree in Dentistry	Facultat de Medicina i Odontologia	2	Second quarter
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SUBJECT-MATTER

Degree	Subject-matter	Character
1206 - Degree in Dentistry	Pathological anatomy	COMPULSORY
1206 - Degree in Dentistry	Pathological anatomy	COMPULSORY

COORDINATION

ALFARO CERVELLO CLARA

SUMMARY

The subject of Pathological Anatomy is a compulsory semester-long course taught in the second year of the Degree in Dentistry. Its contents are related to other previous basic courses in the Dentistry Degree such as Anatomy, Human Physiology, Microbiology, and Immunology, and especially with the basic courses of morphological and structural content in Biology and Histology.

This course aims for students to understand the general mechanisms of disease and its morphological expression at a general organic level, covering degenerative, circulatory, inflammatory, and neoplastic diseases. It also specifically focuses on the pathology of the oromaxillofacial area, analyzing the macro and microscopic characteristics of the lesions in the anatomical area of the head and neck, addressing malformative/dysgenetic, degenerative/metabolic, inflammatory pathology, as well as neoplastic tumor growth.

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 is recommended to have passed the Biology and Histology courses of the Degree in Dentistry, with an understanding of the structure, morphology, and function of cells, tissues, and organs in general, and specifically in relation to the oromaxillofacial area and its associated structures.

COMPETENCES / LEARNING OUTCOMES

1206 - Degree in Dentistry

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 el método científico y tener capacidad crítica para valorar los conocimientos establecidos y la información novedosa.

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

1. THEORY

1. Concept and evolution of Pathological Anatomy (Pathology) within the biomedical sciences.
2. Elementary cellular lesions. Cell death.
3. Pathology of protein, fat, and carbohydrate metabolism.
4. Pathology of pigments.
5. Local and systemic circulatory disorders.



6. Pathology of inflammation. Lesional pathochrony.
7. Pathology of chronic inflammation. Granulomas.
8. Inflammatory pathology of the pulpoapical complex.
9. Granulomas and orofacial granulomatosis.
10. Tissue repair and scarring.
11. Inflammatory pathology of the oral cavity.
12. Pathology of the immune response.
13. Concept of atrophy. Forms of reactive growth.
14. Oromaxillofacial malformative growth.
15. Abnormalities of keratinization and its expression in the oral cavity.
16. Neoformative growth. Concepts of benignity and malignancy. Precancerous lesions.
17. Natural history of cancer. Carcinogenesis.
18. Benign epithelial tumors and their expression in the anatomical head and neck region.
19. Malignant epithelial tumors and their expression in the oromaxillofacial region.
20. Salivary gland tumors.
21. Neurogenic tumors. Main types. Differential morphological diagnosis in the anatomical head and neck region.
22. Oromaxillofacial cystic lesions.
23. Benign lymphadenopathies.
24. Lymphomas and lymphoproliferative processes.
25. Benign and malignant odontogenic tumors.



- 26. Benign mesenchymal tumors: expression in the anatomical head and neck region.
- 27. Malignant mesenchymal tumors: expression in the oromaxillofacial region.
- 28. Pathology of the tongue: glossopathies.
- 29. Non-tumoral pathology of the major and minor salivary glands.
- 30. Maxillomandibular osteopathies.

WORKLOAD

PRESENCIAL ACTIVITIES

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

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	4,00
Independent study and work	64,00
Preparation of lessons	12,00
Preparation for assessment activities	4,00
Resolution of case studies	6,00
Total hours	90,00

TEACHING METHODOLOGY

- Theoretical classes: 30 lessons, each 1 hour long
- Microscopic practical classes: 7 practical classes, each 2 hours long
- Seminars: 6 seminars, each 2 hours long
- Preparation of one paper on the content covered during the seminars, with personalized support for the student (electronic tutoring)



- In-person tutoring

- Electronic tutoring

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

EVALUATION

* Theoretical exam: 18 questions: 15 short-answer questions with limited space for responses, and 3 long-answer questions.

* Practical exam: Microscopic practical exam in which the student must recognize and diagnose five histological preparations of lesions studied in the practical microscopic sessions.

* Seminar evaluation: Multiple-choice test with 5 questions (4 options of which only one is correct) + preparation of a paper on the content covered during the seminars.

Throughout the course, continuous evaluation may be carried out, both in the theoretical and in the practical part. This evaluation is voluntary and can take different modalities. The score obtained will be added to the final grade, only for those students who have passed.

It is a requirement to have completed all practical sessions successfully in order to be eligible for the early examination session for this subject.

Attendance to practical activities is mandatory. It is considered that the student meets this requirement if they have attended a minimum of 80% of these activities and have adequately justified the impossibility of attending the remaining sessions due to the occurrence of a major force cause.

Students are reminded of the importance of completing evaluation surveys for all faculty members of the subjects in the degree.

REFERENCES

Basic

- Kumar V, Abbas AK y Aster JC. Robbins y Cotran. Patología estructural y funcional, 10^a ed., Elsevier, 2021.
- Gnepp DR y Bishop JA. Gnepp. Diagnostic Surgical Pathology of the Head and Neck, 3^a ed., Elsevier, 2020.



- Cawson RA y Odell EW. Cawson. Fundamentos de medicina y patología oral, 9.^a ed, Elsevier, 2018.
- Sapp JP, Eversole LR y Wysocki, GP. Patología oral y maxilofacial contemporánea, 2^a ed., Elsevier Mosby, 2005.

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

Complementary

- Bagán Sebastián JV y Vera Sempere FJ. Patología de la mucosa oral, Syntex Latino, Barcelona 1989.
- Vera Sempere FJ. Cuadernos de Patología Oromaxilofacial. Ed. Denes, Valencia, 2008.
- Vera Sempere FJ. Técnicas inmunohistoquímicas y moleculares de aplicación en patología de las glándulas salivales. En: Fisiopatología de las glándulas salivales, Medicina Oral SL, Valencia, 2010.