

Academic Year/course: 2021/22

29312 - General Surgical Pathology I

Syllabus Information

Academic Year: 2021/22

Subject: 29312 - General Surgical Pathology I

Faculty / School: 229 - Facultad de Ciencias de la Salud y del Deporte

Degree: 442 - Degree in Odontology

ECTS: 6.0

Year: 2

Semester: First semester

Subject Type: Compulsory

Module:

1. General information

1.1. Aims of the course

The subject and its expected results meet the following approaches and objectives:

1-Introduce the general pathophysiological principles that underlie the surgical methods and provide conditions for the student to acquire the knowledge of the most common disease entities in Surgical Pathology.

2-Introduce structural and functional bases of the different alterations and diseases, and establish the corresponding anatomical-clinical correlation with special attention to the oropharyngeal area.

3-Use and implement methods and techniques to make the patient insensible to pain and protect against psychic and / or somatic aggression before, during and after surgical interventions.

1.2. Context and importance of this course in the degree

The student will know the general principles of Pathology and Surgical Pathology enabling him to tumor processes both benign and malignant in order to adequately treat and understand and appreciate inflammatory processes and developments as well as all systemic pathologies of origin or treatment surgical particularly affecting the oral cavity, such as infectious diseases, abscesses, boils etc.

1.3. Recommendations to take this course

To achieve the expected learning outcomes and the progressive acquisition of competencies attendance and student participation in lectures is recommended. As for seminars and practical classes, attendance is mandatory. It is also advisable that the student see the bibliography recommended by the teacher. It is necessary that students have previous knowledge of Anatomy, Histology and Physiology.

To take the subject is advisable to have passed the compulsory subjects of 1 degree of dentistry, General Anatomy, General Physiology, Biochemistry and Molecular Biology and Histology.

2. Learning goals

2.1. Competences

To pass the course, students will be more competent to ...

Knowing the general processes of sick, heal and repair, among which include infection, inflammation, bleeding and clotting, healing, trauma and immune system disorders, degeneration and neoplasia

Knowing the general pathological features of diseases and disorders affecting organ systems.

The diagnosis and therapeutic bases of the main surgical syndromes and disease entities most common surgical pathology related to dental activity

2.2. Learning goals

The student, for passing this subject, should demonstrate the following results ...

- Distinguish between normal and pathological, recognizing the signs and symptoms of the diseases that have been studied.
- Know and apply the principles that govern all surgical activity.
- Learn to handle properly sterile instruments in sterile fields also, for the realization of small interventions, cures, etc.
- Have acquired skill in performing simple surgical sutures.
- Know how to start and maintain a basic cardiopulmonary resuscitation supported with an automatic external defibrillator.

2.3. Importance of learning goals

Students learn basic principles of surgery and pathology in their daily work as professionals future of dentistry.

3. Assessment (1st and 2nd call)

3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The student must demonstrate that it has achieved the intended learning outcomes through the following evaluation activities

2 exams are carried out: Pathological Anatomy block and Surgical Pathology block, each one is scored on 10 points.
Structure of both:

- * 10 test questions, with 5 answers, of which only one is true: blank answer has a value of 0 points, correct answer has a value of 0.3 points, failed answer has a value of -0.1 points. Total 3 points.
- * Short questions, scored on 1 point each. Total 4 points.
- * A development question, 3 points.

Final grade: average of the mark obtained in the two exams. It represents 80% of the final grade for the course. The remaining 20% is obtained from the qualification of all practices.

To pass the course, it is mandatory:

- * Have obtained a 5 in each of the theoretical exams.
- * Have completed the surgical pathology practices.

Grading system: The numerical rating will be expressed in accordance with the provisions of art. 5.2 of Royal Decree 1125/2003 of September 5 (BOE September 18), which establishes the European credit system and the system of qualifications for university degrees of an official nature and valid throughout the national territory. Thus, the grades will be established in the following range: From 0 to 4.9: Suspense (S); 5.0 to 6.9: Pass (A); from 7.0 to 8.9: Notable (N); 9.0 to 10: Outstanding (SB). The mention of Honor Registration may be awarded to students who have obtained a grade equal to or greater than 9.0.

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as theory sessions, laboratory sessions, and autonomous work and study.

4.2. Learning tasks

This course is organized as follows:

- **Theory sessions.** Theoretical aspects of the course will be developed by the teacher with the active participation of students. The professor will provide the material required for your participation.
- **Laboratory sessions.** Practices concerning the given topics: sutures, surgical instruments, basic life support, knowledge of the basic material of resuscitation and semi-automatic external defibrillator. Preparation of a detailed **report** of the activities carried out:
 - Microscopic practices of preparations of various pathologies mainly of the oral cavity
 - Portfolio: preparation by the student of a PowerPoint presentation covering the topics dealt with in practice sessions with personal images of contributions and information from various injuries

4.3. Syllabus

This course will address the following topics:

Section 1: General theme.

- 1. Introduction to pathological anatomy. Evolution historical. Methods of study. Purpose of this discipline.
- 2 concept of surgery. Introduction to the study of the subject issue

- 3. Pathology of the cell. Reversible and irreversible injury. Necrosis and its types. Changes macro and microscopic of the necrotic tissues.
- 4. Deposit of substances. Endogenous and exogenous pigmentation. Pigmentations that fundamentally affect the teeth.

Section 2: local and SYSTEMIC CIRCULATORY disorders.

- 5. Hyperemia, congestion, edema, ischemia, and infarction.
- 6. Inflammation. Pathophysiology of the inflammatory process. Acute inflammation.
- 7. inflammatory reaction in surgery. Concept, etiology, and pathogenesis. Biological response to aggression.
- 8. Chronic inflammation and granulomatous inflammation.
- 9. Trauma. Concept and varieties.
- 10. Repair. Regeneration and healing. Phases of the repair of wounds. Clinical forms of healing. The cicatricial response modifying factors.
- 11 scar pathology. Tissue pathology of physical etiology. Thermal, chemical burns. Injuries caused by electricity. Injuries caused by the cold.

Section 3: disorders of growth and cell DIFFERENTIATION.

- 12. Neoplasms. Generalities. Concept of benignancy and malignancy of tumors. Carcinogenesis: Carcinogens
- 13 subject groups. Classification of tumors. Precursor alterations in neoplasms. Characters macro and microscopic neoplasia. Metastasis and metastatic routes.
- 14. General cancer clinic. Evolutionary stages. Diagnosis. Therapeutic resources in solid tumors. The program that the student is offered to help you achieve the expected results includes the following activities ...
- 15. white lesions of the oral mucosa. Classification. macro- and microscopic appearance of these lesions
- 16. Red lesion. warty lesions and papillary of the oral cavity. Classification. Macro and microscopic appearance of these lesions.
- 17. reactive and tumor connective tissue injuries. Classification, macro and microscopic appearance thereof.
- 18. Inflammatory lesions of salivary glands. Sialoadenitis acute and chronic Sialolithiasis. Benign tumors of the salivary gland adenoma pleomófico, oncocytoma, Warthin tumor. Malignant tumors. Mucoepidermoid tumor.
- 19. Cysts of jaw and neck. Classification. Macro and microscopic appearance of these lesions.
- 20. odontogenic and non-odontogenic maxillary tumors. macro- and microscopic appearance.
- 21. skin tumors.

Section 4: OTHER DISEASES

- 22. Shock. Concept, etiology, and pathophysiology.
- 23. hypovolemic shock. Clinic, complications, and treatment.
- 24. Anaphylactic shock and septic shock.

Pathological anatomy practice sessions

1st practice. Carved of samples. Paraffin embedding. Cutting Section, staining and mounting. Macroscopic description of different lesions by the students.

Practical microscopic

- 1. Deposits of substances. Pigmentation
- 2-. Necrosis
- 3-. Acute and chronic inflammation. Reparative processes.
- 4-. Classification of tumors benign and malignant epithelial tumors of the oral cavity.
- 5-. Salivary glands. Pleomorphic adenoma.
- 6.- Cystic lesions of the oral cavity.
- 7- Joint with Pharmacology practice, the study of the canker sores. Realization of a portfolio, presented in powerpoint, which will pick up seen in practices.

Practices surgery to be carried out in the laboratory practice of resuscitation CPR-CPR.

Management of the DESA, (semi-automatic external defibrillator)

Knowledge of the basic surgical material

Knowledge of General measures of asepsis and antisepsis

Knowledge of the team surgically textile, the difference between clean and sterile and handling the placement of suitable sterile material.

Knowledge and basic surgical equipment training in basic surgical techniques, suture wounds hemostasis slurs cleaning

4.4. Course planning and calendar

Calendar of sessions and presentation of works

Pathology practices will be held in the room of microscopes, practices and groups calendar will be announced at the beginning of the academic year.

Delivery of the portfolio, after checking with the Professor, will be in the first week of November.

Further information concerning the timetable, classroom, office hours, assessment dates (<https://fccsyd.unizar.es/odontologia/grado-odontologia>) and other details regarding this course will be provided on the first day of class or please refer to the Faculty of Health and Sports Sciences website and Moodle.

4.5. Bibliography and recommended resources

To consult the bibliography and recommended resources, you must access the *Recommended Bibliography* link.