

## 29312 - General Surgical Pathology I

### Syllabus Information

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**Academic Year:** 2019/20

**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.
- If necessary, assist the surgeon in the care of patients with dental conditions with participation

## 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

written exam of 20 questions test with 5 items and one correct answer (3 points) type, wrong answers are not discounted, 8 short questions (3 points) and two essay questions (2 points).

The practices are valued with 2 points.

Half of the exam questions corresponds to Pathology and the other half Surgical Pathology. You must obtain a minimum of 5 points in each part to pass the exam.

To pass the course, it is mandatory to have made surgical pathology practices and the presentation of the workbook.

Other evaluation activities

-Portafolios Of microscópicas practices. The note will mean 10% of the final grade (up 1 point). the quality and variety of images will be valued and to be representative of the injuries described as well as the student's ability to respond to questions posed by the teacher at the reviews of work.

## 4.Methodology, learning tasks, syllabus and resources

### 4.1.Methodological overview

The learning process that has been designed for this course is based on the following: the theoretical part will be made by master classes, the teacher, seminars on the theoretical issues of the subject and that they will be developed by the teacher with the active participation of students previously Professor will be provided that material required for your participation.

Theoretical seminars / practical made by students.

Practices in laboratory. Practices concerning the given subject: 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 oral cavity -portfolio: preparation by the student of a PowerPoint presentation covering seen in practices with personal images of contributions and information from various injuries

### 4.2.Learning tasks

THEORETICAL BLOCK.

Theoretical program that is offered to the student to help you achieve the intended results. Interactive classes. The student raises the teacher any questions arising during the teaching of the master class.

Block practical Anatomy PATHOLOGY practice practices laboratory:

1st practice. Carved of samples. Paraffin embedding. Cutting block, 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, study of the canker sores. Realization of a portfolio, presented in power point, 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, difference between clean and sterile and handling placement of suitable sterile material.

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

### 4.3.Syllabus

The program offered to students to assist in achieving the expected results includes the following activities...

#### **Block theme 1:General theme.**

1. Introduction to pathological anatomy. Evolution historical. Methods of study. Purpose of this discipline.

Theme 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.

Theme 4. Deposit of substances. Endogenous and exogenous pigmentation. Pigmentations that fundamentally affect the teeth.

#### **Block theme 2: local and SYSTEMIC CIRCULATORY disorders.**

5 theme. Hyperemia, congestion, edema, ischemia and infarction.

6 issue. Inflammation. Pathophysiology of the inflammatory process. Acute inflammation.

Issue 7. inflammatory reaction in surgery. Concept, etiology and pathogenesis. Biological response to aggression.

Track 8. Chronic inflammation and granulomatous inflammation.

Track 9. Trauma. Concept and varieties.

Issue 10. Repair. Regeneration and healing. Phases of the repair of wounds. Clinical forms of healing. The cicatricial response modifying factors.

Item 11 scar pathology. Tissue pathology of physical etiology. Thermal, chemical burns. Injuries caused by electricity.

Injuries caused by the cold.

#### **Block theme 3: disorders of growth and cell DIFFERENTIATION.**

Item 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.

Item 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 ...

Item 15. white lesions of the oral mucosa. Classification. macro- and microscopic appearance of these lesions

Item 16. Red lesion. warty lesions and papillary of the oral cavity. Classification. Macro and microscopic appearance of these lesions.

Item 17. reactive and tumor connective tissue injuries. Classification, macro and microscopic appearance thereof.

Subject 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.

Item 19. Cysts of jaw and neck. Classification. Macro and microscopic appearance of these lesions.

Item 20. odontogenic and non-odontogenic maxillary tumors. macro- and microscopic appearance.

Topic 21. skin tumors.

#### **THEMATIC 4: OTHER DISEASES**

Theme 22. Shock. Concept, etiology and pathophysiology.

Unit 23. hypovolemic shock. Clinic, complications and treatment.

Unit 24. Anaphylactic shock and septic shock.

### 4.4.Course planning and calendar

#### **Calendar of sessions and presentation of works**

Important dates of the subject such as registration or the global of the subject review, as well as the academic calendar and the updated schedule are reflected on the web site of the Faculty of Health Sciences and sport:

<https://fccsyd.unizar.es/odontologia/grado-odontologia> exhibition by Professor sessions will be developed from day one academic year and once completed the theoretical contents each thematic block will be the corresponding seminar.

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.

Important dates of the course as registration or an overall examination of the subject, as well as the academic calendar and schedule updates are reflected on the website of the Faculty of Health Sciences and Sport: <https://fccsyd.unizar.es/odontologia/grado-odontologia>

Delivery Date portfolio, first week of November.

Calendar of practices of the subject, will be announced the first week of the course.

Pathology tutorials, see the subject board

Surgical Pathology tutorials, see the subject board

#### 4.5. Bibliography and recommended resources

##### **Basic bibliography:**

Manual of surgery in primary care. Rosemary Marquez, A; Beautiful Fernández, i. 1st ed. Alicante: ECU (University club publishing). 2011.

Compendium of surgery / H. Durán Sacristán... [et to the.] . -[1st ed., 1st reimp.] Madrid [etc.]: McGraw-Hill Interamericana, D.L. 2003

Treaty of surgical pathology / editor Courtney M. Townsend; publishers associated R. Daniel Beauchamp, Kenneth L. Mattox, B. Mark Evers; translation José Luis González Hernández... [et to the.] . 16th ed. Mexico: McGraw-Hill Interamericana, IMP. 2003

Treaty of surgery: biological basis of modern surgical practice / [editor] Courtney M. Townsend, Jr.; [associate editors] R. Daniel Beauchamp, B. Mark Evers, Kenneth L. Mattox. 19th ed. Amsterdam; Barcelona; Madrid [etc.]: Elsevier, D.L. 2013  
Kumar, Vinay. Robbins and Cotran structural and functional pathology / Vinay Kumar, Abul K. Abbas, Nelson Fausto. 7th ed., [1st reimp.] Madrid [etc.]: Elsevier, D.L.2007

Structural and functional pathology / Vinay Kumar... [et to the.] ; with illustrations by James A. Perkins. 8th ed., [reimp.]

Amsterdam; Barcelona; Madrid [etc.]: Elsevier, D.L. 2010  
Rubin: structural Pathology: clinico-pathological medical foundations / Emanuel Rubin... [et to the.] . 4th ed. Madrid [etc.]: McGraw-Hill Interamericana, D.L 2006

Structural Pathology: clinico-pathological medical foundations / editors, Raphael Rubin, David S. Strayer; editor-fundador and consultant, Emanuel Rubin. 6th ed. Philadelphia; Barcelona [etc.]: Wolters Kluwer / Lippincott Williams & Wilkins, D.L. 2012  
Pathology / directed by F.J.Pardo Mindan. [1st ed., reimp.] Madrid [etc.]: Harcourt, 2000

Stevens, Alan. Pathology / Alan Stevens, James Lowe. 2nd ed. Madrid: Harcourt, 2001

##### **Complementary bibliography:**

Stevens, Alan. Basic histopathology: atlas and text color / Alan Stevens, James S. Lowe, Barbara Young; Philip. J. Deakin drawings; [revision Pere Jordi Fábregas Batlle]. 4th ed.

Immunological aspects of surgery / Marta Navarro Zorraquino (Director). Zaragoza: Presses, University of Zaragoza, 1997

Orthopedics and traumatology. Silberman. Varaona. 3rd Ed. Argentina. Pan American ed. 2010

Surgery. Digestive, circulatory, respiratory / directors, S. Tamames Escobar, C. Martinez Ramos; D. Sánchez de Vega and S. Tamames Gómez collaborators. Madrid [etc.]: Pan American medical, IMP. 2000

Regezi, Joseph a... Oral pathology: clinical-pathologic correlations / Joseph A. Regezi. 5th ed Philadelphia [etc.]: Saunders, cop. 2008