# **1. BASIC DATA**

SUBJECT	Applied medical surgical pathology I
DEGREE PROGRAM	Dentistry
SCHOOL	Faculty of Health Sciences
COURSE	Second year
ECTS	6 ECTS (150 h)
CREDIT TYPE	Mandatory
LANGUAGE	Spanish / English
DELIVERY MODE	In class
TRIMESTER/SEMESTER	First semester
YEAR	2020/2021
COORDINATING PROFESSOR	Beatriz Prieto Moure

## 2. PRESENTATION OF THE COURSE/MODULE

Applied Surgical Medical Pathology I is a mandatory subject of 6 ECTS that takes place on a semester basis in the second year of the Dentistry degree. This subject belongs to the "Applied Surgical Medical Pathology" module that has a total of 12 ECTS.

It aims to train students to acquire the knowledge and skills necessary for the realization of an oriented anamnesis and physical exploration, to know the most frequent and relevant pathologies for dental practice, to plan diagnostic and therapeutic strategies, to solve clinical problems and emergency situations.

## **3. COMPETENCIES AND LEARNING OUTCOMES**

### Core competencies:

- **CB2**: That students 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 defense of arguments and the resolution of problems within their area of study.
- **CB3**: That students 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.



- **CB4**: That students can transmit information, ideas, problems and solutions to a specialized and non-specialized public.
- **CB5**: That the students have developed the necessary learning skills to undertake further studies with a high degree of autonomy.

### General competencies:

- **CG1**: Know the essential elements of the dentist profession, including ethical principles and legal responsibilities
- **CG2:** Understand the importance of such principles for the benefit of the patient, society and profession, with special attention to professional secrecy.
- **CG3**: Ability to know how to identify the patient's concerns and expectations, as well as to communicate effectively and clearly, both orally and in writing, with patients, family members, the media and other professionals.
- **CG8**: Ability to know how to share information with other health professionals and work as a team.
- **CG10**: Ability to know and identify psychological and physical problems arising from gender violence to train students in the prevention, early detection, assistance, and rehabilitation of victims of this form of violence.
- **CG11**: Ability to understand the basic biomedical sciences on which Dentistry is based to ensure proper oral and dental care.
- **CG14**: Knowledge of the general processes of the disease, among which are infection, inflammation, alterations of the immune system, degeneration, neoplasia, metabolic disorders and genetic disorders.
- **CG15**: Be familiar with the general pathological characteristics of diseases and disorders that affect organic systems, specifically those that have an oral repercussion.
- **CG16**: Ability to understand the fundamentals of action, indications and efficacy of drugs and other therapeutic interventions, knowing their contraindications, interactions, systemic effects and interactions on other organs, based on the available scientific evidence.
- **CG17**: Ability to understand and recognize the principles of ergonomics and safety at work (including cross infection control, radiation protection and occupational and biological diseases).
- **CG19**: Knowledge of the scientific method and have critical capacity to assess established knowledge and new information. Be able to formulate hypotheses, collect and critically evaluate information to solve problems, following the scientific method.

#### Cross-curricular competencies:

- **CT1**: Responsibility: That the student is able to assume the consequences of the actions he performs and respond to his own actions.
- **CT2**: Self-confidence: That the student is able to act safely and with sufficient motivation to achieve their objectives.
- **CT5**: Interpersonal comprehension: That the student be able to perform an active listening in order to reach agreements using an assertive communication style.
- **CT6**: Flexibility: That the student is able to adapt and work in different and varied situations and with diverse people. It involves assessing and understanding different positions adapting their own approach as the situation requires.
- **CT7**: Teamwork: That the student is able to 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 presented situations.
- **CT10**: Innovation-creativity: That the student is able to devise new and different solutions to problems that add value to the problems that arise.

### Specific competencies:

- **CE27**: Know the general processes of illness, cure and repair, including infection, inflammation, bleeding and coagulation, scarring, trauma and alterations of the immune system, degeneration, neoplasia, alterations metabolic and genetic disorders.
- **CE28**: Know the general pathological characteristics of diseases and disorders that affect organic systems.
- **CE29**: Know the oral manifestations of systemic diseases.
- **CE30**: Know the general and clinical pharmacology in dental practice.
- **CE31**: Know the pharmacological bases of the different anesthetic techniques, both local and general, as well as the role of sedation and general anesthesia in the management of the dental patient.
- **CE32**: Know and handle the most frequent emergencies and medical emergencies in dental practice and basic cardiorespiratory resuscitation techniques.
- **CE33**: Have appropriate knowledge of human nutrition, in particular, the relationship of nutritional habits and diet with the maintenance of health and the prevention of oral and dental diseases.

### Learning outcomes:

- LO1: Ability to perform oriented anamnesis and physical exploration.
- LO2: Knowledge of the most frequent and most relevant pathologies for dental practice.

- LO3: Planning of diagnostic and therapeutic strategies.
- LO4: Solution of clinical problems.
- **LO5**: Ability to integrate clinical information with that obtained by complementary tests.
- LO6: Ability to analyze emergency situations and making decisions in such situations.

The table below shows the relation between the competencies developed during the course and the expected learning outcomes:

Competencies	Learning Outcomes
<ul> <li>CB2, CB3</li> <li>CG1, CG2, CG3, CG10, CG14, CG15, CG17, CG19</li> <li>CT1, CT5, CT6</li> <li>CE27, CE28, CE29, CE30, CE32, CE33</li> </ul>	L01
<ul> <li>CB2, CB3</li> <li>CG1, CG11, CG14, CG15, CG17</li> <li>CT1</li> <li>CE27, CE28, CE29, CE33</li> </ul>	LO2
<ul> <li>CB2, CB3, CB4</li> <li>CG3, CG10, CG11, CG14, CG15, CG16</li> <li>CT1, CT2, CT6, CT7, CT8, CT10</li> <li>CE28, CE30, CE31, CE33</li> </ul>	LO3
<ul> <li>CB2, CB3, CB4, CB5</li> <li>CG8, CG11, CG14, CG15, CG19</li> <li>CT1, CT2, CT5, CT6, CT7, CT8, CT10</li> <li>CE27, CE28, CE30, CE31, CE33</li> </ul>	LO4
<ul> <li>CB2, CB3, CB5</li> <li>CG8, CG14, CG15</li> <li>CT1, CT7</li> <li>CE27, CE28, CE29</li> </ul>	LO5
<ul> <li>CG8, CG10, CG14, CG15, CG16</li> <li>CT1, CT2, CT8</li> <li>CE32</li> </ul>	LO6

## 4. CONTENTS

The subject is organized into two learning units that are divided in different lessons:

### <u>UNIT 1:</u>

- UNIT 1.1- Bases of health care. Evidence-based Dentistry.
- UNIT 1.2. The Healthcare Process: Prevention, Prognosis and Therapeutic Plan.
- UNIT 1.3. The Diagnosis Process: The Clinical History.

- UNIT 1.4. The Diagnosis Process: Complementary Studies (Medical Tests).
- UNIT 1.5. Clinical History in Dentistry. Surgical Risk Assessment. ASA System.
- UNIT 1.6. Medical Emergencies in the Dentistry Office.

### <u>UNIT 2:</u>

- UNIT 2.1. Etiology and Pathogenic Mechanisms. Local and Systemic Diseases.
- UNIT 2.2. Genetically Based Diseases.
  - UNIT 2.2.1.- Cancer: Prevention, Diagnosis and Treatment.
  - UNIT 2.2.2.- Cancer and preneoplastic lesions of the oral cavity.
- UNIT 2.3.- Immune-Based Diseases.
  - UNIT 2.3.1.- Hypersensitivity-Allergies and Anaphylactic Reactions.
  - UNIT 2.3.2.- Autoimmunity-Rheumatoid Arthritis.
  - UNIT 2.3.3.- Autoimmunity-Multiple Sclerosis.
  - UNIT 2.3.4.- Autoimmunity-Systemic Lupus Erythematosus.
  - UNIT 2.3.5.- Autoimmunity-Sjögren's Syndrome.
  - UNIT 2.3.6.- Autoimmunity-Graves' Disease.
  - UNIT 2.3.7.- Autoimmunity-Glomerulonephritis.
  - UNIT 2.3.8.- Immunodeficiencies.
- UNIT 2.4.- Infectious Diseases.
  - UNIT 2.4.1.- Sexually Transmitted Diseases.
- UNIT 2.5.- Preventive Measures.

## 5. TEACHING – LEARNING METHODOLOGIES

The types of teaching-learning methodologies that will be applied are the following:

- ✓ Master class.
- ✓ Case method.
- ✓ Cooperative learning.
- ✓ Problem-based learning.
- Simulation environments.

# 6. LEARNING ACTIVITIES

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

Type of educational activity	Hours
Master class	65 h
Group work	10 h
Critical analysis of scientific papers	10 h
Practical exercises	10 h
Case analysis	30 h
Laboratory session	15 h
Tutoring sessions	10 h
TOTAL	150 h

## 7. EVALUATION

The evaluation systems are listed below, as well as their weight on the total grade:

Evaluation System	Average
Knowledge test	40%
Virtual laboratory session	20%
Debates	20%
Practical Exercises	10%
Clinical Cases and Problems	10%

In the Virtual Campus, when you access the subject, you will be able to consult in detail the evaluation activities that you must carry out, as well as the delivery dates and the evaluation procedures for each of them.

### Knowledge test:

- It will consist of 2 parts: 60 multiple choice questions (MCQ) + 2 clinical cases

- Following the general UE rules, each wrong answer in MCQ will subtract one third of the value of a correct answer.

- The mark of the knowledge test is calculated as the weighted average of both parts.

- To pass a final grade of 5.0 out of 10.0 points is required. The marks for each part of the test will be averaged as long as they are equal to or greater than 4.5.

In addition, the following considerations must be taken into account:

- The activities will be delivered using the virtual platform before the deadline. Any work or activity delivered later than said date and / or that does not meet the required characteristics will be scored with 0 points.

- The student must handle the BLACKBOARD platform, as it will be used as a means of communication between the student and the teacher and to carry out tests, provide information on classes, problem-solving activities, grades, etc.

### 7.1. Ordinary Call

To pass the course in ordinary call, you must obtain a grade equal to or greater than 5.0 out of 10.0 in the final grade (weighted average) of the course. In any case, it will be necessary for you to obtain a grade greater than or equal to 5.0 in the final test, as well as in the laboratory practices, so that an average can be made with the rest of the activities.

The mention of "Honour Degree" will be awarded to students who have obtained a grade equal to or greater than 9.0. Their number may not exceed 5% of the students enrolled in each subject in the corresponding academic year, unless the number of students enrolled is less than 20, in which case a single Honour Degree may be granted.

# 7.2. Extraordinary Call

The student should recover the part of the subject not evaluated or in which the score greater than or equal to 5.0 in ordinary call has not been achieved

To pass the course in the second exam period, you must obtain a final grade of at least 5 out of 10 (weighted average). In any case, you will need to obtain a grade of at 5.0 in

the extraordinary knowledge test in order for it to count towards the final grade along with all the grades corresponding to the other activities.

The student must deliver the activities not successfully completed in the first exam period after having received the corresponding corrections from the professor, or those that were not delivered in the first place.

# 8. SCHEDULE

This section indicates the schedule with delivery dates of assessable activities of the subject:

Assessable activities	Date
Knowledge test	January, ordinary call
Laboratory practices	See Blackboard
Debates: Oral Presentations	See Blackboard
Practical exercises	See Blackboard
Cases / Problems	See Blackboard

This schedule could be modified due to logistical reasons. Any modification will be properly notified to the students.

## 9. **BIBLIOGRAPHY**

The recommended bibliography is listed below:

- Benjamin, Ivor B., Griggs, Robert C., Wing, Edward J., Fitz, J. Gregory Andreoli and Carpenter's Cecil Essentials of Medicine. Elsevier, Saunders, 2016.
- Rozman, Ciril and Cardellach, Francesc. *Compendio De Medicina Interna*. Barcelona, España: Elsevier, 2016.
- Kasper, Dennis L., Anthony S. Fauci, Stephen L. Hauser, Dan L. Longo, J. Larry Jameson, and Joseph Loscalzo. *Harrison's Principles of Internal Medicine*. New York, N.Y.: McGraw-Hill, 2015.

# **10. ATTENTION TO DIVERSITY UNIT**

Students with specific educational support requirement:

Curricular adaptations or adjustments for students with specific requirements, intended to guarantee the same opportunities, will be guided by the Unit for Attention to Diversity (UAD).

It will be mandatory to obtain a report of curricular adaptations/adjustments by UAD, thus students with specific needs for educational support should contact <u>Unidad.diversidaduev@universidadeuropea.es</u> at the beginning of each semester.

## **11. SATISFACTION SURVEYS**

Your opinion matters!

The European University encourages you to participate in satisfaction surveys to detect strengths and areas for improvement regarding teachers, 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.