

## 1. BASIC INFORMATION

Subject	Applied Surgical Medical Pathology I
Degree Program	Degree in Dentistry
School	Faculty of Health Sciences
Year	Second
ECTS	6 ECTS
Credit type	Mandatory
Language(s)	English
Delivery mode	Face-to-face
Semester	First semester
Academic year	2024/2025
Coordinating professor	Dr. Martín Pérez Leal

### 2. PRESENTATION

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

It aims to train students to acquire the knowledge and skills necessary to carry out oriented anamnesis and physical examination, knowledge of the most frequent pathologies and those most relevant to dental practice, the planning of diagnostic and therapeutic strategies, the solution of clinical problems, the ability to integrate clinical information with that obtained by complementary tests and the ability to analyze emergency situations and make decisions in these situations.

### 3. COMPETENCES 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 audience.
- **CB5**: That students have developed those learning skills necessary to undertake further studies with a high degree of autonomy.



#### **General competencies:**

- **CG1**: Know the essential elements of the dental profession, including ethical principles and legal responsibilities.
- **CG2**: Understand the importance of such principles for the benefit of the patient, society and the 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 the psychological and physical problems derived from gender violence to train students in 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
  a correct oral and dental assistance.
- **CG14**: Knowledge of the general processes of the disease, including infection, inflammation, alterations of the immune system, degeneration, neoplasia, metabolic alterations and genetic disorders.
- **CG15**: Be familiar with the general pathological characteristics of diseases and disorders that affect organic systems, specifically those that have oral repercussions.
- **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 control of cross infections, radiological protection and occupational and biological diseases).
- **CG19**: Knowledge of the scientific method and have the critical capacity to assess established knowledge and new information. Being able to formulate hypotheses, collect and critically assess information for problem solving, following the scientific method.

#### **Cross-curricular competencies:**

- **CT1**: Responsibility: That the student is capable of assuming the consequences of the actions he/she carries out and being responsible for his/her own actions.
- CT2: Self-confidence: The student is capable of acting safely and with sufficient motivation to achieve their goals.
- **CT5**: Interpersonal understanding: The student is capable of active listening in order to reach agreements using an assertive communication style.
- CT6: Flexibility: The student is able to adapt and work in different and varied situations and with different people. It involves evaluating and understanding different positions, adapting your own approach as the situation requires.
- CT7: Teamwork: The student is capable of participating in an active way in achieving a common goal, listening, respecting and evaluating the ideas and proposals of the rest of the team members.
- **CT8**: Initiative: The student is capable of anticipating proactively, proposing solutions or alternatives to the situations presented.
- **CT10**: Innovation-Creativity: The student is capable of devising new and different solutions to the problems faced.



#### **Specific competencies:**

- **CE27**: To know the general processes of getting sick, healing and repairing, including infection, inflammation, hemorrhage and coagulation, healing, trauma and alterations of the immune system, degeneration, neoplasia, alterations metabolic and genetic disorders.
- **CE28**: To know the general pathological characteristics of diseases and disorders that affect organic systems.
- **CE29**: To know the oral manifestations of systemic diseases.
- CE30: To know general and clinical pharmacology in dental practice.
- **CE32**: To know and handle the most frequent medical emergencies and emergencies in dental practice and in basic cardiorespiratory resuscitation techniques.
- **CE33**: To have appropriate knowledge of human nutrition, in particular, the relationship between nutritional habits and diet with the maintenance of health and the prevention of oral and dental diseases.

### Learning outcomes:

- **RA1**: Ability to carry out oriented anamnesis and physical examination.
- RA2: Knowledge of the most frequent pathologies and the most relevant 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.
- RA6: Ability to analyze emergency situations and make decisions in said situations.

The table below shows the relationship between the skills developed in the subject and the learning outcomes pursued:

Competencies	Learning outcomes
CB2, CB3 CG1, CG2, CG3, CG10, CG14, CG15, CG17, CG19 CT1, CT5, CT6 CE27, CE28, CE29, CE30, CE32, CE33	RA1: Ability to perform oriented anamnesis and physical examination.
CB2, CB3 CG1, CG11, CG14, CG15, CG17 CT1 CE27, CE28, CE29, CE33	<b>RA2</b> : Knowledge of the most frequent pathologies and the most relevant for dental practice.
CB2, CB3, CB4 CG3, CG10, CG11, CG14, CG15, CG16 CT1, CT2, CT6, CT7, CT8, CT10 CE28, CE30, CE33	RA3 : Planning of diagnostic and therapeutic strategies.
CB2, CB3, CB4, CB5 CG8, CG11, CG14, CG15, CG19 CT1, CT2, CT5, CT6, CT7, CT8, CT10 CE27, CE28, CE30, CE33	RA4 : Solution of clinical problems.
CB2, CB3, CB5 CG8, CG14, CG15 CT1, CT7 CE27, CE28, CE29	RA5 : Ability to integrate clinical information with that obtained by complementary tests.
CG8, CG10, CG14, CG15, CG16 CT1, CT2, CT8 CE32	<b>RA6</b> : Ability to analyze emergency situations and make decisions in said situations.



### 4. CONTENT

The subject is organized into two learning units, which, in turn, are divided into lessons (depending on the units):

#### UNIT 1:

- Lesson 1.1- Bases of health care. Evidence-based dentistry.
- Lesson 1.2.- The healthcare process: Prevention, Prognosis and Therapeutic Plan.
- Lesson 1.3.- The Diagnosis process: The Clinical History.
- Lesson 1.4.- The Diagnosis process: Complementary studies (medical tests).
- Lesson 1.5.- Clinical History in Dentistry. Surgical Risk Assessment. ASA system.
- Lesson 1.6.- Medical Emergencies in the Dentistry Office.

#### UNIT 2:

- Lesson 2.1.- Etiology and Pathogenic Mechanisms. Local and systemic diseases.
- Lesson 2.2.- Genetically Based Diseases.
  - o Lesson 2.2.1.- Cancer Prevention, Diagnosis, Treatment.
  - o Lesson 2.2.2.- Cancer and preneoplastic lesions of the oral cavity.

#### Lesson 2.3.- Immune Based Diseases.

- Lesson 2.3.1.- Hypersensitivity-Allergies and Anaphylactic Reactions.
- o Lesson 2.3.2.- Autoimmunity-Rheumatoid Arthritis.
- o Lesson 2.3.3.- Autoimmunity-Multiple Sclerosis.
- o Lesson 2.3.4.- Autoimmunity-Systemic Lupus Erythematosus.
- o Lesson 2.3.5.- Autoimmunity-Sjögren's syndrome.
- Lesson 2.3.6.- Autoimmunity-Graves' disease.
- o Lesson 2.3.7.- Autoimmunity-Glomerulonephritis.
- o Lesson 2.3.8.- Immunodeficiencies.

### Lesson 2.4.- Infectious Diseases.

UNIT 2.4.1.- Sexually Transmitted Diseases.

Lesson 2.5.- Preventive Measures.

### 5. TEACHING-LEARNING METHODOLOGIES

The types of teaching-learning methodologies that will be applied are indicated below:

- Master class.
- Case method.
- Cooperative learning.
- Problem Based Learning (PBL).
- Simulation environments.

### 6. LEARNING ACTIVITIES

Listed below are the types of learning activities and the number of hours the student will spend on each

Face-to-face modality:



Learning activity	Number of hours
Tutoring sessions	18 h
Masterclasses	20 h
Virtual Master Classes	9 h
Group work	6 h
Critical analysis of scientific articles	5 h
Practical exercises	10 h
Case analysis	20 h
Laboratory practices	15 h
Autonomous study and work	45 h
On-site knowledge tests	2 h
TOTAL	150 h

## 7. ASSESSMENT

Listed below are the assessment systems used and the weight each one carries towards the final course grade:

### Campus-based mode:

Assessement system	Weight
Knowledge test	40%
Laboratory practices	10%
Debates	20%
Practical exercises	10%
Case/Problem	10%
Projects	10%

When you access the course on the *Campus Virtual*, you'll find a description of the assessment activities you have to complete, as well as the delivery deadline and assessment procedure for each one.

# 7.1. Ordinary call (First exam period)

To pass the course in the first exam period, you must obtain a grade greater than or equal to 5.0 out of 10.0 in the final grade (weighted average) of the course.

In any case, it will be necessary to obtain a grade greater than or equal to 5.0, independently, in each of the evaluation systems that make up the course (including the knowledge tests separated into partials). It may be assessed that a grade equal to or greater than 4 is needed in the knowledge tests when separated into partial exams.



The Universidad Europea de Valencia establishes continuous assessment as a system of evaluation of knowledge, skills and core, general, cross-curricular and specific competences of the degree in Dentistry, in accordance with the provisions of the Regulations for the evaluation of undergraduate degrees. In this regard and for the purposes of the use of calls the student should be aware that, if any evaluation system provided in the Learning Guide, in the ordinary call (first exam period the student will have an overall grade of the subject, thus using up one call.

According to the aforementioned Regulations, students taking face-to-face degree courses are required to justify at least 50% of class attendance, as a necessary part of the evaluation process and in the case of theoretical or practical classes determined as mandatory by the teacher in the schedules of the subject, the student must register an attendance of 90%, whether the absence is justified or not. The lack of accreditation by the means proposed by the University will entitle the professor to grade the subject as failed in the ordinary call, according to the grading system.

Punctuality will be required, 3 delays of more than 15 minutes or departures before class will be counted as a lack of attendance.

The student must consult in the schedule of the course in the Virtual Campus the sessions of compulsory attendance in the classroom.

The mention of "Matrícula de Honor" will be awarded to students who have obtained a grade equal to or higher 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 only one honorary registration may be awarded.

### 7.2. Second exam period

To pass the course in the second exam period, you must obtain a grade higher or equal to 5.0 out of 10.0 in the final grade (weighted average) of the course.

In any case, it will be necessary to obtain a grade greater than or equal to 5.0 in the final test, so that it can be averaged with the rest of the activities.

The activities that were not handed in or passed in the first exam period must be submitted, after having received the corresponding corrections from the teacher.

The Universidad Europea de Valencia establishes the continuous evaluation as a system of assessment of knowledge, skills and core, general, cross-curricular, and specific competences of the degree in Dentistry, in accordance with the provisions of the Regulations for the evaluation of undergraduate degrees. In this regard and for the purposes of using calls, the student should be aware that in the extraordinary call the Objective Test of Knowledge (OTK) which determines whether or not the call was used. In the exceptional case that the student only needs to pass evaluation system /s that are not the OTK, it will be considered NP if not presented and will obtain a numerical grade if the student was examined of, at least, one of them.

Pursuant to the aforementioned Regulations, students taking face-to-face degree courses are required to justify at least 50% of class attendance, as a necessary part of the evaluation process, and in the case of theoretical or practical classes determined as mandatory by the teacher in the schedules of the subject, the student must register an attendance of 90%, whether the absence is justified or not. Those students who, due to non-compliance with this requirement, must take the extraordinary call (second exam period), need to perform as many activities or knowledge tests determined by the teacher to recover this part successful completion will be based on the specified rubric.



## 8. SCHEDULE

This table shows the delivery deadline for each assessable activity in the course:

Assessable activities	Date
Knowledge test	January, ordinary call
Laboratory practices	See Virtual Campus
Debates	See Virtual Campus
Practical exercises	See Virtual Campus
Case/Problem	See Virtual Campus
Projects	See Virtual Campus

This schedule may be subject to changes for logistical reasons relating to the activities. The student will be notified of any change as and when appropriate.

## 9. BIBLIOGRAPHY

The reference work for following the subject is:

- Pérez Arellano JL, Sisinio de Castro (2019). Manual de Patología General (8ªed), Elsevier.
- 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

Complementary bibliography:

- 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.

# 10. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

From the Educational Guidance and Diversity Unit we offer support to our students throughout their university life to help them reach their academic achievements. Other main actions are the students inclusions with specific educational needs, universal accessibility on the different campuses of the university and equal opportunities.

From this unit we offer to our students:

- 1. Accompaniment and follow-up by means of counselling and personalized plans for students who need to improve their academic performance.
- 2. In terms of attention to diversity, non-significant curricular adjustments are made in terms of methodology and assessment for those students with specific educational needs, pursuing an equal opportunities for all students.



- 3. We offer students different extracurricular resources to develop different competences that will encourage their personal and professional development.
- 4. Vocational guidance through the provision of tools and counselling to students with vocational doubts or who believe they have made a mistake in their choice of degree.

Students in need of educational support can write to us at: <a href="mailto:orientacioneducativa.uev@universidadeuropea.es">orientacioneducativa.uev@universidadeuropea.es</a>

# 11. ONLINE SURVEYS

Your opinion matters!

The Universidad Europea encourages you to participate in several surveys which help identify the strengths and areas we need to improve regarding professors, degree programs and the teaching-learning process.

The surveys will be made available in the "surveys" section in virtual campus or via e-mail. Your assessment is necessary for us to improve.

Thank you very much for your participation.