

1. BASIC INFORMATION

Course	Applied Medical Surgical Pathology II
Degree program	Dentistry
School	Faculty of Health Sciences
Year	2º
ECTS	6
Credit type	Mandatory
Language(s)	Spanish/English
Delivery mode	In class
Semester	4th
Academic year	2025-2026
Coordinating professor	Dra. Estíbaliz López Fernández de Villaverde

2. PRESENTATION

Applied Surgical Medical Pathology I is a compulsory subject of 6 ECTS that is taught 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, knowledge of the most frequent and most relevant pathologies for 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 decision making in such 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.
- **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.
- **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 following table shows the relationship between the competencies developed during the course and the learning outcomes pursued:

Competencies	Learning outcomes
<ul style="list-style-type: none"> • CB2, CB3 • CG1, CG2, CG3, CG10, CG14, CG15, CG19 • CT1, CT5, CT6 • CE27, CE28, CE29, CE30, CE32, CE33 	LO1: Ability to perform oriented anamnesis and physical exploration.
<ul style="list-style-type: none"> • CB2, CB3 • CG1, CG11, CG14, CG15 • CT1 • CE27, CE28, CE29, CE33 	LO2: Knowledge of the most frequent and most relevant pathologies for dental practice.
<ul style="list-style-type: none"> • CB2, CB3, CB4 • CG3, CG10, CG11, CG14, CG15 • CT1, CT2, CT6, CT7, CT8, CT10 	LO3: Planning of diagnostic and therapeutic strategies.

<ul style="list-style-type: none"> • CE28, CE30, CE33 	
<ul style="list-style-type: none"> • CB2, CB3, CB4, CB5 • CG8, CG11, CG14, CG15, CG19 • CT1, CT2, CT5, CT6, CT7, CT8, CT10 • CE27, CE28, CE30, CE33 	LO4: Solution of clinical problems.
<ul style="list-style-type: none"> • CB2, CB3, CB5 • CG8, CG14, CG15 • CT1, CT7 • CE27, CE28, CE29 	LO5: Ability to integrate clinical information with that obtained by complementary tests.
<ul style="list-style-type: none"> • CG8, CG10, CG14, CG15 • CT1, CT2, CT8 • CE32 	LO6: Ability to analyze emergency situations and making decisions in such situations.

4. CONTENT

Learning unit 1: Cardiovascular Pathology

- Lesson 1.1. Clinical history in cardiovascular disease.
- Lesson 1.2. Hemostasis and drugs in dental practice of dentistry.
- Lesson 1.3. Hypertension: diagnosis and treatment.
- Lesson 1.4. Lipid metabolism disorders: diagnosis and treatment.
- Lesson 1.5. Diabetes Mellitus: diagnosis and treatment.
- Lesson 1.6. Ischaemic heart disease: diagnosis and treatment.
- Lesson 1.7. Peripheral vascular disorders.
- Lesson 1.8. Congenital heart diseases. Prophylaxis of bacterial endocarditis.
- Lesson 1.9. Acute cerebrovascular accident.
- Lesson 1.10. Heart failure and odontology.

Learning unit 2: Nervous System Pathology

- Lesson 2.1. Clinical history in Nervous System pathologies.
- Lesson 2.2. Seizures and Epilepsy.
- Lesson 2.3. Motor neuron disease: Amyotrophic Lateral Sclerosis (ALS).
- Lesson 2.4. Neurodegenerative disorders: Alzheimer's disease.
- Lesson 2.5. Neurodegenerative disorders: Parkinson pathology.

Learning unit 3: Digestive System Pathology

- Lesson 3.1. Clinical history in gastrointestinal pathology.
- Lesson 3.2. Oral pathology. Oral infections: viral, bacterial and fungal infections.
- Lesson 3.3. Autoimmune and granulomatous diseases of the oral cavity.
- Lesson 3.4. Gastro-esophageal Reflux Disease

- Lesson 3.5. Peptic Ulcer Disease.
- Lesson 3.6. Acute and chronic hepatitis. Hepatic cirrhosis.
- Lesson 3.7. Intestinal pathologies: malabsorption syndromes (celiac disease)

Learning unit 4: Respiratory System Pathology

- Lesson 4.1. Clinical history in respiratory pathology.
- Lesson 4.2. Asthma and COPD.

Learning unit 5: Osteoarticular Pathology

- Lesson 5.1. Clinical history of osteoarticular pathology.
- Lesson 5.2. Bone pathology.

Learning unit 6: Women Pathology

- Lesson 6.1. Myomas, prolapses, endometriosis and PCOS.

Learning unit 7: Emergencies at the dental clinic

- Lesson 7.1. Emergencies at the dental clinic.

5. TEACHING-LEARNING METHODOLOGIES

The types of teaching-learning methodologies used are indicated below:

- Master class.
- Case method.
- Cooperative learning.
- Problems based learning.
- Simulation environments

6. LEARNING ACTIVITIES

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

Campus-based mode:

Learning activity	Number of 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	150h

7. ASSESSMENT

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

Campus-based mode:

Assessment system	Weight
Knowledge tests	40
Debates	10
Projects	10
Laboratory sessions	20
Practical exercises	10
Case/Problem	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. First assessment period

To pass the course in the first assessment 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 first assessment 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 first assessment period, 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 assessment period

To pass the course in the second assessment 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 assessment 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 second assessment period 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.

8. SCHEDULE

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

Assessable activities	Deadline
Knowledge test	Ordinary call in June
Case/Problem	Specified in <i>Campus Virtual</i>
Practical exercise	Specified in <i>Campus Virtual</i>
Debates	Specified in <i>Campus Virtual</i>

Projects	Specified in <i>Campus Virtual</i>
Laboratory sessions	Specified in <i>Campus Virtual</i>

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 main reference work for this subject is:

- 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.

The recommended bibliography is the following:

- 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. EDUCATIONAL GUIDANCE, DIVERSITY AND INCLUSION UNIT

From the Educational Guidance, Diversity and Inclusion 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:

orientacioneducativa.uev@universidadeuropea.es