

1. BASIC INFORMATION

Course	Applied Medical Surgical Pathology II
Degree program	Dentistry
School	Faculty of Health Sciences
Year	2º
ECTS	6 ECTS
Credit type	Mandatory
Language(s)	Spanish/English
Delivery mode	In class
Semester	Second semester
Academic year	2020-2021
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.
- **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 following table shows the relationship between the competencies developed during the course and the learning outcomes pursued:

Competencies	LearningOutcomes
<ul style="list-style-type: none"> • CB2, CB3 • CG1, CG2, CG3, CG10, CG14, CG15, CG17, 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, CG17 • 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, CG16 • CT1, CT2, CT6, CT7, CT8, CT10 • CE28, CE30, CE31, CE33 	LO3: Planning of diagnostic and therapeutic strategies.
<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, CE31, 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, CG16 • 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. Loss of consciousness: alterations in the level of consciousness (sleeping alterations and coma).
- Lesson 2.4. PNS and motor unit disorders: Amyotrophic Lateral Sclerosis.
- 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:

Type of educational 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	150 h

7. ASSESSMENT

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

Assessment system	Weight
Knowledge test	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.

Knowledge test:

- It will consist on 60 multiple choice questions + 2 clinical cases.
- Following the general university rules, each wrong answer in multiple choice questions will subtract one third of the value of a correct answer.
- The score 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 points about 10.0.

In addition, the following must be taken into account:

- ✓ Activities will be delivered using the virtual platform before the deadline. Any work or activity delivered after that date and / or that does not meet the required characteristics will be rated with 0 points.
- ✓ The student must operate the BLACKBOARD platform, since it will be used as a means of communication between the student and the teacher and to perform tests, provide information on classes, problem solving activities, grades, etc.

7.1. First exam period

To pass the course in the ordinary call, you must obtain a final course score of at least 5 out of 10 points in the final grade (weighted average).

In any case, it will be necessary to obtain a grade greater than or equal to 5.0 in the knowledge test, as well as in the laboratory practices, in order for it to count towards the final grade along with all the grades corresponding to the other activities.

The mention with honors 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 Honor Roll may be granted.

7.2. Second exam period

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

Assessable activities	Deadline
Knowledge test	January, ordinary call
Case/Problem	At the middle of the semester
Practical exercise	At the end of each learning unit
Debates	3 sessions in the Cardiovascular Pathology Unit 3 sessions in the Digestive Pathology Unit 1 session in the Respiratory Pathology Unit 1 session in the Osteoarticular Pathology Unit
Projects	2 sessions in the Nervous System Pathology Unit 1 session in the Digestive Pathology Unit 1 sesión in the Women Pathology Unit and in the Emergencies at the dental clinic unit
Laboratory sessions	To be determined Activities at the end of each practical session

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 recommended bibliography is the following:

- 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. DIVERSITY MANAGEMENT UNIT

Students with specific learning support needs:

Curricular adaptations and adjustments for students with specific learning support needs, in order to guarantee equal opportunities, will be overseen by the Diversity Management Unit (UAD: Unidad de Atención a la Diversidad).

It is compulsory for this Unit to issue a curricular adaptation/adjustment report, and therefore students with specific learning support needs should contact the Unit at unidad.diversidad@universidadeuropea.es at the beginning of each semester.

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.