

# 1. BASIC DATA

Course	Applied Medical-Surgical Pathology I	
Degree program	Dentistry degree	
School	Biomedical and health sciences school	
Year	2º	
ECTS	6 ECTS	
Credit type	Mandatory	
Language(s)	English	
Delivery mode	Face	
Semester	First	
Academic year	2024-2025	
Coordinating professor	Patricia Valencia Orgaz, Shirley Danlo, Manuel Martínez Sellés, Marco Puma.	

# 2. PRESENTATION

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

It aims to train students to acquire the knowledge and skills necessary to carry out anamnesis and physical examination oriented, 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 analyse situations emergency and decision-making in such situations.

# 3. COMPETENCIES AND LEARNING OUTCOMES

#### **Core competencies:**

- CB2: Students must know how to apply their knowledge to their work or vocation in a professional way and possess the competencies that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study.
- CB3: Students must have the ability to gather and interpret relevant data (usually within their
  area of study) in order to make judgments that include reflection on relevant social, scientific or
  ethical issues.
- CB4: Students should be able to transmit information, ideas, problems and solutions to both a specialised and non-specialised audience.
- CB5: Students must have developed those learning skills necessary to undertake further studies with a high degree of autonomy.



#### **Transversal competences:**

In this subject, the following competencies will be developed and evaluated in particular:

- CT1 Autonomous learning: Process that allows the person to be the author of their own
  development, choosing the paths, strategies, tools and moments that they consider most
  effective to learn and independently put into practice what they have learned. The autonomous
  student, in short, selects the best strategies to achieve their learning objectives.
- CT2 **Self-confidence**: Ability to assess our own results, performance and capabilities with the internal conviction that we are capable of doing things and the challenges that are posed to us
- CT5 Ability to apply knowledge to practice: Ability to use the knowledge acquired in the
  academic field in situations as close as possible to the reality of the profession for which they are
  training, for example, by relating theoretical foundations with their application to real problems
  of everyday life, addressing problems and situations close to professional activity or solving real
  questions and/or problems.
- CT6 Oral Communication / Written Communication: Communication is the process by which
  we transmit and receive data, ideas, opinions and attitudes to achieve understanding and action,
  oral being that which is carried out through words and gestures and written communication,
  through writing and/or graphic supports.
- CT7 Awareness of ethical values: Ability to think and act according to universal principles based
  on the value of the person that are aimed at his or her full development and that entails
  commitment to certain social values.
- CT8 Information Management: Ability to search, select, analyze and integrate information from diverse sources.
- CT10 **Initiative and entrepreneurial spirit:** Preference for assuming and carrying out activities. Ability to resolutely undertake difficult or random actions. Ability to anticipate problems, propose improvements and persevere in achieving them

#### **Specific competencies:**

- CE9. Know clinical and laboratory diagnostic procedures and tests, know their reliability and diagnostic validity and be competent in the interpretation of their results.
- CE11. Identify the main reason for consultation and the history of the current disease. Prepare a
  general medical history of the patient and a clinical file that faithfully reflects the patient's
  records.

#### Learning outcomes:

- RA1: Ability to carry out a targeted anamnesis and physical examination
- RA2: Knowledge of the most common pathologies and those most relevant to dental practice
- RA3: Planning of diagnostic and therapeutic strategies
- RA4: Clinical Troubleshooting
- RA5: Ability to integrate clinical information with that obtained by complementary tests
- RA 6: Capacity for analysis of emergency situations and decision-making in such situations



The table below shows the relationship between the competencies developed in the subject and the learning outcomes that are pursued:

Competences	Learning Outcomes
CB2, CB3,CB5, CT5, CT6, CT7 CT10, CG1, CG2, CG3, CG14, CG15, CE11	RA1: Ability to take a history and Oriented physical examination
CB2, CB5, CT2, CT5, CG1, CG2, CG3, CG14, GC15, CG17, SG11	RA2: Knowledge of the most common pathologies and one of the most relevant for dental practice
CB2, CB3, CB4, CB5, CT1, CT2, CT5, CT6, CT8, CT10, CG1, CG2, CG3, CG8, CG14, CG15, CG16, CG19, CE9, CE11	RA3: Planning of diagnostic strategies and Therapeutic
CB2, CB3, CB5, CT2, CT5, CT7, CT8, CT16, CG1, CG2, CG3, CG8, CG14, CG15, CG16, GC17, CE9, EC11	RA4: Clinical Troubleshooting
CB2, CB3,CB4, CB5, CT1, CT5, CT6, CT8, CT10, CG1, CG8, CG14, CG15, CG17, CG19,CE9,CE11	RA5: Ability to integrate clinical information with that obtained by the complementary tests
CB2, CB3, CT2, CT5, CT7, CT10, CG1, CG2, CG3, CG15, CG16, CG19,CE9,CE11	RA 6: Ability to analyze situations of emergency and decision-making in these situations

# 4. CONTENTS

The subject is organized into two learning units, which, in turn, are divided into topics UA 1 HEALTH

#### CARE

- 1.1. Bases of Health Care. Evidence-Based Dentistry.
- 1.2. The Healthcare Process: Prevention, Diagnosis, Prognosis and Therapeutic Plan.
- 1.3. The Diagnostic Process: The Clinical History.
- 1.4. The Diagnostic Process: Complementary Studies.
- 1.4.1. Elemental blood and urine analysis.
- 1.4.2. Microbiological and pathological anatomy studies. Other analytical studies.
- 1.4.3. Diagnostic Imaging
- 1.5. The Prognosis and the Therapeutic Plan. Medical and surgical treatment
- 1.6. Clinical History in Dentistry. Surgical Risk Assessment: ASA System.
- 1.7. Medical emergencies in the dental office

#### **UA 2: WAYS TO GET SICK**

- 2.1. Etiology and pathogenic mechanisms. Focal diseases and systemic diseases.
- 2.2. Genetic diseases.
- 2.2.1. Cancer: Prevention, diagnosis and treatment.
- 2.2.2. Cancer and preneoplastic lesions of the oral cavity
- 2.3. Immunological diseases.
- 2.3.1. Congenital and acquired immunodeficiencies
- 2.3.2. Allergy. Anaphylactic reactions.
- 2.3.3. Autoimmune Diseases 2.4-

## Infectious Diseases

- 2.4.1. Infectious diseases. General.
- 2.4.2. Prevention, Diagnosis and Treatment of Infectious Diseases
- 2.4.3. Sexually transmitted diseases/infections (STDs/STIs).
- 2.4.4. Standard Prevention Measures.
- 2.4.5. The health accident.



# 5. TEACHING-LEARNING METHODOLOGIES

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

# **6. TRAINING ACTIVITIES**

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

- Master class.
- Clinical cases.
- Cooperative learning.
- Problem-based learning.
- Project-based learning.
- Article Analysis
- Gamification Testing

## **Face-to-face modality:**

Training activity	Number of hours
Practical exercises	5 h
Case analysis.	3 p.m.
Group work	5 h
Master Classes	30 h
Asynchronous Masterclass	2,5
Laboratory Practices	7,5
Guardianship	5
Critical analysis of scientific articles	5
Knowledge Tests	2,5
Study and Freelance Work	72,5
TOTAL	150 h



# 7. EVALUATION

In accordance with article 6, point 12 of the REGULATIONS FOR THE EVALUATION OF OFFICIAL BACHELOR'S DEGREES OF THE EUROPEAN UNIVERSITY OF MADRID:

Any student who uses or uses unlawful means in the holding of an assessment test, or who unduly attributes to himself the authorship of academic work required for the assessment, will have the grade of "fail" (0) in all the assessment tests of the call in which the event occurred and may also be subject to sanction. prior to the opening of disciplinary proceedings.

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

# Face-to-face modality:

In accordance with article 1 point 4 of the REGULATIONS FOR THE EVALUATION OF OFFICIAL BACHELOR'S DEGREES OF THE EUROPEAN UNIVERSITY OF MADRID:

For students who are studying face-to-face undergraduate education, it is mandatory to justify at least 50% of attendance at classes, as a necessary part of the evaluation process and to comply with the student's right to receive advice, assistance and academic monitoring from the professor. The lack of accreditation by the means proposed by the university of at least 50% of attendance will entitle the professor to grade the subject as failing in the ordinary call, in accordance with the grading system provided for in these regulations. All this, without prejudice to other requirements or higher attendance percentages that each faculty may establish in the learning guides or in its internal regulations.

Therefore, it is the faculty of the professor that students who have not complied with the 50% attendance in the ordinary call must pass <u>all the objective tests in extraordinary standing</u>, for which they must obtain a grade greater than or equal to 5.0 out of 10.0 in all of them (Board faith faculty 11-07-23).

Evaluation system	Weig ht
Theoretical knowledge test	50%
Resolution of Clinical Cases	40%
Training Activities	10%

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



# 7.1. Ordinary call

To pass the subject in the ordinary call, you must obtain a grade greater than or equal to 5.0 out of 10.0 in the final grade (weighted average) of the subject.

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

- The objective evaluation of the theoretical knowledge of the PMQA-1 subject will be carried out by means of two partial formative written tests.
- The teaching objectives of the subject corresponding to each assessment will be considered passed when an average numerical grade ≥ to 5 is obtained in each of the written tests of theoretical knowledge, being a necessary condition the obtaining of a minimum of 5 points to make a numerical average in each of the written knowledge tests.
- Those students who obtain a grade lower than 5 in the first knowledge test may take another similar written test when the second knowledge test is taken.
- Those students who obtain a grade of less than 5 points in the second knowledge test will not have passed the evaluation of theoretical knowledge in the ordinary call

## -Activities: 40% of the final grade

Throughout the course, activities will be carried out that will consist of the resolution of clinical cases with practical application. The teacher will indicate in each of them, the criteria for their completion, evaluation and grading. The final grade will be the average of the marks of the activities.

The teaching objectives in this section will be considered to have been passed when an average grade is obtained for all the activities carried out  $\geq$  to 5 points, this condition being necessary to be able to make an average with the rest of the assessable blocks.

## -Attitudes: 10% of the final grade:

Single grade at the end of the course in which the overall work and participation in person (either on campus or in the extended classroom) in the different training activities of individual and/or collaborative participation proposed during the course and/or the presentation and development of the group work and the attitudes shown during the development of the subject will be assessed. Participation in the activities proposed in asynchronous virtual mode will also be valued. The teacher will indicate in each of the training activities proposed the modality for their development, the criteria for their realization, evaluation and grading.



# 7.2. Extraordinary call

To pass the subject in the extraordinary call, you must obtain a grade greater than or equal to 5.0 out of 10.0 in the final grade (weighted average) of the subject.

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

The activities not passed in the ordinary call must be submitted, after having received the corresponding corrections from the teacher, or those that were not delivered.

To pass the extraordinary call subject you must ....

• In the evaluation for students who have failed in the June call, only that part of the subject in which the teaching objectives have not been achieved during the ordinary school period will be included. It will be carried out by means of a test with characteristics similar to those carried out during the course.

#### **Special Situation Assessment**

- For those students who cannot carry out the continuous assessment, in a documentary manner and previously informed to the teacher during the first week of the subject, a specific assessment will be agreed.
- The following are considered as justified reasons for non-attendance at class:
- Overlaps with other subjects authorized by the Faculty.
- Prolonged illness justified with medical certification.
- Work reasons, justified with an employment contract.
- Other reasons: to be evaluated by the professor and the Faculty.
- This circumstance does not exempt students from carrying out practices, objective tests and work that is proposed and carried out in the classroom.

All those sections that have not been passed in the ordinary call (knowledge test and mandatory active methodologies) must be re-evaluated in the extraordinary call.

## 8. SCHEDULE

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

Assessable activities	Date
Activity 1,5,9, 13,18,19:  Attendance and participation in activities proposed during the face-to-face or virtual master classes.  Group work	Activity 1 (week 2-3) Activity 5 (week 4-5) Activity 9 (week 6-7) Activity 13 (week 10-11) Activity 18 (week 12-14) Activity 19 (week 16-18)



Activity 4, 7, 12, 16, 17:  • Case Method	Activity 4 (week 4) Activity 7 (week 8) Activity 12 (week 12) Activity 16 (week 16)
Laboratory Practices	Activity 17 (week 12-14)
Activity 2, 10, 12, 15  Discussion and Group Work	Activity 2 & 10 (Weeks 1-9) Activity 12, 15 (weeks 10-18)
Activity 8  • Checking Acquired Knowledge 1	Activity 8 (week 9)
Activity 20 Checking the knowledge acquired 2	Activity 20 (week 18)

This schedule may be modified for logistical reasons of the activities. Any modification will be notified to the student in a timely manner.

The training activities and the realization of clinical cases will be assessable activities for which the student will be required to be present in the classroom.

## 9. BIBLIOGRAPHY

The reference work for the follow-up of the subject is:

- 1.- Dentist's Guide to Medical Conditions, Medications, and Complications. 2nd edition. Kanchan M. Ganda, 2017. Wiley Blackwell
- 2.- Scully's Medical Problems in Dentistry 7th Edition 2014 Elsevier.
- 3.-Introduction to Clinical Medicine. Pathophysiology and Semiology. Laso, F.J, 3rd edition, 2015, Editorial Elsevier Masson.

Recommended bibliography is indicated below:

- 1.- Dentist's Guide to Medical Conditions, Medications, and Complications. 2nd edition. Kanchan M. Ganda, 2017. Wiley Blackwell
- 2.- Scully's Medical Problems in Dentistry 7th Edition 2014 Elsevier.
- 3.- Essentials of Medicine for Dental Students. 3rd Revised edition edition (2016). Jaypee Brothers Medical Publishers.
- 4.- Alagappan's Clinical Medicine for Dental Students 3rd Edition. 2015. Jaypee
- 5.- Andreoli and Carpenter's Cecil Essentials of Medicine, 9th Edition, 2016, Saunders.
- 6.- Introduction to Clinical Medicine. Pathophysiology and Semiology. Laso, F.J, 3rd edition, 2015, Editorial Elsevier Masson.



Throughout the course, and progressively, readings and scientific articles related to the subject being treated will be provided, as well as connections to websites of interest in relation to the subject.

# 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: orientacioneducativa@universidadeuropea.es

# 11. SATISFACTION SURVEYS

Your opinion matters!

The European University encourages you to participate in satisfaction surveys to detect strengths and areas for improvement in the teaching staff, the 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.