

COURSE DESCRIPTION HISTOLOGY AND ANATOMICAL PATHOLOGY SECOND YEAR SECOND SEMESTER DEGREE OF DENTISTRY TYPE OF COURSE: ATTENDANCE IS REQUIRED ACADEMIC YEAR 2022/2023 SCHOOL OF MEDICINE



1. COURSE/SUBJECT IDENTIFICATION

1.- COURSE/SUBJECT:

Name: Histology and Anatomical Pathology		
Code: 19695		
Year (s) course is taught: SecondYear	Semester (s) when the course is taught: Second Semester	
Type: Basic	ECTS of the course: 6	Hours ECTS: 25
_anguage: English Modality: Attendance is Required		Required
Degree (s) in which the course is taught: Dentistry		
School which the course is taught: Medicine		

2.- ORGANIZATION OF THE COURSE:

Department: Basic Medical Sciences	
Area of knowledge: Cellular Biology and Anatomical Pathology	

2. LECTURERS OF THE COURSE/SUBJECT

1.-LECTURERS:

Responsible of the Course	CONTACT
Name:	Riánsares Arriazu Navarro
Phone (ext):	913724700 Ext.: 4761
Email:	arriazun@ceu.es
Office:	Office: 2.12, MED Building, Second Floor.
Teaching and Research profile	Ph.D. from USPCEU, Professor of Cell Biology and Human Histology. Dentistry Degree Coordinator. Accredited PCD (ANECA).
Research Lines	Biomarkers in cancer. Six-year research has been gained recognition from the national committee for the assessment of the research action (CNEAI).

Lecturer(s)	CONTACT
Name:	Francisco José Pérez Rodríguez
Phone (ext):	912113533
Email:	franciscojose.perezrodriguez@hm.ceu.es
Office:	



2.- TUTORIALS:

For any queries, students can contact lecturers by e-mail, phone or visiting their office during the teacher's tutorial times published on the students' Virtual Campus.

3. COURSE DESCRIPTION

Histology and Anatomical Pathology is a theoretical and practical subject (basic character), which is taught in the second semester of the second year. The course provides a working knowledge of the fundamental oral histology and the changes affecting the human body, in response to pathologic stimuli particularly in organs and tissues of the mouth.

It is recommended to have completed and passed the First-year subject, Biology.

4. COMPETENCIES

1.- COMPETENCIES

Code	Basic and General Competencies
CB1	Students should have demonstrated that they have gained knowledge of and understand an area of study that starts from the base of general secondary education, and is usually seen as a level that, even though based on advanced textbooks, it also includes certain aspects that imply knowledge deriving from the vanguard of their field of study.
CG7	To promote autonomous learning of new knowledge and techniques, as well as motivation for quality.
CG11	Understanding the basic biomedical sciences on which Dentistry is based in order to ensure correct mouth and dental care.
CG12	Understanding and recognizing the normal structure and function of the stomatognathic apparatus on a molecular, cell, tissue and organic level during the different stages of life.

Code	Specific Competencies
CE1	Understanding the biomedical sciences on which Dentistry is based in order to ensure correct mouth and dental care. These sciences should include content pertinent to embryology, anatomy, histology and physiology of the human body; Genetics, Biochemistry, Cellular and Molecular Biology, and Microbiology and Immunology.
CE2	Understanding the morphology and function of the stomatognathic apparatus, including specific content pertinent to embryology, anatomy, histology and physiology.

2.- LEARNING OUTCOMES:

Code	Learning outcomes	
	To know the normal histology of oral cavity and the organs related to it, as a basis for	



5. LEARNING ACTIVITIES

1.- DISTRIBUTION OF STUDENTS` ASSIGNMENT:

Total hours of the course	150
	1

Code	Name	On-campus hours
	Theory classes (Lectures, Seminars, Tutorial)	43
	Practical classes	16
	Others	4
TOTAL F	TOTAL Presence Hours63	

Code	Name	Not on- campus hours
	Self-student work	87

2.- DESCRIPTION OF LEARNING ACTIVITIES:

Activity	Definition
Theory and Practice Class	Training activity that combines the transmission of theoretical information by the teacher for the acquisition of knowledge and the performing of practical activities in the classroom that involve the application of the theoretical knowledge acquired. It can include theoretical class, information search, resolution of practical cases, reasoned interpretation of study sources, resolution of exercises, expositions of topics by students, etc., always under the teacher's supervision.
Laboratory practicals	Training activity that prioritizes the performance by the student of practical activities in the laboratory involving the application of theoretical knowledge and the acquisition and development of practical knowledge and skills. This activity may include work among peers, learning of basic and specific techniques and methods, workbooks, use of ICTs, simulation with typodons, phantoms and virtual simulation in three dimensions, etc.
Evaluation test	Face-to-face training activity in which the student carries out the assessment tests under the teacher's supervision.
Group work	Formative activity in groups, aimed at carrying out work, critical discussions, debates, etc., applying knowledge of the area of study and moderated by the teacher.
Autonomous student work	Training activity in which students autonomously manage their learning by studying training materials. It is understood as the work time that the student needs and uses, outside class time, to acquire the competencies and skills



required by the degree syllabus.

6. ASSESMENT OF LEARNING

1.- CLASS ATTENDANCE:

- In order to be eligible for examination by continuous assessment, students must attend at least 75% of scheduled class time (attendance sheets will be used). As students may be absent 25% of the classes, no attenuating circumstances will be accepted for absences.
- 100% attendance at practical classes is required to overcome the ordinary examination / continuous assessment and the re-take extraordinary examination. There is not contemplated the practical sessions between the ordinary examination and the re-take extraordinary examination, which is why the non-realization of these in the months scheduled carries the suspense of both examinations.

2.- ASSESMENT SYSTEM AND CRITERIA:

ORDINARY EXAMINATION (continuous assessment)			
Code	Name	Percentage	
	Self-assessments, individual or group work and/or activities	16%	
	Lab practice: practice exam*	14%	
	Written evaluation*1	70%	

* It is compulsory that the score on the practical exam and the final examination will be equal or superior to 5 points out of 10 in each one.

¹ It is compulsory to get 5 points in each of the blocks of units (Oral Histology and Anatomical Pathology) to pass the exam.

RE-TAKE EXAM/EXTRAORDINARY EXAMINATION			
Code	Name	Percentage	
	Practice exam*	14%	
	Theoretical exam*, ¹	86%	

* It is compulsory that the score on the practical exam and the final examination will be equal or superior to 5 points out of 10 in each one.

¹ It is compulsory to get 5 points in each of the blocks of units (Oral Histology and Anatomical Pathology) to pass the exam.



3.- DESCRIPTION OF ASSESSMENT CRITERIA:

Assesment Criteria	Definition
ORDINARY EXAMINATION. CONTINUOUS ASSESSMENT:	 The continuous assessment consisting of: On-line quizzes through the virtual campus, tasks. Assignments (individual or in groups). Practice exam. Final exam: multiple choice, short answer, or both. To pass the subject, the students must get a minimum score of 5 points out of 10 by adding both parts. It is compulsory that the mark of the practical part and the final examination will be equal or superior to 5 points out of 10 in each one. The ordinary examination may include questions relating to the work (practical work, assignments, etc.) that has been covered during the course. The non-performance of the practices (partial or complete) involves failing the Ordinary Examination (See section CLASS ATTENDANCE).
EXTRAORDINARY EXAMINATION:	 Students that do not pass the ordinary examination should sit the final extraordinary examination, which includes all contents of the subject. The final course grade in the examination will be based on the practical exam (14%) and the final examination (86%). It is compulsory that the mark of the practice exam and the theoretical exam will be equal or superior to 5 points out of 10 in each one. The Extraordinary examination can include questions about the different activities have been done during the course. The non-performance of the practices (partial or complete) involves failing the Extraordinary Examination (See section CLASS ATTENDANCE).
	"The student who does not present the final examination during the regular or extraordinary session will be graded with" Not Presented ," whether you have made any own academic activity ongoing evaluation."

7. COURSE PROGRAMME

1.- COURSE PROGRAMME:

THEORETICAL:

A) ORAL HISTOLOGY:

- 1. Introduction to Oral Histology.
- 2. Enamel: Structure and composition. Amelogenesis. Function.
- 3. Dentin-pulp complex I. Dentin: Structure and composition, dentinogenesis, and function.
- 4. Dentin-pulp complex II: Dental Pulp: Structure, irrigation, innervation, and function.
- 5. Periodontium: Cementum. Periodontal ligament. Alveolar bone. Gingiva. Dentogingival junction.
- 6. Oral cavity. Oral mucose. Tongue.
- 7. Salivary glands.





B) ANATOMICAL PATHOLOGY:

8. Introduction to Pathology: Concept and study methods.

General Cell Pathology

- 9. Etiologic agents. Reversible and irreversible cell injuries.
- 10. Cell. Adaptation. Morphologic and functional changes.
- 11. Cell Death. Necrosis and apoptosis. Morphologic aspects of the different kinds of necrosis.
- 12. Inflamation: Concept and Physiopathology Morphologic aspects of chronic and acute inflammation. Evolution and systemic repercussion of inflammation.
- 13. Tissue damage repair. The cell cycle., growing factors and stem cells. Morphologic and physiologyc aspects. Scarring and wound healing.

Benign Pathology of the oral cavity

- 14. Malformations and development alterations.
- 15. Mandibular cysts.
- 16. Infection.
- 17. Epithelium reactive changes. Pseudotumoral conditions.
- 18. Secondary manifestations of systemic disease.

Neoplasia

- 19. Concept. Etiology and Pathogenesis: Molecular basis of cáncer.
- 20. Malignant and benign features. Nomenclature of the most frequent tumors.
- 21. Epidemiology of human cancer. Clinical effects of cancer. .Staging . Host response to tumors.
- 22. Benign tumors of the oral cavity.
- 23. Malignant tumors of the oral cavity.

PRACTICAL WORK PROGRAMME:

• Observation of teeth and oral cavity histological slides.

8. RECOMMENDED READING

1.- ESSENTIAL BIBLIOGRAPHY:

- CHIEGO. Essentials of oral histology and embryology: a clinical approach. Last Edition. Mosby.
- ROBBINS. Basic pathology. Last edition. Elsevier.

2.- ADDITIONAL BIBLIOGRAPHY:

- BERKOVITZ, HOLLAND, MOXHAM. Oral Anatomy, Histology, and Embryology. Last edition. Mosby.
- CAWSON. Fundaments in oral and pathology. Last edition. Elsevier.
- GÓMEZ DE FERRARIS y CAMPOS MUÑOZ. Histología, Embriología e Ingeniería tisular bucodental. Última edición. Médica Panamericana.
- KIERSZENBAUM. Histology and Cell Biology: An introduction to Pathology. Last edition. Elsevier.
- SQUIER AND BROGDEN. Human oral mucosa: development, structure and function. Last edition. Wiley.
- WHEATER'S. Functional Histology. Last edition. Elsevier.

4.- WEB RESOURCES :



- http://www.cytochemistry.net/Cell-biology/
- http://www.bu.edu/histology
- http://www.udel.edu/Biology/Wags/histopage/colorpage/colorpage.htm
- http://www.ncbi.nlm.nih.gov/pubmed

9. ATTITUDE IN THE CLASSROOM

1.- REGULATIONS

Any irregular act of academic integrity (no reference to cited sources, plagiarism of work or inappropriate use of prohibited information during examinations) or signing the attendance sheet for fellow students not present in class will result in the student not being eligible for continuous assessment and possibly being penalized according to the University regulations.

The same rule will apply to those students that, without permission from the teacher, make use of electronic devices (computers, mobile phones, etc.) in the classroom.

Likewise, all materials used in this course including notes, tests, assignments, etc. are covered by copyrights which forbid you from sharing class materials with any group. The Professors reserve all copyright and other intellectual property rights associated with their material (notes, tests, assignments, etc.). You are in violation of the law if you post/text/share any course materials for use by others.

10. EXCEPTIONAL MEASURES

Should an exceptional situation occur which prevents continuing with face-to-face teaching under the conditions previously established to this end, the University will take appropriate decisions and adopt the necessary measures to guarantee the acquisition of skills and attainment of learning outcomes as established in this Course Unit Guide. This will be done in accordance with the teaching coordination mechanisms included in the Internal Quality Assurance System of each degree.