

## 1. BASIC DATA

Course	PEDIATRIC DENTISTRY I
Degree program	DENTISTRY
School	HEALTH SCIENCES
Year	THIRD
ECTS	6 ECTS
Credit type	MANDATORY
Language(s)	SPANISH/ENGLISH
Delivery mode	IN-PERSON
Semester	1st
Academic year	2024/2025
Coordinating professor	DR. ANGEL DEL CAMPO RODRIGUEZ

## 2. PRESENTATION

Pediatric Dentistry is a mandatory subject within the Teaching planning of the Degree in Dentistry at the Universidad Europea de Valencia. It is the first of the four parts that the subject of Pediatric Dentistry is divided, which is given over 2 years during the 3rd and 4th year of the Dentistry degree. It is a theoretical-practical subject, which ranges from the introduction to Pediatric Dentistry as part of Dentistry to the first steps in Dental Operatory which its knowledge is necessary to apply the optimal care of the dental health of children, adolescents and patients with special needs.

This subject given at the first semester of the third year of Dentistry provides a global vision of the oral changes that children experience during their growth and development, and at the same time introduces the most common oral pathology in childhood such as dental caries disease, its etiology, its treatment and its prevention strategies.

The subject develops different skills that are necessary for preclinical practice and some of the activities framed within the "simulated environments" and the Sustainable Development Goals (SDG), two of the pillars of the Academic Model of the Universidad Europea de Valencia.



The knowledge and skills developed in this subject will be basic to understand fundamental aspects of the subjects of Orthodontics and Pediatric Dentistry. In addition, it will train the student to adapt dental treatments for the pediatric patients.

## 3. COMPETENCIES AND LEARNING OUTCOMES

#### **GENERAL**

CG4 - Understand and recognize the social and psychological aspects relevant to the treatment of patients.

CG12. Ability to understand and recognize the normal structure and function of the stomatognathic apparatus, at the molecular, cellular, tissue and organic levels, in the different stages of life.

CG25. Ability to know and apply the basic treatment of the most common oral pathology in patients of all ages. Therapeutic procedures should be based on the concept of minimal invasion and a holistic and integrated approach to oral treatment.

CG26. Ability to plan and perform multidisciplinary, sequential and integrated dental treatments of limited complexity in patients of all ages and conditions and patients requiring special care.

CG27. Ability to propose and propose preventive measures appropriate to each clinical situation.

#### **BASICS**

CB3: That students can 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 the students can transmit information, ideas, problems and solutions to a specialized and non-specialized public.

CB5: That the students have developed those learning skills necessary to undertake later studies with a high degree of autonomy.

#### **CROSS-CURRICULAR (TRANSVERSAL)**



CT1. Responsibility: The student can assume the consequences of the actions that he / she performs and responds from his / her own actions.

CT3. Awareness of ethical values: The student's ability to feel, judge, argue and act according to moral values in a coherent, persistent, and autonomous way.

CT4. Communicative skills: The student must be able to express concepts and ideas effectively, including the ability to communicate in writing concisely and clearly, as well as speak in public effectively.

CT5. Interpersonal understanding: That the student is able to perform an active listening in order to reach agreements using a style of assertive communication.

CT7. Teamwork: That the student is able to actively participate in the achievement of a common goal, listening, respecting and valuing the ideas and proposals of the rest of his team members.

CT8. Initiative: The student must be able to proactively anticipate proposing solutions or alternatives to the situations presented.

#### **SPECIFICS**

CE34 - To carry out basic treatments of the buco-dental pathology in patients of all the ages. Therapeutic procedures should be based on the concept of minimal invasion and a comprehensive and integrated approach to oral-dental treatment.

CE36 - To take and interpret radiographs and other procedures based on the image, relevant in dental practice.

CE51 - Assess and treat the patient with caries or other non-carious dental pathology and be able to use all materials aimed at restoring the shape, function and aesthetics of the tooth in patients of all ages.

CE59 Perform the oral-dental treatment of the infantile patient and recognize its characteristics and peculiarities.



#### **LEARNING OUTCOMES**

- RA1. Know the development the dentition (both), teeth anatomy and dental nomenclatures.
- RA2. Know the chronology of eruption, the order of tooth replacement and the correct occlusion in primary, mixed and permanent dentition.
- RA3. Knowing how to plan and carry out the most appropriate preventive methods for caries disease in each case.
- RA4. Know how to diagnose and treat tooth loss in childhood
- RA5. Know, diagnose and treat different anomalies of the developing dentition

The following table shows the relationship between the competencies developed during the course and the learning outcomes pursued:

Competencias/Competencies	Resultados de aprendizaje/ Learning Outcomes
CG12, CE34	RA1
CG12, CE34, CE49	RA2
CG14, CG25, CG27, CE33, CE34,	RA3
CE51	
CG25, CE26	RA4
CG12, CG25, CG26, CG27, CG4,	RA5
CB3, CB4, CT1, CT3, CT4, CT5,	
CT7, CT8, CE34, CE36, CE51,	
CE59	

## 4. CONTENT

The subject is organized on the following topics:

- Introduction to Pediatric Dentistry.
- Morphology of Primary Dentition I: Anatomy of the Anterior Teeth.
- Morphology of Primary Dentition II: Anatomy of Upper and Lower Molars anatomy.
- Dental Development.
- Developmental Dental Anomalies I: number, Size, Shape and colour alterations.



- Developmental Dental Anomalies II: Hereditary and non-hereditary alterations in dental structure.
- Tooth eruption, physiology of replacement and Pathology of the eruption.
- Development of occlusion and Articulation of primary dentition.
- First Visit in Pediatric Dentistry I: Clinical History: Medical, Dental and Behavioral.
   Exploration.
- Pediatric Dental Radiology. Radiographic Diagnosis and examination.
- Prevention in Pediatric Dentistry
- Introduction to Pediatric Dental Caries. Early Childhood Caries (ECC).
- Restorative Dentistry I: Pits and Fissures Sealants (PFS) and Preventive Resin Restoration (PRR).
- Practical Exercises (Images) in Pediatric Dentistry
- Analysis and solution of Problem-Cases (Clinical cases)

#### The Preclinical Practical Program will be carried out through the following practices:

- Soap carving: Upper Primary Central Incisor.
- Soap carving: Upper Primary Canine.
- Soap carving: Lower Primary Second Molar.
- Soap carving: Upper Primary First Molar
- Nomenclature of Primary and Permanent Dentition.
- Odontograms.
- Plaque Disclosing Agents and Indexes
- Topical Fluorides treatments & Infant Oral Health Instructions.
- Diet Analysis.
- Caries Risk Assessment
- Pediatric Dental Radiology.
- Isolation of the Operating field in Children
- Pediatric restorative dentistry I: Pits and fissures sealants and PRR's
- Practices with Simulator (SIMODONT).



## 5. TEACHING-LEARNING METHODOLOGIES

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

- Masterclass
- Case method
- Collaborative Learning
- Simulation

# **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
Tutorials	13
Master Classes	12
Virtual Master Classes	6
Seminars	4
Practical Exercises	20
Analysis of Cases	17
Preclinical Laboratory Practices	32
Autonomous Work Study	44
Presential (In-person) knowledge tests	2
TOTAL	150



## 7. EVALUATION

Listed below are the evaluation systems used and the weight each one carries towards the final grade.

**Presential (In-person) Modality** 

Evaluation system	Weight
Theoretical Knowledge Test	30%:
Average grade of presential (in-person) preclinical practices	50%
Practical Exercise (Images)	10%
Case-Problem (Clinical case)	10%
TOTAL	100%

When you access to the course on *Virtual Campus (Campo Virtual)*, you'll find a description of the evaluating activities that you must complete, as well as the delivery deadline and evaluation procedures for each one.

## 7.1. Ordinary call

To pass the subject in the ordinary call, you must obtain a grade higher or equal to 5.0 out of 10 in the final grade (average weighted) of the subject:

In accordance with the regulations of the Faculty of Health Sciences, class attendance is mandatory, being necessary to attend 50% of the theoretical classes. The absence of attendance in theoretical classes implies that the student has not reached the necessary competences to pass the subject and will have to fail the matter in the ordinary session, having to attend the examination in the extraordinary call. Punctuality will be considered, three delays of more than 10 minutes or leaving the class before is over will be counted as a lack of attendance.



- Attend and register an attendance of 90% of the preclinical practices at the laboratory (no more than 2 justified absences or NOT). If the absence is not justified, the practice cannot be recovered and it will be scored with a "0".
- If the student has less than the **90%** of attendance to the Preclinical Practices, it will be considered that she/he has not reached the necessary skills to pass the subject, and it will have the ordinary call failed and must attend to the extraordinary call.
- If a student wishes to take the practices missed during justified absences, they may do so during the day marked in the chronogram, being able to make up to a maximum of 2 practices.
- The student must consult in the schedule of the course in the Virtual Campus the sessions of mandatory attendance in the classroom.

## 1. Theoretical knowledge test (30%):

- o It corresponds a written test, that should get a score greater or equal to 5.0 out of 10.
- The written test will consist in Multiple Choice Questions and Short Answer Question.
- Each multiple-choice question will consist of 4 possible answers, of which only one is correct. Each incorrect MCQ deducts a proportional part of points. Unanswered questions do not count against the total grade. Questions without answers do not discount.
- The student cannot miss the test since is mandatory. If a student has not presented himself or has not passed the written test, he will have the possibility of recovering the test at the extraordinary call.
- o If a student has not passed the written test, they will have the possibility of recovering also at the extraordinary call.

#### 2. Preclinical simulated practices (50%):

 The grade will be obtained from the average of the presential (in-person) practices that are evaluated throughout the semester. The average of these practices must be approved with a grade greater than or equal to 5 out of 10.



### 3. Practical exercise / Images test (10%):

- This is an evaluable test that uses clinical and radiographic **images**. The student must know how to recognize different diagnoses, treatments and materials or techniques through images given during this course. The test must be passed with a grade greater or equal than 5 out of 10 and it is a **mandatory test**.
- If this part is failed in the ordinary call, another Practical-Exercise test (Image Test) will take another test to solve the Image test at the extraordinary call.

### 4. Case-problem/Clinical case (10%):

- o It is an evaluable written exercise. The student must be able to relate the theoretical concepts learned to carry out a diagnosis and a resolution of a clinical cases. It must be passed with a grade equal to or greater than 5. The test is mandatory.
- In case of having this part failed in the ordinary call, the student will take another test to solve the case-problem in an extraordinary call

The mention of "Honorable Qualification" will be awarded to students who have obtained a grade equal to or greater than 9.0. Their number may not exceed five percent 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 "Honorable Qualification" may be granted.

## 7.2. Extraordinary call

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

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



The European University of Valencia establishes continuous evaluation as a system for assessing the basic, general, transversal and specific knowledge, skills and competencies of the Dentistry degree, in accordance with the planned Regulations for the evaluation of Undergraduate degrees. In this regard and for the purposes of consuming calls, the student must be aware that in the extraordinary call it will be the Objective Knowledge Test (POC) that determines whether he or she consumes the call or not and in the exceptional case that he or she only has to pass the system. evaluation/s other than the POC, you will be considered NP if you do not present it/s and you will obtain a numerical grade if you present at least one of them.

In accordance with the Regulation, students who take in-person degree courses are required to justify at least 50% of their 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 subject schedules, the student must record 90% attendance, whether the absence is justified or not. Those students who, due to non-compliance with this requirement, must appear in an extraordinary session, must carry out as many activities or knowledge tests as determined by the teacher to recover this part and its corresponding improvement based on the specified rubric.

- Obtain a grade equal to or greater than 5 out of 10 in the theoretical knowledge test that has not been passed in the ordinary call.
- Obtain a grade equal to or greater than 5 out of 10 in the average grade of the laboratory practices that has not been passed in the ordinary call.
- Take the extra individualized theoretical test in the event of not having passed the ordinary call due to exceeding the number of absences allowed in theory.
- Take the extra individualized practical test in the event of not having passed the ordinary call due to exceeding the number of absences allowed in preclinical laboratory practices.
- Perform a Practical Exercise Test, assuming you have failed the imaging test, and pass it with a score equal to or greater than 5 out of 10.
- Perform a case problem, assuming you have failed the clinical case, and pass it with a score equal to or greater than 5 out of 10.



## 8. CHRONOGRAM

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

Assess	able activities	Deadline
0	Knowledge test (presential/In person class)	JANUARY 2024
0	Case problem (Clinical Case)	JANUARY 2024
0	Practical exercise (Images test)	
0	Average Preclinical (presential/In person) Lab Practices	JANUARY 2024

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

The student must consult in the chronogram of the subject on Blackboard in the virtual campus the sessions that will be mandatory on classroom.

## 9. BIBLIOGRAPHY

The main reference work for this subject is:

La obra de referencia para el seguimiento de la asignatura es:

- Boj, J.R., Catalá, M., Garcia-Ballesta, C., Mendoza, A., Planells, P., Cortés, O. (2019).
   Odontopediatría. Bebés, niños y adolescentes. (1ª Ed) Odontologia Actual.
- Koch, G., Poulsen, S., Espelid, E., Haubek, D. (2017). Pediatric Dentistry. A clinical Approach.
   (3<sup>rd</sup> Ed) Wiley-Blackwell.
- Nowak A.J., Christensen J.R., Mabri T.A., Townsend J.A., Wells, M. H. (2019). Pediatric Dentistry: infancy through Adolescence. (6th Ed) Elsevier.



A continuación, se indica bibliografía recomendada:

- Andreasen J.O. (2011). Traumatic Dental Injuries: A Manual. (3er Ed.) Wiley-Blackwell
- Dean, J.A. (2022) McDonald & Avery's Dentistry for the Child and Adolescent. (11<sup>th</sup> Ed.)
   Elsevier.
- · Cameron, A. C., Widmer, R.P. (2021) Handbook of Pediatric Dentistry. (5ªEd.) Elsevier.
- · Casamassimo PS. (2013) Pediatric Dentistry: Infancy Through Adolescence. 5ªEd Elsevier/Saunders.
- Nelson, S.J. (2020) Wheeler's Dental Anatomy, Physiology, and Occlusion. (11Ed.)
   Elsevier.
- American Academy of Pediatric Dentistry, Policies & Guidelines.
   <a href="http://www.aapd.org/policies">http://www.aapd.org/policies</a>
- International Association of Dental Traumatology. <a href="https://www.iadt-dentaltrauma.org">https://www.iadt-dentaltrauma.org</a>

In addition, the student will be given other bibliography materials that will be available in Blackboard. It is a dynamic bibliography that will be adapted, on a minimum, to the requirements and interests of the students. Given the change in privacy regulations, etc., it may only be possible to provide students with links for the development of the various activities.

# 10. UNIT OF EDUCATIONAL GUIDANCE, DIVERSITY AND INCLUSION

The Unit of Educational Guidance, Diversity and Inclusion (ODI) offers support to students throughout their university life to help them achieve their academic objectives. Another of the pillars of action of this Unit is the inclusion of students with specific educational support needs, universal accessibility on the different campuses of the University and the provision of opportunities.



This Unit offers students:

1. Accompaniment and monitoring by providing personalized advice and plans to students who

need to improve their academic performance.

2. In terms of attention to diversity, non-significant curricular adjustments are made, that is, at

the level of methodology and evaluation, in those people with specific educational support

needs, thereby pursuing equity of opportunities for all students.

3. We offer to the students different extracurricular training resources to develop various skills

that will enrich their personal and professional development.

4. Vocational guidance by providing tools and advice to students with vocational doubts or who

believe they have made a mistake in choosing a degree.

Students who need educational support can write to us at:

orientacioneducativa.uev@universidadeuropea.es

## 11. ONLINE SURVEYS

Your opinion matters!

teaching-learning process.

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

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.