

1. BASIC INFORMATION

Course	PEDIATRIC DENTISTRY II
Degree program	DENTISTRY
School	HEALTH SCIENCES
Year	THIRD
ECTS	6 ECTS
Credit type	MANDATORY
Language(s)	SPANISH/ENGLISH
Delivery mode	PRESENTIAL (IN-PERSON)
Semester	SECOND SEMESTER
Academic year	2024/25
Head professors	DR. ANGEL DEL CAMPO RODRÍGUEZ

2. PRESENTATION

Pediatric Dentistry II is the second of the four parts that the subject of Pediatric Dentistry is divided. It is a mandatory theoretical-practical subject that is taken in the second semester of the 3rd year within the teaching planning of the Degree in Dentistry at the Universidad Europea de Valencia. This subject provides the knowledge necessary to understand the care necessary to achieve optimal oral health in children, adolescents and patients with special needs.

During this semester we continue learning about Restorative Dentistry including major reconstructions of damaged dental structures and introducing the student to pulp pathology and therapeutics in primary dentition and immature permanent teeth. The bases are implemented to be able to carry out a child's first visit to the dental office, considering the importance of clinical and radiological examination to achieve an appropriate diagnosis, prognosis and treatment plan for the pediatric patient. Also highlighting the importance of analyzing the patient's behavioral history to guide their behavior within the dental clinic.

The knowledge and skills developed in this subject will be basic to understand fundamental aspects of the Orthodontics subjects and the rest of the subjects that are part of the Pediatric Dentistry subject.

3. COMPETENCIES AND LEARNING OUTCOMES

GENERALS

- GC4 – Understand and recognize the social and psychological aspects relevant to patient's treatment.
- GC25. 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.
- GC26. 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.
- GC27. Ability to propose and propose preventive measures appropriate to each clinical situation.

BASICS:

- BC3: That students could 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.
- BC4: That the students can transmit information, ideas, problems and solutions to a specialized and non-specialized public.
- BC5: That the students have developed those learning skills necessary to undertake later studies with a high degree of autonomy.

CROSS-CURRICULAR (TRANSVERSAL):

- TC1. Responsibility: That the student can assume the consequences of the actions that he / she performs and responds from his / her own actions.
- TC3. 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.

- TC4. 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.
- TC5. Interpersonal understanding: That the student can perform an active listening in order to reach agreements using a style of assertive communication.
- TC7. Teamwork: That the student can actively participate in the achievement of a common goal, listening, respecting and valuing the ideas and proposals of the rest of his team members.
- TC8. Initiative: The student must be able to proactively anticipate proposing solutions or alternatives to the situations presented.

SPECIFICS:

- SC01 - Know the biomedical sciences on which Dentistry is based to ensure correct oral care. These sciences should include appropriate contents of Embryology, anatomy, histology and physiology of the human body, Genetics, Biochemistry, Cellular and Molecular Biology and Microbiology and Immunology.
- SC02 - Know the morphology and function of the stomatognathic apparatus, including appropriate content on specific embryology, anatomy, histology and physiology.
- SC03 - Know the scientific method and have the critical capacity to evaluate established knowledge and new information.
- SC08 – Differentiate between normal and oral pathology, as well as the evaluation of semiology data.
- CE10 - Know the behavioral and communication sciences that facilitate dental practice.
- SC11- To know how to differentiate, select and handle the appropriate materials and instruments in dentistry.
- CE12 - Know dental biomaterials: their handling, properties, indications, allergies, biocompatibility, toxicity, waste disposal and environmental impact.
- CE14 - Know and use basic equipment and instrumentation for dental practice.
- CE15 - Apply the principles of ergonomics in dental work, both individually and within the work team when appropriate, as well as the principles of prevention of occupational risks associated with dental practice.
- CE16 - Provide a global approach to oral care and apply the principles of health promotion and prevention of oral and dental diseases.

- SC34 - 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 minimally invasive dentistry and a comprehensive and integrated approach to oral treatment.
- SC38 - Determine and identify the aesthetic requirements of the patient and the possibilities of satisfying their concerns.
- SC39- Identify patients requiring special care, recognizing their characteristics and peculiarities
- SC40 Assess the motor and sensory function of the mouth, maxillaries and surrounding structures.
- SC44 Prepare and isolate the operative field.
- SC51 - 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.
- SC54 - Perform endodontic treatments and other procedures to preserve pulp vitality.
- SC55 - Perform conventional aesthetic procedures from a multidisciplinary perspective.
- SC57 - Prepare the prescriptions of the customized medical devices "dental prostheses" and "orthodontic appliances and dento-facial orthopedics".
- SC59 Perform the oral-dental treatment of the infantile patient and recognize its characteristics and peculiarities.
- SC61 - Plan, determine the specific design characteristics, records, prescription, clinical tests, placement and clinical adjustment for commissioning of fixed and removable space maintainers and interceptive orthodontic techniques as well as removable active elements intended to displace teeth or correct bites crossed.

Learning Outcomes:

LO1. To Know the development, anatomy and nomenclature of both dentitions.

LO2. To know how to select the appropriate restorative technique and which will be the most suitable material to use in Pediatric Dentistry

LO3. To know how to treat large dental tissue destruction including full cover and esthetic restorations.

LO4. To Know how to diagnose and treat dental loss in childhood.

LO5. To know how to describe pulp pathogenesis in primary dentition and in young permanent teeth. Select the appropriate pulp treatment according to the diagnosis made and to know the techniques to perform the indicated pulp treatment.

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

Competencies	Learning Outcomes
GC12, CE34, CE49, CE52	LO1
CG12, CE34, CE49	LO2
CG14, CG25, CG27, CE34, CE51,	LO3
CG25, CE37, CE44, CE38, CE51, CE52, CE55, CE59, CE61	LO4
CG12, CG14, CG25, CG26, CG27, CG4, CB3, CB4, CT1, CT3, CT4, CT5, CT7, CT8, CE34, CE36, CE37, CE38, CE40, CE44, CE46, CE47, CE51, CE52, CE53, CE54, CE55, CE57, CE58, CE59, CE61	LO5

4. CONTENT

The subject is organized on the following topics:

- Pediatric Restorative Dentistry II: class I and II cavities.
- Pediatric Restorative Dentistry III: class III, IV, and V cavities.
- Pulp pathology and therapy in temporary dentition.
- Pulp pathology and therapy in young permanent teeth (YPT).
- Tooth loss during childhood. Space maintainers and prosthesis in Pediatric Dentistry.
- Treatment of major dental tissue destruction in Temporary and Young permanent Teeth. Preformed metallic crowns and Esthetic restorations.
- Dental material and Ergonomics in Pediatric Dentistry
- Perinatal and Infant oral health care.
- Behavior Guidance in Pediatric Dentistry. Basic Techniques.
- First visit in Pediatric Dentistry. Clinical record and examination.
- Analysis and Resolution of Practical Exercises and Problem Cases.
- Complex simulation.

The preclinical practical program contains the following practices:

- Class I and II cavity obturations with composite in phantom's teeth models
- Class III, IV and V cavity obturations with composite in phantom's teeth models
- Pulpotomy in phantom's tooth with artificial Pulp
- Pulpectomy in phantom's tooth with artificial Pulp and obturation with restorative Glass Ionomer cement.
- Preparation, adjustment and cementation of Preform Metallic Crown in phantom's tooth.
- Preparation and reconstruction of tooth with a strip crown (celluloid) phantom's tooth.
- Simulator's Practice (SIMODONT).

5. TEACHING-LEARNING METHODOLOGIES

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

- Masterclass
- Case method
- Cooperative 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
Tutorials	13
Master Classes	12
Virtual Master classes	6
Seminaries	4
Practical Exercises	20
Case Analysis	17
Laboratory practices	32,5
Autonomous study work	44
Knowledge test (in person)	1,5
TOTAL	150

7. EVALUATION

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

Assessment system	Weight
Theoretical knowledge test	30%
Average grade of presential (in-person) preclinical practices	50%
Practical Exercise (Images test)	10%
Case-Problem (Clinical case), Data driven and Spanish activities.	10%
TOTAL	100%

When you access the course on the *Campus Virtual*, you'll find a description of the assessment activities you must complete, as well as the delivery deadline and assessment procedure 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%):

- 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.
- 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%):**

- 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 Universidad Europea de 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:

Assessable activities	Deadline
○ Theoretical Knowledge test	May-June 2025*
○ Case problem (Clinical case) ○ Practical exercise (Images Test)	May-June 2025*
○ Average preclinical practices	May-June 2025*

*Date to be determined by Academic Planning Department.

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.

The student must consult the compulsory classroom sessions in the course schedule on the virtual campus.

9. BIBLIOGRAPHY

The main reference work for this subject is:

- 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. (3rd 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.

Recommended bibliography is indicated below:

- 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. (11th 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. <http://www.aapd.org/policies>
- International Association of Dental Traumatology. <https://www.iadt-dentaltrauma.org>

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!

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.