

1. BASIC INFORMATION

Subject	PEDIATRIC DENTISTRY II
Degree Program	DEGREE IN DENTISTRY
Faculty	HEALTH SCIENCES
Grade	THIRD GRADE 3º
ECTS	6 (150 HOURS)
Credit type	MANDATORY
Languages	SPANISH / ENGLISH
Delivery Mode	In-person classes
Semester	2º SEMESTER
Year	2020/2021
Coordinating Professors	IRENE REDONDO Y PAULA OLIVEROS

2. PRESENTATION

It is a theoretical-practical subject, which is an introduction to Pediatric Dentistry as part of Dentistry.

Provides knowledge for optimal oral health care for children and adolescents.

The subject develops different competences that are necessary together to pre-clinical practice.

This subject, given on the **second** semester of the third year of Dentistry provides a global vision of the most common pediatric dental treatments, deepens in each of them, from preventive or minimally invasive treatments such as pits and fissure sealants or Resin Preventive restorations, to conservative treatments, such as reconstructions, pulp treatments and pediatric crowns. In addition, dental trauma is studied from its diagnosis, emergency action and treatment. At the end of the course the student must be able to make a complete treatment plan in pediatric patients.

The knowledge and competences developed in this subject will be essential to understand basic aspects of subjects such as Orthodontics and Pediatric Dentistry. It will also enable the student to adapt different dental treatments to the pediatric patient

3. Competencies and learning outcomes

CORE AND GENERAL

GC4. Understand and recognize the social and psychological aspects relevant to the treatment of patients.

GC12. 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.

GC14. Knowledge of the general processes of the disease, including infection, inflammation, alterations of the immune system, degeneration, neoplasia, metabolic alterations and genetic disorders.

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.

GC30. Ability to recognize the role of the dentist in the actions of prevention and protection against oral diseases, as well as in the maintenance and promotion of health, both at an individual and community level.

BC2. That the 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 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

CC1. Responsibility: That the student is able to assume the consequences of the actions that he / she performs and responds from his / her own actions.

CC3. 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.

CC4. 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.

CC5. Interpersonal understanding: That the student is able to perform an active listening in order to reach agreements using a style of assertive communication.

CC7. 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.

CC8. Initiative: The student must be able to proactively anticipate proposing solutions or alternatives to the situations presented.

SPECIFIC

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 minimal invasion and a comprehensive and integrated approach to oral-dental treatment.

SC35 - To diagnose, plan and perform, in general, a multidisciplinary, sequential and integrated treatment of limited complexity in patients of all ages and conditions and in patients with special needs (diabetic, hypertensive, oncological, transplanted, immunosuppressed, anticoagulated, among others) Or disabled. Specifically, the dentist should be competent in establishing a diagnosis, prognosis and development of adequate therapeutic planning, and particularly in orofacial pain, temporo-mandibular disorders, bruxism and other parafunctional habits; Dental and periapical pathology; Buco-dental trauma; Periodontal and peri-implant tissue; Bone pathology of the jaws, soft tissues of the mouth and glands attached; States of partial or total edentation and in the planning of its rehabilitating treatment through denture and mucosal prosthesis, or through dental implants, malposition and / or dental malocclusions and other anatomical or functional alterations of the face or the stomatognathic system and its possible corrections Orthodontic, orthopedic or surgical.

SC36 - To take and interpret radiographs and other procedures based on the image, relevant in dental practice.

SC37 - Make diagnostic models, assemble them and take inter-occlusal records.

SC38 - Determine and identify the aesthetic requirements of the patient and the possibilities of satisfying their concerns.

SC39 - Identify the patient that requires special care, recognizing its characteristics and peculiarities.

SC40 Assess the motor and sensory function of the mouth, maxillaries and appendages.

SC41 Perform limited procedures of invasive diagnostic techniques in soft tissues (biopsies).

SC42 Be competent in the appropriate prescription of drugs, knowing their contraindications, interactions, systemic effects and repercussions on other organs.

SC43 Apply loco-regional anesthesia techniques.

SC44 Prepare and isolate the operative field.

SC45 Identify, assess and respond to medical emergencies and emergencies that may arise during clinical practice and apply cardio-pulmonary resuscitation techniques; manage acute infections, including pharmacological prescription and simple surgical aspects.

SC46 Identify and attend any dental emergency.

SC47 - Perform both medical and surgical treatment of common oral soft tissue diseases.

SC48 - Perform simple surgical procedures: removal of temporary and permanent erupted teeth, fractured or retained roots and uncomplicated surgical removal of non-erupted teeth and simple procedures for pre-prosthetic surgery.

SC49 - Treat dento-alveolar trauma in temporary and permanent dentitions.

SC50 - Treat both pharmacologically and surgically the inflammatory processes of periodontal and / or peri-implant tissues including supra and subgingival periodontal instrumentation techniques.

SC51 - Assess and treat the patient with caries or other non-cariou 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.

SC52 - Design, prepare teeth, prescribe, register, perform clinical tests and place and put into service indirect restorations: inlays, veneers or aesthetic laminated fronts and unit crowns.

SC53 - Operatively treat destructive processes and traumatic dento-alveolar lesions.

SC54 - Perform endodontic treatments and apply procedures to preserve pulp vitality.

SC55 - Perform conventional aesthetic procedures from a multidisciplinary perspective.

SC56 - Treat both partial and total edentulism, including biological design (specific design features), dental preparation, obtaining records, clinical tests and adaptation to patients of

partial and complete removable prostheses, simple dento-supported bridges and simple prostheses on implants, both removable and fixed, including their «placement» and «commissioning».

SC57 - Prepare the prescriptions of the customized medical devices "dental prostheses" and "orthodontic appliances and dento-facial orthopedics".

SC58 - Perform non-surgical treatment of temporomandibular disorders and oro-facial pain.

SC59 Perform the oral-dental treatment of the infantile patient and recognize its characteristics and peculiarities.

SC60 - Identify and correct oral habits that can cause or exacerbate malocclusions.

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: Know the Cranial and Bucofacial development and growth of the child.
- LO2: Know how to describe the most frequent carious pathology in children, its diagnosis and treatment.
- LO3: To know the pulp pathology in temporary and permanent young dentition, its diagnosis and treatment.
- LO4: Know how to diagnose the different types of trauma in the pediatric patient, its diagnosis, prognosis and treatment.
- LO5: Properly handle the behavior of the child patient and know how to apply the different anxiety control techniques.
- LO6: Make a correct medical history oriented to the pediatric patient and its adequate treatment plan

The table below shows the relation between the competencies developed during the course and the envisaged learning outcomes:

Competencies	Learning outcomes
CG14, CG12, CG25, CB3, CB4, CB5, CE 34, CE44, CT1, CT3, CT4, CT5, CT7, CT8, CE36, CE38, CE39, CE46	LO1, LO2.
CE59, CE60, CE61	LO3, LO4

SC36, 38, 39, 46.	LO5
GC: 25, 26, 27.	LO6
SC: 34, 35, 44, 46.	

4. CONTENTS

THEORETICAL SYLLABUS:

The theoretical program will be taught in the schedule established by the University, except on holidays previously marked in the University Calendar.

There are 3 groups for theoretical lessons to be delivered

- **M31 GROUP:** Wednesdays 12.30-14.30h.
- **M32 GROUP:** Mondays 08:30-10:30h
- **T31-T32 GROUP:** Mondays 15.30-17.30h
- **T3Z GROUP:** Tuesdays 19.30-21.30h

Several active and collaborative methodologies will be applied in the classroom, aimed at guiding the student in the process of acquiring knowledge and skills through multiple training activities.

These activities may be subject to modifications due to pedagogical reasons. These will be determined by the department and students will be warned of such changes.

The subject will be organised in the following topics:

- TOPIC 1: Pulp pathology in temporary dentition.
- TOPIC 2: Pulp pathology in Young permanent dentition.
- TOPIC 3: Major destructions in temporary dentition. Crown restorations in Pediatric Dentistry.
- TOPIC 4: Dental trauma. Generalities.
- TOPIC 5: Dental trauma in temporary teeth.
- TOPIC 6: Dental trauma in Young permanent dentition.
- TOPIC 7: Tooth loss during childhood. Space maintainers and prosthesis in Pediatric Dentistry.
- TOPIC 8: Dental development Anomalies. Number, shape and color alterations.
- TOPIC 9: Dental development Anomalies. Tooth structure hereditary and non-hereditary.
- TOPIC 10: First visit in Pediatric Dentistry. Clinical record and patient exploration.
- TOPIC 11: Child basic behaviour management in Pediatric Dentistry.
- TOPIC 12: Perinatal dentistry and early childhood caries.

The **practical program** will be taught through:

- Practical exercises related to the theoretical contents. Sessions last 2 hours per week. The pre-clinical practices will be developed in the University's simulation laboratory according to the distribution that is delivered at the beginning of the academic year:
- Seminars and / or **short sessions of clinical images diagnosing**. These are of particular importance for the student to develop and deepen the diagnosis.

- In blackboard when you access the subject, you can consult in detail the practice and the list of materials that you should use in each of them, as well as the delivery dates and evaluation procedures of each of them.

- Simulator.
- This semester timetables are:
 - **M31 GROUPS:** Fridays 08.30-10.30h
 - **M32 GROUP:** Thursdays 12.30-14.30h
 - **T31-T32 GROUP:** Thursdays 16.30-18.30h
 - **T3Z GROUP:** Fridays 17.30-19.30h
- In blackboard when you access the subject, you can consult in detail the practice and the list of materials that you should use in each of them, as well as the delivery dates and evaluation procedures of each of them.
- The student must bring all the necessary material of the practice to be carried out, otherwise it would not be possible to carry out the practice and it would be considered as not presented.

Practices to be performed:

- RPR type I in 2.6.
- RPR type II in 3.6.
- Class I cavity and composite obturation in 6.5
- Class II cavity in 6.4 phantom tooth with composite obturation.
- Class II cavities in phantom's teeth 5.4 and 5.5 (ZPUW) and composite obturations.
- Class II cavities in phantom's teeth 7.4 y 7.5.
- Class V cavity in tooth's phantom 5.3 (ZPUW).
- Class III cavity in phantom's tooth 6.1
- Class IV cavity with strip crown and composite obturation, in tooth's phantom 5.1.

- Pulpotomy in 8.5 tooth (ZPUW).
- Pulpectomy in 5.5 tooth (ZPUW).
- Metallic preformed Crown in phantom's tooth 5.5.
- Simulation.

5. TEACHING-LEARNING METHODOLOGIES.

Different types of teaching-learning methodologies are indicated below:

- Master class.
- Case method.
- Problem solving learning.
- Knowledge test.
- Preclinical practices.
- Personal study.
- Tutoring sessions.

6. TRAINING ACTIVITIES.

The following table shows how the different types of activities are distributed and how many hours are assigned to each type:

Face to face learning mode:

Educational Activity	Number of hours
Master Classes	50 hours
Laboratory classes	40 hours
Simulator	10 hours
Case problem: Images seminars	15 horas
Practical exercises: Clinical Case	15 horas
Tutoring sessions	20 horas
TOTAL	150 horas

7. EVALUATION.

The table below shows the evaluable activities, as well as their weight on the total grade of the subject.

Evaluation System	Percentage
Theoretical Knowledge Test:	40%
1st Partial ODP II	1st Partial: 20%
2nd Partial ODP II	2nd Partial: 20%
Preclinical simulated practices	50%
<ul style="list-style-type: none"> Practices in person's Average (30%) Final Practical test (20%) 	
Practical exercise	5%
Case/Problem	5%
Total	100%

In the Virtual Campus, whenever you access the subject, you will be able to consult in detail the evaluation activities that you must perform as well as the delivery dates and the evaluation procedures for each of them.

7.1. FIRST EXAM PERIOD (ORDINARY CALL)

To pass the course in the first exam period you must attend the following:

- Pass each part of the subject independently, with a grade greater than or equal to 5'0 over 10'0.
- Attend and register the attendance of 50% of the theoretical sessions and 95% of the preclinical practices.

If absences occur in theory classes, it will be considered that the student has not reached the necessary skills to pass the subject and will fail the subject in the Ordinary Call. He will also have to perform an extra individualized test in the extraordinary call. If the absences occur in practices classes, then the student will have the subject failed in ordinary call and will have to retake as many activities as the teacher determines is necessary to recover this part.

1. Theoretical Knowledge test (40%):

There will be 2 written theoretical knowledge tests. Each test will contain 20 multiple choice questions (8 points) and an essay question (2 points).

Each multiple choice question will have 4 possible answers and just one is correct. Wrong answers will discount 0,4 points. Non answered questions do not discount.

This evaluation system implies that the student cannot miss any of the tests since they are mandatory.

In the event that a student, who has not submitted or has not passed the written test, has the possibility of recovering it in the period of the extraordinary call.

2. Preclinic simulated practices (50%):

The final average grade of the practical activities must be greater than or equal to 5 in order to pass the subject. **The average mark obtained in the practices will have a value of 30% on the final mark of the practical part of the subject.**

Finally, a **practical final test (20%)** will be carried out and must be passed with a grade greater than or equal to 5.

3. Case/ problem (5%):

An image seminar will be carried out, once all the subjects that make up the theoretical contents have been taught. In it, any of the theoretical content taught in the subject may be assessed.

To pass the image seminar activity, it is necessary to obtain a grade equal to or greater than 5'0 over 10'0. In case of having this part failed in the ordinary call, the student will carry out a test of clinical cases in the extraordinary call.

4. **Practical Exercise (5%):**

This is an evaluable written exercise that will be carried out in the classroom. The student must be able to relate the theoretical concepts learned to carry out a diagnosis and resolution of the cases raised.

In case of failing this part or not applying for it, the student will have to retake the practical exercise in the extra ordinary call.

“Honor Degree” will be awarded to students who have obtained a grade equal to or greater than 9.0. These may not exceed 5% of the students enrolled in the subject and in the corresponding academic course; unless the number of enrolled students is less than 20, in which case, a single Honor Degree will be granted.

7.2. SECOND EXAM PERIOD (EXTRAORDINARY CALL).

To pass the subject in the Extraordinary call you will have to:

- Obtain a grade equal to or greater than 5.0 out of 10.0 in the theoretical and / or practical knowledge test that has not been passed in the ordinary call.
- Perform the practical individualized extra test in the case of not having passed the ordinary call for exceeding the number of absences allowed in theory and / or laboratory.
- Perform the Image seminar test (case-problem) and a clinical case (problem exercise), and pass them with a grade equal to or greater than 5.
- The failed or the non-delivered practical activities in the ordinary call, must be delivered again, after having received the corrections from the teacher.

8. CHRONOGRAM

This section indicates the schedule with the delivering dates of the grading activities of the subject:

Grading Activities	Group	Date
Practical exercise: (Clinical case) and Case / problem: (Images seminary) (in person)	M31	26.05.2021
	M32	24.05.2021
	T31+T32	24.05.2021
	T3Z	18.05.2021
1º Partial Theoretical Knowledge Test	M31	31.03.2021
	M32	22.03.2021
	T31, T32	22.03.2021
	T3Z	23.03.2021
2º Partial Theoretical Knowledge Test and Practical Knowledge test	M31	¿/06/2021
	M32	¿/06/2021
	T31+32	¿/06/2021
	T3Z	¿/06/2021

This chronogram might be modified for logistical reasons. Any modification will be previously notified to the students.

9. Bibliography

SPECIFIC BIBLIOGRAPHY

- Boj JR, Catalá M, Garcia Ballesta C, Mendoza A, Planells P, Cortés O. (2019). **Odontopediatría. Bebés, niños y adolescentes**. 1ª Ed. Barcelona: Ed Odontología Books. 1ª edición.
- Boj JR, Catalá M, Garcia Ballesta C, Mendoza A. (2011). **Odontopediatría. La evolución del niño al adulto joven**. Barcelona: Ed Masson.
- Van Waes HJM, Stöckli PW. (2001). **Atlas de Odontología Pediátrica**. Barcelona: Ed Masson. 1ª edición.
- Koch. (2017). **Pediatric Dentistry. A clinical Approach**. ester, West Sussex, UK; Ames, Iowa: John Wiley & Sons. 3th edition.

RECOMMENDED BIBLIOGRAPHY

- Pinkham. (2019). **Pediatric Dentistry: infancy through adolescence**. Philadelphia, PA: Elsevier. 6th edition.
- McDonald & Avery's. (2016). **Dentistry for the Child and Adolescent**. St. Louis, Missouri: Elsevier. 10th edition.
- Cameron A, Widmer R. (2008). **Handbook of Pediatric Dentistry**. Ed Mosby Elsevier.
- Policies & Guidelines - American Academy of Pediatric Dentistry, <http://www.aapd.org/policies>
- Dental Trauma Guide <http://www.dentaltraumaguide.org>
- Andreasen J.O. (2011). **Traumatic Dental Injuries: A Manual**. Chichester, West Sussex, UK: Wiley-Blackwell. 3th edition.
- Nelson, S.J. (2015). **Wheeler's dental anatomy, physiology, and occlusion**. St. Louis, Missouri: Elsevier Saunders
- SESPO. (200). **Flúor 2000. Actualidad, dosificación y pautas de tratamiento**. Editorial Promolibro.
- SESPO. (2006). **Uso de antimicrobianos en odontología**. Ed. Promolibro.
- Axelsson P. (2000). **Diagnosis and Risk Prediction of Dental Caries**. Chicago: Quintessence Pub. Co.

- SESPO. Uso de antimicrobianos en odontología. Ed. Promolibro.2006. Axelsson P. Diagnosis and Risk Prediction of Dental Caries. Germany, Quintessence, 2000.

In addition, the student will be given other 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. ATTENTION TO DIVERSITY UNIT.

Students with specific educational support needs:

In order to guarantee equal opportunities to those students with specific educational support needs, curricular adaptations or adjustments will be indicated by the Attention to Diversity Unit (UAD).

It will be mandatory a report of this unit, so those students with specific educational support needs should contact: unidad.diversidad@universidadeuropea.es at the beginning of each semester.

11. SATISFACTION SURVEY.

¡Your opinion matters!

The European University encourages you to participate in the satisfaction surveys to detect strengths and improvement areas regarding the teaching staff, the degree and the teaching-learning process.

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.

12. How to communicate with your professor

Whenever you have a question about the content or activities, don't forget to post it to your course forum so that your classmates can read it. You might not be the only one with the same question!!!

If you have a question that you only want to ask your professor, you can send him/her a private message from the *Virtual Campus*. And if you need to discuss something in more detail, you can arrange an advisory session with your professor.

It's a good idea to check the course forum on a regular basis and read the messages posted by your classmates and professors, as this can be another way to learn.

Theoretical syllabus will be imparted by professors:

- Marta Calomarde Rees, marta.calomarde@universidadeuropea.es
- Ángel del Campo Rodríguez, angel.delcampo@universidadeuropea.es
- Miriam Lloret García, miriam.lloret@universidadeuropea.es
- Paula Oliveros Granell, paula.oliveros@universidadeuropea.es
- Irene Redondo Martínez, irene.redondo@universidadeuropea.es
- María Florencia Sittoni Pino, mariaflorencia.sittoni@universidadeuropea.es
- Alicia Vilar Pinazo, alicia.vilar@universidadeuropea.es

Practical syllabus will be imparted by professors:

- Verónica Ausina Marquez, veronica.ausina@universidadeuropea.es
- Ángel del Campo Rodríguez, angel.delcampo@universidadeuropea.es
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