



Information about the subject

Degree: Bachelor of Science Degree in Dentistry

Faculty: Faculty of Medicine and Health Sciences

Code: 480411 **Name:** Paediatric Dentistry I

Credits: 6,00 **ECTS Year:** 4 **Semester:** 1

Module: Module 4: Dental Pathology and Therapeutics

Subject Matter: DENTAL THERAPY **Type:** Compulsory

Field of knowledge: Health Sciences

Department: -

Type of learning: Classroom-based learning

Languages in which it is taught: English, Spanish

Lecturer/-s:

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Universidad
**Católica de
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San Vicente Mártir

Course guide

Year 2023/2024
480411 - Paediatric Dentistry I

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Module organization

Module 4: Dental Pathology and Therapeutics

Subject Matter	ECTS	Subject	ECTS	Year/semester
DENTAL THERAPY	66,00	Cosmetic Dentistry	6,00	4/2
		Orthodontics I	6,00	3/2
		Orthodontics II	6,00	4/1
		Paediatric Dentistry I	6,00	4/1
		Paediatric Dentistry II	6,00	4/2
		Pathology and Dental Therapeutics I	6,00	3/1
		Pathology and Dental Therapeutics II	6,00	3/2
		Pathology and Dental Therapeutics III	6,00	4/1
		Prosthodontics I	6,00	3/1
		Prosthodontics II	6,00	3/2
		Prosthodontics III	6,00	4/1
DENTAL PATHOLOGY	60,00	Dental Traumatology	6,00	5/1
		Dentistry in Special Patients	6,00	4/2
		Emergencies in Dentistry	6,00	5/2
		Legal and Forensic Dentistry	6,00	5/1



DENTAL PATHOLOGY

Oral Medicine	6,00	3/1
Oral Surgery I	6,00	4/1
Oral Surgery II - Implantology	6,00	5/2
Pathology of the Temporo-Mandibular Joint and Orofacial Pain	6,00	4/2
Periodontics I	6,00	3/2
Periodontics II	6,00	4/2



Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

- R1 The student is able to obtain and elaborate a clinical history.
- R2 Knows how to carry out an intra and extraoral clinical examination.
- R3 The student is able to diagnose orthodontic-orthopaedic problems of limited complexity.
- R4 The student is able to early diagnose and determine appropriate therapy for the malocclusion.
- R5 Proves knowledge to carry out the analysis of the dentition, and the bone characteristics of the patient, in the premature phase for the diagnosis and interceptive treatment.
- R6 Proves diagnostic skills for surgical cases.
- R7 Understands non-cariogenic dental pathology.
- R8 Knows of cariogenic dental pathology.
- R9 Knows manual and rotary instruments used in dental therapy.
- R10 Knows the isolation of the operating field.
- R11 Knows cavity design and preparation.
- R12 Knows the use and application of dental restoration materials.
- R13 Proves knowledge and prevention of iatrogeny in dental therapy.
- R14 The student proves to be competent in assessing the condition of the teeth by establishing a diagnosis and prognosis as well as knowing how to formulate a treatment plan.
- R15 The student proves to be competent at assessing the patient's risk of caries and implementing individualized strategies for caries prevention.



- R16 The student proves to be competent at performing caries removal or other treatments that aim to eliminate caries using techniques that preserve pulp viability.
- R17 The student proves to be competent in evaluating and treating non-caryogenic dental pathology.
- R18 The student proves to be competent in performing therapeutic procedures aimed at preserving, establishing or restoring the form, function and aesthetics of the teeth, as well as the way of the dental pulp.
- R19 Knows the etiopathogenesis of the octopus-periapical diseases.
- R20 Knows the relevant dental anatomy in endodontics.
- R21 Knows the manual and rotary instruments used in endodontics.
- R22 Proves knowledge of the different phases and techniques of endodontic treatment: opening, cleaning and shaping and filling of root canals.
- R23 Evaluates the success and failure of endodontic treatments.
- R24 The student proves to be competent in the recognition of pulp and pulpoperiapical pathology.
- R25 The student proves to be competent in making a correct diagnosis.
- R26 The student can recognize and use the instruments commonly used in endodontics.
- R27 Knows the specific problems of developing teeth, with anatomical variations or reabsorption.
- R28 Knows the physical characteristics of teeth with great destruction of their structure and the means of reconstruction.
- R29 Knows the materials and techniques of retention in vital and non-vital teeth.
- R30 Discerns the difficulties in the reconstruction of proximal faces and contact points: matrices and wedges
- R31 Manages the organization, design and structure of scientific communication.
- R32 The student proves to be competent in recognizing the complexity of reconstructing a tooth with a large destruction.



- R33 Knows the instruments to use in the restoration of teeth with great destruction of their crown.
- R34 The student proves to be competent in the knowledge of retention aids, both on vital and non-vital teeth.
- R35 The student proves to be competent in performing root canal treatment on uncomplicated monoradicular and multi-radicular teeth and in handling the specific instruments.
The student proves to be competent in performing therapeutic procedures aimed at preserving, establishing or restoring the shape, function and esthetics of teeth, as well as the viability of the dental pulp.
The student proves to be competent in recognizing the signs that treatment will be complex and in knowing how to take appropriate measures to deal with them.
To know the components of the stomatognathic system. Biomechanics and functionality.
- R36 The student proves to be competent in performing therapeutic procedures intended to preserve, establish or restore the shape, function and esthetics of the teeth, as well as the viability of the dental pulp.
- R37 Knows the components of the stomatognathic system. Biomechanics and functionality.
- R38 Understands the neuroanatomy and physiology of the masticatory system. Mastication - swallowing - aesthetics. Also, integrates the knowledge of the dental articulator and its importance in the dentist's daily practice. Static and dynamic occlusion.
- R39 Proves knowledge to elaborate a correct clinical history and the correct handling of the information with the laboratory.
- R40 Integrates the concepts of occlusion and its importance in dental work.
- R41 Proves knowledge to elaborate a correct clinical history and the correct handling of the information with the laboratory.
- R42 Show ability to take measurements and materials for their application.
- R43 Defines the specific characteristics of the temporary and permanent human dentition.
- R44 Manages positional dental nomenclature systems.
- R45 Knows how to search for information from different sources and analyse it with a critical and constructive spirit.
- R46 Becomes familiar with the child's management in the practice and understand their differences from the adult.



- R47 Establishes an appropriate diagnosis and treatment plan for the child patient.
- R48 Plans and proposes the appropriate preventive measures for each clinical situation.
- R49 Obtains and prepares a clinical history containing all relevant information.
- R50 Knows how to perform a complete oral examination, including the appropriate radiographic and complementary examination tests, as well as obtaining appropriate clinical references.
- R51 Makes an initial diagnostic judgement and establish a reasoned diagnostic strategy, being competent in the recognition of situations requiring urgent dental care.
- R52 Manages therapeutic procedures based on the concept of minimally invasive and a comprehensive and integrated approach to oral health care.
- R53 Makes a clinical diagnosis by interpreting the signs, symptoms and interpretation of complementary tests.
- R54 Carries out a comprehensive treatment plan for the paediatric patient.
- R55 Applies integral treatments in the infant patient.
- R56 Manages the pediatric patient's behavior.
- R57 The student is able to identify malocclusive features that can be treated at an early age.
- R58 Proves knowledge of aesthetic restorative materials.
- R59 Knows the necessary steps for dental restoration with dental ceramics and dentin adhesives.
- R60 Develops and applies the necessary elements to prevent dental trauma in the anterior sector.



Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

GENERAL	Weighting			
	1	2	3	4
CG1 I aCapacity for analysis and synthesis			X	
CG2 I bOrganizational and planning skills			X	
SPECIFIC	Weighting			
	1	2	3	4
CE A 7 Promote autonomous learning of new knowledge and techniques, as well as motivation for quality.				X
CE A 9 Understand the importance of maintaining and using records with patient information for subsequent analysis, preserving the confidentiality of the data.				X
CE C 2Knowing how to perform a complete oral examination, including the appropriate radiographic and complementary examination tests, as well as obtaining appropriate clinical references.				X
CE C 2Be able to make an initial diagnostic judgement and establish a reasoned diagnostic strategy, being competent in the recognition of situations requiring urgent dental care.				X
CE D 2Know 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 minimum invasion and on a global and integrated approach to oral treatment.				X
CE D 2Know how to plan and carry out multidisciplinary, sequential and integrated dental treatments of limited complexity in patients of all ages and conditions and patients requiring special care.				X
CE D 2Plan and propose the appropriate preventive measures for each clinical situation.				X



CE D 2 Acquire clinical experience under proper supervision.

x

CE E 3 Recognise the role of the dentist in actions to prevent and protect against oral diseases, as well as in the maintenance and promotion of health, both at individual and community level.

x

TRANSVERSAL

Weighting

1 2 3 4

1. a. Analysis and synthesis skills

x

1. b. Organizational and planning capacity

x

1. c. Oral and written communication in the native language.

x

1. d. Knowledge of a foreign language

x

1. e. Computer skills

x

1. g. Problem solving

x

1. h. Decision making

x

2. i. Teamwork

x

2. j. Multidisciplinary teamwork

x

2. k. Work in an international context

x

2. l. Interpersonal skills

x

2. m. Recognition of diversity and multiculturalism

x

2. n. Critical Reasoning

x

2. o. Ethical commitment

x

3. p. Autonomous learning

x



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3. q.	Adaptation to new situations			x
3. r.	Creativity			x
3. s.	Leadership		x	
3. t.	Knowledge of other cultures and customs		x	
3. u.	Initiative and entrepreneurship			x
3. v.	Motivation for quality			x
3. w.	Sensitivity to environmental and socio-health issues			x



Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
	60,00%	MULTIPLE CHOICE TEST: Multiple choice test with one correct answer. This shows to greater extent the contents acquired by the student.
	30,00%	PRACTICAL: Written test in which the student is asked to solve practical exercises, clinical cases or problems about the contents of different subjects.
	10,00%	SIMULATIONS, OSCES: Through simulations, real-life situations are reproduced in standardised conditions, which enable the teacher to analyse the clinical skills of the student in specific situations. Computer simulations or standardised simulated illnesses are used. The test known as OSCE (Objective Structured Clinical Examination) may also be used. The OSCE consists of students going around a circuit of sequential stops where they are asked to carry out a variety of different skills and techniques.

Observations

- Attendance to laboratory practices and ECOEs/seminars is mandatory as it constitutes continuous assessment.
- Only one justified absence from a practice/ECOE/seminar is allowed, and it is necessary to submit the supporting documentation to the responsible professor within a maximum of 15 days after the absence. Arriving more than 10 minutes late to practical sessions/ECOEs/seminars will be considered as a delay. If 4 delays accumulate, it will be counted as an unjustified absence.
- The same criteria for exam attendance justification will be applied to justify absences, according to the statutes and regulations of the University.
- The laboratory practices and ECOEs/seminars are compulsory, and therefore, several absences of any kind (more than 2) will result in the inability to pass the course by failing to meet the minimum attendance requirement of 90% for practices/ECOEs/seminars. Consequently, the student will not be eligible to participate in either the first or second examination opportunity for both the practical and theoretical components.
- The student must attend the corresponding practice group but can switch to another group, provided that the responsible professor is notified at least one week in advance.



- Evaluation criteria for the theoretical exam: The multiple-choice test will consist of several questions with 4 answer options, of which only one is correct. Additionally, there will be a correction factor, deducting 0.25 points from the total test score for each incorrect answer.
- Evaluation criteria for the practical component: The laboratory practices constitute continuous assessment. To pass the practical part, it is necessary to achieve a minimum of 70% of the grade for that practice section and pass the continuous assessment.
- If the maximum number of absences allowed for the practical exam is exceeded, i.e. 2 unjustified absences or 3 justified absences, the student will be able to sit the second round of the theory exam directly.
- In the case of having more than two unjustified absences or more than three justified absences, the student will not be able to pass the subject as he/she will not be able to acquire the competences foreseen as he/she will not have 90% of attendance to the practicals/ECOE(s)/seminars. In other terms, the student will have to take the course the next year.
- There is a final practical exam with only one opportunity (minimum 60% required to pass) for those who do not pass the continuous assessment or do not meet the attendance requirements: 1 unjustified absence or 2 absences justified. This opportunity is available if the previous attendance requirements have been met.
- There is a retake practice (on the same day as the practical exam) only for those who are expected to pass the practical part due to one justified absence.
- To calculate the average for each component and pass the course, a minimum score of 50% is required for the multiple-choice test, 70% for the practical component if it is evaluated continuously, or 60% if it is the practical exam, in addition to attendance to ECOE(s)/seminars.
- The grade for any component of the course will not be carried over to the following academic year. In the case of the practical component, if the student has completed and passed the continuous assessment in the previous course and/or passed the practical exam, they may directly present themselves for the practical exam in the current course. This must be communicated to the responsible professor at the beginning of the course, specifying the evaluation system to be followed (final exam or continuous assessment).
- Any student who does not attend the proposed ECOE(s)/seminars must make up for it by attending the recovery practice session (on the proposed day) and submitting the work/activity proposed by the professor. The student must present and defend the work publicly, achieving a minimum score of 70% out of 100% on the proposed rubric. This opportunity is available only if the absence has been justified according to the established rules and has been approved and agreed upon by the professor beforehand.
- A portfolio of the work done in laboratory practices must be compiled. The presentation format will be proposed by the teaching staff, and the student must properly fill it out and complete it with photographs of their laboratory work. This portfolio is mandatory to justify and determine that the proposed work in the course guide has been completed. If the portfolio is not submitted or incomplete, it will not be considered as evidence of following the continuous assessment (the student will perform the practical exam).



- The student is under the obligation to follow the regulations of UCV clinics (both in the laboratory and in the laboratory/clinic), regarding:
 - clothing,
 - care of the facilities,
 - behaviour,
 - non-compliance will result in a sanction/expulsion from the practical sessions.
- The student must have the necessary language skills for patient care in clinical practices (if they are carried out).

MENTION OF DISTINCTION:

According to Article 22 of the Regulations governing the Evaluation and Qualification of UCV Courses, the mention of "Distinction of Honor" may be awarded by the professor responsible for the course to students who have obtained, at least, the qualification of 9 over 10 ("Sobresaliente"). The number of "Distinction of Honor" mentions that may be awarded may not exceed five percent of the number of students included in the same official record, unless this number is lower than 20, in which case only one "Distinction of Honor" may be awarded.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

- | | |
|----|---|
| M1 | Lecture.
Problem Solving.
Explanation of contents by the teacher.
Explanation of knowledge and skills. |
| M2 | Practical basic sciences laboratory sessions, practical simulation laboratory sessions, virtual hospital and dissecting room. |
| M3 | Problem and case solving.
Social action activities. |
| M4 | Group work with research, discussion and filtering information about the degree subjects. |
| M6 | Discussion and problem solving. |
| M8 | Oral presentations by students. |



- M9 Group work: group work sessions supervised by the teacher.
Knowledge building through interaction and activity of students.
- M10 Carrying out bibliographic reviews and practical work experience dissertations.
- M11 Practical in-person classes in clinics linked to the university, where the student will carry out different treatments under direct supervision from the assigned tutor.
- M12 Seminars, supervised monographic classes with shared participation.
- M13 Personal preparation of written texts, essays, problem solving, seminars.
- M15 Personalised Attention. Period of instruction and/or guidance carried out by a tutor with the aim of analysing with the student his/her work, activities and evolution in learning of subjects.



IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
THEORY CLASS M1	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60	30,00	1,20
PRACTICAL CLINICAL SESSION M2, M6, M8, M12, M13	R1, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60	24,00	0,96
SEMINAR M3, M4, M6, M8, M12	R1, R2, R3, R4, R5, R6, R18, R19, R20, R43, R44, R45, R46, R47, R48, R49, R51, R52, R53, R54, R55, R56, R58	4,00	0,16
TUTORING M15	R1, R7, R8, R51, R52, R53, R54, R55, R56, R57	2,00	0,08
EVALUATION M6, M15	R54	2,00	0,08
TOTAL		62,00	2,48



LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
INDIVIDUAL WORK M1, M2, M3, M10, M11, M12, M13, M15	R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59	86,00	3,44
GROUP WORK M2, M3, M4, M6, M8, M10, M11	R47, R48, R49, R50, R51, R52, R53, R54, R55	2,00	0,08
TOTAL		88,00	3,52



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
1.- PAEDIATRIC DENTISTRY INTRODUCTION. DENTAL ANATOMY AND NOMENCLATURE. DENTAL ANOMALIES.	1.History, examination, diagnosis and treatment planning in Paediatric Dentistry. 2.Morphological considerations of primary dentition.
2. OPERATIVE DENTISTRY IN PAEDIATRIC DENTISTRY	1.Dental caries in children. 2.Prevention in Paediatric Dentistry. 3.Operative Dentistry in Paediatric Dentistry: cavity preparation. 4.Restorative treatment in Paediatric Dentistry: restoration of occlusal and proximal surfaces in posterior teeth 5.Restorative treatment in Paediatric Dentistry: restoration of proximal surfaces and incisal edges in anterior teeth.
3. DENTAL AND SOFT TISSUE ANOMALIES	1.Dental development and eruption. Orofacial development and craniofacial disorders. 2.Dental developmental anomalies that affect the tooth as a unit. 3.Dental developmental anomalies that affect specific tissues. 4.Panoramic X-ray analysis 5.Early attention in Paediatric Dentistry. 6.Oral pathology in Paediatric Dentistry. 7.Periodontal diseases in Paediatric Dentistry.



Temporary organization of learning:

Block of content	Number of sessions	Hours
1.- PAEDIATRIC DENTISTRY INTRODUCTION. DENTAL ANATOMY AND NOMENCLATURE. DENTAL ANOMALIES.	6,00	12,00
2. OPERATIVE DENTISTRY IN PAEDIATRIC DENTISTRY	17,00	34,00
3. DENTAL AND SOFT TISSUE ANOMALIES	8,00	16,00

References

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