Information about the subject

Degree: Bachelor of Science Degree in Dentistry

Faculty: Faculty of Medicine and Health Sciences

Code: 480412 **Name:** Paediatric Dentistry II

Credits: 6,00 **ECTS Year:** 4 **Semester:** 2

Module: Module 4: Dental Pathology and Therapeutics

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

Field of knowledge: Health Sciences

Department: Dentistry

Type of learning: Classroom-based learning

Languages in which it is taught: English, Spanish

Lecturer/-s:

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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	Prepares orthodontic diagnostic models and evaluates them.
R4	Receives further training in straight arch and low friction techniques, as well as in the generalities of removable orthodontic techniques.
R5	The student is able to carry out early diagnosis of the orthopedic and interceptive problem and approach of the different forms of therapy.
R6	Studies and proves knowledge of the physiopathological bases associated with dental movement.
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	The student proves to be competent in recognizing the signs that indicate that the treatment will be complex and in knowing how to take adequate measures to treat it.
R20	Knows the etiopathogenesis of the octopus-periapical diseases.
R21	Knows the relevant dental anatomy in endodontics.
R22	Knows the manual and rotary instruments used in endodontics.
R23	Proves knowledge of the different phases and techniques of endodontic treatment: opening, cleaning and shaping and filling of root canals.
R24	Evaluates the success and failure of endodontic treatments.
R25	The student proves to be competent in the recognition of pulp and pulpoperiapical pathology.
R26	The student proves to be competent in making a correct diagnosis.
R27	The student can recognize and use the instruments commonly used in endodontics.
R28	The student is able to recognize the complexity of an endodontic treatment case.
R29	Knows the specific problems of developing teeth, with anatomical variations or reabsorption.
R30	Knows the physical characteristics of teeth with great destruction of their structure and the means of reconstruction.
R31	Knows the materials and techniques of retention in vital and non-vital teeth.
R32	Discerns the difficulties in the reconstruction of proximal faces and contact points: matrices and wedges

R33	Manages the organization, design and structure of scientific communication.
R34	The student proves to be competent in recognizing the complexity of reconstructing a tooth with a large destruction.
R35	Knows the instruments to use in the restoration of teeth with great destruction of their crown.
R36	The student proves to be competent in the knowledge of retention aids, both on vital and non-vital teeth.
R37	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.
R38	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.
R39	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.
R40	Knows the components of the stomatognathic system. Biomechanics and functionality.
R41	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.
R42	Proves knowledge to elaborate a correct clinical history and the correct handling of the information with the laboratory.
R43	Integrates the concepts of occlusion and its importance in dental work.
R44	Show ability to take measurements and materials for their application.
R45	Clinical cases. Knows how to solve real clinical cases and apply the knowledge of the subject.
R46	Defines the specific characteristics of the temporary and permanent human dentition.

R47 Manages positional dental nomenclature systems.

R48 Knows how to search for information from different sources and analyse it with a critical and constructive spirit.

R49 Becomes familiar with the child's management in the practice and understand their differences from the adult.

R50 Establishes an appropriate diagnosis and treatment plan for the child patient.

R51 Plans and proposes the appropriate preventive measures for each clinical situation.

R52 Obtains and prepares a clinical history containing all relevant information.

R53 Knows how to perform a complete oral examination, including the appropriate radiographic and complementary examination tests, as well as obtaining appropriate clinical references.

R54 Makes an initial diagnostic judgement and establish a reasoned diagnostic strategy, being competent in the recognition of situations requiring urgent dental care.

R55 Manages therapeutic procedures based on the concept of minimally invasive and a comprehensive and integrated approach to oral health care.

R56 Knows and applies the basic treatment of the most common oral pathology in patients of all ages.

R57 Applies the sequence of the treatment plan assessing dental urgency and the patient's capacity to collaborate.

R58 Makes a clinical diagnosis by interpreting the signs, symptoms and interpretation of complementary tests.

R59 Carries out a comprehensive treatment plan for the paediatric patient.

R60 Applies integral treatments in the infant patient.

R61 Shows ability to perform communications in the scientific field.

R62 Manages the pediatric patient's behavior.

R63 The student is able to identify malocclusive features that can be treated at an early age.

R64 Knows about direct and indirect composite restorations

R65 Knows the necessary steps for dental restoration with composite resins and dentin adhesives.

R66 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 a Capacity for analysis and synthesis				x
CG2 I b Organizational 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 2 Knowing 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 2 Be 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 2 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 minimum invasion and on a global and integrated approach to oral treatment.				x
CE D 2 Know 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 2 Plan and propose the appropriate preventive measures for each clinical situation.				x

CE D 21	Acquire clinical experience under proper supervision.				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. f.	Information management capacity				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
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
	0,00%	OPEN QUESTIONS: Written exam in which basic theory knowledge and the ability to relate, integrate and coherently express it in writing is assessed.
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, R61, R62, R63, R64, R65, R66	60,00%	MULTIPLE CHOICE TEST: Multiple choice test with one correct answer. This shows to greater extent the contents acquired by the student.
	0,00%	ORAL TEST: Oral exam in which the student answers the questions the teacher asks, verbally explaining the contents acquired, allowing for interaction with the teacher.
	0,00%	PRESENTATION: The student develops by means of an oral presentation, supported with audio-visual materials, a theme or topic given by the teacher. At the end of the presentation, the teacher or audience may ask questions.

R1, R2, R3, R26, R27, R28, R29, R30, R31, R32, R37, R38, R43, R46, R47, R50, R52, R54, R55, R56, R58, R59, R60, R62, R64, R65	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.
	0,00%	ASSIGNMENTS: The student, ether individually or in a group, develops a theme which reviews or researches, and he/she presents it, in writing, for assessment by the teacher.
	0,00%	CLASS PARTICIPATION: The teacher assesses the participation, involvement and progress the student makes in acquiring knowledge and skills in theory and practical classes and seminars. This is never more than 5% of the final grade.
R1, R2, R14, R15, R43, R44, R45, R46, R47, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R63, R64, R65	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.
	0,00%	PRACTICAL EXAM: The student carries out a test in which he/she must show by means of practical application the acquisition of certain knowledge. For example, histological or anatomopathological diagnoses, interpretation of images or diagnostic tests.

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.
• 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 of any kind. This opportunity is available if the previous attendance requirements have been met.
• 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/ECOEs/seminars. In other terms, the student will have to take the course the next year.
• 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 ECOEs/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:
In accordance with the regulations governing the assessment and grading of subjects in force at UCV, the distinction of "Matrícula de Honor" (Honours with Distinction) may be awarded to students who have achieved a grade of 9.0 or higher. The number of "Matrículas de Honor" (Honours with Distinction) may not exceed five percent of the students enrolled in the group for the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case a single "Matrícula de Honor" (Honours with Distinction) may be awarded. Exceptionally, these distinctions may be assigned globally across different groups of the same subject. Nevertheless, the total number of distinctions awarded will be the same as if they were assigned by group, but they may be distributed among all students based on a common criterion, regardless of the group to which they belong. The criteria for awarding "Matrícula de Honor" (Honours with Distinction) will be determined according to the guidelines stipulated by the professor responsible for the course, as detailed in the "Observations" section of the evaluation system in the course guide.

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, R7, R8	24,00	0,96
PRACTICAL CLINICAL SESSION M11	R1, R2, R52, R53, R54, R55, R56, R57, R58, R59, R60	12,00	0,48
SEMINAR M6	R1, R42, R43, R46, R47, R48, R49, R50, R51, R52, R53, R56, R57, R58, R59, R62, R63, R65	8,00	0,32
TUTORING M15	R58, R59	2,00	0,08
EVALUATION M13	R52, R53, R54, R55, R56, R57, R58, R59, R60	2,00	0,08
PRACTICAL CLASS M2	R1, R2, R3, R4, R9, R10, R11, R49, R50, R51, R52, R53, R56, R57, R58, R59, R61, R62, R63, R65, R66	12,00	0,48
TOTAL		**60,00**	**2,40**

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
INDIVIDUAL WORK M10	R55, R56, R57, R58, R59, R63	87,50	3,50
GROUP WORK M4	R55, R56, R57, R58, R59, R60, R63	2,50	0,10
TOTAL		**90,00**	**3,60**

Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
1.- CHILD BEHAVIOUR MANAGEMENT	1.Psychological Development of the Child. 2.Behaviour Management in Paediatric Patients. 3.Sedation and Paediatric Treatments Performed under General Anaesthesia. 4.Child Abuse.
2.- PAIN CONTROL. EXTRACTION AND MAINTENANCE OF SPACE IN PEDIATRIC DENTISTRY	1.Local anaesthesia. 2.Extraction in Paediatric Dentistry 3.Management and maintenance of space.
3.- PULP PATHOLOGY AND PULP THERAPY. DENTAL TRAUMATOLOGY	1.Diagnosis and pulp treatment in primary teeth. 2.Pulp treatment in young permanent dentition. 3.Fractures in primary and permanent dentition. 4.Traumatic luxations in permanent and primary teeth.
4.- EARLY TREATMENT OF MALOCCLUSIONS. HABITS CONTROL AND INTERCEPTIVE ORTHODONTICS	1.Early treatment of malocclusions.
5.- DENTAL TREATMENT IN PAEDIATRIC PATIENTS WITH SPECIAL NEEDS	1.Physiological principles and medication in childhood. 2.Dental children’s emergencies. 3.Dentistry in paediatric patients with special needs I. 4.Dentistry in paediatric patients with special needs II: mentally and sensory disabled.

Temporary organization of learning:

Block of content	Number of sessions	Hours
1.- CHILD BEHAVIOUR MANAGEMENT	8,00	16,00
2.- PAIN CONTROL. EXTRACTION AND MAINTENANCE OF SPACE IN PEDIATRIC DENTISTRY	6,00	12,00
3.- PULP PATHOLOGY AND PULP THERAPY. DENTAL TRAUMATOLOGY	7,00	14,00
4.- EARLY TREATMENT OF MALOCCLUSIONS. HABITS CONTROL AND INTERCEPTIVE ORTHODONTICS	2,00	4,00
5.- DENTAL TREATMENT IN PAEDIATRIC PATIENTS WITH SPECIAL NEEDS	7,00	14,00

References

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FURTHER READING

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