

Course Title	Pediatric Dentistry II				
Course Code	DES430				
Course Type	Compulsory				
Level	Bachelor (1 <sup>st</sup> Cycle)				
Year / Semester	4 <sup>th</sup> year / 7 <sup>th</sup> semester				
Teacher's Name	TBA				
ECTS	2	Lectures / week	1 hr / 13 weeks + exam week	Laboratories / week	2 hrs / 13 weeks
Course Purpose and Objectives	<p>This course is a continuation of the Pediatric Dentistry I course. It includes a lecture and laboratory component.</p> <p>The objective of the course is for the student to:</p> <ul style="list-style-type: none"> <li>• Learn foundation knowledge on the principles, terminology, instruments, materials and techniques utilized in the practice of Pediatric Dentistry</li> <li>• Apply therapeutic techniques for caries and pulpal management of primary teeth, in the laboratory under clinical stimulation.</li> </ul> <p>In the practical component, the students will have demonstrations and perform a series of exercises in typodonts, for clinical procedures used in Pediatric Dentistry.</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Discuss the advantages and techniques for tooth isolation.</li> <li>• Discuss options and indications for early caries management of occlusal and interproximal lesions (monitoring and topical fluorides, sealant, preventive resin restorations, resin infiltration by selecting).</li> <li>• Describe the anatomic differences between primary and permanent teeth and how these differences affect the preparation for composites in primary teeth.</li> <li>• Select the appropriate restorative materials for each type of tooth, lesions and restoration.</li> <li>• Discuss the different options for pulpal management in primary teeth (direct and indirect pulp capping, pulpotomy and pulpectomy in primary teeth) as well as the indications, techniques and materials used.</li> <li>• Discuss the indications and techniques for primary teeth esthetic crowns.</li> </ul>				

	<ul style="list-style-type: none"> <li>• Describe the indications and technique (preparation, adaption and cementation) for stainless steel crowns in primary and permanent teeth.</li> <li>• Describe the indications and application techniques for splinting after dental trauma.</li> <li>• Discuss the anti-caries effectiveness of silver diamine fluoride, indications and techniques.</li> <li>• Describe the indications for space maintenance following premature loss of a primary tooth, as well as selection of the appropriate appliances for each case.</li> </ul> <p>Be able under clinical simulation to:</p> <ul style="list-style-type: none"> <li>• Isolate anterior and posterior teeth, in the typodont using the rubber dam.</li> <li>• Diagnose caries, occlusally and interproximally, using the ICDAS clinical and radiographic criteria.</li> <li>• Apply sealants in typodont and natural teeth.</li> <li>• Perform preventive resin restorations in typodont and natural teeth.</li> <li>• Prepare Class II and III composite resin, in typodont primary teeth.</li> <li>• Perform pulpotomy in primary teeth.</li> <li>• Prepare and adapt a stainless steel crown in typodont primary teeth.</li> <li>• Apply a splint for dental trauma management.</li> </ul>		
Prerequisites	None	Co-requisites	None
Course Content	<p>Lectures:</p> <ul style="list-style-type: none"> <li>• Introduction to the Pediatric Dentistry simulation lab experience.</li> <li>• Learn about the advantages of the application of rubber dam and the different ways of isolation in Pediatric Dentistry for posterior and anterior teeth.</li> <li>• Learn about early caries; diagnosis and management of occlusal lesions in Pediatric Dentistry with sealants and Preventive Resin Restorations (PRR); indications and application techniques.</li> <li>• Learn about early caries; diagnosis and management of buccal and interproximal lesions in Pediatric Dentistry with resin infiltration and sealants; indications and application techniques.</li> <li>• Learn about the anatomic differences between primary and permanent teeth and how these affect cavity preparations and pulpal management.</li> <li>• Learn about selection of appropriate restorative materials in Pediatric Dentistry. Success and durability of composites, glass ionomers and stainless steel crowns.</li> <li>• Esthetic restorations for primary anterior teeth.</li> <li>• Learn about the indications, preparation technique and placement of preformed stainless crowns in primary and permanent teeth.</li> </ul>		

	<ul style="list-style-type: none"> <li>• Learn about pulpal management in primary teeth. Indications, materials and techniques (indirect and direct pulp capping and interim therapeutic restorations) in primary teeth.</li> <li>• Learn about pulpal management in primary teeth. Indications, technique, dressing materials for pulpotomy and pulpectomy in primary teeth.</li> <li>• Learn about the indications and application techniques for splinting after dental trauma.</li> <li>• The anti-caries effectiveness of silver diamine fluoride, indications and application technique.</li> <li>• Learn about space maintenance in primary and mixed dentition.</li> </ul> <p>Labs:</p> <ul style="list-style-type: none"> <li>• Preparation of typodonts with artificial teeth, and place in acrylic base natural teeth (one primary molar and two permanent posterior with early caries).</li> <li>• Training in isolation with different isolation techniques.</li> <li>• Diagnosis of early caries lesions and perform sealant and PRR on natural teeth.</li> <li>• Diagnosis of early interproximal caries lesions and apply sealant on natural teeth. Demonstration of resin infiltration application.</li> <li>• Preparation of Class II cavities for composites in primary molars.</li> <li>• Preparation of Class II cavities for composites and fill with composite.</li> <li>• Preparation of Class III cavities for composites in primary teeth.</li> <li>• Preparation of typodont primary teeth for stainless steel crowns (SSC).</li> <li>• SSC fitting and cementation.</li> <li>• Exercise on performing pulpotomy in primary tooth.</li> <li>• Application of a trauma splint for tooth stabilization after dental trauma under clinical stimulation.</li> <li>• Demonstration of silver diamine fluoride application.</li> <li>• Demonstration of band adaptation, impression and fabrication of a band and loop space maintainer.</li> </ul>
Teaching Methodology	Face-to-face
Bibliography	<p>Koch G, Poulsen S, Espelid I, Haubek D. Pediatric Dentistry: A Clinical Approach. Oxford: Wiley Blackwell, 2017.</p> <p>Dean JA. McDonald and Avery's Dentistry for the Child and Adolescent. St. Louis: Elsevier, 2015.</p> <p>European Academy of Pediatric Dentistry Policies and Guidelines <a href="https://www.eapd.eu/index.php/policies-and-guidelines">https://www.eapd.eu/index.php/policies-and-guidelines</a></p> <p>American Academy of Pediatric Dentistry Oral Health Policies and</p>

	<p>Recommendations (The Reference Manual in Pediatric Dentistry)</p> <p><a href="https://www.aapd.org/research/oral-health-policies--recommendations/">https://www.aapd.org/research/oral-health-policies--recommendations/</a></p>								
Assessment	<table border="1" style="width: 100%;"> <tr> <td style="width: 60%;">Final Examination</td> <td style="width: 40%; text-align: center;">60%</td> </tr> <tr> <td>Laboratory / Clinical Work / Oral presentations</td> <td style="text-align: center;">30%</td> </tr> <tr> <td>Participation and attendance</td> <td style="text-align: center;">10%</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">100%</td> </tr> </table>	Final Examination	60%	Laboratory / Clinical Work / Oral presentations	30%	Participation and attendance	10%	Total	100%
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Language	English								