

Course Title	Operative Dentistry IV				
Course Code	DES400				
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	5	Lectures / week	1 hr / 13 weeks + exam week	Clinic / week	4 hrs / 13 weeks
Course Purpose and Objectives	<p>This course is a continuance of the Operative Dentistry III course. It includes a lecture and clinical component. The theoretical component is designed to give to the student's knowledge on patient comprehensive examination and assessment, diagnosis, treatment planning, ethical and compassionate patient communication and patient management. The principles, terminology, instruments, materials and techniques that are taught in the pre-clinical years will be further discussed in relation to the clinical practice of Operative Dentistry. The endodontic, periodontal, radiographic and occlusal evaluation will be related to the clinical practice of Operative Dentistry for the students to develop critical thinking during clinical patient care. The principles of tooth preparations and single tooth restorations in direct restorative materials such as amalgam and composite resin, to restore pathologically damaged tooth structure due to dental caries, fracture or trauma, will be discussed from a clinical perspective. Evidence based literature relevant to contemporary Operative Dentistry will be reviewed and students will have assignments related to that information.</p> <p>In the clinical component, the students will treat patients under calibrated supervision, following the principles and techniques they learned in the laboratory simulation training and the theoretical component, utilizing current techniques, instrumentation and materials. They will gain experience in providing safe and effective comprehensive treatment of patients, following operative and non-operative, prevention-based treatment plans. All aspects of Operative Dentistry interventions will be applied on the basis of a clear understanding of the aetiology and preventive aspects of caries and caries management by risk assessment.</p>				

	<p>The students will be treating a diverse population of patients with different backgrounds, to be exposed to different patient approaches and emphasis will be given to the appropriate diagnosis and treatment planning, including alternative treatment plans and proper patient communication. The philosophy of Operative Dentistry treatment will be minimum invasion and focus will be given on preventive measures, appropriate home care and dental follow ups to treat aetiologically the Dental caries disease. Proper rubber dam isolation techniques will be applied to the majority of Operative Dentistry cases. Students will have to comply with infection control protocols and all safety regulations, including environmental protection measures during all clinical procedures.</p> <p>This course prepares the students for performing safe and effective Operative Dentistry procedures in a more advanced level.</p>		
<p>Learning Outcomes</p>	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Perform a thorough clinical examination including periodontal and endodontic evaluation as related to Operative Dentistry, prescribe appropriate radiographs and interpret all diagnostic data gathered.</li> <li>• Demonstrate proficiency in patient medical history and dental history of the patient.</li> <li>• Identify the chief complaint, other Dental needs and treatment expectations.</li> <li>• Develop treatment plans, alternative treatment plans and communicate with the patient. Provide the expected prognosis of the treatment and the consequences of no treatment.</li> <li>• Appropriately manipulate and place, in patient tooth cavities, restorative materials such as amalgam, composite resin and glass ionomer cements in order to properly restore anatomical form, function and aesthetics.</li> </ul>		
<p>Prerequisites</p>	<p>None</p>	<p>Co-requisites</p>	<p>None</p>
<p>Course Content</p>	<ul style="list-style-type: none"> <li>• Reviewing Medical history, Dental history and identifying patient chief complaint through proper communication.</li> <li>• New and recall patient clinical examination and assessment.</li> <li>• Selection of appropriate radiographs for Operative Dentistry diagnosis. Data gathering and interpretation.</li> <li>• Risk management and risk assessment in Operative Dentistry.</li> <li>• Establishing diagnosis, including differential diagnosis and developing treatment plans and alternative treatment plans.</li> </ul>		

	<ul style="list-style-type: none"> <li>• Establish and maintain patient records. Documentation and charting.</li> <li>• Self-assessment of clinical performance and evaluation of restorations.</li> <li>• Treating recall patients, patient education and motivation on appropriate home care related to Operative Dentistry.</li> </ul>								
Teaching Methodology	Face-to-face								
Bibliography	<p>Ritter AV, Boushell LW, Walter R. Sturdevant's Art and Science of Operative Dentistry. St. Louis: Elsevier, 2018.</p> <p>Sakaguchi RL, Ferracane JL, Powers JM. Craig's Restorative Dental Materials. St. Louis: Elsevier, 2018.</p> <p>Hilton TJ, Ferracane JL, Broome J. Summitt's Fundamentals of Operative Dentistry: A Contemporary Approach. Hanover Park, Illinois: Quintessence Publishing, 2013.</p>								
Assessment	<table border="1"> <tr> <td>Final Examination</td> <td>60%</td> </tr> <tr> <td>Laboratory / Clinical Work / Oral presentations</td> <td>30%</td> </tr> <tr> <td>Participation and attendance</td> <td>10%</td> </tr> <tr> <td>Total</td> <td>100%</td> </tr> </table>	Final Examination	60%	Laboratory / Clinical Work / Oral presentations	30%	Participation and attendance	10%	Total	100%
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