Course Title	Operative Dentistry V				
Course Code	DES445				
Course Type	Compulsory				
Level	Bachelor (1st Cycle)				
Year / Semester	4th year / 8th semester				
Teacher's Name	TBA				
ECTS	5	Lectures / week	1 hr / 14 weeks	Clinic / week	4 hrs / 13 weeks + 5 hrs / 6 weeks
Course Purpose and Objectives	This course is a continuance of the Operative Dentistry IV course. It includes a lecture and clinical component. The theoretical component is designed to give to the students 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. 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.				

	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 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. This course prepares the students for performing safe and effective Operative Dentistry procedures in a more advanced level.		
Learning Outcomes	Upon successful completion of this course students should be able to: • Diagnose all types of dental carious and non-carious lesions. • Manage clinically all caries lesions with operative procedures or with prevention based, remineralization treatment plans, as indicated. • Manage clinically non-carious cervical lesions. • Select the appropriate dental materials and techniques for each clinical case. • 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.		
Prerequisites	None	Co-requisites	None
Course Content	• Clinical diagnosis of carious and non-carious lesions. • Clinical management of carious and non-carious lesions. • Selection and application of appropriate restorative clinical treatment approach in regards to pulp vitality, periodontal condition and specific Operative Dentistry related issues, such as retention of the restorative material. • Proper application of contemporary bonding agent systems. • Proper application of bases and liners, as indicated. • Clinical diagnosis and restorative treatment planning of endodontically treated teeth.		

<table>
<tr><td></td><td>

- Foundations and core build-ups to restore teeth with extensive loss of tooth structure that will receive crowns or will serve as abutment teeth for fixed partial dentures.

</td></tr>
<tr><td>Teaching Methodology</td><td>Face-to-face</td></tr>
<tr><td>Bibliography</td><td>Ritter AV, Boushell LW, Walter R. Sturdevant’s Art and Science of Operative Dentistry. St. Louis: Elsevier, 2018.

Sakaguchi RL, Ferracane JL, Powers JM. Craig’s Restorative Dental Materials. St. Louis: Elsevier, 2018.

Hilton TJ, Ferracane JL, Broome J. Summitt’s Fundamentals of Operative Dentistry: A Contemporary Approach. Hanover Park, Illinois: Quintessence Publishing, 2013.</td></tr>
<tr><td>Assessment</td><td>
<table>
<tr><td>Examinations</td><td>60%</td></tr>
<tr><td>Laboratory / Clinical Work / Oral presentations</td><td>30%</td></tr>
<tr><td>Class participation and attendance</td><td>10%</td></tr>
<tr><td>Total</td><td>100%</td></tr>
</table>
</td></tr>
<tr><td>Language</td><td>English</td></tr>
</table>