

Course Title	Cariology and Oral Ecology				
Course Code	DES276				
Course Type	Compulsory				
Level	Bachelor (1 <sup>st</sup> Cycle)				
Year / Semester	2 year / 4 semester				
Teacher's Name	TBA				
ECTS	1	Lectures / week	1 hrs / 13 weeks + exam week	Laboratories / week	1 hrs / 6 weeks
Course Purpose and Objectives	<p>To provide knowledge on the oral ecosystem in health and disease, the microbial composition and various allogenic and autogenic factors that affect the equilibrium of the ecosystem and also how a disturbed ecological balance associates with disease development, especially dental caries.</p> <p>Additionally, students will become familiar with salivary tests, diet registration and cariogram to be able to assess the individual caries risk and to evaluate the effect of preventive measures.</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Recognize oral ecological conditions with their variations that exist in health and the changes that lead to disease</li> <li>• Recognize, describe and perform clinical tests to assess caries risk</li> <li>• Understand the life-style factors associated with oral dysbiosis and caries manifestation</li> <li>• Discuss the etiopathology of dental caries from an ecological point of view</li> </ul>				
Prerequisites	None		Co-requisites	None	
Course Content	<p>Lectures:</p> <ul style="list-style-type: none"> <li>• The mouth as a habitat - Main features of the abiotic part</li> <li>• Synthesis and establishment of the biotic part of the oral ecosystem</li> <li>• Metabolic activities of the oral microbiome</li> </ul>				

	<ul style="list-style-type: none"> <li>• Salivary pellicle and microbial dental plaque</li> <li>• Dental caries microbiology</li> <li>• Theories for the etiopathogenesis of dental caries - The ecological plaque hypothesis</li> <li>• Theoretical aspects on salivary tests, diet and other risk factors for dental caries</li> </ul> <p>Laboratories</p> <ul style="list-style-type: none"> <li>• Sialometry (Flow rate &amp; Buffering capacity)</li> <li>• Microbiological salivary tests for caries risk assessment</li> <li>• Diet assessment</li> <li>• Dental plaque index</li> <li>• Cariogram</li> <li>• Metabolic activity of dental plaque and salivary sediment - Sugars and sugar substitutes</li> </ul>								
Teaching Methodology	Face-to-face								
Bibliography	<p>Marsh and Martin's Oral Microbiology. P. Marsh, M. Lewis, H. Rogers, D. Williams, M. Wilson. 6th Edition; Churchill Livingstone 2016. eBook ISBN: 9780702061752, Paperback ISBN: 9780702061066</p> <p>Brathall D, Hänsel Petersson G, Stjernswärd JR. Cariogram Manual. Internet version, 2004. Department of Cariology, Malmö University, Sweden</p>								
Assessment	<table border="1"> <tr> <td>Examinations</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>	Examinations	60%	Laboratory / Clinical Work / Oral presentations	30%	Participation and attendance	10%	Total	100%
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