

Course Title	Physiology II				
Course Code	DES135				
Course Type	Compulsory				
Level	Bachelor of Dentistry				
Year / Semester	1 <sup>st</sup> year / 2 <sup>nd</sup> semester				
Teacher's Name	TBA				
ECTS	6	Lectures / week	3 hrs / 13 weeks + exam week	Laboratories / week	3 hrs / 13 weeks
Course Purpose and Objectives	<p>This course aims to provide the students with knowledge of the basic principles of human physiology and the mechanisms of body function, focusing on the oral and maxillofacial region. An overall objective is to facilitate critical analysis of physiologic information as it relates to the clinical practice of dentistry.</p> <p>The laboratory portion of this course is designed to enhance comprehension of dental physiology and to allow students to meaningfully relate this subject through application.</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Discuss orofacial physiology (sensory &amp; neuromotor control).</li> <li>• Describe the properties and function of saliva; taste &amp; olfaction and the mechanisms of thermo &amp; mechanosensation.</li> <li>• Explain the dynamics and neural control of mastication &amp; swallowing function, understand basic swallowing pathophysiology. Describe mandibular movement, dynamics of temporomandibular joint and occlusion,</li> <li>• Describe the mechanism of speech and the effects of structural and functional stomatognathic abnormalities on speech production.</li> <li>• Discuss physiology of pain, principles of healing of oral structures and calcification.</li> </ul>				
Prerequisites	None	Co-requisites	None		
Course Content	<p>In that regard, students will familiarize themselves with the following Modules:</p> <ul style="list-style-type: none"> <li>• Fundamentals in orofacial physiology II</li> </ul>				

	<ul style="list-style-type: none"> <li>• Applied comparative orofacial physiology II</li> <li>• Physiology of the nervous system and sensory organs</li> <li>• Dynamics of mastication and swallowing: II</li> <li>• Cortical control and motor neurophysiology</li> <li>• Control of mandibular movement/dynamics of TMJ</li> <li>• Mechanism of speech: Abnormalities in structure and physiology</li> <li>• Saliva: Composition, properties and function</li> <li>• Mechanisms of Taste and Olfaction: Mechano-sensation/Chemo-sensation</li> <li>• Ageing</li> <li>• Sensory physiology of pain / nociception</li> <li>• Calcium metabolism/ calcification</li> </ul>								
Teaching Methodology	Face-to-face								
Bibliography	<p>Selected reading:</p> <p>Groher ME, Crary MA. Dysphagia: Clinical Management in Adults and Children. St. Louis: Mosby Elsevier, 2010.</p> <p>ADDITIONAL READING</p> <p>Ferguson DB. Oral Bioscience. London: New Generation Publishing, 2006.</p> <p>Bradley RM. Essentials of Oral Physiology. St. Louis: Mosby, 1995.</p>								
Assessment	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Final Examination</td> <td style="width: 30%; 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								