

Course Title	Pathophysiology				
Course Code	DES205				
Course Type	Compulsory				
Level	Bachelor of Dentistry				
Year / Semester	2 <sup>nd</sup> year / 3 <sup>rd</sup> semester				
Teacher's Name	TBA				
ECTS	6	Lectures / week	3 hrs / 13 weeks + exam week	Lab hours / week	3 hrs / 13 weeks
Course Purpose and Objectives	<p>The objective of this course is to enhance the students' knowledge regarding the detailed pathophysiological mechanisms of disease. The course aims at allowing students to progress to more advanced medical courses such as Internal Medicine and the various medical specialties. The course is intended to familiarize students with the pathogenesis of diseases of different bodily systems, such as:</p> <p>Clinical Immunology  Cardiovascular  Respiratory  Electrolyte disorders  Gastrointestinal diseases - liver, biliary tract and pancreatic diseases  Endocrine disease  Hematological diseases  Kidney and Urinary tract diseases  Rheumatology  Diabetes and other Metabolic disorders  Neurological</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Describe the major pathophysiological mechanisms of immune, nervous, myoskeletal, Gastrointestinal and endocrine disorders and to recognize the relative symptoms and signs of the specific pathological condition.</li> <li>• Describe the pathophysiology mechanisms of cardiorespiratory system and based on this to recognize early signs and symptoms of chronic and acute cardiorespiratory failure.</li> <li>• Recognize biochemical (electrolytes) and cell disorders regarding blood tissue sample and kidneys dysfunction.</li> <li>• Combine common pathophysiological paths between the different</li> </ul>				

	<p>systems, in order to be able to archive the appropriate diagnosis in patients with comorbidities.</p> <ul style="list-style-type: none"> <li>• Demonstrate proficiency in history taking</li> <li>• Choose appropriate clinical examination, evaluate clinical and laboratory patient's parameters,</li> </ul>		
Prerequisites	None	Co-requisites	None
Course Content	<p>In that regard, students will familiarize themselves with the following Pathophysiology Modules:</p> <ul style="list-style-type: none"> <li>• Clinical Immunology. Case reports and clinical scenarios of immune system disorders, clinical examination and evaluation</li> <li>• Cardiovascular pathophysiology (structural, coronary artery disease, infections). Case reports and clinical scenarios on cardiovascular disease, clinical examination and evaluation [SEP]</li> <li>• ECG pathologies, arrhythmias, vascular peripheral disease, pulmonary embolism, congenital anomalies. Case reports and clinical scenarios on cardiovascular disease including ECG interpretation and cardiogenic shock, clinical examination and evaluation</li> <li>• Pathophysiology mechanisms of respiratory disorders. Case reports and clinical scenarios of respiratory system disorders, clinical examination and evaluation</li> <li>• Disorders of electrolytes: causes, laboratory results, effects on the other systems and organs. Case reports and clinical scenarios, clinical and laboratory examination and evaluation</li> <li>• Disorders of gastrointestinal system. Case reports and clinical scenarios, clinical, laboratory and imaging examination and evaluation</li> <li>• Disorders of Endocrine system, effects on correlated systems. Case reports and clinical scenarios, clinical and laboratory examination and evaluation</li> <li>• Anemia and blood cell disorders, laboratory exams interpretation. Case reports and clinical scenarios, clinical and laboratory examination and evaluation</li> <li>• Disorders on normal kidney function. Associated Responsible pathophysiological mechanisms. Case reports and clinical scenarios, clinical and laboratory examination and evaluation</li> <li>• Rheumatology and myoskeletal disorders. Case reports and clinical scenarios, clinical, laboratory and imaging examination and evaluation</li> <li>• Neurology disorders. Case reports and clinical scenarios, clinical and imaging examination and evaluation</li> </ul>		
Teaching Methodology	Face-to-face, Lectures, Practical exercises, Quizzes, Case Presentations, simulated patients, Rotations		
Bibliography	<p>Rubin E, Reisner HM. Essential of Rubin's Pathology. New York: Lippincott, Williams and Wilkins, 2008.  Damjanov I. Pathophysiology. St. Louis: Elsevier, 2008.</p>		

	Schneider AS, Szanto PA. BRS Pathology (Board Review Series). New York: Lippincott, Williams and Wilkins, 2014.									
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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Language	English									