Subject:	Pathological physiology 1		
Study	Dental Medicine	Study Period:	Winter time
Evaluation:	Graduated (credit)	Subject Type:	Compulsory
Content:	2 h. lectures and 2h. practical exercises/ week		Total 56 hours

## Department: Department of Pathological Physiology, UPJŠ FM

Week	Lectures https://portal.lf.upjs.sk/index-en.php	Seminars
1.	<b>Oral health I:</b> Physical & chemical lesions and reactive changes in the oral cavity	<b>Tutorial (T):</b> Introduction into pathophys., instructions <b>Seminar (S):</b> Nosology; Pathological manifestation of processes
2.	Etiology I: Mendelian, non – mendelian genetics; Genetics in dentistry	<ul> <li>T: Physical factors; electrical injury, hypo/hyperbaria</li> <li>S: Chemical factors - smoking, alcohol</li> </ul>
3.	<b>Etiology II :</b> Disorders of nutrition in dentistry; (incl. obesity, malnutrition, avitaminoses)	<ul> <li>T: Review of genetic disorders</li> <li>S: Mendelian &amp; non- mendelian genetics</li> </ul>
4.	<b>Etiology III:</b> Disorders of inner milieu (water, electrolytes; calcium, phosphates)	<ul> <li>T: Nutrition disorders; Metabolic sy.</li> <li>S: Avitaminoses; Trace elements (fluorine)</li> </ul>
5.	<b>Pathogenesis I.</b> Microcirculatory failure Shock, MODS, DIC (hypercoagulation)	T: Acid - base balance disorders S: Edemas; Minerals (calcium, phosphate)
6.	<b>Pathogenesis II.</b> Typical pathol. processes Pain, Fever, Ischemia, Hypoxia	S: Review of etiology; Reserved topic Credit test 1
7.	Public Holiday	<ul> <li>T: Typical path. procc., Fever – forms, causes</li> <li>S: Pain – pain of head and neck</li> </ul>
8.	<b>Pathogenesis III.</b> Acute and chronic inflammation; SIRS; Sepsis; MODS	T: Inflamm. markers; Sepsis; Wound healing S: Chronic inflammation; Abscess, granuloma
9.	Pathogenesis IV. Immunopathology	<ul> <li>T: Dis. of immunity in dentistry</li> <li>S: Immunodeficiency &amp; autoimmunity</li> </ul>
10.	<b>Pathogenesis V.</b> Tumors - biology; molecular genetics	<ul><li>T: Genetic background of tumours</li><li>S: Precancer. and canc. states in oral cavity</li></ul>
11.	<b>Pathogenesis VI.</b> Stress & maladaptation; Cellular stress	<ul> <li>T: Stress; disorders form maladaptation</li> <li>S: Oxidative stress; Glycation end products</li> </ul>

12.	Pathogenesis VII. Disorders of consciousness Terminal states	T: Coma; Brain death S: Resuscitation; Postresuscitation disease
13	<b>Oral health II.</b> Disorders of oral cavity (caries, periodont., red & white lesions etc.)	<b>S</b> : Review of pathogenesis; Reserved topic Credit test 2
14.	<b>Oral health III.</b> Typical path. processes in oral medicine; Ontogenesis in oral cavity	Evaluation of the semester results. Credits