

**Subject:** Pathological Physiology 1  
**Study programme:** Dental Medicine  
**Category of subject:** Obligatory

**Form of study:** Lectures/seminars 2/2  
**Study form:** Full-time study  
**Prerequisites:** Physiology 2

**Semester:** 5<sup>th</sup>  
**Completion of the course:** Credit  
**Credits:** 3

**Department of Pathological Physiology, Faculty of Medicine, Pavol Jozef Šafárik University, Košice**  
**Schedule of the lectures and tutorials from Pathological Physiology 1 for Dental Medicine, Winter semester 2023/2024**

W	Lecture (Monday 9 <sup>15</sup> – 10 <sup>45</sup> P2)			Lecturer	Practical lessons		Credit tests (other duties)
	Date	Topic	Date		Topic (T-tutorials, S-seminars)		
Unite 1	1.	18.9.	<b>Oral health I.</b> Physical & chemical lesions and reactive changes in the oral cavity	Beňačka	18.9.- 22.9.	<b>T:</b> Introduction into pathophys., instructions <b>S:</b> Nosology; Pathol. manif., processes	Scientific work
	2.	25.9.	<b>Etiology I.</b> Mendelian, non – mendelian genetics ; Genetics in dentistry	Lovásová	25.9.- 29.9.	<b>T:</b> Phys. factors; electr. inj., hypo/hyperbaria <b>S:</b> Chemical factors - smoking, alcohol	Semester work instructions
	3.	2.10.	<b>Etiology II.</b> Disorders of nutrition in dentistry; (incl. obesity, malnutrition, avitaminoses)	Lovásová	2.10.- 6.10.	<b>T:</b> Review of genetic disorders <b>S:</b> <i>Mendelian &amp; non- mendelian genetics</i>	QiuZ Presentation
	4.	9.10.	<b>Etiology III.</b> Disorders of inner milieu (water, electrolytes; calcium, phosphates);	Lovásová	9.10.- 14.10.	<b>T:</b> Nutrition disorders; Metabolic sy. <b>S:</b> <i>Avitaminoses; Trace elements (fluorine)</i>	QiuZ Presentation
Unite 2	5.	16.10.	<b>Pathogenesis I. Microcirculatory failure</b> Shock, MODS, DIC (hypercoagulation)	Beňačka	16.10.- 20.10.	<b>T:</b> <i>Acid - base balance disorders</i> <b>S:</b> <i>Edemas; Minerals (calcium, phosphate)</i>	QiuZ Presentation
	6.	23.10.	<b>Pathogenesis II. Typical pathol. processes</b> Pain, Fever, Ischemia, Hypoxia	Beňačka	23.10.- 27.10.	<b>S:</b> <i>Review of etiology; Reserved topic</i>	<b>Credit test 1</b>
	7.	30.10.	<b>Pathogenesis III.</b> Acute inflammation	Beňačka	30.10.- 3.11.	<b>T:</b> Typical path. procc., Fever – forms, causes <b>S:</b> <i>Pain – pain of head and neck</i>	QiuZ Presentation
	8.	6.11.	<b>Pathogenesis IV.</b> Chronic inflammation; SIRS; Sepsis; MODS	Beňačka	6.11.- 10.11.	<b>T:</b> Inflamm. markers; Sepsis; Wound healing <b>S:</b> <i>Chronic inflammation; Abscess, granuloma</i>	QiuZ Presentation
	9	13.11.	<b>Pathogenesis V.</b> Immunopathology	Beňačka	13.11.- 16.11.	<b>T:</b> Dis. of immunity in dentistry <b>S:</b> <i>Immunodeficiency &amp; autoimmunity</i>	QiuZ Presentation
	10.	20.11.	<b>Pathogenesis VI.</b> Tumors - biology; molecular genetics	Beňačka	20.11.- 24.11.	<b>T:</b> Genetic background of tumours <b>S:</b> <i>Precancer. and canc. states in oral cavity</i>	QiuZ Presentation
	11.	27.11.	<b>Pathogenesis VII.</b> Stress & maladaptation; Cellular stress	Beňačka	27.11.- 1.12.	<b>T:</b> Stress; disorders form maladaptation <b>S:</b> <i>Oxidative stress Glycation end products</i>	QiuZ Presentation
	12.	4.12.	<b>Pathogenesis VIII.</b> Disorders of consciousness Terminal states	Beňačka	4.12.- 8.12.	<b>T:</b> Coma; Brain death <b>S:</b> <i>Resuscitation; Postresuscitation disease</i>	QiuZ Presentation
Unite 3	13.	11.12.	<b>Oral health II.</b> Disorders of oral cavity (caries, periodont., red & white lesions etc.)	Beňačka	11.12.- 15.12.	<b>S:</b> <i>Review of pathogenesis; Reserved topic</i>	<b>Credit test 2</b>
	14.	18.12.	<b>Oral health III.</b> Typical path. processes in oral medicine; <i>Ontogenesis in oral cavity</i>	Lovásová	18.12.- 22.12.	Evaluation of the semester results. <b>Credits</b>	Topics of semester work

November 2 – Dean’s day off, November 1 and November 17 – National Holidays

**Seminars (S)** = special topics for discussion; **Tutorials & homeworks & exams (T)** = discussions, consultations, oral and quiz exams on the current topics.  
**Responsible for the subject:** doc. MUDr. Roman Beňačka, CSc., mim. prof.