

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

Form of study: Lectures/seminars 2/3
Study form: Full-time study
Prerequisites: Physiology 2

Semester: 5th
Completion of the course: Credit
Credits: 5

Department of Pathological Physiology, Faculty of Medicine, Pavol Jozef Šafárik University, Košice
Schedule of lectures and tutorials from Pathological Physiology 1 for General Medicine, Winter semester 2020/2021

W	Lecture (Tue 12 ¹⁵ -13 ⁴⁵ P2)			Lecturer	Practical lessons		Credit tests (other duties)
	Date	Topic	Date		Topic (T - tutorials, S – seminars)		
Unite 1	1.	22.9.	Etiology I: Monogenic and chromosomal diseases; Mendelian, non-Mendelian	Beňačka	21.9.-25.9.	T: Introduction into pathophysiol., Instructions S: <i>Nosology; Pathol. signs, processes</i>	Scientific work
	2.	29.9.	Etiology II: Hereditary metabolic disorders	Beňačka	28.9.-2.10.	T: Physical factors, Radiation dis.; Hypo/hyperbri S: <i>Chem. fact.; heavy metals, smoking, alcohol, drug</i>	Semester work instructions
	3.	6.10.	Etiology III: Disorders of nutrition; Obesity, Malnutrition qualit. & quantitative; Dietology	Lovásová	5.10.-9.10.	T: Genetics – overview; Epigenetics S: <i>Chromosomal mutations (structural, numeric)</i>	QiuZ Presentations
	4.	13.10.	Etiology IV: Disorders of inner milieu (water, electrolytes); Oedemas	Ráčz	12.10.-16.10.	T: Nutrition; Obesity, Metabolic sy. S: <i>Avitaminoses, Trace elements</i>	QiuZ Presentations
Unite 2	5.	20.10.	Pathogenesis I. Microcirculatory failure (shock), DIC (hypercoagulation)	Beňačka	19.10.-23.10.	S: Acid - base balance disorders. Case reports	Practical protocol Acid-base disorders
	6.	27.10.	Pathogenesis II. Typical pathol. manifest; Pain, Hypoxia, Ischemia,	Beňačka	26.10.-30.10.	S: <i>Review of etiology; Reserved topic</i>	Credit test 1
	7.	3.11.	Pathogenesis III. Inflammation	Beňačka	2.11.-6.11.	T: Typical pathological processes S: <i>Aging – theories</i>	QiuZ Presentations
	8.	10.11.	Pathogenesis IV. Immunopathology	Beňačka	9.11.-13.11.	S: Markers of inflamm.; Molecular basis, Fever T: <i>Wound healing – molecular pathophysiology</i>	QiuZ Presentations
	9.	17.11.	State day		16.11.-20.11.	T: Chronic inflammation Immunology – overview; S: <i>Autoimmunity & immunodeficiency</i>	QiuZ Presentations
	10.	24.11.	Pathogenesis V. Neoplasms – biology; genetics, metastases	Beňačka	23.11.-27.11.	T: Tumor biology; clin.markers; Paraneoplastic. sy. S: <i>Molecular carcinogenesis</i>	QiuZ Presentations
	11.	1.12.	Pathogenesis VI. Stress, maladaptation; Cellular stress	Beňačka	30.11.-4.12.	T: Maladaptation dis.; Molecular pathogen. of stress S: <i>Oxidative stress; Antioxidants; Glycation damage</i>	QiuZ Presentations
	12.	8.12.	Pathogenesis VII. Dis. of consciousness – qualitative & quantitative; Terminal states	Beňačka	7.12.-11.12.	T: Evaluation of coma & brain death S: <i>Thanatology; Postresuscitation disease</i>	QiuZ Presentations
Unite 3	13.	15.12.	Cellular pathophysiology I. Basics of intercellular signalling; intracell. pathways	Beňačka	14.12.-18.12.	T: Path. of ontogenesis – fetus, infancy, gravidity S: <i>Review of pathogenesis</i>	Credit test 2
	14.	22.12.	Cellular pathophysiology II. Cell death, necrosis, apoptosis; degeneration, dystrophy	Beňačka	21.12.-23.12.	S: Credits, evaluation of semester	Topics of semester works

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