Subject: **Pathological physiology 2**	Subject type:	**Compulsory**
Study year: 3	Content:	**3/3 winter time**
Study program: **General Medicine**		

Aim of the course

Pathophysiology is the essential part of pre-clinical medical education. Pathological Physiology 2 provides a systematic review of pathophysiology of organ systems. It is devoted to analysis and explanation of pathomechanisms involved in functional disturbances of the organs and systems of the organism such as: cardiovascular system, haematology, respiratory system, nervous system, urinary system, endocrinology, gastrointestinal tract and connective tissue.
The course is included in the summer semester of the 3rd year of study. The prerequisite subjects are Pathological Physiology 1 and Medical Biochemistry 1.
Pathophysiology is an integrative biomedical subject that helps to understand the mechanisms of diseases. It is an important part of undergraduate medical education and a necessary prerequisite for the study of clinical subjects.

Education: lectures/seminars
Assessment: exam (written and oral)

Syllabus

Week 1
Cardiovascular system I: Congenital and acquired valvular disorders
Cardiovascular system II: Ischaemic heart disease

Week 2
Cardiovascular system III: Dysrrhythmias – pathogenesis; genetics
Cardiovascular system IV: Heart failure – systolic, diastolic

Week 3
Cardiovascular system V: Hypertension
Hematology I: Haemorrhagic diathesis; thrombophilia

Week 4
Respiratory system I: Restrictive & obstructive diseases; Asthma
Respiratory system II: Respiratory failure

Week 5
Nephrology I: Glomerular & tubulointerst disorders
Nephrology II: Kidney failure – acute, chronic (uremia)

Week 6
Nervous system I: Motor disorders; weakness, palsy
Nervous system II: Somatosensory disorders

Week 7
Nervous system III: Vegetative nervous disorders

Nervous system IV: Neurodegenerative disorders

Week 8
Nervous system V: Higher NS disorders; Dementia
Endocrine system I: Hypothalamic- hypophyseal disorders I

Week 9
Endocrine system II: Hypophyseal disorders II; Growth hormone disorders., SIADH, Diabetes insipidus, Prolactin

Week 10
Endocrine system III: Supraren disorders
Endocrine system IV: Thyroid disorders

Week 11
Diabetes mellitus I: Diabetes mellitus - etiopathogenesis
Diabetes mellitus II: DM – manifestation, Insulin resistance

Week 12
Gastrointestinal tract I: Peptic ulcer diseases, Bowel disorders

Week 13
Gastrointestinal tract II: Liver failure; Pancreatic diseases

Week 14
Connective tissue: Osteoporosis, osteomalatia; Degenerative disorders of joints; rheumatism