

## COURSE DESCRIPTION

<b>Academic year:</b> 2022/2023	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Pharmacy	
<b>Course ID:</b> FaF.KFT/13-Bc/00	<b>Course title:</b> Pathology
<b>Educational activities:</b> <b>Type of activities:</b> lecture / laboratory practicals <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> on-site learning	
<b>Number of credits:</b> 5	
<b>Recommended semester:</b> 2.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> Personal attendance at all lectures and practical classes and sufficiently demonstrated readiness for practical exercises, justified absence (max 2x) is replaced according to the instructions of the teacher (a) replace absence from exercise or b) elaboration of a written work; to pass 3 scheduled pre-tests, each minimally 60% rate. The final exam test is completed by students in computer by written form (distant) of examination. To pass the final exam test by students in minimally 60% rate. Evaluation (mark and score): A 91-100%, B 81-90%, C 71-80%, D 66-70%, E 60-65%, FX < 60%. Scale of assessment (preliminary/final): 0/100	
<b>Learning outcomes:</b> The graduate of the course will obtain concise general and transparent knowledge about structural, morphological and functional disorders at the level of cells, tissues, organs and systems of pathologically altered organism, which will allow him to create a comprehensive picture of individual diseases. Understand the causes, pathomechanisms, symptoms of pathological disturbances and subsequent complications. The acquired knowledge about the anatomical and functional changes of the individual's body is a necessary basis for the graduate, who in the future will focus on providing medical devices, medical accessories and home medical devices to the affected individual persons.	
<b>Class syllabus:</b> The graduate of the course will obtain concise general and transparent knowledge about structural, morphological and functional disorders at the level of cells, tissues, organs and systems of pathologically altered organism, which will allow him to create a comprehensive picture of individual diseases. Understand the causes, pathomechanisms, symptoms of pathological disturbances and subsequent complications. The acquired knowledge about the anatomical and functional changes of the individual's body is a necessary basis for the graduate, who in the future will focus on providing medical devices, medical accessories and home medical devices to the affected individual persons. Course description: Pathology - introduction, basic terminology. Disease – characterization, classification of diseases. Causes and mechanisms of diseases – environmental factors, genetic abnormalities, congenital diseases. Alterations in metabolism and nutrition. Causes and	

mechanisms of cellular injury. Inflammation. Mechanisms of alteration in blood circulation. Pathophysiology of pain. Selected diseases of nervous system - alterations in blood flow, Disturbances in the sleep, memory disturbances, pathophysiology of ANS. anxiety and personality disorders, depression, bipolar disorder, schizophrenia, Epilepsy, neurodegenerative disorders (Alzheimer Disease, Parkinson Disease). Loss of conscious. Alterations in haemostasis and haemocoagulation. Anemias. Alterations in immune response. Pathophysiology of endocrine system. Pathophysiology of vessels - alterations in blood flow and pressure. Shock. Pathophysiology of heart – alterations in coronary circulation, myocardial diseases, congenital defects, complications rhythm disturbances, failure. Pathophysiology of respiratory system – disturbances in ventilation -perfusion relation, respiratory insufficiency. Pathophysiology of gastrointestinal system – basic symptoms of gastrointestinal disturbances. Ulcer disease. Liver diseases. Pathophysiology of kidney – glomerular disturbances, obstructive disorders, incontinency. Alterations in genital and reproductive function Disturbances in homeostasis. Alterations in musculoskeletal structure and functions. Infectious diseases – epidemiology, transfer, pathomechanisms, microbial microflora, resistency. Tumors – classification, biology of tumor cells, invasion, metastases, symptoms. Practical part is focused on basic developmental periods of human life and disorders. Pathological disturbances in histology, alterations in growth, homeostasis, adaptation mechanisms to the influence of various pathogens and changes in the external environment. Selected symptoms of diseases. General symptomatology, symptomatology of individual systems. Seminars about selected disorders. Diets in selected diseases of CVS, GIT, excretory system and selected symptoms and syndromes of individual systems. Alterations in integumentary system. Skin manifestations in diseases of various systems. Disorders of the Sensory System

**Recommended literature:**

Mačák, J. Mačáková, J. Dvořáčková. Patologie. 2.vydanie, Vydavateľstvo: Grada, Praha, 2012, ISBN 97880-247-3530-6  
Mohan H: Patológia. Vydavateľstvo: Balneotherma, Bratislava, 2011. ISBN: 9788097015664  
Plank, J. Hanáček J. a kol.: Patologická anatómia a patologická fyziológia. Vydavateľstvo: Osveta, Martin, 2007 ISBN: 8080632410  
Folsch, UR, Kochsiek K., Schmidt RF.: Patologická fyziologie, Vydavateľstvo: Grada, Praha 2003  
S. Sibernagl, F. Lang: Atlas patofyziologie.: Vydavateľstvo: Grada, Praha 2001.  
Lecture and exercise handouts will be available in Moodle's online system 2220,2021.

**Languages necessary to complete the course:**

Slovak

**Notes:**

the course is available only in summer semester

**Past grade distribution**

Total number of evaluated students: 331

A	ABS	B	C	D	E	FX
17,82	0,0	20,24	21,45	11,78	12,69	16,01

**Lecturers:** doc. MUDr. Tatiana Stankovičová, CSc., prof. PharmDr. Ján Klimas, PhD., MPH, PharmDr. Stanislava Kosírová, PhD., PharmDr. Tatiana Foltánová, PhD., PharmDr. Eva Kráľová, PhD., PharmDr. Zuzana Kiliánová, PhD., PharmDr. Tomáš Rajtík, PhD., PharmDr. Attila Kulcsár, PhD., doc. PharmDr. Anna Paul Hrabovská, PhD.

**Last change:** 13.12.2021

**Approved by:** doc. MUDr. Tatiana Stankovičová, CSc.