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| C:\Documents and Settings\PC735\Local Settings\Temporary Internet Files\Content.Word\Logo_Univerziteta stari.jpg | **UNIVERSITY OF BANJA LUKA****FACULTY OF MEDICINE** | logo mF novi |
| **UNDERGRADUATE STUDIES** |
| **Study Programme of** | **MEDICINE** |
| **Course Unit Name** | **Pathophysiology** |
| **Type of Course Unit** | **General Education** |
| **Course Unit Code** | **Course Unit Status** | **Semester** | **Class Workload** | **Number of ЕCTS** |
|  | COMPULSORY | V and VI | V: 2L+3P VI: 3L+3P | 13 |
| **Members of Staff** | Prof. Dr Darko Golić, full professor, Prof. Dr Milorad Vujnić, associate professor; Assist. Prof. Alma Prtina; Aleksandra Krivokuća, assistant; Uglješa Maličević, assistant |
| **Eligibility Requirements** | **Form of Requirements** |
| Medical Biochemistry and Medical Physiology | As provided by the Rules of the First-Cycle Studies  |
| **Goals of the Course Unit**  |
| The goals of classes in pathophysiology, as a bridge between pre-clinical and clinical course units, are for students to adopt current theoretical knowledge and practical skills in: 1. study and analysis of specific etiological factors and their properties, which instigate pathological processes in the organism, and their interaction with organism structure; 2. understanding the genesis of the pathological process at the level of the molecule, biochemical subcellular and cellular damage, through humoral tissue functional disorders, to function disorders of organ systems which lead to the incidence of disease; 3. study how a diseased organism adapts and responds to the environment; 4. principles of functional examination, and practical skills in functional examination system by system |
| **Learning Outcomes (knowledge acquired):**  |
| Knowledge acquired during classes in pathophysiology enables the student and medical doctor to: 1. identify the cause of the disease; 2. get to know and understand the mechanisms of the incidence of function disorders in a diseased organism which lead to clinical manifestations of the disease; 3. adopt the practical skills in function examination system by system and interpretation of pathological results. |
| **Contents of the Course Unit:** |
| **General pathophysiology**: Etiology and pathogenesis, disease and death. Physical and chemical etiological factors. Inheritance as an etiological factor. Disorders of local circulation. Shock. Inflammation and infection. Organism defense mechanisms. Disorders of the immune system. Pathophysiological aspects of malignant tumors. Disorders of the metabolism of proteins, carbohydrates and lipids. Disorders of the metabolism of vitamins, essential oligoelements and enzymopathy. Disorders of Acid–Base balance, metabolism of water and electrolytes.**Special pathophysiology**: Endocrinopathies. Pathophysiology of the cardiovascular system. Pathophysiology of blood and hematopoietic organs. Pathophysiology of respiration. Pathophysiology of the digestive system. Disorders of the hepatobiliary system. Disorder of the function of the kidneys and the urinary tract. Pathophysiology of the nervous system. Disorders of the locomotor system. |
| **Teaching Methods:** |
| The classes are given in the form of lectures, practicals, theoretical practicals, midterms, office hours, and independent student work |
| **Literature:** |
| **Core reading:** 1. Hamer D, Mc Phee S. Pathophysiology of Disease: An Introduction to Clinical Medicine. 8th Edition. Lange Medical Books/Mc Graw-Hill; 2019. **or**2. Hamer D, Mc Phee S. Pathophysiology of Disease: An Introduction to Clinical Medicine. 7th Edition. Lange Medical Books/Mc Graw-Hill; 2014.3. Dujmović F, Stošić Z, Đerić M. Book of Practical Exercises in Pathophysiology. Faculty of Medicine University of Novi Sad. |
| **Examination Form:**  |
| **Pre-Exam Duties** | **Final Exam** | **Total Points** |
| **Attendance** | **10** | **Practical and oral** | **50** | **100** |
| **Midterms** | **40** |  |  |
| **Note for the Course Unit:**  |
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| **Syllabus Designer: Prof. Dr Nela Rašeta Simović; Prof. Dr Darko Golić** |

**Craniotomy**

A Craniotomy is the most commonly performed surgery for brain tumor removal. It also may be done to remove a blood clot (hematoma), to control hemorrhage from a weak, leaking blood vessel (cerebral aneurysm), to repair arteriovenous malformations (abnormal connections of blood vessels), to drain a brain abscess, to relieve pressure inside the skull, to perform a biopsy, or to inspect the brain.

**Craniectomy**

A Craniectomy is similar to a craniotomy as both procedures involve removing a portion of the skull, the difference is that after a craniotomy the bone is replaced and after a craniectomy the bone is not immediately replaced

Краниотомија

Краниотомија је најчешће извођена операција за уклањање тумора на мозгу. Такође се може урадити за уклањање крвног угрушка (хематома), за контролу крварења из слабог крвног суда који цури (церебрална анеуризма), за поправку артериовенских малформација (ненормалне везе крвних судова), за дренирање апсцеса мозга, за смањење притиска унутар лобање, да изврши биопсију или да прегледа мозак.

Краниектомија

Краниектомија је слична краниотомији јер обе процедуре укључују уклањање дела лобање, разлика је у томе што се после краниотомије кост замењује, а после краниектомије кост се не замењује одмах.