# UNIVERSITY OF NOVI SAD FACULTY OF MEDICINE



# Study program: Doctoral Academic Studies in Biomedical Sciences

#### Name of the subject: CURRENT ISSUES IN PATHOPHYSIOLOGY

Teacher(s): Biljana A. Vučković, Gorana P. Mitić, Velibor S. Čabarkapa, Radmila R. Žeravica, Branislava P. Ilinčić

# Status of the subject: Elective

# Number of ECNE points: 20

#### Condition: -

#### Goal of the subject

Improving and deepening knowledge of pathophysiological disorders at the cellular and molecular levels; analyzing and explaining function disorders ranging from the genetic, embryological, histological and anatomical levels to the physiological and pathophysiological level.

Understanding the complexity of the pathophysiological process and disorders of regulatory, adaptive and compensatory mechanisms is necessary to enable the student to independently identify current problems in the field of pathological physiology, as well as to independently carry out research work in selected fields in pathological physiology.

#### Outcome of the subject

Acquiring knowledge from the methodology of scientific research work with the specificities present in pathological physiology. Enabling the student to use modern methods of searching literature in electronic and printed form, to perform critical analysis and interpretation of scientific and medical literature, to define scientific problem and to choose appropriate laboratory methodology for studying these problems, to independently carry out scientific research work in the current field in pathological physiology and to analyze and interpret the research results.

# Content of the subject

Theoretical lectures

- 1. Actualities in pathophysiology disorders of structure and function of macromolecules
- 2. Actualities in pathophysiology disorders up to cellular level
- 3. Actualities in pathophysiology disorders of energy metabolism
- 4. Actualities in pathophysiology general disorders in inflammation
- 5. Actualities in pathophysiology disorders of organ systems 1.
- 6. Actualities in pathophysiology disorders of organ systems 2.
- 7. Actualities in pathophysiology disorders of organ systems 3.

#### Practical lectures

Consultation with the mentor, consideration of functional testing methods, interpretation of selected cases of functional testing, working with databases.

#### **Recommended literature**

# Compulsory

- 1. Norris TL, Lalchandani R. Porth's Pathophysiology: Concepts of Altered Health States. Tenth Edition. Philadelphia: Wolters Kluwer; 2019.
- 2. McCance KL, Huether SE. Pathophysiology: The Biologic Basis for Disease in Adults and Children, 8th Edition. Edinburg: Elsevier Science; 2018.
- 3. Laposata M. Laposata's Laboratory Medicine. Diagnosis of Disease in the Clinical Laboratory. Third Edition. New York: McGraw-Hill Education; 2019.

## Additional

- 1. Huether SE, McCance KL. Understanding Pathophysiology. 6th Edition. St Louis, Missouri: Elsevier; 2016.
- 2. Hammer GH, Mc Phee JS. Pathophysiology of disease. An Introduction to Clinical Medicine, 7th ed. Lange Medical Books/McGraw-Hill;2014.

Number of active classes	<b>Theory</b> : 60	Practice: 45
Methods of delivering lectures: Interactive lectures and practices; Consultations; Essays		
Evaluation of knowledge (maximum number of points 100)		
lectures: 10		
practices: 20		
colloquium: 5		
essay: 10		

oral exam: 55