UNIVERSITY OF BELGRADE
FACULTY OF MEDICINE
PhD STUDIES

NAME OF THE MODULE: PHYSIOLOGICAL SCIENCES

CONTENTS OF THE STUDY PROGRAM

The aim of the program is to provide quality education for researchers in the field of experimental, translational and clinical physiology and pathological physiology, who should become familiar with homeostatic mechanisms and disorders at the molecular, subcellular, cellular, tissue and organ level; to acquire an integrative understanding of the functioning of homeostatic systems in health and disease, and acquire a basis for involvement in basic and clinical biomedical research. Students are expected to be able to design and perform different types of experimental, translational and clinical research using different research techniques/methods, to analyze and interpret research results, written and oral scientific communication, critical analysis and interpretation of medical literature.

ENROLLMENT REQUIREMENTS

General: persons with completed integrated academic studies in medical sciences lasting 6 years (360 ECTS); or persons with completed academic studies in biological or medical orientation who have achieved at least 300 ECTS at previous levels of study.
Special: average grade from all previous levels of study to be at least 8.00, knowledge of the English language to the level of ability to communicate and follow scientific literature, appropriate computer skills, desirable recommendations related to engaging in scientific research work.

MEMBERS OF THE ADVISORY BOARD

Prof. Dr. Dragan Djurić (Chair), Prof. Dr. Olivera Stanojlović, Prof. Dr. Zvezdana Kojić, Prof. Dr. Tatjana Radosavljević, Prof. Dr. Jelena Nešović Ostojić, Prof. Dr. Nataša Petronijević, Prof. Dr. Sonja Vučković.
Secretary: Prof. Dr. Dragan Hrnčić.

COMPULSORY SUBJECTS

Methodology of the scientific research, Research ethics, Informatics, Statistics for researchers in the field of biomedical sciences (basic course), Homeostatic systems, Homeostasis disorders, Pharmacological modulation of homeostasis disorders. In addition, candidates whose research and doctoral dissertation involve working with experimental animals are required to attend and pass the course Introduction to science of laboratory animals.

LIST OF ELECTIVE SUBJECTS

Translational neurophysiology, Cellular aspects of the pathophysiology of the nervous system and epithelial kidney tissue, Behavioral physiology and chronobiology, Cardiovascular biology, Translational gastrointestinal physiology, Reproductive biology, Cellular and molecular mechanisms in the pathogenesis of liver diseases, Molecular biology methods in

experimental and clinical medicine, Clinical physiology in perioperative medicine, anesthesiology and intensive care.