UNIVERSITY OF BELGRADE FACULTY OF MEDICINE PhD STUDIES

NAME OF THE MODULE: Applied research in medicine, sport and motor skills

CONTENT OF THE PROGRAM:

The study program provides theoretical and practical knowledge and skills necessary to independently research and analyze the role of physical activity and exercise in functionally impaired, diseased, and athletic populations. By expanding their understanding of motor function across diverse populations, Ph.D. students can address fundamental questions in human movement science, identify potential targets for therapeutic interventions, and contribute to interdisciplinary research efforts to improve motor function, human health, performance, and quality of life. Based on evidence from research and good practice, students acquire the skills to develop individually tailored exercise programs and implement them.

ADMISSION REQUIREMENTS:

The rights to enroll in Module "Applied Research in medicine, sport, and motor skills" have students who have completed one of the following:

- 1. Integrated Academic Studies in Medicine that last six years (360 ECTS),
- 2. Faculty of Philosophy- section of Psychology and have achieved at least 300 ECTS
- 3. Faculty of Sport and Physical Education and have achieved at least 300 ECTS
- 4. Faculty of Special Education and Rehabilitation and have achieved at least 300 ECTS

MEMBERS OF THE ADVISORY BOARD

- 1. Prof. Sanja Mazic, MD, PhD
- 2. Prof. Ljubica Konstantinovic, MD, PhD
- 3. Prof. Dejan Nesic, MD, PhD
- 4. Prof. Dragan Micic, MD, PhD, Academician
- 5. Prof. Marko Bumbasirevic, MD, PhD, Academician

OBLIGATORY COURSES: Methodology of the scientific research, Research ethics, Informatics, Statistics for researchers in the field of biomedical sciences (basic course), Physiological responses to physical activity, Functional and motor assessments, Illnesses and clinical syndromes in the field of sports and exercise medicine.

ELECTIVE COURSES:

Biomechanics, Motor control and motor learning, Adaptive motor control and new technologies, Functional capacity and physical activity determinants, Sport-specific exercise adaptation, Endocrine response to exercise, Immune system and exercise, Aging and physical activity, Reparative and regenerative medicine, Genetics and physical activity, Physical activity and mental health, Sports nutrition, supplementation, and doping, Extreme sports and health, Sports cardiology