	UNIVERSITY OF BANJA LUKA **FACULTY OF MEDICINE**	
	UNDERGRADUATE STUDIES	
Study Programme of	**MEDICINE**	

Course Unit Name	**Physiology of Physical Activity**			
Type of Course Unit	**General Education**			
Course Unit Code	**Course Unit Status**	**Semester**	**Class Workload**	**Number of ECTS**
ISM22PPA	ELECTIVE	IV	1L+1P	2
Members of Staff	Prof. Dr Amela Matavulj, Prof. Dr Nenad Ponorac, Assist. Prof. Dr Tanja Šobot, Zorislava Zagorac, MSc			

Eligibility Requirements	**Form of Requirements**
Course units from the previous year of study must be passed.	As provided by the Rules of the First-Cycle Studies

Goals of the Course Unit

To enable the students to get to know the adaptation reactions of the organism (acute and chronic) as processes of adapting to gradually increasing demands of a physical activity.

Learning Outcomes (knowledge acquired):

Having passed the exam, the students will be able to understand acute changes in the organism during physical exertion and chronic adaptation changes which are consequent to different types of training protocols; they will be able to compare the differences in the functioning of individual organ systems during physical exertion in relation to resting state; they will be able to independently assess basic functional parameters of physical ability and to understand the fundamentals of proper nutrition in sports. The students will be able to apply recommendations on the significance of physical activity to health, as well as recommendations on supplements and the use of doping agents in sports.

Contents of the Course Unit:

Acute physiological response of the organism to physical activity. Chronic physiological response of the organism to physical activity. Ergometric, determination of energetic capacity, metabolic adaptation to training. Adaptation to aerobic and anaerobic training. Physical activity, health and disease prevention. Hormonal regulation in physical activity. Impact of external factors on physical activity. Thermoregulation and physical exertion. Physical activity in hypobaric/hyperbaric conditions, in outer space. Nutrition. Function of the gastrointestinal system during physical activity. Balance of water and electrolytes during physical exertion, dehydration and physical ability during exertion. Doping and supplementation in sports.

Teaching Methods:

The classes are given in the form of lectures, practicals, seminars, midterms, office hours, and independent student work

Literature:

Физиологија спорта и вјежбања. Selected chapters.
Larry W. Kenney, Jack H. Wilmore, David L. Costill. Human Kinetics. 20219

Examination Form:

Pre-Exam Duties		**Final Exam**		**Total Points**
Attendance	**5**			**100**
Midterm(s)	**20**	**Oral / Written**	**50**	
Seminar paper	**25**			

Note for the Course Unit:

Syllabus Designer: Prof. Dr Nenad Ponorac, Prof. Dr Amela Matavulj, Assist. Prof. Dr Tanja Šobot