Study program: Physical Education and Sport

Type and level of studies: Basic academic studies

Course title: RESEARCH IN PHYSIOLOGY OF PHYSICAL ACTIVITY

Lecturer or lecturers (for lectures)**:** Ilić Ž. Vladimir
Lecturer or lecturers (for practice): Djurić Branka

Course status: Elective

ECTS: **5**

Condition: Passed the exam in the field of physiology of physical activity at basic academic studies

Course objectives:
The objective of the course is to introduce students to the physiological processes that take place in the body at various intensities and types of sports activities, with accompanying biochemical changes. Influence of central nervous system control on the functional response of the locomotor system. Learning motor activities.

Course outcome:
The outcome of the course is that a student who has successfully mastered the program in this course should know the functioning of certain systems that are dominant during physical activity, and to understand the changes in the biochemical composition of body fluids and tissues occurring during physical activity, as well as the role in coordination between central nervous and locomotor system.

Contents description:
Theory teaching.
Reactions of individual organic systems and changes in biochemical composition during various physical activities: 1. body fluids; 2. kidneys; 3. blood; 4. cardiovascular system; 5. breathing system; 6. Muscular the system; 7. nervous system; 8. energy processes; 9. physical working ability.
Practical teaching
1. Monitoring changes in cardio-respiratory parameters during work and
recovery; 2. Reflexes in man; 3. Dynamometry; 4. Presentation of laboratory analysis.

References:
1.Nikolić, Z. (2003): Fiziologija fizičke aktivnosti (Physiology of Physical Activity). FVFS, Belgrade
2.Ilic, N. (2008): Praktikum iz fiziologije (Practicum in Physiology). SZGR `` Joksimović``, Belgrade
3.Gitton, AS. (2003): Medicinska fiziologija (Medical physiology). Contemporary Administration, Belgrade
4.Wilmore, JH., Costill, DH., and Kenney WL. Physiology of sport and exercise. 4th ed., Human Kinetics, Champagn, USA

No. of active classes				Other classes:
Lectures: 3	Exercises/ Practical classes: 1	Other forms of teaching:	Study research work:	**8**

Teaching method
Presentation of seminar work or presentation of a student on a given topic: discussion and commentary.
Exercises: Biochemical changes during work; Motor function

Knowledge assessment (maximum score 100)

Exam prerequisites	**points**	**Final examination**	**points**
Class Activities	10	Written examination	
Practicum	10	Oral examination	**40**
Preliminary exam / Colloquium	20		
Seminar	20		