Course title: Motor control

**Lecturer or lecturers (**for lectures)**:** Nedeljkovic C. Aleksandar, Suzovic Dj. Dejan, Jaric M. Slobodan Course status: Elective

ECTS: 10

Condition: courses - Measurement and Evaluation in Physical Education and Sport, Acquisition and Analysis of Biomechanical Signals

**Course objectives:** 

- To enable understanding of the nature and complexity of the system of motor control in human from the different perspectives through the introspection in contemporary theory and practice of motor control.
- To introduce students with the investigations of motor control from the different perspectives (behavioristic, cognitive...).
- To introduce students with the current research problems and their results.
- The introspection of the experimental methods applied in motor control investigations.

**Course outcome:** As a result of successful accomplishment of all obligations that are proposed by the curriculum, it is expected that the students will be able to:

- recognize the current research problems in the field of motor control.
- recognize the basic set-ups, theories and models in motor controls.
- application of the methods and procedures that are use in the research of motor control.

## **Contents description:**

I part: Introduction in motor behavior - Historical development in the field of investigations; Methodology of the physical performance investigations; Information analysis; Attention and performances.

II part: Motor control - Senses and their contribution in motor control; Role of CNS in motor control; Principles of speed and accuracy; Coordination; Individual differences and performances.

III part: Neurophysiological basis in motor control

IV part: Motor learning - Concepts of motor learning and research methods; Factors that impact the exercises; Significance of feedback; Process of learning; Storage and transfer.

## **References:**

1. Richard A. Schmidt, Tim Lee. Motor Control and Learning-4th Edition. Champaign, IL: Human Kinetics; 2005.

2. Mark L Latash.	Neurophysiological t	basis of human	movements.	Champaign, I	L: Human
Kinetics; 1998					

No. of active cl	Other classes:			
Lectures:	Exercises/	Other forms of teaching:	Study research	
4	Practical classes:		work:	
			4	

## **Teaching method**

Theoretical lectures; practical lectures, seminars, assignments, work within the small groups

Knowledge assessment (maximum score 100)						
Exam prerequisites	points	Final examination	points			
Class Activities	30	Written examination				
Practical instruction		Practical examination				
Preliminary exam / Colloquium	30	Oral examination	40			
Seminar papers						