Name of the course: RESEARCH IN MOTOR CONTROL

Teacher(s): Ilić Duško, Nedeljković Č. Aleksandar, Saša R. Filipović

Course status: Elective
Number of ECTS points: 10

Requirement: None

# Course objective:

- (1) To enable understanding of the nature and complexity of the motor control system in humans from different perspectives, through insight into modern theory and practice of motor control.
- (2) To acquaint students with the approach in motor control research from different perspectives (behaviorist, cognitive ...).
- (3) To acquaint students with current research problems and their results.
- (4) Gaining insight into experimental methods applied in motor control research

#### Outcome of the course:

As a result of successful fulfillment of all requirements proposed by the course program, it is expected that students will be able to:

- (1) a comprehensive view of the problems dealt with by motor control,
- (2) recognition of basic settings, theories and models in motor control,
- (3) the application of methods and procedures used in motor control research.

#### **Content of the course:**

Part I: Introduction to motor behaviour

Historical development of research areas; Motor skills research methodology; Information processing; Attention and ability;

Part II: Motor control

Senses and their participation in motor control; The role of the CNS in motor control; Principles of speed and accuracy; Coordination; Individual differences and abilities;

Part III: Motor learning

Motor learning concepts and research methods; Factors affecting exercise; Significance of feedback; Learning process; Memorization and transfer

### **Recommended literature**

Richard Schmidt, Tim Lee, Carolee Winstein, Gabriele Wulf, Howard Zelaznik. Motor Control and Learning 6th Edition. Champaign, IL: Human Kinetics; 2019.

Number active classes	Theory: 4	Practice:

### **Course delivery methods**

Theoretical lectures, Study research work

# Knowledge assessment (maximum number of points 100)

Lecture activity - 30

Colloquia - 40

Written exam - 30

Testing ways may vary: (written exams, oral exams, project presentations, seminars, etc. .....)

\*maximum length 1 A4 page