

Tárgy neve angolul: Introduction to motor control and learning

Tárgy neve magyarul: Bevezetés a mozgásszabályozásba és mozgástanulásba

Tárgyfelelős neve: Andrea Berencsi

Tárgyfelelős tudományos fokozata: PhD

Tárgyfelelős MAB szerinti akkreditációs státusza: AT

Course description

Name of the course: Introduction to motor control and learning

Instructors: Andrea Berencsi PhD and Tibor Vámos PhD

Aims:

The aim of the seminar is to make the participants acquainted with the basic principles of motor control and learning. The various aspects of motor performance are discussed in the context of typical and atypical development. Students participate in a field study in a motor learning lab setting.

Learning outcomes and competences:

Knowledge:

- Understanding basic concepts of motor control
- Foundations of motor skill learning including influencing factors such as age, feedback, and schedule.
- Basic knowledge about cognitive aspects of motor performance and its disorders
- Both theoretical and practical knowledge about motor control and learning related to special needs education.

Skills:

- To improve planning and evaluation skills of motor activities.
- To be able to approach human motor performance through various aspects and influencing factors.

Attitude:

- Open to integrating motor control and learning knowledge with his/her own area of expertise
- Active participation in the practical tasks of the seminar

Autonomy and responsibility:

- Committed to learning and carry out learning-related tasks independently.
- Takes responsibility for their studies, progress and achievements

The content of the course:

Main content and topics:

- 1. Models of motor control
- 2. Neuroscience and cognitive aspects of motor performance
- 3. Postural control and locomotion
- 4. Fine motor control and hand movements
- 5. Motor learning: processes and theories that underpin motor learning
- 6. Motor learning in typical and atypical development
- 7. Motor learning-field study

System of evaluation:

Active participation in the seminars is expected (maximum 1 seminar to be missed, field study is compulsory).

Exam with five grades. Form of assessment: written essay on selected topics.

To complete the course, the assignment must be passed with a minimum of 50%. The sub-tasks are worth points, the scores are summed, and the total score determines the grade: 0-49%=1, 50-59%=2, 60-69%=3, 70%-84%=4, 85-100%=5.

Relevant literature:

1. Richard Schmidt and Tim Lee (2019) *Motor Learning and Performance: From Principles to Application* (6th Ed.) Human Kinetics.

Further required reading is part of every course syllabus.