1. Course title: **Kinesiology** 

2. Type of the course: Lectures and regular classes

3. Form of evaluation: **Examination** 

4. Recommended amount of hours: 20

Classes: 16

Lectures: 4

5. Proposed semester: winter

6. Course description:

- 1. Aims of teaching: Knowing the rules of the human musculoskeletal system. Getting to know the mechanisms controlling movements under physiological conditions and in pathological conditions. Skills in functional analysis of simple and complex movements normally and with certain disorders of the locomotor system.
- **2. Areas where knowledge is required prior to the course:** Prior to teaching in the field of kinesiology, students should have basic knowledge of anatomy, physiology and biomechanics of the necessary capabilities and knowledge of physics, especially mechanics.
- **3. Physiotherapy skills required prior to class:** Ability estimation (measurement) range of motion in various joints.

## 7. Learning outcomes:

- 1. The student knows the causes and effects of forces acting on the human movement and their relationship with pathologies within the skeletal and muscular systems.
- 2. The student has a basic knowledge of the possibility of registration, description and analysis of locomotion (gait, run).
- 3. The student is able to do measurements assessing strength and endurance parameters involved in the manipulation movements.

## 8. Qualifications:

The student has the knowledge and skills in the field of kinesiology, which allows him to evaluate the forces acting on the human movement. He or she is prepared to record the kinematic and dynamic parameters of locomotion and manipulation, and then self-interpretation.

9. The unit implements the subject:

## Department of Biomechanics, Institute of Biomedical Sciences

10. Instructors: dr hab. Wanda Forczek-Karkosz

11. Recommended credit points: 4

12. Possibility of conducting classes remotely: 30% (6 h)