

1. **Subject name:** Functional diagnostics
2. **Type of classes:** practical classes
3. **Form of assessment:** credited with a grade
4. **Semester:** summer
5. **Number of hours:** 20
6. **Syllabus**
 - Lesson 1 (3 hours)
Assessment of gait and balance, especially in elderly.
 - Lesson 2 (3 hours)
Objective and functional methods of assessment of body balance and dynamic stability.
 - Lesson 3 (2 hours)
Role of physical activity in the prevention of falls in elderly.
 - Lesson 4 (4 hours)
Functional assessment of movement patterns using the Functional Movement Screen test.
 - Lesson 5 (3 hours)
Objective and functional assessment of foot posture. The plantar short foot muscles exercises.
 - Lesson 6 (3 hours)
Evaluation of muscle bioelectric activity using surface electromyography.
 - Lesson 7 (2 hours)
Exam.
7. **Knowledge and understanding**

Knowledge: Systematic understanding of gait and balance analysis. Capacity to describe and evaluate causes of gait disorders in elderly, identify the factors of falls and capacity to identify prevention of emergency. Application of knowledge and understanding; problem solving abilities.

Skills: Capacity to integrate knowledge and to analyse and evaluate the different health aspects of health problems in elderly and functional capacity.

Social competence: Capacity to work theoretically and practically in gait and balance clinical assessment.
8. **Qualifications:** first and second degree studies
9. **Organisational unit of a course:** Section of Rehabilitation in Rheumatology and Geriatrics, Institute of Clinical Rehabilitation
10. **Person responsible for the subject:** Agnieszka Skiba, PhD, Iwona Sulowska, PhD
11. **Conditions of the course:** Sports outfit and shoes
12. **Amount of ECTS points:** 4