

Course title: REHABILITATION

ECTS credit allocation (and other scores): 2

Semester: spring

Level of study: ISCED-7 - second-cycle programmes (EQF-7)

Branch of science: Medical and health sciences

Language: English

Number of hours per semester: 35

Course coordinator/ Department and e-mail: prof. Ireneusz M. Kowalski, MD, PhD

Type of classes: classes and lectures

Substantive content

CLASSES:

1. Orthopedic examination. Planning rehabilitation after endoprosthesis, in degenerative disease.
2. Neurological examination. Planning rehabilitation after spinal cord injury, brain trauma, cerebral palsy.
3. Practical Classes in prevention of back pain.
4. Scoliosis, Scheuermann's disease, postural abnormalities, interview, examination, X-ray.
5. Back pain - interview, examination, rehabilitation.
6. Neurological rehabilitation I: rehabilitation after spinal injuries, neuroplasticity.
7. Fundamentals of kinesitherapy and physical therapy in rehabilitation
8. Neurological rehabilitation II: after brain trauma with and without coma, stroke, ICF.
9. Back pain syndromes - C and L segment discopathy.
10. Rehabilitation of developmental age - developmental delay, cerebral palsy, scoliosis.

Joint functional examination of the patient and planning of further proceedings.

LECTURES:

1. Assumptions of 'Polish School of Rehabilitation'. General consequences of immobility after CNS, polytrauma and stroke. Methods of treatment in rehabilitation. Physiotherapy. Tools and specialized devices in rehabilitation.
2. Cerebral Palsy. Brain plasticity. Methods of spasticity rehabilitation and treatment. Medical equipment in rehabilitation. Orthopedic equipment.
3. Posture abnormalities in pediatric population. Body statics. Diagnostic measurement tools, prophylaxis and rehabilitation of posture abnormalities. Scoliosis – treatment and therapy evaluation.
4. Congenital spine deformations – diagnostics, pre-operative and post-operative rehabilitation.
5. Principles and components of orthopedic equipment - prosthetics, orthotics, orthotic aids for locomotion, upright standing and nursing. Medical equipment in Rehabilitation.

Form and manner of obtaining credit in the course Rehabilitation:

1. Course ends with an oral examination.
2. A student is allowed to take the examination in Rehabilitation only after receiving positive credits from lectures, practical classes and seminars.
3. For the final evaluation of Rehabilitation learning outcomes a standardised oral exam (OSCE – Objective Structured Clinical Examination) has been introduced. The exam is held in groups of 4-5 students, in front of the commission composed of professor, assistant and/or lecturer.
4. The exam questions are divided into two groups - theoretical and practical:
 - theoretical questions cover material from lectures and seminars,



- practical questions cover material from seminars and practical classes,
- during the exam student draws two questions: one theoretical and one practical.

5. The exam commission evaluates student's answers according to the following criteria:

- a) the scope of theoretical knowledge,
- b) general understanding of the issue,
- c) skills of analyzing the problem,
- d) skills of problem resolving,
- e) concision of the answer,
- f) skills of giving practical recommendations.

6. The final examination grading system is as follows: - 5 (very good) – obtaining 6 points according to the criteria - 4.5 (more than good) – obtaining 5 points according to the criteria - 4 (good) - obtaining 4 points according to the criteria - 3.5 (fairly good) - obtaining 3 points according to the criteria – 3 (satisfactory) - obtaining 2 points points according to the criteria - 2 (fail) - obtaining 1 or no points according to the criteria II.

Lectures end with credit (no grade) on the base of presence.

Learning purpose: Student should acquire basics of rehabilitation knowledge. Student should become familiar with definition, assumptions and methodology of the Polish Rehabilitation School. Student should get acquainted with topics covering physiotherapy, assistive technology in rehabilitation; should know and understand the principles of directing a patient to rehabilitation. Student should be able to assess and perform a functional examination of a patient in Rehabilitation Department.

On completion of the study programme the graduate will gain:

Knowledge:

Knows and understands the concept of disability and invalidity.

Knows and understands the role of medical rehabilitation, as well as common kinesiotherapy methods and physical forces used in medical rehabilitation.

Knows and understands distinguish between basic neurological syndromes.

Knows and understands causes, symptoms, principles of diagnosis and therapeutic management in common diseases of the nervous system, including: craniocerebral trauma, especially concussion.

Knows and understands the causes, symptoms, principles of diagnosis and therapeutic management of spinal and spinal cord diseases.

Skills:

Can conduct a medical interview with an adult patient.

Can propose individualisation of existing therapeutic guidelines and other methods of treatment in the face of ineffectiveness or contraindications to standard therapy.

Can perform selected complex procedures and medical acts in a patient before 18 years of age; including planning a rehabilitation programme for most common diseases of pediatric patients.

Can assist in the performance/performances selected complex procedures and medical activities including: implementation of procedures, treatment and rehabilitation in outpatient and home-based chronic patients; can assess the ability of a disabled patient to function.

Can conduct a medical interview with a child and his/her family.

Can conduct a full, targeted physical examination of an adult patient.

Can plan diagnostic, therapeutic and prophylactic procedures.

Can qualify patients for home and hospital treatment.

Can make a functional assessment of a disabled patient.

Can offer a rehabilitation programme in most common diseases.

Can plan a specialist consultation.

Can keep patient's medical records.

Social Competencies:



The student is guided by the well-being of the patient.

Can establish and maintain a deep and respectful contact with the patient and demonstrate understanding of differences in worldview and culture.

Obeys the medical confidentiality rule and respects patient rights.

Notifies and recognises its own limitations and makes a self-assessment of deficits and needs.

Basic literature:

- 1) Kowalski I.M., Topór M. 2008. Rehabilitation programmes for children and adolescents with bad posture, vertebral column curvatures and pelvic deformities. Eu cooperation programme. Kaliningrad,
- 2) Cooper G. 2006. Essential Physical Medicine and Rehabilitation, Humana Press.
- 3) Sackheim K.A. 2013. Rehab Clinical Pocket Guide. Rehabilitation Medicine, Springer New York.

Supplementary literature:

- 1) Journal: Postępy Rehabilitacji, 2007-2019
- 2) Journal: Ortopedia, Traumatologia, Rehabilitacja, 2007-2019
- 3) Journal: Fizjoterapia Polska, 2007-2019
- 4) Journal: Fizjoterapia, 2007-2019
- 5) Journal: Rehabilitacja Medyczna, 2007-2019
- 6) Journal: Rehabilitacja Praktyczna, 2007-2019
- 7) Journal: Polish Annals of Medicine, 2007-2019
- 8) Journal: Advances in Rehabilitation, 2007-2019

The allocated number of ECTS points consists of:

Contact hours with an academic teacher: 40

Student's independent work: 10