



48SJ-REHA

ECTS: 2

YEAR: 2023L

**REHABILITATION
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**COURSE CONTENT
CLASSES**

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. SEMINRS 1. Neurological rehabilitation I: rehabilitation after spinal injuries, neuroplasticity. 2. Orthopedic rehabilitation: in osteoarthritis, after arthroplasty. 3. Neurological rehabilitation II: after brain trauma with and without coma, stroke, ICF. 4. Back pain syndromes - C and L segment discopathy. 5. Rehabilitation of developmental age - developmental delay, cerebral palsy, scoliosis

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. Limb's amputation, stump's rehabilitation, principles and components of orthopedic equipment - prosthetics, orthotics, orthotic aids for locomotion, upright standing and nursing. Medical equipment in rehabilitation. Content description and essentials of following terms: rehabilitation, physiotherapy, physical therapy vs. kinesiotherapy, occupational therapy. Definition and physiological basis of rehabilitation. Comprehensive rehabilitation. Factors facilitating and impeding rehabilitation process. Prophylaxis issues in rehabilitation. Orthopedic equipment - prosthetics, orthotics, orthotic aids for locomotion, upright standing and nursing. Medical equipment in rehabilitation. Special approach to patients with impairments of musculoskeletal system. Physiotherapy and its profile in: neurology, cardiology, pulmonology, pediatrics, geriatrics, psychiatry. Physiotherapy for patients with disability and impairments of CNS. Rehabilitation protocols for hypotonia and hypertonia. Rehabilitation of patients with CNS vascular disease (stroke). Rehabilitation of patients with CNS progressive disease. Combination therapy for pain. Definition, classification and characteristics of scoliosis and postures abnormalities. Physiology of movement and body posture. Regulation of muscle tone. Consequences of spinal cord injury. Activity of CNS. Neuromatrix-neuronal nets. Brain plasticity.

EDUCATIONAL OBJECTIVE:

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.

DESCRIPTION OF LEARNING OUTCOMES FOR THE COURSE IN RELATION TO FIELD AND MAJOR LEARNING OUTCOMES

Codes of learning outcomes in a major field of study:	M/NM+++ , M/NMA_P7S_UW++ ,
Codes of learning outcomes in a major area of study:	E.U1.+ , E.U16.+ , E.U18.+ , E.U2.+ , E.U20.+ , E.U22.+ , E.U23.+ , E.U3.+ , E.U32.+ , E.U38.+ , E.W13.+ , E.W14.+ , E.W30.+ , E.W31.+ , F.W13.+ , K.1.+ , K.2.+ , K.3.+ , K.5+ , KA7_UU7+ , KA7_UU8+ ,

LEARNING OUTCOMES:

Knowledge

- W1 - (E. W30) Knows and understands the concept of disability and invalidity.
- W2 - (E.W31) Knows and understands the role of medical rehabilitation, as well as common kinesiotherapy methods and physical forces used in medical rehabilitation.
- W3 - (E. W13) Knows and understands distinguish between basic neurological syndromes.
- W4 - (E. W14) Knows and understands causes, symptoms, principles of diagnosis and therapeutic management in common diseases of the nervous system, including: craniocerebral trauma, especially concussion.
- W5 - (F.W13) Knows and understands the causes, symptoms, principles of diagnosis and therapeutic management of spinal and spinal cord diseases.

Skills

- U1 - (E. U1) Can conduct a medical interview with an adult patient
- U10 - (E. U18) Can propose individualisation of existing therapeutic guidelines and other methods of treatment in the face of ineffectiveness or contraindications to standard therapy
- U12 - (H.U.21) 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
- U13 - (H. U22) 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.
- U2 - (E. U2) Can conduct a medical interview with a child and his/her family.
- U3 - (E. U3) Can conduct a full, targeted physical examination of an adult patient.

Course/module:	
Rehabilitation	
Fields of education:	
Course status:	mandatory
Course group:	B - przedmioty kierunkowe
ECTS code:	
Field of study:	Medicine
Specialty area:	Medicine
Educational profile:	General academic
Form of study:	full-time
Level of study:	uniform master's studies
Year/semester:	4 / 8
Type of course:	
Classes, Seminar, Lecture	
Number of hours per semester/week:	Classes: 15, Seminar: 10, Lecture: 10
Teaching forms and methods	
Classes(K1, K2, K3, K4, U1, U10, U12, U13, U2, U3, U4, U5, U6, U7, U8, U9, W1, W2, W3, W4, W5) : Joint functional examination of the patient and planning of further proceedings. - a student who complies with the conditions for attendance, - the final mark consists of the assessment of the preparation for the classes, the activity on the exercises and the practical test - from the orthopedic examination, neurological assessment, functional assessment (false clinical tests) , Seminar(K1, K2, K3, K4, U1, U10, U12, U13, U2, U3, U4, U5, U6, U7, U8, U9, W1, W2, W3, W4, W5) : Multimedia presentation. Discussion of the main thematic issues., Lecture(K1, K2, K3, K4, U1, U10, U12, U13, U2, U3, U4, U5, U6, U7, U8, U9, W1, W2, W3, W4, W5) : Problem lecture	
Form and terms of the verification results:	
CLASSES: Part in the discussion - the final mark consists of the assessment of the preparation for classes, the activity on the exercises(K1, K2, K3, K4, U1, U10, U12, U13, U2, U3, U4, U5, U6, U7, U8, U9, W1, W2, W3, W4, W5) ; CLASSES: Written test - In order to verify the preparation of students for classes, the instructor may conduct a written test of the so-called pre-test.(K1, K2, K3, K4, U1, U10, U12, U13, U2, U3, U4, U5, U6, U7, U8, U9, W1, W2, W3, W4, W5) ; CLASSES: Colloquium practical - - a student who complies with the conditions for attendance, practical test of orthopedic, neurological examination, functional assessment (specific clinical tests)(K1, K2, K3, K4, U1, U10, U12, U13, U2, U3, U4, U5, U6, U7, U8, U9, W1, W2, W3, W4, W5) ; SEMINAR: Part in the discussion - Student's activity assessed during classes.(K1, K2, K3, K4, U1, U10, U12, U13, U2, U3, U4, U5, U6, U7, U8, U9, W1, W2, W3, W4, W5) ; SEMINAR: Written test - Written description of the case according to the scheme: 1st interview 2. physical examination - orthopedic / neurological 3. functional assessment on an appropriate scale 4. analysis of additional tests (X-ray, MRI, CT) and clinical problems 5. planning the rehabilitation process: purpose, methods 6 prognosis The completeness of documentation, diligence, aesthetics, linguistic correctness and reasoning will also be assessed. (K1, K2, K3, K4, U1, U10, U12, U13, U2, U3, U4, U5, U6, U7, U8, U9, W1,	

- U4 - (E. U16) Can plan diagnostic, therapeutic and prophylactic procedures.
 U5 - (E. U20) Can qualify patients for home and hospital treatment.
 U6 - (E. U22) Can make a functional assessment of a disabled patient
 U7 - (E. U23) Can offer a rehabilitation programme in most common diseases.
 U8 - (E. U32) Can plan a specialist consultation.
 U9 - (E. U38) Can keep patient's medical records.

Social competence

- K1 - (K. 2) The student is guided by the well-being of the patient;
 K2 - (K. 1) Can establish and maintain a deep and respectful contact with the patient and demonstrate understanding of differences in worldview and culture.
 K3 - (K. 3) Obeys the medical confidentiality rule and respects patient rights.
 K4 - (K.5) Notices and recognises its own limitations and makes a self-assessment of deficits and needs.

BASIC LITERATURE

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

SUPPLEMENTARY LITERATURE

- 4) , Journal: Fizjoterapia , 2007-2018

W2, W3, W4, W5) ; LECTURE: Oral exam - I. 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. 3. 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. 4. 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. 5. 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. (K1, K2, K3, K4, U1, U10, U12, U13, U2, U3, U4, U5, U6, U7, U8, U9, W1, W2, W3, W4, W5)

Number of ECTS points: 2

Language of instruction: English

Introductory courses:

Anatomy, physiology, orthopedics, neurology

Preliminary requirements:

Students taking classes in the subject of Rehabilitation should have knowledge of human anatomy, physiology, orthopedics, and neurology.

Name of the organizational unit offering the course:

Katedra Rehabilitacji i Ortopedii,

Person in charge of the course:

prof. dr hab. n. med. Ireneusz Kowalski,

Course coordinators:

Notes:

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Detailed description of the awarded ECTS points - part B

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The awarded number of ECTS points is composed of:

1. Contact hours with the academic teacher:

- participation in: classes	15 h.
- participation in: seminar	10 h.
- participation in: lecture	10 h.
- consultation	5 h.
	40 h.

2. Student's independent work:

- preparation for classes	5 h.
- to prepare for the test	5 h.
	10 h.

1 ECTS point = 25-30 h of the average student's work, number of ECTS points = 50 h : 25 h/ECTS = 2,00 ECTS

on average: **2 ECTS**

- including the number of ECTS points for contact hours with direct participation of the academic teacher:	1,60 ECTS points,
- including the number of ECTS points for hours completed in the form of the student's independent work:	0,40 ECTS points,