

## SYLLABUS

Concerning the cycle of education **2025- 2031**

Academic year 2029/2030

### 1. BASIC COURSE/MODULE INFORMATION

Course/Module title	<b>Rehabilitation</b>
Course/Module code *	<b>RH-E</b>
Faculty (name of the unit offering the field of study)	<b>Faculty of Medicine, University of Rzeszow</b>
Name of the unit running the course	<b>Rehabilitation Department</b>
Field of study	<b>Medicine</b>
Qualification level	<b>Uniform Master's Degree Studies</b>
Profile	<b>Practical</b>
Study mode	<b>Stationary / non-stationary</b>
Year and semester of studies	<b>V year, semester 9</b>
Course type	<b>Obligatory</b>
Language of instruction	<b>English</b>
Coordinator	<b>Joanna Grzegorzczuk, MD PhD</b>
Course instructor	<b>Lidia Perenc MD, Prof., Olga Wolińska MD, PhD</b>

\* - as agreed at the faculty

#### 1.1. Learning format – number of hours and ECTS credits

Semester (no.)	Lectures	Classes	Laboratories	Seminars	Practical classes	Internships	ECTS credits
9	10	20					2

#### 1.2. Course delivery methods

- conducted in a traditional way
- involving distance education methods and techniques

**1.3. Course/Module assessment** (exam, pass with a grade, pass without a grade)  
- pass with grade

**2. PREREQUISITES**

Knowledge of anatomy, physiology and pathophysiology
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**3. OBJECTIVES, LEARNING OUTCOMES, COURSE CONTENT, AND INSTRUCTIONAL METHODS**

**3.1. Course/Module objectives**

O <sub>1</sub>	Getting to know the issues of medical rehabilitation, learning its definition, goals, methods and means
O <sub>2</sub>	Learning the elements of clinical examination for rehabilitation purposes, learning the basic principles of programming comprehensive rehabilitation treatment
O <sub>3</sub>	Familiarization with the issues of comprehensive rehabilitation of children and adults with musculoskeletal dysfunctions, after orthopedic injuries and neurological diseases

**3.2. COURSE/MODULE LEARNING OUTCOMES**

Learning Outcome	The description of the learning outcome defined for the course/module	Relation to the degree programme outcomes
LO_01	CONCEPT OF DISABILITY	E.28.
LO_02	THE ROLE OF MEDICAL REHABIITATION AND THE METHODS USED IN IT.	EW29.
LO_03	INDICATIONS FOR MEDICAL REHABILITATION IN THE MOST COMMON DISEASES.	E.30
LO_04	CONDUCT A CONVERSATION WITH THE PATIENT, TAKING INTO ACCOUNT THE CONVERSATION STRUCTURE (STARTING THE CONVERSATION, COLLECTING INFORMATION, CLARIFYING AND PLANNING, ENDING THE CONVERSATION), TAKING INTO ACCOUNT THE STRUCTURE OF SUCH A CONVERSATION AND SHAPING THE RELATIONSHIP WITH THE PATIENT USING THE SELECTED MODEL (E.G. CALGARY-CAMBRIDGE GUIDELINES, SEGUE, KALAMAZOO CONSENSUS, MAASTRICHT MAAS GLOBAL), INCLUDING BY ELECTRONIC MEANS OF COMMUNICATION;	E. U23.

LO_05	APPLY THE PRINCIPLES OF GIVING FEEDBACK (CONSTRUCTIVE, NON-JUDGMENTAL, DESCRIPTIVE) WITHIN TEAM WORK;	E. U30.
LO_06	ACCEPT, EXPLAIN AND ANALYSE ONE'S OWN ROLE AND RESPONSIBILITIES IN THE TEAM AND RECOGNIZE ONE'S ROLE AS A DOCTOR IN THE TEAM;	E. U31
LO_07	OBTAIN INFORMATION FROM TEAM MEMBERS WHILE RESPECTING THEIR DIFFERENT OPINIONS AND SPECIALIZED COMPETENCES, AND INCLUDING THIS INFORMATION IN THE PATIENT'S DIAGNOSTIC AND THERAPEUTIC PLAN;	E. U32
LO_08	DISCUSS THE PATIENT'S SITUATION WITHIN THE TEAM, EXCLUDING SUBJECTIVE ASSESSMENTS, WHILE RESPECTING THE PATIENT'S DIGNITY;	E. U33
LO_09	<p>use the following protocols (e.g. when transferring patient care, ordering or providing a patient consultation):</p> <p>1) ATMIST (A (Age), T (Time of injury), M (Mechanism of injury), I (Injury suspected), S (Symptoms/Signs), T (Treatment/Time));</p> <p>2) RSVP/ISBAR (R (REASON), S (STORY), V (VITAL SIGNS), P (PLAN)/I (INTRODUCTION), S (SITUATION), B (BACKGROUND), A (ASSESSMENT), R (RECOMMENDATION)).</p>	E. U34
LO_10	ESTABLISHING AND MAINTAINING DEEP AND RESPECTIVE CONTACT WITH THE PATIENT, AS WELL AS SHOWING UNDERSTANDING OF WORLDVIEW AND CULTURAL DIFFERENCES;	K.01
LO_11	BEING CONCERNED BY THE PATIENT'S WELL-BEING;	K.02
LO_12	OBSERVATION OF MEDICAL CONFIDENTIALITY AND PATIENT RIGHTS;	K.03
LO_13	TAKING ACTIONS TOWARDS THE PATIENT BASED ON ETHICAL PRINCIPLES, WITH AWARENESS OF THE SOCIAL CONDITIONS AND LIMITATIONS ARISING FROM THE DISEASE;	K.04
LO_14	NOTICING AND RECOGNIZING ONE'S OWN LIMITATIONS, MAKING SELF-	K.05

	ASSESSMENT OF DEFICITS AND EDUCATIONAL NEEDS;	
LO_15	PROPAGATING HEALTH-PROMOTING BEHAVIOR;	K.o6

### 3.3. Course content (to be completed by the coordinator)

#### A. Lectures

Content outline
<p>1. Organizational and introductory classes. Introducing students to the topics of the lectures and the course completion criteria. In the case of an educational pathway leading to teacher qualifications, learning outcomes from the standards preparing for the teaching profession should also be taken into account. Definition of rehabilitation. The Polish school of rehabilitation. Methods used in rehabilitation. Indications and contraindications for rehabilitation. Various forms of contracting rehabilitation services.</p>
2. Definition of disability – causes and supportive measures.
<p>3. Development of children and youth – review. Infant neurodevelopmental examination for rehabilitation purposes.</p>
<p>4. Rehabilitation of children with: cerebral palsy, operated on for myelomeningocele and hydrocephalus, with muscular dystrophy, with spinal muscular atrophy, with Down syndrome.</p>
<p>Rehabilitation in posture defects and scoliosis. Selection of orthopedic equipment and technical support for children and adolescents. Pulmonary rehabilitation in pediatrics: cystic fibrosis, bronchial asthma.</p>

#### B. Classes

Content outline
<p>1. Familiarizing students with the issues of exercises and passing criteria. Introduction to classes. Patient examination for physiotherapy.</p>
<p>2. Discussion of medical cases. Conducting a physiotherapeutic examination on oneself. Patient examination for physiotherapy purposes. Regeneration, compensation, adaptation. Factors supporting and hindering the rehabilitation process. Functional assessment of the musculoskeletal system in adults. Rehabilitation in musculoskeletal diseases in adults: rheumatoid diseases (RA), osteoarthritis, overuse injuries of</p>

<p>the musculoskeletal system, back pain.  Selection of orthopedic equipment and technical support.  Rehabilitation in cardiovascular diseases.  Specific aspects of rehabilitation in geriatrics.</p>
<p>3. Bedside exercises, patient examination, and discussion of the patient's health condition.  Prevention and rehabilitation of the consequences of immobilization.  Rehabilitation of individuals after orthopedic procedures: spinal fractures with spinal cord injury, limb fractures, joint replacements.  Neurological examination for adult rehabilitation purposes.  Clinical problems and fundamentals of rehabilitation in patients with central nervous system diseases (stroke, multiple sclerosis, Parkinson's disease) and peripheral nervous system diseases (polyneuropathy, peripheral nerve injuries).  Neurorehabilitation methods based on brain plasticity.  Selection of orthopedic equipment and technical support.</p>

### 3.4. Methods of Instruction

**Lecture:** supported by a multimedia presentation

**Classes:** group work (problem solving, case study, discussion)

## 4. ASSESSMENT TECHNIQUES AND CRITERIA

### 4.1. Methods of evaluating learning outcomes

Learning outcome	Methods of assessment of learning outcomes (e.g. test, oral exam, written exam, project, report, observation during classes)	Learning format (lectures, classes,)
LO-01-15	test	lectures, classes

#### 4.2. Course assessment criteria

Mandatory presence and active participation in all exercises.

##### **Lectures No 3, 4 and 5 (prof. L.Perenc)**

Descriptive solution to a problem set by the lecturer based on available literature and lecture material.

**pass** - the student correctly and comprehensively described the functional assessment of the patient and proposed a rehabilitation program appropriate for the patient, demonstrating knowledge of the methods used in medical rehabilitation based on the latest scientific literature.

**fail**- the student incorrectly described the patient's functional assessment or incorrectly proposed a rehabilitation program for the patient.

##### **Skills assessment**

5,0 – The student actively participates in classes, is well prepared, and has acquired theoretical and practical knowledge in the field of rehabilitation. He has mastered the skills of collecting medical history and physical examination of the patient to a very good extent.

4,5 - The student actively participates in classes, gained theoretical and practical knowledge in the field of rehabilitation at a very good level. He has mastered the skills of collecting medical history and physical examination of the patient to a good extent.

4,0 - The student actively participates in classes, is corrected, and has acquired good theoretical and practical knowledge in the field of rehabilitation. He has mastered the skills of collecting medical history and performing physical examination of the patient to a good extent.

3,5 - The student participates in classes; his scope of preparation does not allow for a comprehensive presentation of the discussed problem in the field of rehabilitation. He has sufficiently mastered the skills of collecting medical history and performing physical examination of the patient.

##### **Assessment criteria:**

5.0 - has knowledge of the content of education at the level of 93%-100%

4.5 - has knowledge of the content of education at the level of 85% -92%

4.0 - has knowledge of the content of education at the level of 77% -84%

3.5 - has knowledge of the content of education at the level of 69% -76%

3.0 - has knowledge of the content of education at the level of 60% -68%

2.0 - has knowledge of the educational content below 60%

**5. TOTAL STUDENT WORKLOAD NEEDED TO ACHIEVE THE INTENDED LEARNING OUTCOMES  
– NUMBER OF HOURS AND ECTS CREDITS**

Activity	Number of hours
Course hours	30
Other contact hours involving the teacher (consultation hours, examinations)	2
Non-contact hours - student's own work (preparation for classes or examinations, projects, etc.)	25
Total number of hours	57
Total number of ECTS credits	2

\* One ECTS point corresponds to 25-30 hours of total student workload

**6. INTERNSHIPS RELATED TO THE COURSE/MODULE**

Number of hours	-
Internship regulations and procedures	-

**7. INSTRUCTIONAL MATERIALS**

**COMPULSORY LITERATURE:**

**1.** SARA J. CUCCURULLO, MD PHYSICAL MEDICINE AND REHABILITATION BOARD REVIEW, FOURTH EDITION, ISBN: 978-0-8261-1, EBOOK ISBN: 978-0-8261-3457-8, DOI:10.1891/9780826134578.

**Complementary literature:**

**1.** MARIA GABRIELLA CERAVOLO - NICOLAS CHRISTODOULOU (EDITORS). PHYSICAL AND REHABILITATION MEDICINE FOR MEDICAL STUDENTS, 2018, ISBN 978-88-7051-636-4 - DIGITAL EDITION, FREE DOWNLOADABLE FROM: [HTTPS://WWW.UEMS-PRM.EU/RESOURCES/PHYSICAL\\_REHABILITATION\\_MEDICINE\\_FOR\\_MEDICAL\\_STUDENTS.P](https://www.uems-prm.eu/resources/physical_rehabilitation_medicine_for_medical_students.p)  
**2.** DF WARD A B, BARNES M P, STARK S C, RYAN S. OXFORD HANDBOOK OF CLINICAL REHABILITATION. 2 ND ED., OXFORD UNIVERSITY PRESS. 2009, 465 P., ISBN 978-0-19-955052-4

**3. REHABILITATION – DEFINITION FOR RESEARCH PURPOSES**

PIOTR TEDERKO, MARIUSZ GÓRNICZ, KAROLINA BABIŃ, DAWID FEDER, BARBARA HALL, DARIUSZ JASTRZĘBSKI, MAGDALENA KOZŁOWSKA, ALEKSANDRA KULIS, MAŁGORZATA ŁUKOWICZ, MACIEJ MICHAŁSKI, SŁAWOMIR PAŚKO, PIOTR PYRCZ, NATALIA SALATA, BEATA TARNACKA, KRZYSZTOF WESOŁOWSKI, OLGA WOLIŃSKA, RAFAŁ SAPUŁA, TOMASZ SARAN, JOLANTA KUJAWA DOI: <https://doi.org/10.26444/aaem/192615>

Approved by the Head of the Department or an authorised person