Załącznik nr 5 do zarządzenia nr 189/2025

COURSE SPECIFICATION

Course code: 0912-7LEK-C5.1-R

Course title in Polish: Rehabilitacja
Course title in English: Rehabilitation

1. Placement of the course within the study programme

1.1. Field of study	Medical
1.2. Mode of study	Full-time
1.3. Level of study	Uniform Master's studies
1.4. Profile of study	General academic
1.5. Course specification author	Prof. dr hab. Marek Żak
1.6. Contact	mkzak@ujk.edu.pl

2. Generał characteristics of the course

2.1. Language of instruction	English
2.2. Entry requirements	Key information comprised in the curriculum for medical students, pertaining to the scope of anatomy, physiology, laboratory diagnostics, orthopaedics, neurology, internal medicine, and pharmacology. In particular, the structure and function of the osteoarticular system, nervous system, circulatory, as well as respiratory system. Basic typology of disorders affecting the motor system, as well as nervous, cardiovascular, and respiratory systems.

3. Detailed characteristics of the course

3.1. Type of classes	LECTURE: 15 (including 3 hours of e-learning), CLASSES - 15; PRACTICAL CLASSES: 20
3.2. Place of course delivery	Lecture – Courses held within the teaching facilities of the UJK, Exercises WnoZ worhshops,
3.3. Form of assessment	LECTURE – E, CLASSES - Zo (Credit with grade)
3.4. Teaching methods	Lecture, tutorial, case-study pursued within operational medical facilities
3.5.a. Basic reading list	1. Catherine H. Balthazar, Ann M. Vendrely. ***Rehabilitation Research*****,** 6th Edition Elsevier **2021**, eBook ISBN: 978032368044, Paperback ISBN: 9780323680431 2. Cara Pelser, Helen Banks, Ganesh Bavikatte. ***A Practical Approach to Interdisciplinary Complex Rehabilitation*****,** 1st Edition Elsevier **2022**, eBook ISBN: 9780702082771, Paperback ISBN: 9780702082764 3. Dale Avers, Rita Wong. ***Guccione's Geriatric Physical Therapy*****,** 4th Edition Elsevier **2019,** eBook ISBN: 9780702082771, Paperback ISBN: 9780702082764 4. Michael A. Pagliarulo. ***Introduction to Physical Therapy***, 6th Edition Elsevier **2021,** eBook ISBN: 9780702080173, Paperback ISBN: 9780323673488
3.5.b. Supplementary reading list	1. Karen Kenyon, Jonathan Kenyon. ***The Physiotherapist's Pocketbook - Essential Facts at Your Fingertips,*** 3rd Edition Elsevier **2018**, eBook ISBN: 9780702077982, Paperback ISBN: 9780702055065 2. Shane O'Hanlon, Marie Smith. ***A Comprehensive Guide to Rehabilitation of the Older Patient*****,** 4th Edition Elsevier **2021**, eBook ISBN: 9780702080173, Paperback ISBN: 9780702080166

4. Objectives, content and learning outcomes

4.1. Course objectives (taking into account the form of classes)
Lectures (including e-learning)

C 1 Getting acquainted with the key issues of medical rehabilitation, definitions, objectives, therapeutic methods and the background of its development as a specific field.

C 2 Getting acquainted with the elements of clinical trials for rehabilitation purposes, and key principles of therapeutic management aimed at comprehensive functional enhancements of the patients involved in therapy

C 3 Introducing students to the issues of complex rehabilitation of patients affected by organ dysfunctions, improving treatment of the patients following acute spinal trauma, accompanied by neurological complications, rehabilitation treatment of patients after the injuries of motor organs, comprehensive rehabilitation treatment of degenerative changes in the motor organs, as well as defining its status within the scope of interdisciplinary proceedings (including surgical interventions), conservative treatment of spinal disorders, rehabilitation in the patients affected by the disorders of the respiratory tract and the cardiovascular system.

4.2. Course content (taking into count the form of classes)

Lectures

Lectures 5 lec. x 3 hours= 15 hours

1. CNS neuroplasticity and neurogenesis as the basis for medical rehabilitation. Polish model of medical rehabilitation. The role of a specialist in medical rehabilitation and cooperation as part of a rehabilitation team with a specialist in Physiotherapy. Rehabilitation objectives, specific tasks and its status within the healthcare system. Individual disability juxtaposed against medical rehabilitation process.

2. Definition and physiological basis of rehabilitation, comprehensive rehabilitation, impact measures in rehabilitation, determinants of effectiveness and obstacles faced in rehabilitation, rehabilitation and prevention of disability, specificity of rehabilitation in the disorders of the musculoskeletal, circulatory-respiratory, and nervous systems; individuals in the developmental, as well as in senior age.

3. Select neurophysiological methods applied in rehabilitation. Functional assessment of a patient. Indication and contraindications for rehabilitation. Basics of the hands-on therapy in rehabilitation.

4. Basics of kinesiotherapy, including diverse types of therapeutic exercises. The specifics of rehabilitation pursued in the disorders of the musculoskeletal, circulatory-respiratory, and nervous systems; individuals in the developmental, as well as in senior age.

5. Physical factors in therapeutic improvement, types of energy input applied. Radiological and imaging research in rehabilitation.

Seminars

1. Evaluation of overall effectiveness of the musculoskeletal system in static and dynamic conditions. Mapping out the optimal physiotherapeutic strategies in correlation with the results of physical examination.
2. Rehabilitation in the disorders of the musculoskeletal system. Orthopaedic surgery in orthopaedics, traumatology and rheumatology (extracts, plaster dressings). Comprehensive prevention of adverse outcomes of individual immobilization. Physiotherapy offered to post-surgery patients, originally affected by the disorders of the musculoskeletal system. Faulty posture and scoliosis. Treatment of back pain. Rehabilitation in osteoporosis.

3. Clinical issues and referrals for rehabilitation of patients affected by the disorders of the central and peripheral nervous system. Neuro-rehabilitation methods based on brain plasticity. Principles of physiotherapy in the individuals with increased or reduced muscle tension. Spasticity and rigidity-methods of treatment. Posture defects and scoliosis
4. Clinical issues and principles of physiotherapy in peripheral vascular diseases and select metabolic disorders. Principles of primary and secondary prevention of cardiovascular disease. Rehabilitation methods in the diseases of the circulatory and respiratory systems.
   Pain therapy. Improving conditions in the individuals affected by chronic progressive disease. Psycho-social problems affecting the disabled individuals.

Practical (hands-on) classes (20 hours)

1. Practical implementation of general and differential diagnostics for the purposes of medical rehabilitation. Practical application of select methods of physical therapy and kinesiotherapy. Appreciation of neurorehabilitation methods based on brain plasticity.
2. Key issues in the rehabilitation of patients affected by the disorders of the central and peripheral nervous system. Principles of rehabilitation for the individuals with increased or reduced muscle tone. Methods of treating spasticity and muscle stiffness.
   Clinical issues and key principles of rehabilitation in the developmental age. Rehabilitation of children with sensory modulation disorders.
   Clinical issues and key principles of rehabilitation of children with neuro-developmental delay. Rehabilitation of scoliosis and posture defects in children. Clinical issues and key principles of orthopedic rehabilitation.
   Clinical issues and key principles of rehabilitation in the individuals affected by rheumatic disorders.
   Clinical issues and key principles of rehabilitation in cardiovascular and respiratory disorders.
3. Clinical issues and key principles of physiotherapy in peripheral vascular diseases and select metabolic disorders.
   Clinical issues and key principles of rehabilitation of gynecological diseases.
   Clinical issues and key principles of neurological, geriatric and psychiatric rehabilitation.
   Clinical issues and key principles of rehabilitation in surgical specialties.
   Clinical issues and key principles of oncological rehabilitation.
4. Prognosis as a foundation for mapping out a medical rehabilitation program. Praxeological stages, goals and their hierarchy in the medical rehabilitation program. General outline of medical rehabilitation programming. Designing individually tailored medical rehabilitation programs. Optimal and minimal program in the process of medical rehabilitation. Comprehensive character of the medical rehabilitation process. The results of scientific research as the key criterion for choosing optimal solutions and a stimulus for progress in medical rehabilitation.
5. Adverse effects of erroneously designed structural framework for medical rehabilitation. The need for modification of the timeline for medical rehabilitation. Monitoring of the outcomes as the key guideline for verification and any subsequent modification of the medical rehabilitation program.
   Assessment of the failures of previous rehabilitation ventures as the key guideline for verification and any subsequent modification of the medical rehabilitation program. The most common errors committed when mapping out the structure medical rehabilitation program.

4.3. Course learning outcomes

Course learning outcomes (code)	Upon completion of the course, the student	Alignment with programme learning outcomes
in the area of knowledge knows and understands:		

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W01	environmental and epidemiological conditions for the most common diseases	E.W1.
W02	concept of individual disability	E.W30.
W03	role of medical rehabilitation and methods applied within its scope	E.W31.

in the area of skills knows how to:

U01	conduct a full and specifically targeted physical examination of the adult patient	E.U3.
U02	assess a patient's general condition and awareness	E.U7.
U03	complete differential diagnosis of the most common disorders in adults and children	E.U12.
U04	assess and articulate the somatic and mental status of patients	E.U13.
U05	recognize any directly life-threatening medical conditions	E.U14.
U06	plan diagnostic, therapeutic and preventive procedures	E.U16.
U07	conduct the analysis of any likely side-effects of each specific medication and any potential interaction between them	E.U17.
U08	refer the patient to home-based treatment and/or hospitalization	E.U20.
U09	recognize the conditions in which the functional status of the patient or his specific preferences may potentially cause any restrictions in the treatment, whilst remaining in conflict with applicable medical guidelines	E.U21.
U10	conduct functional assessment of the patient affected by any disability	E.U22.
U11	propose a program of rehabilitation for common medical complaints	E.U23.
U12	assess laboratory test results and identify the actual reasons for deviations from the referential values	E.U24.
U13	plan and order specialist medical consultations	E.U32.
U14	comply with all applicable aseptic and antiseptic regulations	F.U3.

in the area of social competences:

K01	establish and maintain deep and respectful contact with the patient and show understanding towards ideological and cultural differences;	H.S1.
K02	do what is right for the patient;	H.S2.
K03	respect medical confidentiality and patient's rights;	H.S3.
K04	take actions concerning the patient on the basis of ethical principles, being aware of social conditions and restrictions resulting from illness;	H.S4.
K05	recognize his/her own limitations and self-evaluate educational deficiencies and needs;	H.S5.
K06	promote healthy lifestyle;	H.S6.
K07	use reliable information sources;	H.S7.
K08	conclude on the basis of own surveys and observations;	H.S8.
K09	introduce rules of social conduct and teamwork to the group of specialists, including specialists form other medical professions also in the multicultural and multinational environment;	H.S9.
K10	give opinions concerning various aspects of professional activity;	H.S10.
K11	take responsibility for own decisions made during professional activities including own safety and safety of other people;	H.S11.

4.4. Assessment methods for learning outcomes

Assessment method (+/-)

Course learning outcomes (code)	Oral/written/ practical examinaion /other (specify)*	Test*	Project*	In-class activity*	Independent study*	Group work*	Other (specify)*

Type of classes

1: / 2:	L	S	…	L	S	…	L	S	…	L	S	…	L	S	…	L	S	…	L	S	…
W01-W03	+	+		+	+			+			+				+		+			+	
U01-U14	+	+		+	+			+			+				+		+			+	
K01-K11																				+	+

Annotation. 1: form of classes; 2: learning outcomes

4.5. Assessment criteria for learning outcomes

Type of classes:

LECTURE (L) (including classes conducted with the use of distance learning methods and techniques)

Grade	Assessment criteria
3,0	od 61%-68% (10pkt-12pkt)
3,5	od 69%-76% (12,5pkt-14,5pkt)
4,0	od 77%-84%(15pkt-16pkt)
4,5	od 85%-92%(16,5pkt-17,5pkt)
5,0	od 93%-100%(18pkt-20pkt)

Type of classes:

SEMINAR (S) (including classes conducted with the use of distance learning methods and techniques)

Grade	Assessment criteria
3,0	od 61%-68% (10pkt-12pkt)
3,5	od 69%-76% (12,5pkt-14,5pkt)
4,0	od 77%-84%(15pkt-16pkt)
4,5	od 85%-92%(16,5pkt-17,5pkt)
5,0	od 93%-100%(18pkt-20pkt)

Type of classes:

OTHER (...) (including classes conducted with the use of distance learning methods and techniques)

Grade	Assessment criteria
3,0	od 61%-68% (10pkt-12pkt)
3,5	od 69%-76% (12,5pkt-14,5pkt)
4,0	od 77%-84%(15pkt-16pkt)
4,5	od 85%-92%(16,5pkt-17,5pkt)
5,0	od 93%-100%(18pkt-20pkt)

5. ECTS credit allocation – student workload

Category	Student workload (full-time mode)
NUMBER OF HOURS WITH THE DIRECT PARTICIPATION OF THE TEACHER (CONTACT HOURS)	**50**
Participation in lectures*	15
Participation in seminars/laboratories*	35
Other (specify) e.g. classes conducted with the use of distance learning methods and techniques*	
INDEPENDENT STUDY (NON-CONTACT HOURS)	**25**
Preparation for lectures*	15

Preparation for seminars/laboratories*	10
Preparation for examination/test*	
Gathering materials for project, online research*	
Preparation of a multimedia presentation*	
Other (specify)*	
TOTAL HOURS	**75**
ECTS CREDITS for the course	**3**

*** delete as appropriate**

Approved for implementation (date and legible signatures of course instructors in the given academic year):

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