Course description

Part 1

General information about the course	
1. Major of study: Physiotherapy	**2. Study level:** unified MSc/ general academic profile **3. Form of study:** intramural
4. Year: II, III/ cycle 2021-2026	**5. Semester:** IV,V
6. Course name: Physiotherapy in internal diseases in pediatrics	
7. Course status: required	

8. Course contents and assigned learning outcomes:

Messages included in the curriculum of normal anatomy, physiology, diagnostic imaging, orthopedics, neurology, internal medicine and pharmacology; in particular the structure and function of the osteoarticular, nervous, circulatory and respiratory systems. Basic symptomatology of diseases of the musculoskeletal system, nervous system, circulatory system and respiratory system.

Objectives of the course:

- Providing knowledge and developing the skills of objectification of the musculoskeletal system diagnosis in children and adolescents for the selection of physiotherapy measures. Performing clinical measurements and functional tests characteristic for developmental age.
- Developing the ability to use physiotherapy in physiotherapy programs, perform therapeutic tasks, physical treatments in the event of developmental deficits, abnormal antigravity mechanisms, compensatory postural and motor patterns, or other musculoskeletal dysfunctions, appropriate to the clinical and functional state of pediatric patients.
- Developing the ability to cooperate in a rehabilitation team as well as with the family and the environment of pediatric patients.

Learning outcomes / reference to learning outcomes indicated in the standards
For knowledge – student knows and understands: DW1, DW2
For skills student can do: DU17, DU22, DU23, DU24, DU27, DU43, DU47, D.U49
For social competencies student is ready to: presenting an attitude promoting a healthy lifestyle, promoting and being active creating a healthy lifestyle and health promotion during related activities practicing the profession and determining the level of fitness necessary to practice the profession of physiotherapist

9. Number of hours for the course	**52**
10. Number of ECTS points for the course	**3**

11. Methods of verification and evaluation of learning outcomes

Learning outcomes	Methods of verification	Methods of evaluation*
Knowledge	Written test / Credit based on class attendance	*
Skills	Observation of skills acquired by the student during practical classes, verification of the correctness of performing physiotherapy procedures	*
Competencies	Observation of skills acquired by the student during practical classes	*

* The following evaluation system has been assumed:

Very good (5,0) – the assumed learning outcomes have been achieved and significantly exceed the required level
Better than good (4,5) – the assumed learning outcomes have been achieved and slightly exceed the required level
Good (4,0) – the assumed learning outcomes have been achieved at the required level
Better than satisfactory (3,5) – the assumed learning outcomes have been achieved at the average required level
Satisfactory (3,0) – the assumed learning outcomes have been achieved at the minimum required level
Unstatisfactory (2,0) – the assumed learning outcomes have not been achieved

Course description

Part 2

Other useful information about the course	
12. Name of Department, mailing address, e-mail: Department of Rehabilitation, Faculty of Health Science in Katowice, Medical University of Silesia in Katowice, Ziołowa street 45/47 40-635 Katowice. Phone number (32) 252 43 70 / dolko@sum.edu.pl	
13. Name of the course coordinator: Katarzyna Gwizdek MSc, PT kgwizdek@sum.edu.pl	
14. Prerequisites for knowledge, skills and other competencies: Knowledge provided in the curriculum from the range of anatomy, physiology, diagnostic imaging, orthopedics, neurology, internal medicine and pharmacology; in particular the structure and function of the osteoarticular, nervous, circulatory and respiratory systems. Basic symptomatology of diseases of the musculoskeletal system, nervous system, circulatory system and respiratory system.	

15. Number of students in groups	In accordance with the Senate Resolution
16. Study materials	Medical clothing, variable footwear, stethoscope, blood pressure monitor, neurological hammer, centimeter tape, gravity goniometer, skoliometer
17. Location of classes	Department of Rehabilitation, Faculty of Health Science in Katowice, Medical University of Silesia in Katowice, Ziołowa street 45/47 40-635 Katowice
18. Location and time for contact hours	Department of Rehabilitation, Faculty of Health Science in Katowice, Medical University of Silesia in Katowice, Ziołowa street 45/47 40-635 Katowice fixed hours according to the report available at the Cathedral's secretariat.

19. Learning outcomes

Number of the course learning outcome	Course learning outcomes	Reference to learning outcomes indicated in the standards
C_K01	Student knows etiology, pathomechanism, manifestations and the course of the motor system disfunction in the areas of orthopaedics, traumatology, sports medicine, rheumatology, neurology and neurosurgery, paediatrics, children's neurology to ensure effective use of physiotherapeutic management;	DW1
C_K02	Student knows diagnostic principles and general rules and methods of management of the most common motor system disfunctions in the areas of: orthopaedics, traumatology, sports medicine, rheumatology, neurology and paediatrics, children's neurology to ensure effective use of physiotherapeutic management;	DW2

C_S01	Student can take the history and to elicit basic information about the child's development and health condition;	DU17
C_S02	carry out clinical assessment of posture, including measurements with Bunnell scoliometer, point and biostereometric postural analysis and to interpret the results;	DU22
C_S03	determine on the basis of spinal X-ray: the Cobb angle and the rotation angle; applying appropriate evaluation methods, asses the bone age with the use of Risser test, interpret the results and qualify scoliosis for appropriate physiotherapeutic management;	DU23
C_S04	plan, select depending on the clinical and functional condition of a patient, and ensure physiotherapeutic management in children and juveniles with diseased of the motor system, such as: congenital failures, posture disorders and avascular bone necrosis;	DU24
C_S05	instruct children's minders about the so-called motor care, as well as the children and their caregivers in the area of exercise performed at home and the use of medical products as well as the use of daily appliances for therapeutic purposes;	DU27
C_S06	design and select the circulatory-respiratory exercise in children and juveniles, depending on the patient's clinical and functional condition and instruct the children's and juveniles' caregivers about performance of such exercise;	DU43
C_S07	apply the principles of good communication with the patient and communicate with other members of the therapeutic team;	DU47
C_S08	design, select and modify the rehabilitation programmes for patients with different disfunctions of the motor system and internal diseases, depending on the clinical, functional and mental condition.	DU49

20. Forms and topics of classes	**Number of hours**
21.1. Lectures	**16**
Rehabilitation for various diseases occurring in developmental age. Current guidelines - literature review.	6
Congenital and acquired diseases that cause locomotor dysfunction as an interdisciplinary problem that requires comprehensive rehabilitation.	5
Physiotherapy in respiratory and cardiovascular diseases.	5
22.2. Seminars	**14**
Specificity of pediatric functional testing. Methods for assessing exercise capacity in pediatrics.	7
Prevention, primary and secondary prevention in pediatrics. Selected special methods of physiotherapy in developmental age.	7
23.3. Practical classes	**26**
Specific physiotherapeutic methods used in respiratory and cardiovascular diseases as well as in spinal deformities and posture defects.	9
Interpretation and specificity of functional tests (e.g. spirometry) in pediatric patients.	9
Assessment of regularity of development and functional assessment at various stages of development. Assessment of physical fitness and degree of independence.	8
24.4. Without teacher	**18**
Normal and abnormal psychomotor development.	6
Etiology of pediatric respiratory diseases.	6
Neurodevelopmental disorders in children and infants.	6
25. Readings	

1. Dobosiewicz, Krystyna. Boczne Idiopatyczne Skrzywienia Kręgosłupa. Katowice: Śl. Akad. Med., 1997.
2. Durmała, Jacek., and Bartosz. Wnuk. Kinezyterapia Skolioz Idiopatycznych Opis Metody Trójpłaszczyznowej Czynnej Korekcji Sterowanej Oddechem W Symetrycznych Pozycjach Wyjściowych (Metoda Dobosiewicz – DoboMed). Katowice: Śląski Uniwersytet Medyczny w Katowicach, 2015.
3. Jacobsen, J. Ramsoe. Wrodzone Wady Serca. Warszawa: Stowarzyszenie Heart to Heart, 1993. Print. Biblioteka Stowarzyszenia Heart to Heart ; T. 1.
4. Marciniak, Witold., Andrzej. Szulc, and Wiktor Dega. Wiktora Degi Ortopedia I Rehabilitacja. Warszawa: Wydaw. Lekarskie PZWL, 2003.
5. Matyja, Małgorzata. Neurorozwojowa Analiza Wad Postawy Ciała U Dzieci I Młodzieży. Katowice: Wydaw. Akademii Wychowania Fizycznego W Katowicach, 2012.
6. Matyja, Małgorzata., and Anna Gogola. Edukacja Sensomotoryczna Niemowląt. Wyd. 4. ed. Katowice: Wydaw. Akademii Wychowania Fizycznego W Katowicach, 2010.
7. Rosławski, Adam, and Marek Woźniewski. Fizjoterapia Oddechowa. Wyd. 3 Uzup. ed. Wrocław: Wydaw. Akademii Wychowania Fizycznego We Wrocławiu, 2001.
8. Tecklin, Jan Stephen. Fizjoterapia Pediatryczna. Warszawa: Wydaw. Lekarskie PZWL, 1996.

26. Detail evaluation criteria

In accordance with the recommendations of the inspection bodies
Completion of the course – student has achieved the assumed learning outcomes
Detail criteria for completion and evaluation of the course are specified in the course regulations