SYLLABUS OF THE SUBJECT – PhD POSTGRADUATE STUDIES
EDUCATIONAL CYCLE FROM 2022 TO 2026

GENERAL INFORMATION ABOUT SUBJECT	
Subject title	Selected forms of rehabilitation: classic, with the use of apparatus, motor andcognitive in children.
Name of the school implementing the subject	**PhD Postgraduate Studies at Rzeszów University**
Subject type (compulsory, facultative)	Facultative at choice
Year/Term	I year, 2 terms
Faculty	Health Sciences
Language	Polish
Coordinator's particulars	Andżelina Wolan-Nieroda, Phd in Health Sciences
Lecturer's particulars	Andżelina Wolan-Nieroda, Phd in Health Sciences
Initial requirements	Theoretical and practical knowledge in the field of X-ray, functional and palpation anatomy, physiology, clinical basis of physiotherapy in neurology and neurosurgery, kinesitherapy, pediatrics.

SUBJECT SUMMARY
(synthetic description of the content and objectives of the subject; 100-200 words)

The aim of the classes is an extended presentation of the problem of physiotherapy in children, current scientific trends, physical tools, devices and questionnaires that can be used in therapy.
The topics covered are related to:
- issues of developmental disorders observed in children,
- assessment of the child's proper development,
- correct diagnosis
- factors and mechanisms affecting developmental disorders,
- searching for future directions of scientific research.

LEARNING EFFECTS FOR THE SUBJECT AND VERIFICATION METHODS

Effect's symbol	Assumed learning effects	Reference to learning outcomes for qualifications at PQF level 8 (symbol)	Type of classes (lectures, exercises etc)	Verification Methods (test, oral exam, written exam, project)
Knowledge	**Knows and understands**			
1	Knows and understands the rules for the selection of therapeutic agents, forms and methods depending on the type of dysfunction,	P8S_WG1	Seminar/Laboratory	Project

	condition and age of the patient.			
2	Knows and understands the theoretical, methodical and practical basis of special methods of physiotherapy - methods of postural re-education, methods of neurodevelopmental therapy.	P8S_WG2	Seminar/Laboratory	Project
3	Knows and understands indications and contraindications to special methods of physiotherapy - methods of postural re-education, methods of neurodevelopmental therapy.	P8S_WG3	Seminar/Laboratory	Project
4	Knows the broad problem of physiotherapy for children	P8S_WK1	Seminar/Laboratory	Project
Skills	**Is able to**			
1	Is able to select and conduct kinesitherapy aimed at improving individual motor skills in healthy people and people with various dysfunctions.	P8S_UW1	Seminar/Laboratory	Project
2	Is able to plan, select and perform treatments in the field of physiotherapy methods - methods of postural re-education, methods of neurodevelopmental therapy.	P8S_UW2	Seminar/Laboratory	Project
3	Is able to demonstrate advanced manual skills that allow the use of appropriate techniques in the field of special physiotherapy methods - methods of postural re-education, methods of neurodevelopmental therapy.	P8S_UW3	Seminar/Laboratory	Project
4	Communicate on specialisic topics and initiate the debate	P8S_UK/6	Seminar/Laboratory	Project
Social competences	**Is ready to**			

1	Is ready to critically assess achievements within a given discipline and recognize knowledge in solving cognitive problems	P8S_KK1		Observation sheet

FORMS OF TEACHING CLASSES, HOURS AND CREDITS

Term (nr)	Lectures	Exercises	Lab.	Practical	Others	**Credits ECTS**
II			15			2

DIDACTIC METHODS

multimedia presentation, practical demonstration, group work, discussion, project, solving case-study tasks.

PROGRAM CONTENT

1. Proper child development and developmental disorders. Neurological diseases in childhood.
2. Diagnostics of a small child using various questionnaires and methods. Place of the Prechtl method in modern physiotherapy - assessment of global movement patterns.
3. Assessment of body posture - computer diagnostic system.
4. Cognitive problems in children - presentation of devices based on biofeedback improving concentration and attention.
5. Balance disorders in children - assessment methods and interpretation of results.

CONDITIONS FOR PASSING THE SUBJECT (ASSESSMENT CRITERIA)

Credit condition:
Seminar/Laboratory
Knowledge assessment (P8S_WG1, P8S_WG2, P8S_WG3):
Written test:
5.0 - shows knowledge of the content of education at the level of 93%-100%
4.5 - demonstrates knowledge of the content of education at the level of 85%-92%
4.0 - shows knowledge of the content of education at the level of 77%-84%
3.5 - demonstrates knowledge of the content of education at the level of 69%-76%
3.0 - shows knowledge of the content of education at the level of 60%-68%
2.0 - shows knowledge of the content of education below 60%
Practical Credit
Assessment (P8S_UW1, P8S_UW2, P8S_UW3, P8S_UW4, P8S_WK1, P8S_UK/6)
5.0 - the PhD student proposes proper planning of physiotherapeutic procedures, applies elements of methods correctly, in terms of content and methodology.
4.5 - the PhD student, with a little assistance from the lecturer, proposes proper planning of the physiotherapeutic procedures, performs elements of methods correctly, in terms of content and methodology.
4.0 - the PhD student proposes proper planning of the physiotherapeutic procedures, performs elements of the methods according to the plan, with minor corrections done by the lecturer.
3.5 - the PhD student is able to plan physiotherapeutic procedures, performs elements of methods according to a plan that require numerous corrections done under lecturer's guidance and supervision.

3.0 - the PhD student makes minor mistakes while planning proper physiotherapeutic procedures, performs elements of the methods according to the plan that require numerous corrections done under lecturer's supervision and guidance.

2.0 - the proposed planning of physiotherapeutic procedures and the exercises performed by PhD student are substantively incorrect, most of them require correction by the lecturer despite numerous previous explanations, the student makes significant mistakes while performing elements of the methods, without adequate knowledge of the methodology.

TOTAL WORK OUTPUT OF A PHD STUDENT NEEDED TO ACHIEVE THE ESTIMATED EFFECTS IN HOURS AND ECTS CREDITS

Form of activity	The average number of hours to complete the activity
Hours spent in direct contact in accordance with plan of studies	15
Other hours with participation of the lecturer (consultations, exams)	2
Hours carried out independently by the PhD student (preparation for classes, exam, writing a paper, etc.)	15
NUMBER OF HOURS	32
NUMBER OF ECTS CREDITS	2

LITERATURE

BASIC LITERATURE:	1. Matyja M., Gogola A.: Edukacja sensomotoryczna niemowląt. AWF Katowice 2010 2. Sadowska L.: Neurofizjologiczne metody usprawniania dzieci z zaburzeniami rozwoju. AWF Wrocław 2004 3. Adler SS, Beckers D, Buck M. PNF w praktyce. Ilustrowany Przewodnik, DB Publishing, Warszawa, 2009 4. Horst R. Trening strategii motorycznych i PNF. Top School, Kraków, 2010. 5. Neurorozwojowa analiza wad postawy ciała u dzieci i młodzieży, Matyja M, Wydawnictwo Akademii Wychowania Fizycznego w Katowicach, 2012. 6. Wilczyński J. Korekcja wad postawy człowieka. Athropos, Starachowice 2005. 7. Nowotny J. Reedukacja posturalna w systemie stacyjnym. AWF, Katowice 2008.
SUPPLEMENTARY LITERATURE:	1. Borkowska M.: Dziecko niepełnosprawne ruchowo. PZWL Warszawa 2015 2. Martin S.: Nauczanie umiejętności ruchowych dzieci z mózgowym porażeniem dziecięcym i podobnymi zaburzeniami ruchowymi. ReHouse, Warszawa, 2012 3. Andżelina Wolan-Nieroda, Jadwiga Dudziak, Mariusz Drużbicki, Bogumiła Pniak, Agnieszka Guzik. Effect of Dog-Assisted Therapy on Psychomotor Development of Children with Intellectual Disability. Children-Basel. - 2021, Vol. 8, iss. 1 4. Ferrari F., Frassoldati R., Berardi A. et al.: The ontogeny of fidgety movements from 4 to 20weeks post-term age in healthy full-term infants. Early Hum Dev. 2016 Dec;103:219-224.

	5. Dobrakowski, P., & Łebecka, G. (2020). Individualized neurofeedback training may help achieve long-term improvement of working memory in children with ADHD. *Clinical EEG and Neuroscience*, *51*(2), 94–101.