



Syllabus for academic year: 2021/2022 Training cycle: 2017/2018 – 2022/2023													
Description of the course													
Course	Paediatrics (2)							Group of detailed education results					
								Group code	Group name				
								E	non-interventional clinical sciences				
Faculty	Faculty of Medicine												
Major	medicine												
Level of studies	<input checked="" type="checkbox"/> uniform magister studies <input type="checkbox"/> 1 st degree studies <input type="checkbox"/> 2 nd degree studies <input type="checkbox"/> 3 rd degree studies <input type="checkbox"/> postgraduate studies												
Form of studies	<input checked="" type="checkbox"/> full-time <input type="checkbox"/> part-time												
Year of studies	V						Semester:	<input checked="" type="checkbox"/> winter <input checked="" type="checkbox"/> summer					
Type of course	<input checked="" type="checkbox"/> obligatory <input type="checkbox"/> limited choice <input type="checkbox"/> free choice / optional												
Language of study	<input type="checkbox"/> Polish <input checked="" type="checkbox"/> English												
Number of hours													
Form of education													
	Lectures (L)	Seminars (SE)	Auditorium classes (AC)	Major Classes – not clinical (MC)	Clinical Classes (CC)	Laboratory Classes (LC)	Classes in Simulated Conditions (CSC)	Practical Classes with Patient (PCP)	Foreign language Course (FLC)	Physical Education (PE)	Vocational Practice (VP)	Directed Self-Study (DSS)	E-learning (EL)
Winter semester:													
1st Department of Paediatrics, Allergology and Cardiology													
Direct (contact) education ¹					6								
Distance learning ²	4												
Department of Paediatric Endocrinology and Diabetology													
Direct (contact) education					6								

¹ Education conducted with direct participation of university teachers or other academics

² Education with applied methods and techniques for distance learning



Distance learning	4																		
Department of Paediatric Bone Marrow Transplantation, Oncology																			
Direct (contact) education					6														
Distance learning	4																		
Summer semester:																			
1st Department of Paediatrics, Allergology and Cardiology																			
Direct (contact) education					6														
Distance learning	4																		
Department of Paediatric Endocrinology and Diabetology																			
Direct (contact) education					6														
Distance learning	4																		
Department of Paediatric Bone Marrow Transplantation, Oncology and Haematology																			
Direct (contact) education					6														
Distance learning	4																		
TOTAL per year:																			
1st Department of Paediatrics, Allergology and Cardiology																			
Direct (contact) education					12														
Distance learning	8																		
Department of Paediatric Endocrinology and Diabetology																			
Direct (contact) education					12														
Distance learning	8																		
Department of Paediatric Bone Marrow Transplantation, Oncology and Haematology																			
Direct (contact) education					12														
Distance learning	8																		
Educational objectives																			
C1. To familiarize the student with the diagnosis of life-threatening conditions as well as diagnostic and therapeutic activities.																			



- C2. Acquiring and developing students' skills of subjective and physical examination of a child in terms of cardiovascular diseases, endocrine system and neoplasms in children.
- C3. Acquiring the ability to plan a diagnostic procedure, interpret its results and plan therapeutic procedures.
- C4. Wyposażenie studentów w wiedzę dotyczącą wad wrodzonych i chorób uwarunkowanych genetycznie z zakresu kardiologii, endokrynologii i onkologii dziecięcej.
- C5. Educating students of the ability to take preventive measures in selected disease states in the field of cardiology, endocrinology and paediatric oncology.
- C6. Development social competences needed to practice the medical profession, in accordance with graduate's profile.

Education result for course in relation to verification methods of the intended education result and the type of class:

Number of detailed education result	Student who completes the course knows/is able to	Methods of verification of intended education results	Form of didactic class <i>*enter the abbreviation</i>
E.W1	the environmental and epidemiological determinants of the most common diseases;	MCQ test	L, CC
E. W3	the causes, symptoms, principles of diagnosis and therapeutic management of the diseases that are most frequent in children: 1) rickets, tetany, convulsions, 2) heart defects, myocarditis, endocarditis and pericarditis, cardiomyopathy, cardiac arrhythmias, heart failure, hypertension, vaso-vagal episodes, 3) acute and chronic diseases of the upper and lower respiratory tract, congenital malformations of the respiratory system, tuberculosis, cystic fibrosis, asthma, allergic rhinitis, urticaria, anaphylactic shock, angioedema, 4) anaemias, haemorrhagic diathesis, bone marrow failure, childhood cancers, including solid tumours typical of childhood, 5) acute and chronic abdominal pain, vomiting, diarrhoea, constipation, gastrointestinal bleeding, peptic ulcer disease, inflammatory bowel diseases, pancreatic diseases, cholestasis and liver diseases and other acquired diseases and congenital defects of the gastrointestinal tract, 6) urinary tract infections, congenital defects of the urinary tract, nephrotic syndrome, kidney stones, acute and chronic renal failure, acute and chronic nephritis, systemic kidney diseases, urinary disorders, vesicoureteral reflux disease, 7) growth disorders, thyroid and parathyroid diseases, adrenal diseases, diabetes, obesity, puberty and gonadal function disorders, 8) cerebral palsy, encephalitis and meningitis, epilepsy, 9) the most common childhood infectious diseases, 10) genetic syndromes,	MCQ test	L, CC



	11) connective tissue diseases, rheumatic fever, juvenile arthritis, systemic lupus, dermatomyositis;		
E.W6	the most common life-threatening conditions in children and the management of these conditions;	MCQ test	L, CC
E.W37	the causes, symptoms, principles of diagnosis and therapeutic management of the most common hereditary diseases;	MCQ test	L, CC
E. U2	carry out a medical interview with a child and its family;	Completion of the commissioned task	CC
E. U4	conduct a physical examination on a child of any age;	Completion of the commissioned task	CC
E.U7	assess the general condition, state of consciousness and awareness of the patient;	Completion of the commissioned task	CC
E.U10	assess the stage of sexual maturation;	Completion of the commissioned task	CC
E. U12	perform differential diagnosis of the most common diseases of adults and children;	Completion of the commissioned task	CC
E.U13	assess and describe the somatic and psychological state of the patient;	Completion of the commissioned task	CC
E. U14	recognise immediate life-threatening conditions;	Completion of the commissioned task	CC
E. U16	plan diagnostic, therapeutic and preventive procedures;	Completion of the commissioned task	CC
E.U17	conduct an analysis of possible adverse reactions to and interactions between individual drugs;	Completion of the commissioned task	CC
E.U20	qualify the patient for home and hospital treatment;	Completion of the commissioned task	CC
E. U24	interpret laboratory test results and identify causes of deviations from the norm;	Completion of the commissioned task	CC



E.U28	collect and preserve material for tests used in laboratory diagnosis;	Completion of the commissioned task	CC
E.U29	perform basic medical procedures and treatments including: 1) measurement of body temperature (surface and deep), heart rate measurement, non-invasive blood pressure measurement, 2) monitoring of vital signs with a cardiomonitor, pulse oximetry, 3) spirometric examination, oxygen treatment, support and mechanical ventilation, 4) inserting an oropharyngeal tube, 5) intravenous, intramuscular and subcutaneous injections, peripheral venous cannulation, collection of peripheral venous blood, collection of blood for culture, collection of arterial blood, collection of arterialised capillary blood, 6) taking nasal, throat and skin swabs, 7) bladder catheterisation in women and men, gastric probing, gastric lavage, enema, 8) standard resting electrocardiogram with interpretation, electrical cardioversion and cardiac defibrillation, 9) simple strip tests and blood glucose measurement;	Completion of the commissioned task	CC
E.U32	plan specialist consultations;	Completion of the commissioned task	CC
E.U38	maintain patient medical records.	Completion of the commissioned task	CC
G.U7	recognise, when examining a child, behaviours and symptoms that indicate the possibility that violence against the child may have occurred;	Completion of the commissioned task	CC
G.U8	act in such a way as to avoid medical errors;	Completion of the commissioned task	CC

* L- lecture; SE- seminar; AC- auditorium classes; MC- major classes (non-clinical); CC- clinical classes; LC- laboratory classes; CSC- classes in simulated conditions; PCP- practical classes with patient; FLC- foreign language course; PE- physical education; VP- vocational practice; DSS- directed self-study; EL- E-learning

Student's amount of work (balance of ECTS points):

Student's workload (class participation, activity, preparation, etc.)	Student Workload
1. Number of hours of direct contact:	36
2. Number of hours of distance learning:	24
3. Number of hours of student's own work:	18



4. Number of hours of directed self-study	n/d
Total student's workload	78
ECTS points for course	2,5
Content of classes: (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects)	
<p>Lectures</p> <p><u>Winter semester</u></p> <p>Department of Paediatric Bone Marrow Transplantation, Oncology and Haematology</p> <ol style="list-style-type: none"> 1. Life-threatening conditions in paediatric oncology (2h). 2. Infectious complications of cancer treatment (2h). <p>Department of Paediatric Endocrinology and Diabetology</p> <ol style="list-style-type: none"> 1. Progress in the diagnosis and prevention of type I diabetes. Acute complications, management. Prognosis (2h). 2. Modern diagnostics and treatment of maturation and growth disorders in children and adolescents (2h). <p>1st Department of Paediatrics, Allergology and Cardiology</p> <ol style="list-style-type: none"> 1. New methods in paediatric cardiology, part 1: interventional and surgical treatment of congenital malformations (2h). <p>3rd Department and Clinic of Paediatrics, Immunology and Rheumatology of Developmental Age</p> <ol style="list-style-type: none"> 1. Introduction to paediatric rheumatology. <p><u>Summer semester</u></p> <p>Department of Paediatric Bone Marrow Transplantation, Oncology and Haematology</p> <ol style="list-style-type: none"> 1. Targeted therapy in paediatric oncology. Therapeutic aphereses (2h). <p>3rd Department and Clinic of Paediatrics, Immunology and Rheumatology of Developmental Age</p> <ol style="list-style-type: none"> 1. Chosen paediatric rheumatoid disorders (2h) <p>Department of Paediatric Endocrinology and Diabetology</p> <ol style="list-style-type: none"> 1. Type 2 diabetes and other types of diabetes in children. Diagnostics, treatment, prognosis (2h). 2. Disorders of calcium metabolism in children (2h). <p>1st Department of Paediatrics, Allergology and Cardiology</p> <ol style="list-style-type: none"> 1. Cardiomyopathies of developmental age (2h). 2. Heart failure (2h). 	
Seminars	
NA	
Classes	
<p>The exercises are divided into 3 exercise blocks:</p> <ul style="list-style-type: none"> - paediatric oncology (held at the Department of Paediatric Bone Marrow Transplantation, Oncology and Haematology) - paediatric endocrinology (held at the Department of Paediatric Endocrinology and Diabetology) - paediatric cardiology (held at the 1st Department of Paediatrics, Allergology and Cardiology) <p>Department of Paediatric Bone Marrow Transplantation, Oncology and Haematology</p> <p>Classes are conducted within the departments, clinics and laboratories of the Clinic. Students acquire</p>	



theoretical and practical knowledge in the field of etiopathogenesis and symptomatology of cancer in children. Under the supervision of the tutor, the student takes care of one or more patients, she/he takes medical history, plan a differential diagnosis, propose additional tests and treatment. Moreover, she/he assists in performing diagnostic and therapeutic procedures. Particular emphasis during the classes is placed on developing the ability to draw conclusions independently, oncological vigilance and cooperation with the family doctor.

Winter semester

1. Tumours of the central nervous system (3h).
2. Bone tumours. Solid tumours of soft tissues (3h).

Summer semester

1. Combined cancer therapy (3h).
2. Complications of oncological therapy and their treatment (3h).

Department of Paediatric Endocrinology and Diabetology

Classes are conducted within departments, clinics and laboratories of the Clinic, where students gain knowledge and acquire practical skills in the field of:

Winter semester

1. Modern methods of type 1 diabetes therapy - intensive therapy with the use of pens, personal pump. Guardian and CGMS 24-hour blood glucose monitoring - discuss what's new in the treatment and monitoring of diabetes. Practical classes - programming pumps, programming of blood glucose measurement devices. Interpretation of glycaemic test results - demonstration of children's test results (3h).
2. Diseases of the thyroid gland - etiology, diagnosis and treatment (3h).

Summer semester

1. Diseases of the adrenal glands - congenital adrenal hyperplasia etiology, diagnosis, treatment, adrenal insufficiency, adrenal hyperfunction, adrenal crisis.

Growth deficiency and gigantic growth - differential diagnosis, the most common causes of growth deficiency, growth deficiency of family origin, primary dwarfism. Practical classes - joint interviewing, research planning, analysis of test results, calculation of growth hormone dose, evaluation of treatment results, monitoring of the course of treatment. (3h).

2. Sexual maturation disorders - delayed and premature puberty. Interpretation of clinical cases, joint history taking, research planning and treatment monitoring.

Obesity and anorexia. Practical classes - demonstration of own cases. Overview of the principles of nutrition, how to reduce body weight and increase nutrition standards in anorexia.

PCOS (3h)

1st Department of Paediatrics, Allergology and Cardiology

Classes are conducted within the departments, clinics and laboratories of the Clinic. Students acquire theoretical and practical knowledge in the field of symptomatology of congenital heart defects, etiopathogenesis of cardiovascular diseases (inflammation within the heart, arterial hypertension, cardiac arrhythmias), ECG and chest X-ray assessments, and get acquainted with diagnostic tests performed in the Clinic (heart ultrasound, stress test, tilt test).

Winter semester

1. Congenital heart disease with left-right shunt (3h).
2. Congenital heart disease with cyanosis (3h).

Summer semester



1. Rhythm disturbances in children (3h). 2. Hypertension in children (3h).
Other NA
Basic literature 1. Illustrated Textbook of Paediatrics, Tom Lissauer, Will Carroll, 5th Edition, 2018 2.
Additional literature and other materials (no more than 3 items) 1. Nelson Textbook of Pediatrics, Robert M. Kliegman, Joseph St. Geme, 2-Volume Set, 21st Edition, 2019 2.
Preliminary conditions: Valid student ID, pass or conditional pass of the course Paediatric Propaedeutics, appropriate outfit (medical apron) and changeable footwear, stethoscope, flashlight for throat examination, basic skills of physical examination and collecting an interview, in case of an epidemic threat: mask, gloves, visor.
Conditions to receive credit for the course: Grading takes place in direct contact with the teacher. In justified cases, based on the Rector's decision grading may take place remotely. The condition for passing the course is an active participation in classes, completion of the assigned tasks and obtaining 3 positive grades from the tests ending the given exercise blocks (children's oncology, children's endocrinology, children's cardiology). Each absence must be made up for, including rector's days and dean's hours, e.g. in the form of preparation of a presentation, essay, etc. as part of self-study.

Grade:	Criteria for courses ending with a grade ³ Test MCQ 10 pytań (1 werstraktor + 3 dystraktory)
Very Good (5.0)	10 correct answers
Good Above (4.5)	9 correct answers
Good (4.0)	8 correct answers
Satisfactory Plus (3.5)	7 correct answers
Satisfactory (3.0)	6 correct answers
	Criteria for courses ending with a credit³
Credit	NA

Grade:	Criteria for exam ³
Very Good (5.0)	NA
Good Above (4.5)	NA
Good (4.0)	NA
Satisfactory Plus (3.5)	NA
Satisfactory (3.0)	NA

Department in charge of the course:	Department of Paediatric Bone Marrow Transplantation, Oncology and Haematology
Department address:	Borowska 213 Str., 50-556 Wrocław (entrance from Weigla Str.)
Telephone:	71 733 27 00, fax: 71 733 27 09
E-Mail:	pedhemat@umed.wroc.pl

³ The verification must cover all education results, which are realized in all forms of classes within the course



Person in charge for the course:		Prof. dr hab. n. med. Krzysztof Kałwak		
Telephone:		71 733 27 00, fax: 71 733 27 09		
E-Mail:		pedhemat@umed.wroc.pl		
List of persons conducting specific classes:				
Name and surname	Degree/scientific or professional title	Discipline	Performed profession	Form of classes
Department of Paediatric Bone Marrow Transplantation, Oncology and Haematology				
Krzysztof Kałwak	prof. dr hab. n. med	medical science	physician, specialist in paediatrics, paediatric haematology and oncology, clinical immunology, clinical transplantation	clinical classes, lectures
Bernarda Kazanowska	prof. dr hab. n. med.	medical science	physician, specialist in paediatrics, paediatric haematology and oncology	clinical classes, lectures
Ewa Gorczyńska	dr hab. n. med. profesor UMW	medical science	physician, specialist in paediatrics, paediatric haematology and oncology, clinical transplantation	clinical classes, lectures
Grażyna Wróbel	dr hab. n. med.	medical science	physician, specialist in paediatrics, paediatric haematology and oncology	clinical classes, lectures
Wojciech Pietras	dr n. med.	medical science	physician, specialist in paediatrics, paediatric haematology and oncology	clinical classes, lectures
Marek Ussowicz	dr hab. n. med. profesor UMW	medical science	physician, specialist in paediatrics, paediatric haematology and oncology, clinical transplantation	clinical classes, lectures
Grzegorz Dobaczewski	dr n. med.	medical science	physician, specialist in paediatrics, paediatric haematology and oncology	clinical classes, lectures
Jadwiga Węclawek - Tompol	dr n. med.	medical science	physician, specialist in paediatrics, paediatric haematology and oncology	clinical classes, lectures
Elżbieta Latos - Grażyńska	dr n. med.	medical science	physician, specialist in paediatrics, paediatric haematology and oncology	clinical classes, lectures
Joanna Owoc - Lempach	dr n. med.	medical science	physician, specialist in paediatrics, paediatric haematology and oncology	clinical classes, lectures
Monika Mielcarek-Siedziuk	dr n. med.	medical science	physician, specialist in paediatrics, clinical transplantation	clinical classes, lectures



Igor Olejnik	dr n. med.	medical science	physician, specialist in paediatrics, paediatric haematology and oncology, anaesthesiology and intensive care	clinical classes, lectures
Dorota Sęga-Pondel	dr n. med.	medical science	physician, specialist in paediatrics, paediatric haematology and oncology	clinical classes, lectures
Małgorzata Salamonowicz-Bodzioch	dr n. med.	medical science	physician, specialist in paediatrics, paediatric haematology and oncology	clinical classes, lectures
Katarzyna Gul	physician	medical science	physician, specialist in paediatrics, clinical immunology	clinical classes, lectures
Justyna Kwaśnicka	physician	medical science	physician, specialist in paediatrics, paediatric haematology and oncology	clinical classes, lectures
Tomasz Jarmoliński	dr n. med.	medical science	physician, specialist in paediatrics, nephrology, paediatric nephrology, clinical transplantation	clinical classes, lectures
Jowita Frączkiewicz	dr n. med.	medical science	physician, specialist in paediatrics	clinical classes, lectures
Elżbieta Wawrzyniak-Dzierżek	physician	medical science	physician	clinical classes
Michalina Horochowska	physician	medical science	physician	clinical classes
Justyna Miśkiewicz-Bujna	physician	medical science	physician	clinical classes
Izabela Miśkiewicz-Migoń	physician	medical science	physician	clinical classes
Monika Rosa	physician	medical science	physician	clinical classes
Agnieszka Kwella	physician	medical science	physician	clinical classes
Dawid Przystupski	physician	medical science	physician	clinical classes
Paweł Marschollek	physician	medical science	physician	clinical classes
Katedra i Klinika Endokrynologii i Diabetologii Wieku Rozwojowego				
Anna Noczyńska	prof. dr hab.	medical science	physician, specialist in paediatrics, paediatric endocrinology	clinical classes, lectures
Aleksander Basiak	dr n. med.	medical science	physician, specialist in paediatrics, paediatric endocrinology	clinical classes, lectures
Beata Wikiera	dr n. med.	medical science	physician, specialist in paediatrics, paediatric endocrinology	clinical classes, lectures
Teresa Żak	dr n. med.	medical science	physician, specialist in paediatrics, paediatric endocrinology	clinical classes, lectures
Agnieszka Zubkiewicz-Kucharska	dr n. med.	medical science	physician, specialist in paediatrics, paediatric endocrinology	clinical classes, lectures
Joanna Chrzanowska	dr n. med.	medical science	physician, specialist in paediatrics	clinical classes, lectures
Julita Nocoń-Bohusz	dr n. med.	medical science	physician, specialist in	clinical classes,




			paediatrics	lectures
Monika Seifert	dr n. med.	medical science	physician, specialist in paediatrics	clinical classes, lectures
Agnieszka Gorlo	physician	medical science	physician	clinical classes
Michał Stępkowski	physician	medical science	physician	clinical classes
I Katedra i Klinika Pediatrii, Alergologii i Kardiologii				
Wioleta Kucharska	dr n. med.	medical science	physician, specialist in paediatrics, paediatric cardiology	clinical classes, lectures
Małgorzata Gromkowska	dr n. med.	medical science	physician, specialist in paediatrics, cardiology	clinical classes, lectures
Marek Wasicionek	physician	medical science	physician, specialist in paediatrics, cardiology	clinical classes, lectures
Anna Halarewicz-Ciasullo	dr n. med.	medical science	physician, specialist in paediatrics	clinical classes, lectures

Date of Syllabus development
01.10.2021

Syllabus developed by
dr n. med. Joanna Owoc-Lempach
dr n. med. Monika Mielcarek-Siedziuk

Signature of Head(s) of teaching unit(s)

Dean's signature

Wrocław Medical University
Faculty of Medicine
Vice-Dean for English Studies

.....
prof. Beata Spława-Szczyńska, PhD

Uniwersytet Medyczny we Wrocławiu
KATEDRA I KLINIKA
TRANSPLANTACJI SZPIKU, ONKOLOGII
I HEMATOLOGII DZIECIĘCIEJ
.....
prof. dr hab. Krzysztof Kalwak