





Summer Semester													
I Katedra i Klinika Pediatrii, Alergologii i Kardiologii	4				6							3	
Katedra i Klinika Endokrynologii i Diabetologii Wieku Rozwojowego	4				7							3	
Katedra i Klinika Transplantacji Szpiku, Onkologii i Hematologii Dziecięcej	4				7							4	
<b>TOTAL per year:</b>													
I Katedra i Klinika Pediatrii, Alergologii i Kardiologii	8				11							5.5	
Katedra i Klinika Endokrynologii i Diabetologii Wieku Rozwojowego	8				12							5.5	
Katedra i Klinika Transplantacji Szpiku, Onkologii i Hematologii Dziecięcej	8				12							6.5	
Educational objectives (max. 6 items)													
<b>C1. To familiarize the student with the diagnosis of life-threatening conditions and diagnostic and therapeutic activities.</b>													
<b>C2. Developing students' subjective and objective examination skills in the aspect of cardiovascular disease, endocrine system and cancer.</b>													
<b>C3. Acquiring the ability to plan diagnostic procedures, interpret its results and plan therapeutic procedures.</b>													
<b>C4. To familiarize students with morphological and physiological differences of particular organs and systems in developmental age.</b>													
Education result matrix for module/course in relation to verification methods of the intended education result and the type of class													
Number of course education result	Number of major education result	Student who completes the module/course knows/is able to				Methods of verification of intended education results (forming and summarising)				Form of didactic class <i>**enter the abbreviation</i>			
<b>W01</b>	<b>E.W1.</b>	Knows, describes, defines and explains the environmental and epidemiological conditions of the most common diseases.				oral exam				L, CC			
<b>W02</b>	<b>E.W2.</b>	Knows, describes, defines and explains the principles of nutrition for healthy and sick children, protective vaccinations and health care.				oral exam				L, CC			
<b>W03</b>	<b>E.W3.</b>	Knows, describes, defines, explains and understands the causes, symptoms, principles of diagnosis and therapeutic treatment in the case of the most common diseases of children: a) rickets, tetany, convulsions, b) heart defects, myocarditis, endocarditis, cardiomyopathy, arrhythmias, heart failure, hypertension, syncope, c) acute and chronic diseases of the upper and lower respiratory tract, congenital defects of the respiratory system, tuberculosis,				oral exam				L, CC			



		cystic fibrosis, asthma, allergic rhinitis, urticaria, anaphylactic shock, angioedema edema, d) anemia, haemorrhagic diathesis, bone marrow failure, childhood cancers, including solid tumors typical of childhood; e) acute and chronic abdominal pain, vomiting, diarrhea, constipation, gastrointestinal bleeding, peptic ulcer disease, inflammatory bowel disease, pancreatic disease, cholestasis and liver diseases, and other acquired and congenital gastrointestinal disorders, f) urinary tract infections, congenital malformations, nephrotic syndrome, nephrolithiasis, acute and chronic renal failure, acute and chronic kidney disease, renal system diseases, urinary disorders, vesicoureteral reflux disease, g) growth disorders, thyroid and parathyroid diseases, adrenal diseases, diabetes, obesity, puberty disorders and gonadal function, h) cerebral palsy, inflammation of the brain and meningitis, epilepsy, i) the most common infectious diseases of childhood, j) genetic syndromes, k) connective tissue diseases, rheumatic fever, juvenile arthritis, systemic lupus, dermatomyositis.		
<b>W04</b>	<b>E.W4.</b>	Knows, describes, defines and explains issues of: battered child and sexual abuse, mental retardation, behavioral disorders: psychoses, addictions, eating disorders and excretion in children.	oral exam	L, CC
<b>W05</b>	<b>E.W6.</b>	Knows, describes, defines and explains the most frequently occurring life threatening conditions in children and the rules of management in these states.	oral exam	L, CC
<b>U01</b>	<b>E.U2.</b>	Can conduct a medical interview with the child and his family.	Practical/oral/written exam	CC
<b>U02</b>	<b>E.U4.</b>	Can carry out physical examination of a child of all ages.	Practical/oral/written exam	CC
<b>U03</b>	<b>E.U12.</b>	Is able to plan and carry out differential diagnostics of the most common diseases of children.	Practical/oral/written exam	CC
<b>U04</b>	<b>E.U14.</b>	Can recognize the states of immediate life threat.	Practical/oral/written exam	CC
<b>U05</b>	<b>E.U16.</b>	Can plan the diagnostic, therapeutic and prophylactic procedures.	Practical/oral/written exam	CC
<b>U06</b>	<b>E.U24.</b>	Is able to interpret laboratory tests and identify causes of deviations.	Practical/oral/written exam	CC
<b>U07</b>	<b>E.U29.</b>	Is able to perform basic procedures and medical procedures, including: a) body temperature measurement, heart rate measurement, non-invasive blood pressure measurement, b) monitoring of vital signs using a cardiomonitor, pulse oximetry, c) spirometry test, oxygen treatment, assisted and replacement ventilation, d) introduction of the oropharyngeal tube, e) intravenous, intramuscular and	Practical/oral/written exam	CC



		subcutaneous injections, peripheral vein cannulation, peripheral venous blood collection, blood cultures collection, arterial blood sampling, arterialized capillary blood collection, f) collecting swabs from the nose, throat and skin, puncture of the pleural cavity, g) catheterization of the bladder in men and women, probing the stomach, gastric lavage, enema, h) a standard resting electrocardiogram with interpretation, electrical cardioversion and heart defibrillation, i) simple test strips and blood glucose measurement.		
<b>U08</b>	<b>E.U30.</b>	Can assist in the following procedures and medical procedures: a) transfusion of blood and blood products, b) drainage of the pleural cavity, c) puncture of the pericardial sac, d) puncturing the peritoneal cavity, e) lumbar puncture, f) thin-needle biopsy, g) epidermal tests, h) intradermal and scarification tests and interprets their results.	Practical/oral/written exam	CC
<b>K01</b>		Can establish and maintain a deep and respectful contact with the patient.	Practical/oral/ exam	CC
<b>K02</b>		Is guided by the good of the patient, placing them in the first place.	Practical/oral/ exam	CC
<b>K03</b>		Respects medical confidentiality and patient's rights.	Practical/oral/ exam	CC
<b>K04</b>		Is aware of one's limitations and the ability to constantly learn.	Practical/oral/ exam	CC
<p>** L - lecture; SE - seminar; AC – auditorium classes; MC – major classes (non-clinical); CC – clinical classes; LC – laboratory classes; SCM – specialist classes (magister studies); CSC – classes in simulated conditions; FLC – foreign language course; PCP practical classes with patient; PE – physical education (obligatory); VP – vocational practice; SS – self-study, EL – E-learning .</p> <p>Please mark on scale 1-5 how the above effects place your classes in the following categories: communication of knowledge, skills or forming attitudes:</p> <p>Knowledge: 5 Skills: 5 Social competences: 5</p>				
<b>Student's amount of work (balance of ECTS points)</b>				
<b>Student's workload</b> (class participation, activity, preparation, etc.)			<b>Student Workload (h)</b>	
1. Contact hours:			59	
2. Student's own work (self-study):			17,5	
Total student's workload			76,5	
ECTS points for module/course			3	
Comments				
<p><b>Content of classes</b> (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects)</p> <p><u>Katedra i Klinika Transplantacji Szpiku, Onkologii i Hematologii Dziecięcej:</u> Classes are conducted within the Clinic Departments. Students acquire theoretical and practical knowledge in the</p>				



field of etiopathogenesis and symptomatology of cancer in children. Under the supervision of the lecturer, the student covers the care of one or several patients who are interviewed by the student, plans differential diagnosis, offers additional tests and treatment. In addition, it assists in performing diagnostic and therapeutic procedures. Particular emphasis during the classes is on the development of the ability to independently draw conclusions, oncology alertness and cooperation with a family doctor.

Katedra i Klinika Endokrynologii i Diabetologii Wieku Rozwojowego:

Classes are conducted within the Department of Pediatric Endocrinology, at the Outpatient Clinic and diagnostic laboratories, where students acquire knowledge and acquire practical skills in the field of:

1. Contemporary methods of therapy of type 1 diabetes – insulin therapy standards – multiple daily injections and continuous subcutaneous insulin infusion. Glucose monitoring with CGM systems. Practical training: pump use, CGMS interpretation etc. Acute diabetes complications: hypoglycemia and diabetic ketoacidosis – diagnosis, treatment.
2. Puberty disorders – precocious and delayed puberty. Clinical cases presentation and interpretation. Planning of diagnostic procedures and therapy. Goals of therapy.
3. Short stature and gigantism – differential diagnosis, causes: idiopathic short stature, familial short stature, GHD. Practical training - planning of diagnostic procedures and therapy, treatment options. Goals of therapy, monitoring of the treatment.
4. Obesity and anorexia. Practical training – case studies. Nutrition principles, weight reduction in obesity, nutrition in anorexia,

I Katedra i Klinika Pediatrii, Alergologii i Kardiologii:

Classes are conducted within the Department of Pediatric Cardiology. Students acquire theoretical and practical knowledge in the field of symptomatology of congenital heart defects, etiopathogenesis of cardiovascular disease (inflammation in the heart, hypertension, arrhythmias). Practical classes take place in the Department, at the Outpatient Clinic and diagnostic laboratories, where students acquire practical skills (ECG score, chest X-ray), get acquainted with diagnostic tests performed in the Clinic (heart ultrasound, stress test, tilt test)

Lectures (L)

Winter semester

Katedra i Klinika Transplantacji Szpiku, Onkologii i Hematologii Dziecięcej:

1. Life-threatening conditions in pediatric oncology (2h).
2. Infectious complications in cancer patients (2h).

Katedra i Klinika Endokrynologii i Diabetologii Wieku Rozwojowego:

1. Advances in treatment of type 1 diabetes. Acute complications of diabetes. Prognosis (2h).
2. Contemporary diagnostic and treatment of growth and puberty disorders in children and adolescents (2h).

I Katedra i Klinika Pediatrii, Alergologii i Kardiologii:

1. New methods In pediatric cardiology part 1: interventional treatment CHD (2h).
2. New methods In pediatric cardiology part 2 : surgical treatment CHD (2h).

Lectures (L)

Summer semester

Katedra i Klinika Transplantacji Szpiku, Onkologii i Hematologii Dziecięcej:

1. Therapeutic apheresis (2h).
2. Targeted cancer therapies (2h).

Katedra i Klinika Endokrynologii i Diabetologii Wieku Rozwojowego:

1. Type 2 diabetes and other types of diabetes in children. Diagnosis, treatment, prognosis (2h).
2. Disorders of calcium metabolism In children (2h).

I Katedra i Klinika Pediatrii, Alergologii i Kardiologii:

1. Cardiomyopathies in children (2h).
2. Heart failure In children (2h).



<p>Clinical classes (CC)</p> <p>Winter semester</p> <p><u>Katedra i Klinika Transplantacji Szpiku, Onkologii i Hematologii Dziecięcej:</u></p> <ol style="list-style-type: none"> <li>1. CNS tumors (3h).</li> <li>2. Solid tumors. Bone tumors (2h).</li> </ol> <p><u>Katedra i Klinika Endokrynologii i Diabetologii Wieków Rozwojowych:</u></p> <ol style="list-style-type: none"> <li>1. Diabetes – etiology, diagnosis and treatment (3h).</li> <li>2. Thyroid disorders – etiology, diagnosis, treatment (2h).</li> </ol> <p><u>I Katedra i Klinika Pediatrii, Alergologii i Kardiologii:</u></p> <ol style="list-style-type: none"> <li>1. CHD with L-to-R shunt (3h).</li> <li>2. Combined cyanotic CHD (2h).</li> </ol> <p>Clinical classes (CC)</p> <p>Summer semester</p> <p><u>Katedra i Klinika Transplantacji Szpiku, Onkologii i Hematologii Dziecięcej:</u></p> <ol style="list-style-type: none"> <li>1. Combination cancer therapy (4h).</li> <li>2. Late effects of cancer treatment (3h).</li> </ol> <p><u>Katedra i Klinika Endokrynologii i Diabetologii Wieków Rozwojowych:</u></p> <ol style="list-style-type: none"> <li>1. Adrenal glands diseases – congenital adrenal hyperplasia, etiology, diagnosis, treatment. Other causes of adrenal insufficiency, adrenal crisis (4h).</li> <li>2. Short stature. Puberty disorders. Obesity. PCOs (3h).</li> </ol> <p><u>I Katedra i Klinika Pediatrii, Alergologii i Kardiologii:</u></p> <ol style="list-style-type: none"> <li>1. Arrhythmias in children (3h).</li> <li>2. Hypertension in children (3h).</li> </ol>	
<p>Basic literature (list according to importance, no more than 3 items)</p> <ol style="list-style-type: none"> <li>1. W.E. Nelson: Textbook of Pediatrics</li> <li>2. R.E. Behrman, R.M. Kliegman: Nelson Essentials of Pediatrics</li> </ol>	
<p>Didactic resources requirements (e.g. laboratory, multimedia projector, other...)</p> <p>laboratory, seminar room, overhead projector, computer, light microscope, ECG, ultrasound</p>	
<p>Preliminary conditions (minimum requirements to be met by the student before starting the module/course)</p> <p>proper dress and footwear, stethoscope, throat examination flashlight, basic physical examination skills, medical history collection,</p>	
<p>Conditions to receive credit for the course (specify the form and conditions of receiving credit for classes included in the module/course, admission terms to final theoretical or practical examination, its form and requirements to be met by the student to pass it and criteria for specific grades)</p> <p>- Active participation in classes (excused 1 absence per year)</p> <p>- Obtaining credit of the test finishing the practical exercises (oral or written).</p>	
<p> </p>	
<b>Grade:</b>	<b>Criteria</b> (only for courses/modules ending with an examination)
Very Good (5.0)	



Good Plus (4.5)	
Good (4.0)	
Satisfactory Plus (3.5)	
Satisfactory (3.0)	

**Name and address of module/course teaching unit, contact: telephone and e-mail address**

Katedra i Klinika Transplantacji Szpiku, Onkologii i Hematologii Dziecięcej:

ul. Borowska 213  
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Katedra i Klinika Endokrynologii i Diabetologii Wieku Rozwojowego

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I Katedra i Klinika Pediatrii, Alergologii i Kardiologii

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**Coordinator / Person responsible for module/course, contact: telephone and e-mail address**

Katedra i Klinika Transplantacji Szpiku, Onkologii i Hematologii Dziecięcej:

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**List of persons conducting specific classes: full name, degree/scientific or professional title, discipline, performed profession, form of classes.**

**Teachers list:**

**I Katedra i Klinika Pediatrii, Alergologii i Kardiologii**  
Marek Wasiconek, MD, pediatrics, pediatric cardiology, CC, L  
Ewa Masłowska, MD PhD, pediatrics, pediatric cardiology, CC, L  
Joanna Kukawczyńska-Noczyńska, MD, pediatrics, CC  
Anna Halarewicz -Ciasullo, MD, pediatrics, CC  
Magdalena Gziut, MD, pediatrics, CC



**Katedra i Klinika Endokrynologii i Diabetologii Wieku Rozwojowego**

Aleksander Basiak, MD PhD, pediatrics, pediatric endocrinology, CC, L  
Beata Wikiera, MD PhD, pediatrics, pediatric endocrinology, CC, L  
Teresa Żak, MD PhD, pediatrics, pediatric endocrinology, CC, L  
Agnieszka Zubkiewicz-Kucharska, MD PhD, pediatrics, pediatric endocrinology, CC, L  
Monika Seifert, MD, pediatrics, CC  
Agnieszka Gorlo, MD, pediatrics, CC  
Julita Nocoń-Bohusz, MD PhD, pediatrics, CC  
Joanna Chrzanowska, MD PhD, pediatrics, CC

**Katedra i Klinika Transplantacji Szpiku, Onkologii i Hematologii Dziecięcej:**

Alicja Chybicka, Prof, pediatric, pediatric hematology and oncology, clinical transplantology, palliative care, clinical immunology, CC, L  
Bernarda Kazanowska, Ass Prof, pediatrics, pediatric hematology and oncology, CC, L  
Krzysztof Kałwak, Prof, pediatrics, pediatric hematology and oncology, clinical transplantology, clinical immunology, CC, L  
Grażyna Wróbel, Ass Prof, pediatrics, pediatric hematology and oncology, CC, L  
Marek Ussowicz, Ass Prof, pediatrics, pediatric hematology and oncology, clinical transplantology, CC, L  
Wojciech Pietras, MD PhD, pediatrics, pediatric hematology and oncology, CC, L  
Elżbieta Latos-Grażyńska, MD PhD, pediatrics, pediatric hematology and oncology, CC, L  
Monika Mielcarek-Siedziuk, MD PhD, pediatrics, CC, L  
Małgorzata Salamonowicz, MD PhD, pediatrics, pediatric hematology and oncology, CC, L  
Tomasz Jarmoliński, MD PhD, pediatrics, pediatric nephrology, clinical transplantology, transfusiology, CK, W  
Jowita Frączkiewicz, MD, pediatrics, CC  
Małgorzata Janeczko, MD, pediatrics, CC

**Date of Syllabus development**

**Syllabus developed by**

01.06.2017 r.

Monika Mielcarek-Siedziuk, MD PhD

Wrocław Medical University  
FACULTY OF MEDICINE  
DEAN

Signature of Faculty Dean

  
Prof. Małgorzata Sobieszkańska, MD, PhD

Signature of Head of teaching unit  
Uniwersytet Medyczny we Wrocławiu  
KATEDRA I KLINIKA  
TRANSPLANTACJI SZPIKU, ONKOLOGII  
I HEMATOLOGII DZIECIĘCJEJ  
Kierownik

prof. dr hab. Alicja Chybicka

  
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WYDZIAŁ LEIARSKI  
Przedkazan ds. Studentów  
Dr hab. Paweł Domosławski