





Department of Paediatric Bone Marrow Transplantation, Oncology and Hematology	4			6										
Department and Clinic of Paediatric Nephrology	∞			6										
<b>Summer Semester</b>														
1st Department and Clinic of Paediatrics, Allergology and Cardiology	2			6										
2nd Department and Clinic of Paediatrics, Gastroenterology and Nutrition	10			6										
Department of Paediatric Bone Marrow Transplantation, Oncology and Hematology	0			9										
Department and Clinic of Paediatric Nephrology	0			9										
3rd Department and Clinic of Paediatrics, Immunology and Rheumatology of Developmental Age	2													
<b>TOTAL per year:</b>														
Winter semestr	14			30										
Summer semestr	14			30										
Educational objectives (max. 6 items)														
<b>C1. Developing skills in physical examination of a child in the aspect of the diseases of the respiratory system, gastrointestinal tract, urinary system and hematopoietic system.</b>														
<b>C2. Presentation of morphologic and physiologic differences of particular body organs and systems in developmental age (respiratory system, gastrointestinal system, urinary system and</b>														



hematopoietic system).

**C3.** Presentation of the principles of rational nutrition of healthy and sick children.

**C4.** Formation in students of the skills of prophylactic actions in selected diseases of the gastrointestinal system, respiratory system, urinary system and hematopoietic system.

**C5.** Presentation to the students of diseases of respiratory system, gastrointestinal system, urinary system and hematopoietic system in developmental age.

**C6.** Presentation to the students of diseases of congenital malformation and genetically based diseases of respiratory system, gastrointestinal system, urinary system and hematopoietic system in developmental age.

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>W1</b>	<b>EW1</b>	Is capable to describe and explain of genetical, environmental and epidemiological factors of the most common diseases	Oral response	Lectures classes
<b>W2</b>	<b>EW2</b>	Is capable to apply the rules of nutrition of healthy and sick children, immunization and health balance of a child.	Oral response	Lectures classes
<b>W3</b>	<b>EW3</b>	Is capable to list and understands the causes, symptoms, diagnostic rules and therapeutic procedures of the most common diseases in children:  a) acute and chronic diseases of the upper and lower respiratory tracts, congenital malformations of the respiratory tract, tuberculosis, cystic fibrosis, allergic rhinitis, anaphylactic shock, urticaria, angioedema,  b) anemia, hemorrhagic diseases, bone marrow insufficiencies, neoplastic diseases in developmental age including tumors typical for child's age,  c) acute and chronic abdominal pain, vomiting, diarrhea, constipation, gastrointestinal tract bleeding, ulcerative disease, inflammatory bowel disease, cholestasis and liver diseases and acquired diseases and congenital malformation of the gastrointestinal tract,  e) urinary tract infections, congenital urinary tract malformations, nephrotic syndrome, urolithiasis, acute and chronic renal insufficiency, acute and chronic nephritis, systemic kidney diseases, urination disturbances, vesicoureteral reflux disease,	Oral response	Lectures classes
<b>W4</b>	<b>EW6</b>	Is capable to diagnose and describe the most frequent life-threatening conditions in children and knows in practice algorithms of treatment	Oral response	classes



		of these conditions		
<b>U1</b>	EU2	Is capable to gather medical interview with a child and its family.	Oral response	classes
<b>U2</b>	EU4	Is capable to conduct physical examination of a child at every age.	Oral response	classes
<b>U3</b>	EU7	Is capable to assess general state, consciousness and awareness of a patient.	Oral response	classes
<b>U4</b>	EU9	Is capable to put anthropometric measurements and blood pressure into percentile charts.	Oral response	classes
<b>U5</b>	EU12	Is capable to plan and conduct differential diagnosis of the most common diseases in children	Oral response	classes
<b>U6</b>	EU13	Is capable to assess and describe somatic and psychological state of the patient	Oral response	classes
<b>U7</b>	EU14	Is capable to recognize states of direct life-threatening	Oral response	classes
<b>U8</b>	EU16	Is capable to plan diagnostic, therapeutic and prophylactic process	Oral response	classes
<b>U9</b>	EU17	Is capable to interpret and analyze the possible adverse events of particular drugs and their interactions	Oral response	classes
<b>U10</b>	EU24	Is capable to interpret laboratory results, to identify the reasons of deviations and draw the conclusions from laboratory results	Oral response	classes
<b>U11</b>	EU25	Is capable to conduct feeding treatment (including enteral and parenteral feeding)	Oral response	classes
<b>U12</b>	EU28	Is capable to collect material used in laboratory diagnostics	Oral response	classes
<b>U13</b>	EU29	Is capable to perform basic medical procedures and interventions, including: a) taking of body temperature, taking of pulse rate, noninvasive blood pressure measurement, b) monitor of life parameters with cardio monitor and pulse-oximeter, c) spirometry examination, oxygen treatment, assisted and artificial respiration, d) intravenous, subcutaneous and intramuscular injections, peripheral veins cannulation, peripheral blood collection, blood culture collection, arterial blood collection, arterialized capillary blood collection, e) collection of nasal, throat and skin swabs, pleural cavity puncture, f) urinary vesicle catheterization, stomach catheterization, stomach lavage, enema, h) simple strip tests, blood glucose determination.	Oral response	classes
<b>U14</b>	EU30	Willingly and actively participates in the following medical procedures and interventions: a) blood and blood products transfusions, b) pleural cavity drainage, d) intradermic and scarification tests and interprets the results	Oral response	classes
<b>U15</b>	EU32	Creates and is capable to plan consultations with consultants	Oral response	classes

Please mark on scale 1-5 how the above effects place your classes in the following categories:  
communication of knowledge, skills or forming attitudes:

Knowledge: ....5

Skills: ....5



Student's amount of work (balance of ECTS points)	
Student's workload (class participation, activity, preparation, etc.)	Student Workload (h)
1. Contact hours:	88
2. Student's own work (self-study):	30
Total student's workload	118
ECTS points for module/course	4.5
Comments	
<b>Content of the classes:</b>	
<u>I Department and Clinic of Pediatrics, Allergology and Cardiology</u> Classes are conducted in clinical wards (bed-side exercises), Allergology Outpatient Consultation Clinic and Respiratory System Functional Examination Laboratory. Students acquire theoretical and practical knowledge on etopathogenesis and symptomatology of respiratory system diseases in children. As far as possible students independently take care of one or several patients in whom they take medical history, plan differential diagnostics, propose additional tests and treatment. Additionally, students assist in diagnostic and therapeutic procedures. Particular attention is paid to the development of individual drawing of conclusions and cooperation with family and basic care physician.	
<u>II Department and Clinic of Pediatrics, Gastroenterology and Nutrition</u> Classes are conducted in clinical wards (bed-side exercises), Gastroenterology Outpatient Consultation Clinic, Endoscopy and Gastrointestinal System Functional Examination Laboratory. Students acquire theoretical and practical knowledge on etopathogenesis and symptomatology of the gastrointestinal system diseases in children. As far as possible students independently take care of one or several patients in whom they take medical history, plan differential diagnostics, propose additional tests and treatment. Additionally, students assist in diagnostic and therapeutic procedures. Particular attention is paid to the development of individual drawing of conclusions and cooperation with family and basic care physician.	
<u>Department and Clinic of Bone Marrow Transplantation, Pediatric Oncology and Hematology</u> Classes are conducted in clinical wards (bed-side exercises). Students acquire theoretical and practical knowledge on etopathogenesis and symptomatology of the hematopoietical system diseases in children. Under supervision of the teacher students independently take care of one or several patients in whom they take medical history, plan differential diagnostics, propose additional tests and treatment. Additionally, students assist in diagnostic and therapeutic procedures. Particular attention is paid to the development of individual drawing of conclusions and cooperation with family and basic care physician.	
<u>Department and Clinic of Pediatric Nephrology</u> Classes are conducted in the wards Clinic of Pediatric Nephrology and in Dialysis Station (bed-side exercises) and urodynamic laboratory. Students acquire theoretical and practical knowledge on etopathogenesis and symptomatology of the urinary system diseases in children. As far as possible students independently take care of one or several patients in whom they take medical history, plan differential diagnostics, propose additional tests and treatment. Additionally, students assist in diagnostic and therapeutic procedures. Particular attention is paid to the development of individual drawing of conclusions and cooperation with family and basic care physician.	
<b>Lectures</b>	
<u>I Department and Clinic of Pediatrics, Allergology and Cardiology</u> 1. Acute and chronic inflammatory states of the respiratory system in children. 2. Life-threatening conditions in respiratory tract diseases in children.	
<u>II Department and Clinic of Pediatrics, Gastroenterology and Nutrition</u> 1. Inflammatory bowel disease. 2. Celiac disease and malabsorption syndrome. 3. Functional disorders of the gastrointestinal tract in children. 4. Selected diseases of the upper gastrointestinal tract in children. 5. Pathological jaundices in infantile period. Diseases of the pancreas in children.	
<u>Department and Clinic of Bone Marrow Transplantation, Pediatric Oncology and Hematology</u> 1. Anemias of children age. 2. Hemorrhagic disorders in children and adolescents.	
<u>Department and Clinic of Pediatric Nephrology</u>	



1. Glomerulonephritis. Nephrotic syndrome.
2. Congenital malformation of the urinary tract.
3. Acute kidneys injury. Hemolytic-uremic syndrome.
4. Chronic renal disease.

III Department and Clinic of Propaedeutic of Pediatrics, Immunology and Rheumatology of Developmental Age

1. The most common diseases of connective tissue in children.

**Seminars**

- 1.

**Practical Classes**

I Department and Clinic of Pediatrics, Allergology and Cardiology

1. Basic terms in allergology. Allergic diseases as a social problem, epidemiology, basic mechanisms of allergic diseases (environmental and genetic). Prophylaxis of allergy.
2. Respiratory tract infections. Symptomatology in various ages of children. Bronchial asthma, definition, pathophysiology, symptomatology, diagnostics (functional examinations of the respiratory system) treatment.
3. Skin disorders in allergology. Atopic dermatitis.
4. Hives. Symptomatology, pathogenesis, differential diagnostics, treatment.
5. Allergic rhinitis. Differential diagnosis of allergic and infectious rhinitis.

II Department and Clinic of Pediatrics, Gastroenterology and Nutrition

1. Functional disorders of the gastrointestinal tract in infants and older children. Chronic abdominal pain in children, current diagnostic methods.
2. Acute diarrhea. Basics of correction of water-electrolyte balance and acid-base balance disturbances.
3. Pathological jaundices in infants and older children, Malformations of the biliary tracts. Cholelithiasis. Pancreatitis in children
4. Celiac disease and its manifestation in developmental age. Chronic diarrhea in children. Food intolerance and food allergy – diagnostics, differential diagnostics. Disturbances of digestion and intestinal absorption. Cystic fibrosis – manifestations in children.
5. Hemorrhage from the gastrointestinal tract. Inflammatory bowel disease.

Department and Clinic of Bone Marrow Transplantation, Pediatric Oncology and Hematology

1. Assessment of peripheral blood morphology in different age groups. Anemias of children age – symptoms, diagnostics, differential diagnostics, treatment. Thrombocytes count and functions disturbances. Granulocytes count and functions disturbances.
2. Lymphadenopathy. Hepatosplenomegaly.
3. Child age leukemia – symptoms, diagnostics, differential diagnostics, treatment. Child age lymphomas – symptoms, diagnostics, differential diagnostics, treatment.
4. Blood coagulation disturbances. (hemophilia, von Willebrand disease, thrombophilia, DIC).
5. Introduction to hematopoietic cells transplantations.

Department and Clinic of Pediatric Nephrology

1. Urinary tract infections: diagnostics, clinical symptoms, treatment. Functional disorders of the ureter and urinary bladder. Nocturnal enuresis. Developmental disorders of the urinary tract and their consequences, diagnosis treatment. Nephrolithiasis – etiology, diagnostic and therapeutic algorithms, risk assessment.
2. Acute glomerulonephritis: etiology, clinical course, treatment.
3. Chronic glomerulonephritis, pathomorphology, etiology, clinical course, treatment, Idiopathic nephrotic syndrome – etiopathogenesis, morphologic variants, clinical picture, recommended treatment methods of first relapse and in recurrent relapses. Arterial hypertension; etiology, diagnosis, diagnostic procedures, nonpharmacological treatment, pharmacological therapy.
4. Acute renal damage: causes, clinical variants, diagnosis, clinical picture, diagnosis, treatment indication for dialysis, Hemolytic - uremic syndrome, etiopathogenesis, diagnostics, clinical course, treatment.
5. Chronic kidneys disease, causes, pathogenesis, clinical picture, diagnostic and treatment before dialysis, disease monitoring, preparation for renal transplantation.

**Other**

**Basic literature** (list according to importance, no more than 3 items)



1. Nelson's textbook of pediatrics. 20<sup>th</sup> Edition, Elseviere 2016
2. Philips Lanzkowsky: Manual of Pediatric Hematology and Oncology, Elsevier Inc., 6<sup>th</sup> ed., 2016

Additional literature and other materials (no more than 3 items)

- 1.
- 2.
- 3.

Didactic resources requirements (e.g. laboratory, multimedia projector, other...)

Preliminary conditions (minimum requirements to be met by the student before starting the module/course)

Proper outfit and shoes, stethoscope, flashlight for throat examination, skills in physical examination, differential diagnostics and proposed therapy

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)

To obtain a credit for the course a student must get a credit from each of four clinics participating in didactic process (positive result of oral examination conducted by a teaching assistant). Requirement to obtain a final credit: very good, good or sufficient note in each of the clinics and a presence in the classes (one justified absence during the whole academic year is allowed).

<b>Grade:</b>	<b>Criteria</b> (only for courses/modules ending with an examination)
Very Good (5.0)	Very good answers to the theoretical questions and positive resolve diagnostic and therapeutic problems.
Good Plus (4.5)	Good answers to the theoretical questions and positive resolve diagnostic and therapeutic problems.
Good (4.0)	Good answers to the greater part of the theoretical questions and rewarding solving diagnostic problems.
Satisfactory Plus (3.5)	Week answers to the greater part of the questions and lack of the independent problems solving.
Satisfactory (3.0)	Lack of the correct answers to the greater part of the questions and significant troubles with diagnostic problems.

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

.. II Department and Clinic of Pediatrics, Gastroenterology and Nutrition

.. 50-369 Wrocław

tel. 71 - 770 30 45

e-mail: [barbara.iwanczak@umed.wroc.pl](mailto:barbara.iwanczak@umed.wroc.pl)



[andrzej.stawarski@poczta.onet.pl](mailto:andrzej.stawarski@poczta.onet.pl)

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

Prof. dr hab. Barbara Iwańczak

e-mail: [barbara.iwanczak@umed.wroc.pl](mailto:barbara.iwanczak@umed.wroc.pl)

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

...

No	Name	Title/ degree	discipline	profession	Form od didactic class
1	Andrzej Boznański	prof. dr hab. n. med.	medicine	Pediatrician Allergist	Lectures, classes
2	Ewa Willak-Janc	dr n. med.	medicine	Pediatrician Allergist	classes
3	Anna Dębińska	dr n. med.	medicine	Pediatrician	classes
4	Hanna Danielewicz	dr n. med.	medicine	Pediatrician Allergist	classes
5	Barbara Sozańska	dr hab. n. med.	medicine	Pediatrician Allergist	Lectures, classes
6	Anna Łątkowska	dr n. med.	medicine	Pediatrician Allergist	classes
7	Wanda Balińska-Miśkiewicz	dr n. med.	medicine	Pediatrician Allergist	classes
8	Barbara Iwańczak	prof. dr hab. n. med.	medicine	Pediatrician, Pediatrician gastroenterologist, Gastroenterologist	Lectures, classes
9	Andrzej Stawarski	dr n. med.	medicine	Pediatrician, Gastroenterologist	classes
10	Tomasz Pytrus	dr n. med.	medicine	Pediatrician, Gastroenterologist	classes
11	Elżbieta Krzesiek	dr n. med.	medicine	Pediatrician, Gastroenterologist	classes
12	Krzysztof Matusiewicz	dr n. med.	medicine	Pediatrician	classes
13	Anna Kofla - Dłubacz	dr n. med.	medicine	Pediatrician	classes
14	Agnieszka Borys-Iwanicka	dr n. med.	medicine	Pediatrician, pediatricina gastroenterologist	classes
15	Katarzyna Akutko	lek. med.	medicine	Doctor	classes
16	Tatiana Jamer	lek. med.	medicine	Doctor	classes



17	Alicja Chybicka	prof. dr hab. n. med.	medicine	Pediatrician, Pediatrician hematooncologist	Lectures, classes
18	Bernarda Kazanowska	dr hab. n. med.	medicine	Pediatrician, Pediatrician hematooncologist	Lectures, classes
19	Ewa Gorczyńska	dr hab. n. med.	medicine	Pediatrician, Pediatrician hematooncologist	classes
20	Krzysztof Kałwak	prof. dr hab. n. med	medicine	Pediatrician, Pediatrician hematooncologist	classes
21	Grażyna Wróbel	dr hab. n. med.	medicine	Pediatrician, Pediatrician hematooncologist	classes
22	Wojciech Pietras	dr n. med.	medicine	Pediatrician, Pediatrician hematooncologist	classes
23	Marek Ussowicz	dr hab. n. med.	medicine	Pediatrician, Pediatrician hematooncologist	classes
24	Jadwiga Węclawek -Tompol	dr n. med.	medicine	Pediatrician, Pediatrician hematooncologist	classes
25	Elżbieta Latos - Grażyńska	dr n. med.	medicine	Pediatrician, Pediatrician hematooncologist	classes
26	Joanna Owoc - Lempach	dr n. med.	medicine	Pediatrician, Pediatrician hematooncologist	classes
27	Ewa Niedzielska	dr n. med.	medicine	Pediatrician, Pediatrician hematooncologist	classes
28	Monika Mielcarek	dr n. med.	medicine	Pediatrician	classes
29	Dorota Sęga-Pondel	dr n. med.	medicine	Pediatrician	classes
30	Małgorzata Salamonowicz	dr n. med.	medicine	Pediatrician	classes
31	Justyna Kwaśnicka	lek. med.	medicine	Pediatrician	classes
32	Jowita Frączkiewicz	lek. med.	medicine	Doctor	classes
33	Anna Rodziewicz	lek. med.	medicine	Doctor	classes
34	Dorota Sokalla	lek. med.	medicine	Doctor	classes
35	Karolina Galant	lek. med.	medicine	Doctor	classes
36	Mateusz Stachowiak	lek. med.	medicine	Doctor	classes



37	Małgorzata Janeczko	lek. med.	medicine	Doctor	classes
38	Katarzyna Sierżęga	lek. med.	medicine	Doctor	classes
39	Agnieszka Pomykała	lek. med.	medicine	Doctor	classes
40	Zofia Lutrowicz	lek. med.	medicine	Doctor	classes
41	Danuta Zwolińska	prof. dr hab. n. med.	medicine	Pediatrician, Nephrologist, Pediatric Nephrologist	Lectures, classes
42	Katarzyna Kiliś-Pstrusińska	prof. dr hab. n. med.	medicine	Pediatrician, Nephrologist, Pediatric Nephrologist	classes
43	Irena Makulska	prof. dr hab. n. med.	medicine	Pediatrician, Nephrologist, Pediatric Nephrologist	classes
44	Dorota Polak-Jonkisz	dr hab. n. med.	medicine	Pediatrician, Nephrologist, Pediatric Nephrologist	classes
45	Kinga Musiał	dr hab. n. med.	medicine	Pediatrician, Nephrologist, Pediatric Nephrologist	classes
46	Anna Medyńska	dr n. med.	medicine	Pediatrician, Nephrologist, Pediatric Nephrologist	classes
47	Irena Wikiera-Magott	dr n. med.	medicine	Pediatrician, Nephrologist,	classes
48	Renata Bednorz	dr n. med.	medicine	Pediatrician, Nephrologist,	classes
49	Anna Jakubowska	dr n. med.	medicine	Pediatrician,	classes
50	Agnieszka Pukajło-Marczyk	lek. med.	medicine	Pediatrician,	classes
51	Konstancja Fornalczyk	lek. med.	medicine	Pediatrician,	classes
52	Agnieszka Bargenda	lek. med.	medicine	doctor	classes
53	Karolina Nocuń-Wasilewska	lek. med.	medicine	doctor	classes
54	Katarzyna Prościak	lek. med.	medicine	doctor	classes
55	Monika Storek	lek. med.	medicine	doctor	classes
56	Daiva Gorczyca	dr n. med.	medicine	Pediatrician, Rheumatologist	lecture



**Date of Syllabus development**

30.06.2018

**Syllabus developed by**

*dr n. med. Andrzej Stawarski*  
Specjalista chorób dzieci  
Specjalista gastroenterolog  
1341187

dr n.med. Andrzej Stawarski

**Signature of Head of teaching unit**

Signature of Faculty Dean  
Wrocław Medical University  
FACULTY OF MEDICINE  
VICE-DEAN FOR STUDIES IN ENGLISH  
*Prof. Andrzej Hendrich, PhD*

*2 up.*  
*dr n. med. Andrzej Stawarski*  
Specjalista chorób dzieci  
Specjalista gastroenterolog  
1341187