Course description

Part 2

Other useful information concerning the course	
13. Department conducting the course, address, e-mail address: Department of Pediatrics – Pediatric Diabetology and Lifestyle Medicine Clinic, 40-752 Katowice, ul. Medyków 16 e-mail: klinikadiabetologii@sum.edu.pl	
• **14. Course Coordinator:** Prof. Przemysława Jarosz-Chobot, MD, PhD	
15. Prerequisites in terms of knowledge, skills and other competences: • Basic knowledge of anatomy, physiology, and biochemistry of developmental age. • The student is required to be theoretically prepared according to the topics of lectures, classes, and seminars, based on the recommended literature. • Basic knowledge of epidemiology, hygiene principles, and occupational safety and health is required. • In subsequent years of study (IV–VI), knowledge is gradually expanded according to the curriculum for earlier years (III–V).	

16. Group size	In accordance with the Regulation of the Rector of SUM
17. Teaching materials	• Conversational lecture / e-learning • Lectures / e-learning • Presentations / e-learning • Practical bedside exercises • Student's personal equipment: stethoscope
18. Location of classes	At the locations of the units conducting classes (points 13 A–H) and the Center for Medical Education and Simulation
19. Location and time of office hours	At the units conducting classes (points 13 A–H), by individual appointment via the department office (e-mail or phone contact)

20. Learning outcomes

Number of the course learning outcome	Course learning outcomes	Reference to the learning outcome included in the standards
In terms of knowledge:		
P_W01 / C_K01	Knows the environmental and epidemiological determinants of the most common diseases.	E.W1
P_W02 /C_K02	Knows the principles of nutrition for healthy and ill children, including breastfeeding, immunizations, and health check-ups for children	E.W2

P_W03 / C_K03	Knows the causes, principles of diagnosis, and therapeutic management of the most common diseases and symptoms in children, including: 1. fever, dyspnea, rickets, tetany, seizures, 2. heart defects, myocarditis, endocarditis, pericarditis, cardiomyopathies, arrhythmias, heart failure, hypertension, fainting, 3. acute and chronic diseases of upper and lower respiratory tracts, congenital respiratory defects, tuberculosis, cystic fibrosis, asthma, allergic rhinitis, urticaria, anaphylaxis, angioedema, 4. anemia, bleeding disorders, bone marrow failure syndromes, childhood cancers including solid tumors, 5. acute and chronic abdominal pain, vomiting, diarrhea, constipation, GI bleeding, peptic ulcer disease, IBD, pancreatic diseases, cholestasis, liver diseases, and congenital/acquired GI anomalies, 6. urinary tract infections, congenital defects of the urinary system, nephrotic syndrome, nephrolithiasis, acute and chronic kidney failure, nephritis, systemic kidney diseases, voiding disorders, vesicoureteral reflux, 7. growth disorders, thyroid/parathyroid diseases, adrenal disorders, diabetes, obesity, pubertal and gonadal dysfunction, 8. cerebral palsy, encephalitis, meningitis, epilepsy, 9. common childhood infectious diseases, 10. genetic syndromes, connective tissue diseases, rheumatic fever, juvenile arthritis, lupus, dermatomyositis.	E.W3
P_W04	Knows issues related to child abuse and sexual exploitation, intellectual disability, and behavioral disorders – psychosis, addictions, eating and excretion disorders.	E.W4
P_W05	Knows the most common life-threatening conditions in children and the principles of emergency care.	E.W6
P_W06	Knows the consequences of improper nutrition, including starvation, overeating, unbalanced diet, and disorders of digestion and absorption.	C.W50
P_W07	Knows the consequences of vitamin and mineral deficiencies and excess in the body.	C.W48
P_W08	Knows the principles of conducting scientific, observational, experimental, and in vitro research relevant to medical progress.	B.W29
P_W09	Knows the role of verbal and non-verbal communication in interacting with patients and the concept of trust.	D.W6

P_W10	Knows the main concepts, theories, and ethical principles forming a framework for interpreting and analyzing moral-medical issues.	D.W16
P_W11	Knows the basics of evidence-based medicine.	D.W23
In terms of skills:		
P_U01	Able to take a medical history from a child and their family.	E.U2
P_U02	Able to perform a physical examination of a child at any age.	E.U4
P_U03	Able to perform a basic hearing and visual field test, and otoscopic examination.	EU6
P_U04	Able to assess the general condition, consciousness, and awareness of the patient.	EU7
P_U05	Able to assess the Apgar score and maturity of the newborn, and examine neonatal reflexes.	E.U8
P_U06	Able to compare anthropometric measurements and blood pressure with centile charts.	E.U9
P_U07	Able to assess the stage of sexual maturation	E.U10
P_U08	Able to perform health screening examinations.	E.U11
P_U09	Able to perform differential diagnosis of common childhood illnesses.	E.U12
P_U10	Able to assess and describe the somatic and mental condition of the patient.	E.U13
P_U11	Able to recognize life-threatening conditions.	E.U14
P_U12	Able to recognize intoxication with alcohol, drugs, and other substances.	E.U15
P_U13	Able to plan diagnostic, therapeutic, and preventive procedures.	E.U16
P_U14	Able to analyze potential adverse drug reactions and interactions.	E.U17
P_U15	Able to personalize treatment guidelines when standard therapy is ineffective or contraindicated.	E.U18
P_U16	Able to qualify a patient for home or hospital treatment.	E.U20
P_U17	Able to interpret laboratory results and identify causes of deviations from the norm.	E.U24
P_U18	Able to apply nutritional treatment, including enteral and parenteral nutrition.	E.U25
P_U19	Able to qualify patients for vaccination.	E.U27
P_U20	Able to collect and secure samples for laboratory diagnostics.	E.U28
P_U21	Able to perform basic medical procedures and interventions, including: 1. measuring body temperature (surface and core), pulse, non-invasive blood pressure; 2. monitoring vital signs using a cardiac monitor and pulse oximetry; 3. performing spirometry, oxygen therapy, assisted and mechanical ventilation; 4. inserting an oropharyngeal airway;	E.U29

	5. intravenous, intramuscular, subcutaneous injections; peripheral venous cannulation; venous and arterial blood sampling; capillary blood sampling; 6. taking swabs from the nose, throat, and skin; 7. urinary catheterization in females and males, gastric intubation, gastric lavage, enema; 8. resting electrocardiogram with interpretation, electrical cardioversion, defibrillation; 9. simple strip tests and blood glucose measurements	
P_U22	Able to assist in the following procedures and interventions: 1. transfusion of blood and blood-derived products; 2. pleural cavity drainage; 3. pericardial puncture; 4. peritoneal cavity puncture; 5. lumbar puncture; 6. fine needle aspiration biopsy; 7. skin tests; 8. intradermal and scarification tests and interpret the results.	E.U30
P_U23	Able to plan specialist consultations.	E.U32
P_U24	Able to implement basic treatment in acute poisonings.	E.U33
P_U25	Able to manage patient medical records.	E.U38
P_U26	Able to perform simple functional tests assessing human physiological regulation (stress and exercise tests) and interpret the data regarding basic physiological parameters.	B.U7
P_U27	Able to operate simple measuring instruments and assess measurement accuracy.	B.U9
P_U28	Able to use databases, including internet sources, and search for required information using available tools.	B.U10
P_U29	Able to explain the differences between prospective and retrospective, randomized and case-control studies, case reports, and experimental research, and rank them by evidence quality and reliability.	B.U12
P_U30	Able to design and conduct simple scientific studies, interpret results, and draw conclusions.	B.U13
In terms of social competencies:		
P_K01	Knows the key concepts, theories, and ethical principles that serve as a general framework for interpreting and analyzing moral-medical issues.	D.W16
P_K02	Knows the principles of teamwork.	D.W18
P_K03	Able to build an atmosphere of trust during the entire diagnostic and treatment process.	D.U4
P_K04	Able to conduct conversations with adult patients, children, and their families using active listening and empathy techniques and discuss the patient's life situation.	D.U5
P_K05	Able to observe ethical standards in professional activities.	D.U13
P_K06	Able to recognize the ethical dimension of medical decisions and distinguish factual from normative aspects.	D.U14

P_K07	Able to respect patients' rights.	D.U15
P_K08	Able to demonstrate responsibility for self-development and sharing knowledge with others.	D.U16

21. Forms and subjects of classes	**Number of hours**
21.1. Lectures	
Type 1 diabetes	**2**
Type 2 diabetes	**2**
21.2. Seminars	
21.3. Labs	
Diabetic ketoacidosis	**2**
Pharyngitis, laryngitis, pneumonia	**2**
Gastroenteritis	**2**
Fever in children	**2**
Vomiting in children	**2**
Dehydration in children	**2**
Dyspnea in children	**2**
Diabetes – diagnosis and initial management	**2**

22. Literature

Required literature:

1. *Medical history and physical examination in pediatrics*. Obuchowicz A., ŚlAM Publishing
2. *Pediatrics* – Tom Lissauer, Will Carroll; 5th edition, original title: *Illustrated Textbook of Paediatrics*, Polish edition edited by Prof. Andrzej Milanowski, Edra Urban & Partner, Wrocław 2019
3. *Pediatrics in General Practice*, edited by Anna Dobrzańska, Łukasz Obrycki, Piotr Socha. Media-Press Sp. z o.o., 1st edition, Warsaw 2022
4. *ABC of Child Health Screenings*, Anna Oblacińska, Maria Jadkowska, Piotr Sawiec, Kraków, Medycyna Praktyczna, 2017
5. *Nutrition and Nutritional Treatment of Children and Adolescents*, Hanna Szajewska, Kraków, Medycyna Praktyczna, 2017
6. *Propaedeutics of Pediatrics*, M. Krawczyński, PZWL, Warsaw 2022
7. *Developmental Neurology*, ed. B. Steinborn, PZWL, Warsaw 2017
8. *Pediatrics*, eds. W. Kawalec, R. Grenda, M. Kulus, PZWL, 2018
9. *Pediatrics – Clinical Guide*, edited by Piotr Albrecht, 2nd Polish edition, Elsevier, 2021
10. *On-Call Handbook*, edited by Piotr Buda, Ryszard Grenda, Media-Press Sp. z o.o., 2nd edition, Warsaw 2021

Mandatory online educational materials:

1. Recommendations for the management of bacterial infections of the central nervous system. Diagnostic, therapeutic, and preventive guidelines, 2011. http://koroun.nil.gov.pl/wp-content/uploads/2017/10/Rekomendacje-ukl-nerwowy_2011.pdf
2. Recommendations for management of community-acquired respiratory infections, 2016. http://koroun.nil.gov.pl/wp-content/uploads/2017/10/RekomendacjeA42009.pdf
3. National Vaccination Program for the current (autumn session exam) or previous (spring session exam) calendar year
4. Recommendations of the Polish Society of Pediatric Nephrology (PTNFD) for the management of children with urinary tract infections, 2021 https://ptnfd.org/site/resource/1323,zalecenia-zum_2021.pdf

23. Assessment criteria - details	
In accordance with the recommendations of regulatory bodies. Passing the course – the student has achieved the intended learning outcomes. Detailed course completion and grading criteria are included in the course regulations. A. Continuous observation B. Assessment of activity during exercises and seminars C. Clinical case studies D. Oral exam E. Bedside problem-based evaluation	