

Semmelweis University, Faculty of Medicine - undivided, one-tier training in general medicine

Name of the host institution (and any contributing institution):

Gyermekgyógyászati Klinika - Tűzoltó utcai részleg

Name of subject in Hungarian: Gyermekgyógyászat

Name of subject in English: Pediatrics

Name of subject in German: Kinderheilkunde

Credit value of the course: 6

Semester: 11th semester, 12th semester

(in which the subject is taught according to the curriculum)

Weekly hours	Lecture	Practice	Seminar
0.0	0.0	0.0	0.0

Semester hours	Lecture	Practice	Seminar
240.0	0.0	240.0	0.0

Type of course:

obligatory

Academic year:

2026/27

Language of instruction (for optional and elective subjects):

Course code:

AOKGY2849_SA

(in the case of a new course, to be completed by the Dean's Office, following approval)

Course coordinator name: Dr. Kovács Gábor (klinikai főorvos)

Course coordinator location of work, telephone availability: SE Pediatrics Center Tűzoltó Street Department 06-20-825-9265

Course coordinator position: professor

Course coordinator Date and number of habilitation: 02.06.2009. Number: 279.

Objectives of the course, and its place in the curriculum of the medical training program:

The main aim of the sixth-year block of paediatrics is to teach the most typical clinical symptoms and the most common diseases, as well as the special features of the specialty and its everyday routine, and to acquire practical knowledge.

Format of the course (lectures, group work, practical lessons, etc.):

Participating in ward work, ward rounds

Competencies acquired through completion of course:

Paediatrics is a specialty that deals with the problems and diseases of a large special population.

Our goal is that upon completion of university studies, newly graduated doctors with up-to-date theoretical and practical knowledge will be able to perform independent general medical activities in the field of paediatrics as well.

Course outcome (names and NEPTUN ID of related subjects):

Prerequisites for course registration and completion: (NEPTUN ID):

Internal Medicine II.: AOKBHK118_2A

Pediatrics (5th year): AOKGY2961_1A, AOKGY21121_1A, AOKGY1960_1A, AOKGY11120_1A)

Clinical Genetics: AOKGR1966_1A

In the case of multi-semester courses, position on the possibility of and conditions for concurrent registration:

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The number of students required to start the course (minimum, maximum), method of selecting participants:

Based on registration in Neptun, maximum 24 people.

Detailed course syllabus (if the course can be divided into modules, please indicate): (Theoretical and practical instruction must be broken down into hours (weeks), numbered separately; names of instructors and lecturers must be listed, indicating guest lecturers/instructors. It cannot be attached separately! For guest lecturers, attachment of CV is required in all cases!)

Learning the special examination of children at different ages, carrying out and observing interventions. Evaluation of laboratory results, analysis of blood and urine tests, learning the characteristics of imaging tests in childhood.

General topics:

General physical examination, examination of the throat, examination of the fontanelles, signs of rickets and tetany, hip examination, elementary reflexes and movements, meningeal signs, neurological examination, assessment of vital parameters at different ages, use of percentiles. Calculating a baby's calorie need, calculating body surface area, pain and fever management. Assessment of somatic and mental development.

Treatment of priority diseases:

Resuscitation of newborns and children. Newborn care. Treatment of acute hypovolemic shock. Treatment of status asthmaticus, treatment of dyspnea. Treatment of status epilepticus, treatment of convulsive conditions

Treatment of diabetic ketoacidosis. Treatment of acute renal failure, hypertensive crisis. Care and diagnosis of a patient with bleeding from the unknown part of the gastrointestinal tract. Diagnosis and treatment of surgical patients with acute abdominal symptoms. Care of the patient with Addison's disease.

Differential diagnosis:

One of the most important elements of the training of 6th year students is learning the etiology of different symptoms and the diseases from the everyday practice. This knowledge is essential to take the initial diagnostic steps.

Daily work schedule of 6th year student

Morning (starting at 8AM):

Ward rounds: physical examination of patients, discussion of tasks for the day related to ward patients.

Ward work: check the priority patients at the ward and the interventions (individually). We consider it important to get to know the outpatient work belonging to the respective departments, so we also offer the opportunity to visit them.

Students rotate between different departments to see a variety of patients. Students are assigned to a different tutor every week.

Tutors:

Dr. Andrási Noémi, Dr. Bakó Dorottya, Dr. Balázs Dóra, Dr. Bartha Áron, Dr. Bagyuráné Dr. Frank Veronika, Dr. Benyó Gábor, Dr. Bertalan Rita, Dr. Botlik Dóra, Dr. Botos Péter, Dr. Bots Bianka, Dr. Brückner Edit Ágota, Dr. Búdi Tamás, Dr. Constantin Tamás, Dr. Czövek

Dorottya, Dr. Csóka Monika, Dr. Csordás Katalin, Dr. Dobner Sarolta, Dr. Egyed Bálint, Dr. Erdélyi Dániel, Dr. Erdélyi-Nagy Blanka, Dr. Farkas Márk Kristóf, Dr. Felkai Luca, Dr. Frank Veronika, Dr. Garan Diána, Dr. Gács Zsófia, Dr. Garami Miklós, Dr. Goschler Ádám, Dr. Hegedűs Katalin, Dr. Hegyi Márta, Dr. Horváth Bertalan, Dr. Horváth Klára, Dr. Horváth Zsuzsanna, Dr. Hosszú Éva, Dr. Jenővári Zoltán, Dr. Juhász Orsolya, Dr. Kemény Viktória, Dr. Kiss Tamás, Dr. Klaus Laura, Dr. Koch Dóra, Dr. Kónya Sárma Sultana, Dr. Koós Olivér, Prof. Dr. Kovács Gábor, Dr. Kovács Janka, Dr. Lengvári Lilla, Dr. Lengyel Anna, Dr. Liptai Zoltán, Dr. Müller Judit, Dr. Naghizadeh Farzaneh, Dr. Nemes-Csertő Alinka, Dr. Németh Ágnes, Dr. Osztermayer Dorka Réka, Dr. Pálincás Annamária, Dr. Papp-Bozzai Barbara, Dr. Párkányi Rebeka, Dr. Pásztor Borbála, Dr. Petes Cintia, Dr. Petró Anna, Dr. Péter Réka, Dr. Pfeiffer Anita, Dr. Pinti Éva, Dr. Podráczky Noémi, Dr. Pomlénny Petrá, Dr. Ponyi Andrea, Dr. Prokopp Tamás Benedek, Dr. Ranyák Márta Szilvia, Dr. Repkényi Dorottya, Dr. Sándor Réka Zsuzsanna, Dr. Sükösd Zita, Dr. Szabados Márton, Dr. Szabó András Lajos, Dr. Szabó Léna, Dr. Szabó Sándor, Dr. Szarvas Gábor Zsombor, Dr. Szikszay Orsolya, Dr. Tomsits Erika, Dr. Tóth-Szumutku Fanni, Dr. Turi Alexandra, Dr. Varga Martin István, Dr. Váncza Lóránd, Dr. Velkey Ábel, Dr. Vojnisek Zsuzsanna, Damó Eszter, Durst Anna, Bagó György, Kalmárné Rikker Zsuzsanna, Magyar Emma,

Other courses with overlapping topics (obligatory, optional, or elective courses) in interdisciplinary areas. To minimize overlaps, topics should be coordinated. NEPTUN ID(s) of courses (to be provided):

AOKCSA1133_1A, AOKGRI966_1A, AOKNO1655_SA, AOKBHK785_SA

Requirements for attendance, options for making up missed sessions, and method of absence justification:

It is compulsory to bring a stethoscope and a white coat for the practices, without it the practice will not be considered as completed. In accordance with the study and exam regulations, participation in 90% of the current total number of hours is mandatory. Replacement is possible at alternative times designated by the tutor of the student.

The evaluation of the course and its tutors by students is done through an online system during the duration of the practice.

Assessment methods during semester (number, topics, and dates of midterms and reports, method of inclusion in the course grade, opportunities for make-up and improvement of marks):

(number, topics, and dates of midterms and reports, method of inclusion in the course grade, opportunities for make-up and improvement of marks)

Assessment is based on the evaluation of tutors during the 6 weeks.

Number and type of individual assignments to be completed, submission deadlines:

None.

Requirements for the successful completion of the course:

Attendance at least 90% of the total number of hours. Completing the tasks listed on the "Qualification and evaluation" page and presenting practical skills.

Type of assessment:

comprehensive examination

Exam requirements (list of topics, topics of the test exam, and the optional project topics accepted as an exam)

Students receive 3 topics from the topic list and 2 questions from the screening questions. If the student cannot answer to one of the screening questions, the exam is failed.

Topics:

Differential diagnosis (I.)

1. Differential diagnosis of lymphadenomegaly
2. Abdominal tumours - different diagnosis and treatment
3. Differential diagnosis of childhood anaemias
4. Differential diagnosis of bleeding disorders and immunothrombopenia
5. Differential diagnosis of headaches in children
6. Differential diagnosis of hypertension in children
7. Differential diagnosis of obesity in children
8. Differential diagnosis of polyuria and polydipsia
9. Differential diagnosis of oedema
10. Differential diagnosis of haematuria
11. Differential diagnosis of joint pain
12. Differential diagnosis of fever of unknown origin
13. Differential diagnosis of coughing
14. Differential diagnosis of vomiting
15. Differential diagnosis of diarrhoea
16. Differential diagnosis of bloody stool
17. Differential diagnosis of hepatomegaly, splenomegaly
18. Differential diagnosis of constipation, Hirschsprung's disease
19. Differential diagnosis of sore throat
20. Differential diagnosis of acute and chronic abdominal pain
21. Urinary tract infections, shared congenital diseases
22. Failure to thrive in infancy and childhood
23. Neonatal jaundice

General and Emergency Paediatrics (II.)

1. Oncological emergencies: Haemolytic uraemic syndrome, neutropenic fever, hyperleucocytosis, VCS syndrome
2. Alarming signs and necessary examinations in diseases involving the CNS, eg. elevated ICP. Lumbar puncture
3. Symptoms of primary and secondary immunodeficiency
4. The nutrition of the healthy infant and child, nutrition of preterm neonates, caloric needs, nutrition therapy
5. Definition, causes and investigation of malnutrition
6. The prevention of infectious diseases, immunisation
7. Gastrointestinal obstruction in neonates (meconium ileus, pyloric stenosis, intestinal atresia)
8. Diaphragmatic hernia, lung development disorders
9. Acute abdomen in children: ileus, volvulus, intussusception, appendicitis, incarcerated hernia, complications (short bowel syndrome)
10. Acute pain and antiepileptic treatment (pharmacological and non-pharmacological methods)
11. Neonatal life support: APOGAS score
12. Paediatric life support (2020 ERC guideline)
13. Recognition and treatment of shock, different shock types
14. Disorders of fluid balance: treatment (severe dehydration, infusion solutions)
15. Electrolyte disorders (hypos- and hypernatraemia, hypos- and hyperkalaemia)
16. Recognition and emergency treatment of acute respiratory failure
17. Emergency treatment of seizures and status epilepticus
18. Signs of intoxication in children, decontamination
19. Sudden infant death syndrome
20. Recognition and emergency treatment of organ and septic shock
21. Metabolic and respiratory acidosis, metabolic and respiratory alkalosis
22. Symptoms and treatment of hypocalcaemia
23. Perinatal terminology, mortality data and concepts related to gestation and birth.
24. Newborn screening, genetical screening, prevention
25. Physiological growth, anthropometry, normal development, normal values for age from newborns to school age
26. Disorders of neonatal adaptation
27. Perinatal asphyxia
28. Obstructive bronchitis, asthma
29. Epiglottitis, croup, foreign body aspiration
30. Pertussis, sy, HSV, bronchiolitis
31. Causes and treatment of acute gastroenteritis
32. Fever in infants and toddlers
33. Symptoms and signs of allergy: Anaphylaxis.

Specific diseases (III.)

1. Leukemia
2. Tumors of the central nervous system, retinoblastoma
3. Most common solid tumors in children (Neuroblastoma, Wilms-tumor, bone- and soft tissue tumors)
4. Brain injury in neonates, Neonatal seizures, infantile cerebral palsy
5. Infectious diseases of the CNS (meningitis, encephalitis, abscess)
6. Childhood epilepsy: Febrile seizures.
7. Neuromuscular disorders
8. Eating disorders in childhood
9. Behavioral disorders in childhood (autism spectrum disorder, ADHD, tic-disorder)
10. Congenital adrenal hyperplasia
11. Growth disorders
12. Disorders of puberty, gonadal disorders
13. Congenital hypothyreosis
14. Diabetes mellitus, hyperglycaemia, diabetic ketoacidosis
15. Congenital anomalies of the urinary tract, cystic renal disorders
16. Glomerular disorders
17. Haemolytic uremic syndrome
18. Urinary tract infections
19. Acute renal failure
20. Chronic renal failure
21. Juvenile idiopathic arthritis
22. Septic arthritis, osteomyelitis
23. Pediatric SLE
24. Vaccinella in childhood
25. Pneumonia. Most common pathogens by age
26. Cystic fibrosis
27. Malabsorption (celiac disease, lactose and fructose intolerance)
28. Inflammatory bowel disease
29. Acute liver failure, acute hepatitis
30. Neonatal infection
31. Fever with a rash in childhood
32. Mucocutaneous syndromes
33. Complications of prematurity (BPD, ROP, NEC, IVH)
34. Acyanotic congenital heart diseases
35. Cyanotic congenital heart diseases
36. Disorders of the ear
37. Vitamin D deficiency
38. Non-accidental injury in childhood
39. Staphylococcal disease, toxic shock syndrome

Screening questions:

- 1) Imaging modality of choice when evaluating a child for infantile hypertrophic pyloric stenosis: ultrasonography.
- 2) Typical age of intussusception in infants: 3 months - 3 years
- 3) What are the two typical anamnestic features of acute appendicitis? First epigastric and periumbilical pain, later the pain is localized in the right lower abdominal quadrant.
- 4) Standard imaging modality of polytraumatized patients: acute CT.
- 5) Most common cause of acute abdomen in children: appendicitis.
- 6) Which is the most common cause of strangulation ileus? Incarcerated hernia.
- 7) The most common cause of transfusion-requiring hematochemias, without abdominal pain and without diarrhea: Meckel's diverticulum
- 8) You find a high GGT in a patient with obstructive colitis, what should you think about? Sclerosing cholangitis.
- 9) What are the typical characteristics of perianal fissures in Crohn's disease? Not in the midline, deep, not painful.
- 10) What is the first therapeutic choice in Crohn's disease? Exclusive enteral nutrition. 11) What are the two most frequent chest deformities? Pectus excavatum and pectus carinatum.
- 12) What are typical signs of bacterial otitis media? Acute ear tenderness of the tragus.
- 13) What are the 4 most important indications of adenotonsillectomy? Recurrent infections of the upper respiratory tract, recurrent otitis media, inhibition of nasal breathing, obstructive sleep apnea.
- 14) The most frequent pathogen in otitis media? Str. pneumoniae.
- 15) In which cases of middle-ear inflammatory disease should we suggest tympanostomy tubes (Grommet)? Chronic serous otitis media and/or chronic dysfunction of the Eustachian tube.
- 16) What is the most frequent pathogen in urinary tract infections? E. coli.
- 17) What are the typical abnormalities in urine analysis in glomerulonephritis? Red blood cells and red blood cell cylinders. Proteinuria can also appear.
- 18) What is the most frequent cause of hypertension before the adolescent age? Kidney disease. 19) Which is the most frequent glomerulonephritis type? IgA nephropathy.
- 20) What is the prognosis of Wied-syndrome or infantile spasms? Usually poor.
- 21) Which bacterium is the most frequent cause of childhood pneumonia? Str. pneumoniae.
- 22) What are the two main components of the treatment of pseudotumor? Bacterial steriloid, inhibition of adrenergic.
- 23) What is the most common cause of new onset cough? Viral infection.
- 24) What is the Hildebrandt sign characteristic for? Arrey foreign body aspiration.
- 25) What is the most common cause of a cough ongoing since birth which always presents during feeding? Tracheoesophageal fistula.
- 26) What percentage of the mortality is caused by accidents in Hungary in children older than 1 year? 36-40%, this is the main cause of death in children older than 1 year.
- 27) What is the prognosis of juvenile absence epilepsy? Usually favorable.
- 28) What can prevent coronary artery disease (anemury) in Kawasaki syndrome? IVIG.
- 29) What is the most serious complication of juvenile idiopathic arthritis? Macrophage activation syndrome (MAS).
- 30) Which muscles are affected in juvenile polymyositis? Proximal muscles of the limbs.
- 31) What is the typical feature of stool in biliary atresia? Clay-colored (acholic) stool.
- 32) What kind of diseases are included in "atopic march" and in which order? Atopic dermatitis food allergy - asthma bronchiale - allergic rhinitis.
- 33) How is food allergy diagnosed? What is the relationship of IgE testing is not reliable. The diagnosis should be based on double blind oral food challenge.
- 34) In which case serological testing is not informative in celiac disease. In IgA deficiency.
- 35) What is the diagnostic basis of eosinophilic? Skin culture and esophageal biopsy.
- 36) What are the most urinary infections that should be treated with antibiotics? Streptococcus angina, acute otitis media and acute bacterial sinusitis.
- 37) What is the diagnostic basis of erythema migrans? The fact of tick bite and the clinical picture: growing erythema which is more than 5 cm in diameter.
- 38) What is the ideal age for closing the soft palate defect? Between 7 and 18 months.
- 39) What is the most likely diagnosis in the following case: patient with polyuria, polydipsia with positive urine glucose and acetone test? Diabetes mellitus.
- 40) A patient with typical diabetes symptoms has a 11.1 mmol/l blood sugar level in the afternoon. What is to be done? Refer the child to a pediatric diabetic center immediately.
- 41) What kind of hormonal changes are seen in the salt wasting form of congenital adrenal hyperplasia due to deficiency of 21-hydroxylase? Inadequate glucocorticoid and mineralocorticoid secretion, excessive androgen secretion.
- 42) How does the mother's iodine deficiency enhance the newborn's thyroid function? It results in temporary primary hypothyroidism.
- 43) Which is the most common adrenocortical enzyme defect? The defect of the 21-hydroxylase enzyme.
- 44) What are the most typical histologic findings in allergic colitis? Crypt abscesses.
- 45) Name at least 5 extra-intestinal abnormalities in celiac disease: hepatitis, osteoporosis, arthritis, isolated iron deficiency, Dermatitis herpetiformis.
- 46) What is the definition of "graft-versus-leukemia"? Allogeneic attack of the T-lymphocytes against the patient's leukemic cells after allogeneic bone marrow transplantation.
- 47) What is a haploidentical transplant? Half matched HLA antigen stem cell transplant (from usually a family member).
- 48) What does allogeneic stem cell transplant mean? The patient (recipient) gets hematopoietic stem cells from another person (donor).
- 49) What glucose levels are diagnostic for diabetes mellitus? Fasting blood glucose level higher than 7 mmol/l, or more than 11.1 mmol/l at any time or at any point during an oral glucose tolerance test (OGTT).
- 50) Which are the 4 presenting symptoms of diabetes mellitus? Polyuria, polydipsia, weight loss with good appetite, fatigue-weakness.
- 51) What are the diseases most commonly associated with type 2 diabetes mellitus? Celiac disease and Hashimoto thyroiditis.
- 52) What is the most modern therapeutic method of type-one-diabetes? Insulin pump with an integrated glucose sensor.
- 53) How much insulin should be given in diabetic ketoacidosis? 0.05-0.1 U/kg/h
- 54) Since the introduction of expanded screening, how many congenital metabolic diseases are screened routinely in Hungary? 27 and SMA screening is also available.
- 55) The final therapy of biliary atresia is liver transplantation. There is a surgical bridging therapy before transplantation. What is the name of this operation? Kasai porto-enterostomy.
- 56) How often should a baby be breastfed? On demand.
- 57) When is it suggested to introduce cow's milk for children? After 12 months of age.
- 58) How does the renal milk's protein content relate to the cow's milk protein content? One third. 59) What are the most important diseases which can be easily diagnosed and followed up by cranial ultrasound? Brain hemorrhage and hydrocephalus.
- 60) For how long can we see the shadow of the thymus on the thoracic X-ray? Until 3 years of age.
- 61) What radiological examinations can be done to diagnose VUR? (Name three): MCUG (Micturating cystourethrogram), Sono-cystography, Dynamic kidney-cystography.
- 62) How can you diagnose perforation in a critically ill baby with secretory enterocolitis if you cannot move them in the incubator? Horizontal X-ray from side position while the baby is lying on the back.
- 63) In which part of the bone does osteomyelitis start? In the metaphysis.
- 64) How long to wait after surgery before bathing? 7-8 days.
- 65) What is chicken pox (varicella) reactivation called? Herpes zoster.
- 66) What is the sixth disease? Erythema subitum, roseola infantum.
- 67) Which is the contagious disease that causes severe fetal injuries in 80 percent of its cases? Rubella.
- 68) Name at least five examples where pulse oximetry is not informative? Carbon dioxide intoxication, methemoglobinemia, severe anemia, cardiac failure, cold extremities.
- 69) Define paradoxical breathing! The chest moves inward and the abdomen moves outward during inhalation, and vice versa.
- 70) How do we give oxygen to a conscious patient in an emergency situation who is breathing spontaneously? Through a face mask with a reservoir, with high flow oxygen (10-15 l/min).
- 71) How does the concentration of protein and glucose of CSF change in bacterial meningitis? Protein concentration is increased, glucose concentration is decreased.
- 72) Name of the two most common pathogens of newborn meningitis! Streptococcus agalactiae, E. coli.
- 73) What affects the sensitivity of blood cultures? The amount of blood drawn within 24 hours after the fever.
- 74) Name the conditions of infants associated with abdominal pain in which bowel movements are preceded by tension and crying lasting for about 10 minutes? Infantile dyschezia.
- 75) The pathogens causing neonatal infection that can be identified by maternal vaginal secretion screening: Streptococcus agalactiae, Group B streptococcus, GBS).
- 76) The amount of a single fluid bolus required to treat septic shock: 10 ml/kg.
- 77) The most common endocrine disorder during childhood? Hypothyroidism.
- 78) What does precocious puberty mean in the case of girls? If the secondary sexual characteristics appears before the age of 8 years.
- 79) What changes can we see in the urine sediment in typical pyelonephritis? Leukocytes and bacteria.
- 80) In which chromosomal abnormality is diaphragmatic atresia common? Trisomy 21 (Down syndrome).
- 81) What is the radiological sign of diaphragmatic atresia? "Double-bubble" sign.
- 82) What are the B-symptoms in lymphoma? Fever, night sweats, weight loss, etc. 83) At what platelet count is there major risk of bleeding? Below 10-20 G/l.
- 84) What to do in case of neutropenic fever? Broad spectrum empiric antibiotic therapy after taking blood cultures.
- 85) What are the serum electrolyte disturbances in case of tumor lysis syndrome? Elevated potassium, phosphate and uric acid; decreased calcium.
- 86) What are the alarming signs of rebleeding? What examinations are required? Strabismus, leukocoria, ophthalmoscopic examination.
- 87) What is the most common type of malnutrition in childhood? ALU.
- 88) What are the symptoms of increased intracranial pressure? Headache, vomiting in the morning, nuchal rigidity, setting-sun sign, focal neurological signs, bradycardia, high blood pressure, irritability, bulging fontanelle.
- 89) What are the physical symptoms of anorexia? Pale, gaunt, tachycardia, hypotension, heart murmurs.
- 90) How does the total iron binding capacity change in case of anemia and inflammation? Increased in anemia, decreased in inflammation.
- 91) What is the treatment of immune thrombocytopenia (first- and second-line treatment)? IVIG, corticosteroid.
- 92) List the signs of increased work of breathing! Use of respiratory accessory muscles, intercostal retraction, jugular retraction, nasal flaring, paradoxical breathing, grunting.
- 93) At what age do the fontanelles close at the latest? Posterior fontanelle: by 18 months, anterior fontanelle: by 18 months.
- 94) What are the symptoms and laboratory signs of septic syndrome? Prothrombina, hypocalcaemia, hyperfibrinogen, oedema.
- 95) What are the symptoms and laboratory signs of nephritic syndrome? Hematuria, oedema hypertension, uraemia, oliguria (kidney failure is correct instead of the latter two).
- 96) What factors are included in the APOGAS score? Heart rate, respiratory rate, skin color, reflex irritability, muscle tone.
- 97) Age limits of puberty? Boys: 9-14 years, Girls: 8-13 years.
- 98) What are the direct and indirect signs of appetite? Direct signs: tenderness at the McBurney point, indirect signs: Blumberg, Rovsing, Obturator, Psoas signs.
- 99) How can we estimate the body weight between the ages of 2-6 years? (2 years) + 8.
- 100) What does autologous stem cell transplantation mean? A procedure in which a patient's healthy stem cells are collected from the blood or bone marrow before high dose chemotherapy, stored, and then given back to the patient after treatment.
- 101) What is the heart rate and respiratory rate of a healthy newborn? Respiratory rate: 30-60/min, Heart rate: 120-160/min.
- 102) Which cultured pathogen from throat swabs warrants antibiotic treatment? Str. pyogenes.
- 103) In case of maternal GBS positivity, up to what age can the bacteria cause disease in the baby? Up to six months of age.
- 104) What is the recommended empiric treatment of neonates with suspected sepsis? Ampicillin + Gentamycin.
- 105) What are the symptoms and laboratory signs of dyshemostatic syndrome? Petechiae, hypocalcaemia, hyperfibrinogen, oedema.
- 106) In case of pain localized to one point in the bone, when should we order an X-ray if the pain does not stop? 1 week.
- 107) What is the choice of imaging modality if acute osteomyelitis is suspected? MRI.
- 108) What is the most common presentation of cow's milk protein allergy in infants? Bloody stool.
- 109) Which disease should be suspected in case of bloody stool and vomiting in neonates? Volvulus.
- 110) Which disease should be suspected in case of neonates with distended abdomen and severe constipation? Hirschsprung disease.

Clear, specific minimum requirements for assessment. (The list of mandatory concepts, parameters, diagrams, calculations, and practical skills required to obtain a passing grade, as well as the criteria for the completion and evaluation of project assignments accepted as an exam.) A link published on the department's website referring to the minimum requirements of the course.

Screening questions - see above.

The notes available on the Moodle platform cover the knowledge required for the topics.

Method and type of grading (Share of theoretical and practical examinations in the overall evaluation. Inclusion of the results in the end-of-term assessment. Possibilities of and conditions for offered grades.): (Share of theoretical and practical examinations in the overall evaluation, Inclusion of the results in the end-of-term assessment, Possibilities of and conditions for offered grades)

Grades are based on the oral examination. Oral examination can only be attempted if the student received at least grade 2 on the practical examination. The student's performance is evaluated using a five-grade scale: excellent (5), good (4), satisfactory (3), pass (2), and fail (1).

See above.

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Artificial intelligence systems used in the teaching of the subject and the manner of their application

The use of AI-based tools for learning purposes is permitted; however, they may not be considered official sources of information or study materials, and their use is also prohibited during examinations.

Printed resources:

Type	Recommended
Author	Karen Marcdante, Robert M. Kliegman, Abigail M. Schuh
Title	Nelson Essentials of Pediatrics 9ed
Publisher	Elsevier
Year of publication	

Type	Recommended
Author	Robert C. Tasker, Carlo L. Acerini, Edward Holloway
Title	Oxford Handbook of Paediatrics

Publisher	Oxford University Press
Year of publication	2021

Signature of habilitated instructor (course coordinator) announcing the course:

Signature of the director of the host institution:

Date of submission: