

REQUIREMENTS

Semmelweis University, Faculty of General Medicine – single, long-cycle medical training programme

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

Semmelweis University, Department of Pediatrics

Name of the subject: Pediatrics (6th year)

in English:

in German:

Credit value: 6

Semester: 11 - 12

(as defined in the curriculum)

Total number of classes per week: 40	lectures: 0	practical lessons: 40	seminars: 0
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Type of subject: compulsory optional elective

(PLEASE UNDERLINE AS APPLICABLE)

Academic year: 2023/24

Language of instruction, for optional or elective subjects: english

Course code: AOKGY1848_SA

(In the case of a new subject, this cell is filled in by the Dean's Office, following approval)

Course coordinator: Prof. Dr. Szabó Attila

Place of work, phone number: Department of Pediatrics, 06-1-334-3186

Position: Professor, Head of Department of Pediatrics

Date and number of habilitation: Budapest, June 7.2010. , No: 310

Objectives of the course and its place in the medical curriculum:

The main task of the students is to acquire basic skills and knowledge in the field of infant and pediatric medicine. In the 6th year, independent patient care is provided under the guidance and supervision of specialist physicians, which includes patient examination, attendance, independent patient referral, and documentation of patient care.

Place of instruction (address of lecture hall or seminar room etc.):

Department of Paediatrics: 1083 Budapest, Bókay János street 53-54.

Competencies acquired through the completion of the course:

Infant and pediatric medicine is a specialization dealing with special problems and diseases of a large population. Our goal for newly graduated physicians is to possess advanced theoretical and practical knowledge at the end of their university studies and to be able to practice independent medical practice in the field of infant and pediatric medicine.

Prerequisites for course registration and completion:

Internal medicine II.

Pediatrics 5th year

Clinical genetics

Conditions for concurrent course registration and permission thereof in the case of a multi-semester subject: not applicable

Student headcount conditions for starting the course (minimum, maximum) and method of student selection:

Based on Neptun registration, 1/8 of the 6th grade students

Max: 20 students/group

Detailed thematic of the course²:

According to the curriculum, 6th year medical students should complete a 6-week Pediatric practical.

– During one half of the practical, students work in infants' wards, in the other part in children's wards. This way they can acquire and practice the following activities on both infants and children:

– Taking of pulse and blood pressure, correct weight and height measurement (also of infants) (use of percentile tables).

– Under the supervision of the ward physician, active participation in blood sampling, taking throat swab etc.

– Under the supervision of the ward physician, practice of various injection techniques (venous, im, sc and Mantoux test).

– Preparation and control of infusion and transfusion accessories and performing these activities under the supervision of the ward physician. Determination of blood group.

– To assist to special diagnostic or therapeutic interventions and learning eventually to perform them under the supervision of the ward physician (bonemarrow sampling, lumbar puncture).

– Based on the knowledge of the necessary physiological studium: blood counting and urine analysis (also the sediment).

– Taking of case records and temperature charts.

– Participation in the daily rounds for students, where simpler differential diagnostic questions are discussed with the instructions of a full or associate professor.

– Participation in tutorials held on the most important theoretical subjects, enabling students to get acquainted with the standpoint of the hospital in debated questions.

– In addition to the above, students are expected to be able to contact children patients of various ages (to win the patients for the examination), to do basic nursing duties (feeding, drinking, bathing, changing of infants' diapers, administering of medicaments).

– Working in the wards: a) ward round (physical examination, discuss about illnesses, therapy, different diagnoses, etc.) b) follow up on patients c) paperwork (status of physical findings, decursus, discharge report, etc.) d) diagnostic procedures (venapuncture, urine collection, etc.) –

Ward round participation

Related subjects due to interdisciplinary fields (both compulsory and elective) and potential overlaps between subjects:

Pediatrics 5th year: pediatric patient examination – Internal Medicine Propedeutics

Elective courses: Neonatology

Attendance requirements; conditions under which students can make up for absences and the method of absence justification:

Wearing a white lab coat and bringing/using a stethoscope is mandatory during practice. Students confirm their daily presence by signing in the attendance sheet.

Form of assessment in the study period: none

(including the number, topics and scheduling of oral and written tests, their share in the overall evaluation, make-up tests and improvement tests)

Number and type of assignments for individual work and the deadline for submission:

None

Requirements to obtain the teacher's signature:

Completion of rotation and practical exam. The completion of the interventions and the presentation of the attendance sheet signed by the designated tutors are a prerequisite for the oral examination.

Type of assessment: (*comprehensive examination, end-term examination, term-grade, term-grade on a three-grade rating scale, coursework project, no examination*)

Oral final exam.

At the end of the practice, students must have take a practical exam (patient examination) before the oral final exam.

Final examination requirements:

(*list of examination topics, subject areas of tests / examinations, lists of mandatory parameters, figures, concepts and calculations, practical skills and the optional topics for exam-equivalent coursework projects, their criteria of completion and assessment*)

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 hematochezia, without abdominal pain and without diarrhea: **Meckel's diverticulum**
- 8) You find a high GGT in a patient with ulcerative 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 externa? **Pain and/or tenderness of the tragus.**
- 13) What are the 4 most important indications of adenoidectomy? **Recurrent infections of the upper respiratory tract, recurrent otitis media, inhibition of nasal breathing, obstructive sleep apnea.**
- 14) The most frequent pathogen of sinusitis and 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 West-syndrome or infantile spasm? **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 pseudocroup? **Rectal steroid, inhalation of adrenaline.**
- 23) What is the most common cause of new onset cough? **Viral infection.**
- 24) What is the Holzknecht sign characteristic for? **Airway 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 (aneurysm) 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 reliability of IgE testing? **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 endocarditis? **Blood culture and echocardiography.**
- 36) What are the upper airway 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 9 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 18.2 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? **Insufficient glucocorticoid and mineralocorticoid secretion, excessive androgen secretion.**
- 42) How does the mother's iodine deficiency influence 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 ulcerative colitis? **Crypt abscesses.**
- 45) Name at least 5 extraintestinal abnormalities in celiac disease: **hepatitis, osteoporosis, arthritis, isolated iron deficiency, Dühring-disease (dermatitis herpetiformis).**
- 46) What is the definition of "graft versus leukemia"? **Immunologic attack of the donor cells against the patient's leukaemic 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 1 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 breast 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!). **MCU (Micturating cystourethrogram), Sono-cystography, Dynamic kidney-scintigraphy.**
- 62) How can you diagnose perforation in a critically ill baby with necrotizing 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? **Exanthema 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 when 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 culture? **The amount of blood drawn within 24 hours after the fever.**
- 74) Name the condition 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 pathogen 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 causing growth retardation: **Thyroid dysfunction – 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 duodenal atresia common? **Trisomy 21 (Down syndrome)**
- 81) What is the radiological sign of duodenal atresia? **„Double-bubble” sign**
- 82) What are the B-symptoms in lymphoma? **Fever, night sweats, weight loss.** 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 retinoblastoma? What examinations are required? **Strabism, leukocoria - ophthalmoscopic examination.**
- 87) What is the most common type of malignancy in childhood? **ALL.**
- 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 anemia? **Fatigue, paleness, tachycardia, systolic 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 3 months, anterior fontanelle: by 18 months.**
- 94) What are the symptoms and laboratory signs of nephrotic syndrome? **Proteinuria, hypoalbuminemia, hyperlipidemia, 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 APGAR 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 appendicitis? **Direct sign: tenderness at the McBurney point. Indirect signs: Blumberg, Rovsing, Obturator, Psoas signs.**
- 99) How can we estimate the body weight between the ages of 2-8 years? **(2 x 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: 50-60/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 this 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 factors are included in the croup score? **Sound of inhalation, stridor, cough, signs of dyspnea (nasal flaring, retractions), cyanosis.**
- 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**

Topics in Pediatrics for 6th year medical students

Differential diagnosis

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 immunthrombopenia
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 the acute abdomen
14. Differential diagnosis of chest pain
15. Differential diagnosis of coughing
16. Differential diagnosis of vomiting
17. Differential diagnosis of diarrhoea
18. Differential diagnosis of hematemesis
19. Differential diagnosis of bloody stool
20. Differential diagnosis of hepatomegaly, splenomegaly.
21. Differential diagnosis of constipation
22. Differential diagnosis of arrhythmias (bradycardia, tachycardia)
23. Differential diagnosis of sore throat
24. Differential diagnosis of chronic abdominal pain
25. Unconsciousness, altered consciousness
26. Failure to thrive in infancy and childhood
27. Mental retardation
28. Neonatal jaundice

General and Emergency Paediatrics

1. Early and late side effects of oncological treatments
2. Oncological emergencies (tumour lysis syndrome, neutropenic fever, hyperleukocytosis, VCS syndrome)
3. Hydrocephalus, elevated intracranial pressure
4. Alarming signs and necessary examinations in diseases involving the CNS. Lumbar puncture
5. Head injury and its complications

6. Symptoms of primary and secondary immunodeficiency
7. The nutrition of the healthy infant and child, nutrition of preterm neonates, caloric needs, nutrition therapy
8. Definition, causes and investigation of malnutrition
9. Characteristic features for hereditary diseases in newborns
10. When should we consider metabolic disorders?
11. The prevention on infectious diseases, immunisation
12. Gastrointestinal obstruction in neonates (meconium ileus, pylorus stenosis, intestinal atresia)
13. Diaphragmatic hernia, lung development disorders
14. Acute abdomen in children: ileus, volvulus, invagination, appendicitis, incarcerated hernia, complications (short bowel syndrome)
15. Emergencies of the external and internal genitals
16. Acute pain and antipyretic treatment (pharmacological and non-pharmacological methods)
17. Neonatal life support. APGAR score
18. Paediatric life support (2021 ERC guideline)
19. Recognition and treatment of shock, different shock types
20. Disorders of fluid balance, treatment (severe dehydration, infusion solutions)
21. Electrolyte disorders (hypo- and hypernatraemia, hypo- and hyperkalaemia)
22. Recognition and emergency treatment of acute respiratory failure
23. Emergency treatment of seizures and status epilepticus
24. Foreign body aspiration (assessment, emergency care)
25. Most frequent intoxication in children (signs, decontamination) – CO, corrosive substances, alcohols, hydrocarbons, plants, medicines (one pill can kill)
26. Sudden infant death syndrome
27. Recognition and emergency treatment of sepsis and septic shock
28. Metabolic and respiratory acidosis
29. Metabolic and respiratory alkalosis
30. Symptoms and treatment of hypoglycaemia
31. The management of diabetic ketoacidosis
32. Perinatal terminology, mortality data and concepts related to gestation and birth.
33. Newborn screening, genetical screening, prevention
34. Physiological growth, anthropometry, normal development, normal values for age from newborn to school age
35. Disorders of neonatal cardiovascular adaptation
36. Disorders of neonatal respiratory adaptation and lung diseases.
37. Perinatal asphyxia
38. Viral induced wheeze and asthma
39. Epiglottitis, tracheitis, croup
40. Causes and treatment of acute gastroenteritis
41. Fever in infants and toddlers
42. Symptoms and signs, work up and treatment of allergy induced by inhaled agents or food. Anaphylaxis.
43. Transplantation in childhood

Specific diseases

1. Leukaemias
2. Lymphomas
3. Brain tumours, retinoblastoma
4. Neuroblastoma, Wilms-tumour, tumours of the liver
5. Malignant bone and soft tissue tumours
6. Brain injury in neonates. Neonatal seizures
7. Infantile cerebral palsy
8. Infectious diseases of the CNS (meningitis, encephalitis, abscess)
9. Neuroimmunological disorders (ADEM, SM, Guillain-Barré)
10. Childhood epilepsy. Febrile seizures.
11. Facial palsy
12. Neuromuscular disorders
13. Eating disorders in childhood
14. Behavioural disorders in childhood (autism spectrum disorder, ADHD, tic-disorder)
15. Disorders of the pituitary gland
16. Disorders of the adrenal gland
17. Growth disorders
18. Disorders of puberty
19. Gonadal disorders
20. Disorders of the thyroid gland
21. Diabetes mellitus, hyperglycaemia
22. Congenital anomalies of the urinary tract
23. Cystic renal disorders
24. Glomerular disorders
25. Haemolytic uremic syndrome
26. Tubular disorders
27. Urinary tract infections
28. Acute renal failure
29. Chronic renal failure

30. Urolithiasis
31. Juvenile idiopathic arthritis
32. SLE, dermatomyositis, HLH
33. Schönlein-Henoch purpura, Kawasaki-disease, MISC and Wegener granulomatosis
34. Osteomyelitis
35. Hirschsprung-disease
36. Atopic dermatitis, hives, diaper dermatitis
37. Pneumonia. Most common pathogens by age
38. Cystic fibrosis
39. Disorders of the esophagus (GOR, GERD, EoE, congenital and secondary stenosis)
40. Acute and chronic pancreatitis
41. Malabsorption (celiac disease, lactose and fructose intolerance)
42. Inflammatory bowel diseases
43. Unconjugated hyperbilirubinaemia
44. Cholestasis and conjugated hyperbilirubinaemia
45. Acute liver failure, acute hepatitis
46. Neonatal infections
47. Fever with a rash in childhood
48. HIV, Tuberculosis
49. Upper respiratory tract infections, Influenza
50. EBV infection and complications
51. Haematological disorders of neonatal adaptation (polycythaemia, haemolytic disease of the newborn)
52. Complications of prematurity (BPD, ROP, NEC)
53. Acyanotic congenital heart diseases
54. Cyanotic congenital heart diseases
55. Inflammatory diseases of the heart, cardiomyopathies
56. Disorders of the ear
57. Mouth and throat disorders
58. Vitamin-D deficiency
59. Non-lethal numerical chromosomal abnormalities
60. Inheritance patterns and diagnosis of monogenic disorders
61. Non-accidental injury in childhood
62. Staphylococcal diseases, toxic shock syndrome
63. Metabolic syndrome

Method and type of grading:

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

Exam consists of a practical and an oral part. Practical exam takes place the day before the oral exam. Practical exam is not graded and it is a requirement for the oral exam.

There is an entry question for the oral exam followed by three topics, which will be graded.

List of course books, textbooks, study aids and literature facilitating the acquisition of knowledge to complete the course and included in the assessment, precisely indicating which requirement each item is related to (e.g., topic by topic) as well as a list of important technical and other applicable study aids:

List of textbooks:

Tom Lissauer, Graham Clayden: Illustrated Textbook of Paediatrics (Fourth Edition)

William W. Hay, Jr., Myron J. Levin, Robin R. Deterding, Mark J. Abzug: Current Diagnosis & Treatment Pediatrics. 23rd edition, Lange, 2016. ISBN: 978-0071848541

Recommended textbooks: Silver, Kempe Bryn and Fulginiti's Handbook of Pediatrics. Appleton and Lange. ISSN 0440-192

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

Signature of the director of the host institution:

Date of submission: 2023.04.30.



