



Integrated academic studies medicine

FIFTH YEAR

2024/2025.

PEDIATRICS

Subject:

PEDIATRICS

The course is evaluated with 14 ECTS. There are 7 hours of active teaching per week (3 hours of lectures, 3 hours of practice and 1 hour of seminar)

Teachers:

PB	name and surname	E-mail address	Title
1.	Biljana Vuletić	sibil.kg@gmail.com	Full professor
2.	Andjelka Stojković	andja410@mts.rs	Full professor
3.	Sanja Knežević	sanjaknez1980@yahoo.com	Assistant professor
4.	Marija Radovanović	marijaradovanovic939@gmail.com	Assistant professor

COURSE STRUCTURE:

Semester	Name of the module	Week	Lectures weekly	practice weekly	seminar weekly	Teacher
winter	general pediatrics	15	3	3	1	All
summer	special pediatrics	15	3	3	1	
						$\Sigma 90+90=30=210$

EVALUATION:

The grade is equivalent to the number of points earned (see table). Points are earned in three ways:

EXAM PREREQUISITES:

A student can earn up to 40 points: up to 30 points for activity during lectures and practical classes in both semesters, up to 10 points for seminars during both semesters.

FINAL EXAM:

A student can earn up to 60 points by passing a Test (up to 10 points) and an oral exam (up to 50 points). In order for the student to pass the exam, he must achieve more than 50% of points on each of the defined elements of the pre-exam activities, that is, the final exam.

Exam prerequisites	Examination methods (maximum 100 points)		
	No. of points:	Final exam	No. of points:
Student's activity during Lectures and practical classes in winter semester	15	Test	10
Student's activity during Lectures and practical classes in summer semester	15	oral examination	50
Seminars/homework/ test during both semesters	10		

The final grade is formed as follows:

In order to pass the course, the student must obtain a minimum of 51 points, pass pre-exam activities and pass the final exam.

number of points won	grade
0 - 50	5
51 - 60	6
61 - 70	7
71 - 80	8
81 - 90	9
91 - 100	10

LITERATURE:

the name of the textbook	authors	publisher	the library
Nelson Textbook of Pediatrics, 21st ed.	Kliegman RM, St. Geme JW, Blum NJ, Shah SS, Tasker RC, Wilson KM.	Philadelphia: Elsevier-Saunders; 2019.	Has

THE PROGRAM:

TEACHING UNIT 1 (FIRST WEEK):

GROWTH, DEVELOPMENT OF CHILDREN, DISORDER OF GROWTH AND DEVELOPMENT

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none">• Somatic development of the child, stages of growth• Growth disorders - short growth and high growth• Basic aspects of puberty and its disorders	<ul style="list-style-type: none">• Practical application of percentile growth curves• Laboratory diagnostics of short and tall stature• Calculation of body mass index and assessment of children's nutritional status

TEACHING UNIT 2 (SECOND WEEK):

PUBERTY AND ADOLESCENCE

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none">• Developmental characteristics of normal puberty• Premature puberty, classification, causes, diagnosis, treatment• Delayed puberty, causes, diagnosis and treatment	<ul style="list-style-type: none">• Practical application of percentile growth curves• Determining the stage of puberty using Tanner tables• Laboratory examination of premature and late puberty

TEACHING UNIT 3 (THIRD WEEK):

VACCINATION OF CHILDREN

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none">• Immunization calendar in Serbia and the world• Basic principles of vaccine and serum application• General, special, epidemiological contraindications for immunization in children• The principle of implementing a cold chain in the process of storing vaccines• Significance and monitoring of vaccination effectiveness	<ul style="list-style-type: none">• The choice of vaccine according to the age of the child, the epidemiological situation, possible contraindications and adverse reactions• Recognition of an adverse reaction to a vaccine or serum, procedure for reporting adverse reactions• Identifying failures in the implementation of the cold chain for the storage of vaccines

TEACHING UNIT 4 (FOURTH WEEK):

HOMEOSTASIS AND DISORDERS OF WATER AND ELECTROLYTE TRANSPORT

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none">• Homeostasis of water and electrolytes in children• Types of dehydration in children: hypernatremic, hyponatremic and isoosmolar• Determining the type and degree of dehydration	<ul style="list-style-type: none">• Practical determination of the degree and type of dehydration• Practical consideration of fluid replacement and correction of acid-base and electrolyte imbalance

- Therapeutic approach to water and electrolyte disorders
- Principles of oral and intravenous rehydration
- Causes and types of acid-base balance disorders, clinical picture and therapy

TEACHING UNIT 5 (FIFTH WEEK):

NUTRITION OF A HEALTHY CHILD

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • Natural nutrition; • Adapted milk formulas and cow's milk; • Nutrition of premature infants; • Artificial nutrition; • Mixed nutrition; 	<ul style="list-style-type: none"> • Acquaintance of students with nutrition anamnesis, the technique of preparing food for infants and special diets • Practical assessment of nutritional status • Acquaintance with the most important symptoms and signs in children suffering from malnutrition and various forms of selective nutritional deficit

TEACHING UNIT 6 (SIXTH WEEK):

EATING DISORDERS

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • Therapeutic diets in pediatrics • Malnutrition • Rachitis and tetany 	<ul style="list-style-type: none"> • Getting to know the objective examination of children and the method of assessing the state of nutrition • calculation of body mass index • the most important symptoms and signs in children suffering from malnutrition and various forms of selective nutritional deficiency

TEACHING UNIT 7 (SEVENTH WEEK):

ALLERGIC DISEASES IN CHILDREN

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • Basic characteristics of allergic immune response in children • Clinical picture of allergic diseases in children • Basic diagnostic procedures for allergic diseases in children • Types of prevention of allergic diseases in children • Atopic dermatitis, nutritional allergy • Allergic rhinitis and conjunctivitis in children • Drug allergy • Urticaria, angioedema, systemic anaphylaxis 	<ul style="list-style-type: none"> • Introducing students to the implementation of diagnostic procedures in pediatric immunology and allergology • Introducing students to an adequate therapeutic approach to allergic diseases in children

TEACHING UNIT 8 (EIGHT WEEK):

GENETIC DISEASES AND SYNDROMES IN PEDIATRICS

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none">• Chromosomes and genes• Types of inheritance and hereditary diseases• Congenital anomalies• Prenatal Testing• Neonatal screening for hereditary diseases• Genetic counseling center	<ul style="list-style-type: none">• Clinical examination of children with the most common monogenic hereditary diseases• Clinical examination and observation of typical clinical signs in the most common chromosomal pathologies.• Getting to know the possibilities of prenatal diagnosis• Taking material and making a karyotype.• Genetic counseling, the way the genetic counseling center functions

TEACHING UNIT 9 (NINTH WEEK):

PRIMARY AND SECONDARY IMMUNODEFICIENCY

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none">• Components and way of functioning of the immune system• Immunological characteristics of breast milk• Clinical features associated with immunodeficiencies• Laboratory diagnosis of primary immunodeficiencies• Division of primary immunodeficiencies• Clinical picture, diagnosis and treatment of primary immunodeficiencies• Secondary immunodeficiencies	<ul style="list-style-type: none">• Introduction to students with anamnestic data and clinical findings in congenital immunodeficiency• Presentation of laboratory algorithms in diagnosis of immunodeficiency• Review of patients with immunodeficiency

TEACHING UNIT 10 (TENTH WEEK):

CONGENITAL METABOLIC DISORDES

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none">• frequency and types of inheritance of congenital mistakes of metabolism• Clinical approach to the most common innate mistakes of metabolism in children• Innate disorders of amino acid metabolism (phenylalanin, tyrosine, methionine, cysteine, triptophan, valin, leucin, isoleucin)• Defects of lipid metabolism (lipidoses, mucopolipidosis)• Defects of carbohydrate metabolism (glycogenosis, defects of galactose metabolism and mucopolisaccharidosis)	<ul style="list-style-type: none">• Acidobase balance disorders: Causes, types, clinical picture and therapy• Views of cases of the most common congenital disorders of metabolism

ACHING UNIT 11 (ELEVENTH WEEK):

PHARMACOTHERAPY IN CHILDREN

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none">• Pharmacokinetics and pharmacodynamics in children;• Doses of medicines in children;• Medicines and breastfeeding;• Necessity of taking medication anamnesis.	<ul style="list-style-type: none">• Dosage of antibiotics in children• Dosage of antipyretics in children• Roads of drug applications in children

TEACHING UNIT 12 (TWELFTH WEEK):

INFECTIOUS DISEASES IN CHILDREN

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • rash fever • chickenpox • meningitis • measles 	<ul style="list-style-type: none"> • diagnosis of febrile condition in children • Meningitis therapy in children • Lumbar puncture, examination of cerebral fluid

TEACHING UNIT 13 (THIRTEENTH WEEK):

PHYSIOLOGY OF A NEWBORN

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • Basic principles of adequate access to the newborn, Apgar Skor • Features of newborns born before or after term and with a small body mass for gestational age • Neurological status of a healthy newborn <ul style="list-style-type: none"> • Most common birth injuries • Newborn hyperbillerubine: Physiological or pathological. • Pathology of the navel of the newborn • Newborn infections • Resuscitation and transport of life-endangered newborn 	<ul style="list-style-type: none"> • Clinical overview of the newborn. • Neurological examination of the newborn. • Placing a Nazogastric catheter

TEACHING UNIT 14 (FOURTEENTH WEEK):

PATHOLOGY OF THE NEWBORN

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • Respiratory distress syndrome and surfactant application • Silent drainage and application of nitrogen oxide by unionatology 	<ul style="list-style-type: none"> • Drugs in neonatology and dosage • Antimicrobial therapy in neonatology. • Reference values of laboratory analyzes in neonatology

- Bronchopulmonary dysplasia, oxygen therapy and mechanical ventilation in neonatology
- Congenital diaphragmatic hernia
- Necrotic Enterocolitis
- neonatal hepatitis
- Glucose metabolism disorders
- Intracranial bleeding
- neonatal hospital infections

TEACHING UNIT 15 (FIFTEENTH WEEK):

PEDIATRIC CARDIOPULMONARY RESUSCITATION

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • Resuscitation, emergency situations in pediatrics: • Cardiopulmonary-cerebral resuscitation in pediatrics; • Reanimation and therapeutic procedures in certain specific emergency situations in pediatrics (drowning, lightning - electric shock). 	<ul style="list-style-type: none"> • Poisoning in childhood and prevention. • Urgent conditions and resuscitation in pediatrics.

SECOND MODULE: SPECIAL PEDIATRICS

TEACHING UNIT 1 (FIRST WEEK):

PEDIATRIC CARDIOLOGY

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none">• Epidemiology and genetic basis of congenital heart defects: prevalence and etiology• Embryonic development of the heart• Fetal, transitional and neonatal circulation• Evaluation of the cardiovascular system: radiology, ECG, echocardiography, stress test, magnetic resonance, cardiac catheterization• Evaluation of children with congenital heart defects: no cyanosis with increased volume and increased pressure and with cyanosis and increased and decreased pulmonary flow• Defects with left-right shunt: atrial septal defect-type secundum• Atrioventricular septal defect• Ventricular septal defect• Ductus arteriosus persistence• Obstructive heart defects: pathophysiology• Pulmonary stenosis• Aortic stenosis• Coarctation of the aorta• Mitral valve prolapse	<ul style="list-style-type: none">• Introducing students with the specifics of anamnesis in pediatric cardiology• Introducing students with diagnostic procedures in pediatric cardiology• Interpretation of ECG in children and specifics of ECG• Getting to know the treatment of congenital heart disease• Getting to know the therapy of heart failure• Getting to know the treatment of rhythm disorders in children

TEACHING UNIT 2 (SECOND WEEK):

PEDIATRIC CARDIOLOGY

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none">• Cyanogenic heart defects with reduced pulmonary flow (hemodynamics)• Tetralogy of Fallot• Transposition of great arteries• Pulmonary hypertension• Rhythm disorders in children: sinus arrhythmia, supraventricular and ventricular rhythm disorders, bradyarrhythmias, syndrome of prolonged QT interval• Infective endocarditis• Myocardial diseases: myocarditis and cardiomyopathies: hypertrophic, dilatory, restrictive• Diseases of the pericardium• Heart failure, acute and chronic i cardiogenic shock• Acquired heart defects• Heart murmur in children• Arterial hypertension in children	<ul style="list-style-type: none">• The most important symptoms and signs of heart disease in children• Chest inspection, palpation, auscultation• Reading teleradiography of the heart• Getting to know echosonographic diagnostics• Intraducing with interventional procedures in diagnosis and therapy• Medication and non-medication treatment rhythm disorders in children

TEACHING UNIT 3 (THIRD WEEK):

PEDIATRIC ALLERGOLOGY

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none">• THE MOST COMMON EMERGENCIES IN ALLERGOLOGY:<ul style="list-style-type: none">• Anaphylactic shock• Venoms• THE MOST IMPORTANT ISSUES IN ALLERGOLOGY :<ul style="list-style-type: none">• Atopic dermatitis• Food allergy• Allergic rhinitis• Urticaria• Drug allergy	<ul style="list-style-type: none">• Inspection, palpation, chest percussion and auscultation of children's lung fields• Skill in examining a child exhibiting a severe systemic allergic reaction• The skill of examining the skin and available mucous membranes in children• The skill of recognizing the clinical picture of an allergic disease• To systematize clinical symptoms and signs into a clinical picture of a particular allergic disease• Skill in selection and implementation of diagnostic procedures in allergology• The skill of choosing a protocol for the treatment of allergic disease in children• The skill of choosing an elimination diet for a child with an allergic manifestation• To give advice on non-pharmacological prophylaxis and monitor the implementation of pharmacological prophylaxis of allergic diseases in pediatrics

TEACHING UNIT 4 (FOURTH WEEK):

PEDIATRIC PULMONOLOGY

Lectures: 3 hours	Practice: 3 hours
<p>THE MOST COMMON EMERGENCIES IN PULMONOLOGY:</p> <ul style="list-style-type: none"> • Acute respiratory failure • Acute asthma attack • Croup syndrome • Aspiration and incidental pneumonias (Drowning, Inhalation of gases from fires) • Threatening sudden infant death syndrome <p>THE MOST IMPORTANT ISSUES IN PULMONOLOGY:</p> <ul style="list-style-type: none"> • Congenital anomalies of the respiratory system • Respiratory distress syndrome and bronchopulmonary dysplasia • Respiratory infections (pharyngitis, croup, otitis, pneumonia, bronchiolitis) • Asthma in children • Lung tuberculosis • Cystic fibrosis and other rare respiratory diseases • Pleurisy, pneumothorax • Pulmonary echinococcosis 	<ul style="list-style-type: none"> • Inspection, palpation, chest percussion and auscultation of children's lung fields • Recognition of the clinical picture and signs of mild, moderate and severe respiratory insufficiency in children, as well as its assessment using respiratory, heart rate, arterial oxygen saturation measured with a pulse oximeter and assessment of the state of consciousness • Recognition of basic disorders of respiratory function in children using spirometry, body plethysmography, impulse osciometry, • Differential diagnosis of typical and atypical respiratory infections using clinical, biochemical, radiological, microbiological and serological analyses. • Empirical choice of antibiotics for the treatment of respiratory infections of the upper and lower respiratory tract and lungs • The ability to recognize, diagnose and treat pleural effusion and pneumothorax in children • Recognition of asthma as a syndrome, criteria for the diagnosis of asthma and whinging bronchitis in children, differential diagnosis of asthma and whinging bronchitis and treatment protocols • Prevention of asthma and wheezing in children • Implementation of inhalation therapy in children • Differential diagnosis of stridor and respiratory tract foreign body in children • The skill of recognizing a patient with cystic fibrosis, performing diagnostic procedures, learning the basic facts from the treatment protocol for patients with CF. • The ability to recognize a person suffering from primary ciliary dyskinesia • The ability to recognize, diagnose and treat pulmonary tuberculosis in children

TEACHING UNIT 5 (FIFTH WEEK):

PEDIATRIC NEFROLOGY

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • Diagnostics of kidney diseases in pediatrics • Kidney morphology: ECHO examination, radiological and radionuclide diagnostics, biopsy, etc. • Definition, etiology, pathogenesis and classification of glomerular kidney diseases • Nephritic syndrome: definition, etiology, clinical features, diagnosis and treatment • Nephrotic syndrome: definition, etiology, clinical features, diagnosis and treatment es 	<ul style="list-style-type: none"> • The most important symptoms and signs of kidney diseases • Diagnostic algorithms for kidney diseases and interpretation of laboratory test results in kidney diseases

TEACHING UNIT 6 (SIXTH WEEK):

PEDIATRIC NEFROLOGY

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • Definition, etiology, pathogenesis and classification of tubulopathies and tubulointerstitial kidney diseases • Definition, etiology and classification of acute and chronic renal failure, clinical features and treatment • Causative agents and pathogenetic mechanisms of urinary tract infections in children, diagnostic procedures for urinary infections in children and treatment • Etiology and pathogenesis of vesicoureteral reflux (VUR) in children, diagnosis and therapy 	<ul style="list-style-type: none"> • Analysis and interpretation of urine sediment

TEACHING UNIT 7 (SEVENTH WEEK):

PEDIATRIC HEMATOLOGY

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none">• Hematopoiesis and hematopoietic organs• Diseases of pluripotent cells of hematopoiesis - definition, etiopathogenesis, clinical findings, diagnosis and treatment• Definition, etiology, pathophysiological classification, etiological factors, pathogenetic mechanisms of anemia, clinical findings, diagnosis and treatment• Introduction with normal granulocytopoiesis and its disorders• Quantitative and qualitative disorders of the granulocytes• Diseases of the monocyte-macrophage cells• Acute leukemias in children• Chronic granulocytic leukemia - definition, etiopathogenesis, clinical imaging, diagnosis and treatment• Hodgkin's and non-Hodgkin's lymphoma - definition, etiopathogenesis, clinical findings, diagnosis and treatment• CNS tumors and embryonic tumors in children nephroblastoma, neuroblastoma, rhabdomyosarcoma, retinoblastoma - definition, etiopathogenesis, clinical findings, diagnosis and treatment	<ul style="list-style-type: none">• Specifics of the anamnesis in pediatric hematology• Clinical examination in hematological diseases• Interpretation of the laboratory tests that are applied for the diagnosis in hematological diseases• Additional diagnostic procedures

TEACHING UNIT 8 (EIGHT WEEK):

PEDIATRIC HEMATOLOGY

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • Modern concept of hemostasis • Hemorrhagic syndromes - definition, classification, etiopathogenesis, diagnosis • Thrombocytopathies - definition, etiopathogenesis, clinical features , diagnosis and treatment • Vasculopathies - definition, etiopathogenesis, clinical features , diagnosis and treatment • Coagulopathies - definition, etiopathogenesis, clinical features, diagnosis and treatment • Thrombophilia - definition, clinical features, diagnosis and treatment • Application of blood and blood derivatives in pediatrics 	<ul style="list-style-type: none"> • The most common symptoms and clinical signs of a patient with hemostasis disorders • Laboratory tests and diagnostic procedures • Differential diagnosis of hemorrhagic syndrome - application of hemostasis screening tests

TEACHING UNIT 9 (NINTH WEEK):

PEDIATRIC ENDOCRINOLOGY

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • Thyroid diseases: anatomy and physiology of the thyroid, axis of the thyroid-pituitary-hypothalamuspuesc, itima and hypothyroidism, hyperthyroidism, goiter, autoimmune diseases of the thyroid • Adrenal diseases; anatomy and physiology of the adrenal gland, steroidogenesis, adrenal-pituitary-hypothalamus axis, Sy Cushing adrenal adrenal insufficiency, congenital hyperplasia • Parathyroid diseases: metabolism of Ca, P, Mg and vitamin D, hypocalcemia; hypercalcemia, hypoparathyroidism, hyperparathyroidism 	<ul style="list-style-type: none"> • Acquaintance of students with the principles f anamnesis in in pediatric endocrinology • Acquaintance of students with symptoms and signs of endocrinopathy in children

TEACHING UNIT 10 (TENTH WEEK):

PEDIATRIC ENDOCRINOLOGY

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none">• Diseases of the pituitary gland/hypothalamus: anatomy and physiology of the pituitary gland/hypothalamus, hypopituitarism, regulation of water circulation, hypothalamic D. insipidus, syndrome of inadequate secretion of ADH (SIADH)• Diabetes mellitus in children: DMT1: etiopathogenesis, clinical features , acute and chronic complications, principles of therapy The concept of insulin resistance, DMT2, disorder glucose tolerance Appearance of the fetus and newborn mothers with DM	<ul style="list-style-type: none">• Laboratory tests and diagnostic procedures specific for endocrinological diseases• Interpretation of the results of hormon levels (thyroid hormones, adrenal hormones, parathyroid, pituitary)• Determination the degree of nutrition of the child, calculate the value of BMI (body mass index) and determine the nutritional disorders of the child using BMI percentile curves• Determination of the stages of puberty development (according to Tanner)

TEACHING UNIT 11 (ELEVENTH WEEK):

PEDIATRIC GASTROENTEROLOGY

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • Children's GIT physiology, digestion and absorption • Diseases of the oral cavity • Acute diarrhea • Chronic enteropathies 	<ul style="list-style-type: none"> • Intruding the students with the most important symptoms and signs accompanying GIT diseases • Getting to know the objective examination of the abdomen and special examination method

TEACHING UNIT 12 (TWELFTH WEEK):

PEDIATRIC GASTROENTEROLOGY

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • Ulcer disease • Inflammatory bowel diseases • Cholestatic liver diseases • Acute pancreatitis in children 	<ul style="list-style-type: none"> • Mastering the imaging techniques used in diagnostics (endoscopy, rectal examination, as well as analysis of all changes in the color of the skin, stool and urine, especially in newborns)

TEACHING UNIT 13 (THIRTEENTH WEEK):

PEDIATRIC NEUROLOGY

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • Congenital anomalies of the nervous system and syndromes (clinical features, diagnosis, and therapy) • Early cerebral damage (hypoxic ischemic encephalopathy intracranial hemorrhage, intrauterine brain infections, birth injuries) • Floopy infant syndrom (differential diagnosis congenital and acquired diseases that cause hypotonia) • Muscular diseases • Neurocutaneous diseases • Cerebrovascular accidents • Acute hemiplegia, acute ataxia 	<ul style="list-style-type: none"> • Specifics of anamnesis in pediatric neurology • Neurological examination of children (assessment muscle tone, primitive reflexes, examination of cranial nerves, physiological and pathological reflexes, tests of the cerebellum, meningeal signs, sight, speech, walk)

- Guillian-Barre Syndrome

TEACHING UNIT 14 (FOURTEENTH WEEK):

PEDIATRIC NEUROLOGY

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • Seizures • Febrile seizures • Epilepsy • Status epilepticus • Headache and migraine (classification, clinical features diagnosis, therapy, prevention) • Central Nervous System Infections: meningitis, encephalitis, • ADEM (Acute Disseminated encephalomyelitis), Transverse Myelitis • Diagnostic procedures in pediatrics neurology (lumbar puncture, radiography skull, CT (computed tomography) of the endocranium, NMR (nuclear magnetic resonance) of the endocranium, and MRA magnetic angiography of the endocranium and neck, PET (positron emission tomography, (indications and interpretation of findings), EMNG (electronuromyography), EEG (electroencephalography), EP (evoked potentials), VEP (visual), SEP (somatosensory) • Therapy of neurological diseases (medication, habilitation, surgery) 	<ul style="list-style-type: none"> • Lumbar puncture and examination of cerebrospinal fluid (cytological, microbiological, biochemical) • Neurosonography • Neuroradiological diagnostic procedures (interpretation of the pathological findings)

TEACHING UNIT 15 (FIFTEENTH WEEK):

RHEUMATIC DISEASES OF CHILDHOOD, RHEUMATIC FEVER AND POISONING IN PEDIATRICS

Lectures: 3 hours	Practice: 3 hours
<ul style="list-style-type: none"> • Evaluation of suspected rheumatic disease: etiology and pathogenesis, clinical manifestations, physical examination and laboratory findings • Treatment of rheumatic diseases: nonsteroidal antirheumatic drugs, methotrexate, glucocorticoids, other drugs, biological drugs • Juvenile rheumatoid arthritis: etiology, pathogenesis, clinical features, diagnosis, laboratory and treatment • Post-infectious arthritis and other related conditions: pathogenesis, clinical manifestations, diagnosis and treatment • Systemic lupus erythematosus: etiology, epidemiology, pathogenesis, clinical manifestations, diagnosis, laboratory findings and treatment • Kawasaki disease: etiology, epidemiology, pathogenesis, clinical manifestations, diagnosis, laboratory and treatment • Syndromes accompanied by vasculitis • Henoch Schonlein purpura: etiology, epidemiology, pathogenesis, clinical manifestations, diagnosis, laboratory and treatment <p>Rheumatic fever: etiology, epidemiology, pathogenesis, clinical manifestations, diagnosis, laboratory and treatment and prevention</p> <p>Poisoning in pediatrics: etiology, diagnosis and treatment</p>	<ul style="list-style-type: none"> • Specifics of anamnesis in children's rheumatology • Specifics of anamnesis in children suffering from rheumatic fever • Clinical examination of the locomotor system in children • Tests for the diagnosis of systemic diseases connective tissues in children • Drug doses in pediatric rheumatology

WEEKLY COURSE SCHEDULE

COURSE	TUESDAY
PEDIATRICS (3+3)	LECTURES 16:30-18:45 (Institute for Emergency Medical Aid)

SCHEDULE OF PRACTICE

PRACTICE () - according to the schedule of the department

module	week	type	method unit name	teacher
1	1	L	Growth, development of children, disorder of growth and development	Prof. dr Biljana Vuletic
1	1	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
1	2	L	Puberty and adolescence	Asst. Prof. dr Marija Radovanovic
1	2	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
1	3	L	Vaccination of children	Prof. dr Andjelka Stojkovic
1	3	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
1	4	L	Homeostasis and disorders of water and electrolyte transport	Prof. dr Biljana Vuletic
1	4	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
1	5	L	Nutrition of a healthy child	Prof. dr Biljana Vuletic
1	5	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic

				Asst. Prof. dr Marija Radovanovic
1	6	L	Eating disorders	Prof. dr Biljana Vuletic
1	6	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
1	7	L	Allergic diseases in children	Prof. dr Andjelka Stojkovic
1	7	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
1	8	L	Genetic diseases and syndromes in pediatrics	Asst. Prof. dr Marija Radovanovic
1	8	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
1	9	L	Primary and secondary immunodeficiency	Prof. dr Andjelka Stojkovic
1	9	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
1	10	L	Congenital metabolic disorders	Prof. dr Biljana Vuletic

1	10	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
1	11	L	Pharmacotherapy in children	Prof. dr Andjelka Stojkovic
1	11	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
1	12	L	Infectious diseases in children	Prof. dr Andjelka Stojkovic
1	12	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
1	13	L	Physiology of a newborn	Asst. Prof. dr Sanja Knezevic
1	13	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
1	14	L	Pathology of the newborn	Asst. Prof. dr Sanja Knezevic
1	14	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
1	15	L	Pediatric cardiopulmonary resuscitation	Asst. Prof. dr Sanja Knezevic

1	15	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
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module	week	type	method unit name	teacher
2	1	L	Pediatric cardiology	Asst. Prof. dr Sanja Knezevic
2	1	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
2	2	L	Pediatric cardiology	Asst. Prof. dr Sanja Knezevic
2	2	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
2	3	L	Pediatric allergology	Prof. dr Andjelka Stojkovic
2	3	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
2	4	L	Pediatric pulmonology	Prof. dr Andjelka Stojkovic

module	week	type	method unit name	teacher
2	4	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
2	5	L	Pediatric nephrology	Asst. Prof. dr Sanja Knezevic
2	5	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
2	6	L	Pediatric nephrology	Asst. Prof. dr Sanja Knezevic
2	6	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
2	7	L	Pediatric hematology	Asst. Prof. dr Marija Radovanovic
2	7	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
2	8	L	Pediatric hematology	Asst. Prof. dr Marija Radovanovic

module	week	type	method unit name	teacher
2	8	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
2	9	L	Pediatric endocrinology	Asst. Prof. dr Marija Radovanovic
2	9	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
2	10	L	Pediatric endocrinology	Asst. Prof. dr Marija Radovanovic
2	10	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
2	11	L	Pediatric gastroenterology	Prof. dr Biljana Vuletic
2	11	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
2	12	L	Pediatric gastroenterology	Prof. dr Biljana Vuletic

module	week	type	method unit name	teacher
2	12	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
2	13	L	Pediatric neurology	Doc. dr Marija Radovanovic
2	13	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
2	14	L	Pediatric neurology	Doc. dr Marija Radovanovic
2	14	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic
2	15	L	Rheumatic diseases of childhood, reumatic fever and poisoning in pediatrics	Doc. dr Sanja Knezevic
2	15	P		Prof. dr Biljana Vuletic Prof. dr Andjelka Stojkovic Asst. Prof. dr Sanja Knezevic Asst. Prof. dr Marija Radovanovic