

DESCRIPTION OF THE COURSE OF STUDY

Course code	0912-7LEK-C5.1-P	
Name of the course in	Polish	Pediatría
	English	Pediatrics

1. LOCATION OF THE COURSE OF STUDY WITHIN THE SYSTEM OF STUDIES

1.1. Field of study	Medical
1.2. Mode of study	Full-time
1.3. Level of study	Uniform Master's studies
1.4. Profile of study*	General academic
1.5. Specialization*	lack
1.6. Unit running the course of study	Faculty of Medicine and Health Sciences Department of Clinical Pediatrics
1.7. Person/s preparing the course description	dr hab. med. Mieczysław Szalecki , prof. UJK
1.8. Person responsible for the course of study	dr hab. med. Mieczysław Szalecki , prof. UJK
1.9. Contact	mszalecki@wp.pl

2. GENERAL CHARACTERISTICS OF THE COURSE OF STUDY

2.1. Affiliation with the module	Non-surgical clinical studies
2.2. Language of instruction	English
2.3. Semesters in which the course of study is offered	5 th – 9 th semester
2.4. Prerequisites*	Knowledge of topographic and functional human anatomy as well as knowledge of neuroanatomy, physiology and pathophysiology of the child

3. DETAILED CHARACTERISTICS OF THE COURSE OF STUDY

3.1. Form of classes	LECTURE: 70 , CLASSES (including tutorials) - 180	
3.2. Place of classes	Lecture - Courses in the teaching rooms of UJK Classes and tutorials- Department of Clinical Pediatrics	
3.3. Form of assessment	lectures – final oral and written exam classes, tutorials- credit with grade that includes : students abilities, attendance during classes, partial-test evaluation	
3.4. Teaching methods	Lecture with multimedia presentation, practical classes at the bedside of the patient, practical tutorials	
3.5. Bibliography	Required reading	<ol style="list-style-type: none"> Nelson Essentials of Pediatrics, 7th Edition: Karen Marcdante, MD and Robert M. Kliegman, MD. W.B. Saunders Company Paediatric Physical Examination made easy by D.Gill, N O'Brien, last edition.
	Further reading	<ol style="list-style-type: none"> Nelson Textbook of Pediatrics, Vol 1 & 2, 20th Edition, Authors: Robert M. Kliegman & Bonita M.D. Stanton & Joseph St. Geme & Nina F Schor. Illustrated Textbook of Paediatrics, Edited by T. Lissauer, G. Clayden, 2011

4. OBJECTIVES, SYLLABUS CONTENT AND INTENDED TEACHING OUTCOMES

4.1. Course objectives (lecture, classes)

- The primary goal of the clinical course is to know the theoretical basis and practical skills in the diagnosis and therapy of diseases in paediatrics and secondary symptoms. Obtaining information on the specificity and separateness of the pathophysiology and the clinic for the course of diseases in children and adolescents.
- Appropriate techniques of careful medical history taking and physical examination in children as well as adolescents.
- Mastering the basics of interpretation of additional tests in children.

4.2. Detailed syllabus (lecture, classes)

Lectures:

Sem. 5

1. Physical examination in children.
2. Physical and psychomotor development in children.
3. Fever of unknown origin. Diseases genetically determined in the developmental age population.

Sem. 6

4. The role of medical history taking in paediatric diagnostics General basis of the medical examination.
5. Physical examination of children- especially an infant and a newborn.
6. Pediatrics as a medical discipline. Historical outline.
7. Natural and artificial feeding of infants. Guiding principles for feeding healthy and sick children.
8. Proceedings in basic situations for counselling the children.
9. Clinical diagnostics in pediatrics: criteria of the norm and pathology, rules for the interpretation of selected results of the research.
10. Review of modern diagnostic methods in paediatrics.

Sem. 7

11. Fever in children. Pediatric fever of unknown origin.
12. Auxology. The correct course of the growing process. Causes of growth disorders in children.
13. Adolescence - endocrine and psychological aspects. Treatment of early or delayed puberty.
14. Gender identity disorder.
15. Acute diarrhoea, Chronic diarrhoea. Difference of gastrointestinal tract according to age.
16. Selected genetic diseases.
17. A child in a life-threatening condition. Proceeding in urgent situations in paediatrics.
18. Respiratory diseases in children. Acute inflammation.
19. Bronchial Asthma. Asthma symptoms and diagnosis in children.
20. Connective tissue disease in children. Arthritis
21. Cystic fibrosis.

Sem.8

22. Eating disorders in children. Causes of weight loss. Obesity.
23. Basics of semiotics and immunoprophylaxis of infectious diseases in children.
24. Diabetes mellitus. Hypoglycemia.
25. Jaundice in the Neonatal Period.
26. Celiac: disease with many faces.
27. Selected infectious diseases of childhood. The importance of preventive vaccination in the prevention of infections in children.
28. Childhood Skin Problems: Infectious diseases, allergic and systemic diseases.
29. Abdominal pain.
30. Symptomatology of cardiovascular diseases in children. Congenital and acquired heart defects. Hypertension
31. Infantile cerebral palsy.
32. Symptomatology of urinary tract diseases in children. UTI. Chronic kidney disease in paediatrics.

Sem. 9

33. Metabolic disorders in children.
34. Panic Disorder In Children
35. The specificity of hematopoietic diseases in children. Anemia. Thrombocytopenia. Diagnosis and treatment of neutropenia in children.
36. Solid tumors in children.
37. Hematoonkologia. Leukemia. Hodgkin's lymphoma. Non-Hodgkin's lymphomas in children.
38. Battered child syndrome. Sexual abuse.

Classes/ practical classes:

Sem.5

1. Techniques of medical history taking in children.
2. Physical examination in relation to children in different age groups.

3. Assessing and describing somatic state.
4. Semiotics of the most common childhood disorders.
5. Planning of diagnostic, therapeutic and prophylactic procedures.
6. Heart Rate Measurement, blood pressure, monitoring basic vital parameters.
7. Medical record-keeping.
8. Feeding a healthy and sick child. Elimination diets.
9. Active and passive immunity, Immunization Schedule. Compulsory and recommended vaccination.
10. Contraindications Guidelines for Immunization.
11. Basic diagnostic tests of blood, urine and imaging tests and their interpretation.
12. Identification of immediate life-threatening conditions.
13. Disorders of Calcium and Phosphate Metabolism in children.

Sem. 6

14. Techniques of medical history taking, principles of medical history taking.
15. Physical examination part 1: general impressions, body structure, nutrition status, physical development and methods of its evaluation (centile grid), skin examination, lymph nodes of the osteoarticular system, head, neck, respiratory system.
16. Physical examination part 2: cardiovascular examination, physical examination of the abdominal cavity and urogenital system.
17. Physical examination part 3: neurological examination, discussion of the principles of preventive actions (specific and non-specific) nutrition of healthy and sick children, clinical picture of the most common genetically determined diseases.
18. Problems of pediatric counseling. Balance studies. Screening tests in school children.
19. Semiotics of some of the most common symptoms in children. Principles of clinical examination in children taking into account the individuality of the newborn and the infant.
20. Psycho-motor development of the child and methods of its evaluation.
21. Basics of auxological diagnostics. Clinical aspects of child development. Nutritional status and methods of its evaluation.

Sem. 7

22. Infectious diseases of childhood.
23. Upper respiratory tract infection. Basics of laryngological examination in paediatrics.
24. Chronic respiratory diseases. Tuberculosis. Cystic fibrosis.
25. Infection of the lower respiratory tract.
26. Principles of rational functional antibiotic therapy in children.
27. Bronchial asthma, allergic rhinitis, food allergies in children.
28. Basics of neonatology.
29. A newborn baby born prematurely. A newborn with low birth weight.
30. Neonatal problems. Monitoring of children born prematurely and / or with too low birth weight.
31. Nephrotic syndrome.
32. Selected issues about children's immunology. Immune disorders in children. Neutropenia.
33. Obesity in children. Metabolic syndrome in pediatrics.

Sem. 8

34. Acute diarrhea. Diet for sick children.
35. Chronic diarrhea. Elimination diets.
36. Abdominal pain in children.
37. Celiac disease in children.
38. Functional disorders of the gastrointestinal tract. Gastroesophageal reflux disease. Constipation
39. The most common diseases of the liver and pancreas during childhood.
40. Newborn pathology.
41. Birth defects in the newborn.
42. Urinary tract infection.
43. Chronic diseases of the urinary tract in children. Urinary calculus.
44. Hypertension in children.
45. Acute and chronic renal failure. Kidney transplantation in children.
46. Congenital and acquired heart defects.

47. Diseases of connective tissue in children. Arthritis in children.
48. Growth disorders in children. Hormonal causes of growth deficiency.
49. Disorders of puberty in children. Premature and delayed sexual maturation.
50. Thyroid disease in children.
51. Diseases of the adrenal glands and gonads. Gender identity disorder
52. Diabetes mellitus in children.

Sem. 9

53. Selective and population screening for metabolic disorders.
54. Metabolic diseases in pediatrics. Diagnostics. Current treatment options.
55. Prevention of infectious diseases. Calendar of Vaccinations. Compulsory and recommended vaccination.
56. Genetically determined diseases in pediatric practice. Clinical picture. Diagnostics. Current treatment options.
57. Pediatric neurology. Panic states in children. Proceedings in the state of convulsion.
58. Increased intracranial pressure. Brain edema.
59. Meningitis and brain inflammation.
60. Cerebral palsy.
61. Enlarged lymph nodes in children. Signs and symptoms in children hematology.
62. Children's anemia. Laboratory tests in pediatric hematology.
63. Hemorrhagic diathesis.
64. Leukemia in children.
65. Hodgkin's lymphoma. Non-Hodgkin's Lymphoma.
66. Solid cancers in children. Bone marrow transplantation.
67. Menstrual disorders.

4.3. Education outcomes in the discipline

Code	A student, who passed the course	Relation to teaching outcomes
within the scope of KNOWLEDGE:		
W01	knows environmental and epidemiological conditions for the most common diseases;	E. W1
W02	knows nutrition and vaccination principles for healthy and sick children, immunization and carries routine health checks for children;	E. W2.
W03	<p>knows and understand the causes, symptoms, principles of diagnosis and therapeutic procedures in the case of the most frequent diseases of children:</p> <p>a) rickets, tetany, seizures,</p> <p>b) heart defects, myocarditis, endocarditis and pericarditis, cardiomyopathy, arrhythmias , heart failure, hypertension, syncope,</p> <p>c) acute and chronic diseases of the upper and lower respiratory tract, congenital malformations of the respiratory system, tuberculosis, cystic fibrosis, asthma, allergic rhinitis, urticaria, anaphylactic shock, angioedema,</p> <p>d) anemia, bleeding disorders, conditions for marrow failure, cancer in children, including solid tumors typical of childhood;</p> <p>e) acute and chronic abdominal pain, vomiting, diarrhea, constipation, gastrointestinal bleeding, peptic ulcer, nonspecific intestinal diseases, pancreatic diseases, cholestasis, liver disease, and other acquired diseases and congenital defects of the gastrointestinal tract,</p> <p>f) urinary tract infections, congenital defects of urinary tract, nephrotic syndrome, kidney stones, acute and chronic renal failure, acute and chronic inflammation of kidney, systemic kidney disorders, urination disorders, gastroesophageal vesico-ureteral reflux disease,</p> <p>g) growth disorders, diseases of the thyroid and parathyroid, adrenal disease, diabetes, obesity, disorders of maturation and gonadal function,</p> <p>h) cerebral palsy, encephalitis and meningitis, epilepsy,</p> <p>i) the most common childhood diseases,</p> <p>j) genetic syndromes,</p> <p>k), connective tissue diseases, rheumatic fever, juvenile arthritis, systemic lupus, skin and muscle inflammation;</p>	E. W3.
W04	knows the problems of: child abuse and sexual abuse, mental retardation, behavioral disorders: psychosis, addiction, eating disorders, and excretion in children;	E. W4
W05	knows the most common life-threatening conditions in children and the rules of conduct in these states;	E. W6
W06	knows the characteristics of mental disorders and their treatment in children, youth and the elderly;	E.W19.
W07	knows and understand the causes, symptoms, principles of diagnosis and therapeutic management of the most common hereditary diseases	E.W35.

within the scope of ABILITIES:		
U01	makes morphometric measurements, analyzes the developmental profile and records the diseases' karyotypes;	C.U4.
U02	conducts a review of medical history of the child and its family;	E.U2.
U03	conducts physical examination of the child at any age;	E.U4.
U04	assesses patient's general condition, consciousness and awareness;	E.U7.
U05	assesses the condition of a newborn according to a the Apgar scale and assesses its maturity; examines neonatal reflexes;	E.U8.
U06	makes relations between anthropometric measurements and blood pressure with data in growth charts;	E.U9.
U07	assesses the stage of puberty;	E.U10.
U08	conducts checkups for children;	E.U11.
U09	performs differential diagnosis of the most common diseases in adults and children;	E.U12.
U10	assesses and describes the somatic and mental state of patients;	E.U13.
U11	recognizes states of a direct threat to life;	E.U14.
U12	recognizes when a patient is under the influence of alcohol, drugs and other addictive products;	E.U15.
U13	plans diagnostic, therapeutic and preventive procedures;	E.U16.
U14	conducts analysis of the potential side effects of each drug and the interaction between them;	E.U17.
U15	qualifies the patient for home treatment and hospitalization;	E.U20.
U16	defines states in which functional status of the patient's or his/her preferences restrict the treatment in accordance with specific guidelines for the disease;	E.U21.
U17	interprets laboratory tests/results and identifies the reasons for deviations;	E.U24.
U18	applies dietary treatment (including enteral and parenteral feeding);	E.U25.
U19	qualifies the patient for vaccination;	E.U27.
U20	collects samples of material used in laboratory diagnostics;	E.U28.
U21	performs basic medical procedures and treatments, including: a) measurement of body temperature, pulse measurement, non-invasive blood pressure measurement, b) monitoring of vital signs using a cardio-monitor or pulse oximetry, c) spirometry, oxygen therapy, assisted and control mode ventilation d) introduction of the oropharyngeal tube, e) intravenous injection , intramuscular and subcutaneous injections, cannulation of peripheral veins, collection of peripheral venous blood, collection of arterial blood, collection arterialized capillary blood, f) collecting swabs from the nose, throat and skin, puncture of pleural cavity, g) catheterization of the urinary bladder in women and me, nasogastric intubation, gastric lavage, enema, h) standard electrocardiogram along with its interpretation, cardioversion and defibrillation of the heart, i) simple test strips and measuring the concentration of glucose in the blood;	E.U29.
U22	assists when the following procedures and medical treatments are performed: a) transfusions of blood and blood products, b) drainage of the pleural cavity, c) puncture of the pericardium, d) puncture of the peritoneal cavity, e) lumbar puncture, f) needle biopsy,	E.U30.

	g) epidermal tests, h) intradermal and scarification tests and interpret their results;	
U23	plans specialist consultations;	E.U32.
U24	monitors the status of a patient poisoned by chemical substances or drugs;	E.U34.
U25	evaluates decubitus and applies appropriate dressings;	E.U35.
U26	keeps medical records of the patient.	E.U38.
U27	complies with the aseptic and antiseptic rules;	F.U3.

4.4. Methods of assessment of the intended teaching outcomes

Teaching outcomes (code)	Method of assessment (+/-)																				
	Exam oral/written*			Test*			Project*			Effort in class*			Self-study*			Group work*			Others* Attendance		
	Form of classes			Form of classes			Form of classes			Form of classes			Form of classes			Form of classes					
	L	C	P C	L	C	P C	L	C	P C	L	C	P C	L	C	P C	L	C	P C	L	C	P C
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