*Attachment No. 2 to Rector’s ordinance No. 90 /2018*

**description of the course of study**

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

1. **LOCATION OF THE course OF STUDY within the system of studies**

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| **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. Person preparing the course description** | prof. dr hab. n med. Mieczysław Szalecki |
| **1.6. Contact** |  |

1. **General characteristicS of the course of study**

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| **2.1. Language of instruction** | English |
| **2.2. Prerequisites\*** | Knowledge of topographic and functional human anatomy as well as knowledge of neuroanatomy, physiology and pathophysiology of the child |

1. **DETAILED CHARACTERISTICS OF THE COURSE OF STUDY**

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| * 1. **Form of classes**
 | LECTURE: 60 , CLASSES– 70, PRACTICAL CLASSES-130 |
| * 1. **Place of classes**
 | Lecture - Courses in the teaching rooms of UJK Classes and tutorials- Department of Clinical Pediatrics |
| * 1. **Form of assessment**
 | lectures – final oral and written examclasses, tutorials- credit with grade that includes : students abilities, attendance during classes, partial-test evaluation |
| * 1. **Teaching methods**
 | Lecture with multimedia presentation, practical classes at the bedside of the patient, practical tutorials |
| * 1. **Bibliography**
 |  **Required reading** | 1. Nelson Essentials of Pediatrics, 7th Edition: Karen Marcdante, MD and Robert M. Kliegman, MD. W.B. Saunders Company
2. Paediatric Physical Examination made easy by D.Gill, N O'Brien, last edition.
 |
|  **Further reading** | 1. Nelson Textbook of Pediatrics, Vol 1 & 2, 20th Edition, Authors: Robert M. Kliegman & Bonita M.D. Stanton & Joseph St. Geme & Nina F Schor.
2. Ilustrated Textbook of Paediatrics, Edited by T. Lissauer, G. Clayden, 2011
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1. **Objectives, syllabus CONTENT and intended LEARNING outcomes**

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| * 1. **Course objectives *(including form of classes)***

The primary goal of the clinical course is to provide: knowledge, skills and social competence on all diseases in a neonates, infants and children, including: epidemiology, causes, clinical manifestations, diagnosis, differentiation, treatment, prevention, rehabilitation activities. Appropriate techniques of careful medical history taking and physical examination in a neonates, infants and children including morphological and physiological differences in paediatrics. |
| * 1. **Detailed syllabus *(including form of classes)***

Lectures: **Sem. 5**1. Physical examination in children.
2. Physical and psychomotor development in children.
3. Fever of unknown origin.

**Sem. 7**1. Patology of maturation and growth. Disorders of sex development.
2. Respiratory tract diseases.
3. Contagious infections of the childhood.

 **Sem. 8**1. Diabetes mellitus in children.
2. The most common proliferative diseases in paediatric population.
3. Hypertention.

**Sem.9/10**1. Eating disorders in children. Causes of weight loss. Obesity.
2. Basics of semiotics and immunoprophylaxis of infectious diseases in children.
3. Diabetes mellitus. Hypoglycemia.
4. Jaundice in the Neonatal Period.
5. Celiac: disease with many faces.
6. Selected infectious diseases of childhood. The importance of preventive vaccination in the prevention of infections in children.
7. Childhood Skin Problems: Infectious diseases, allergic and systemic diseases.
8. Abdominal pain.
9. Symptomatology of cardiovascular diseases in children. Congenital and acquired heart defects. Hypertension
10. Infantile cerebral palsy.
11. Symptomatology of urinary tract diseases in children. UTI. Chronic kidney disease in paediatrics.
12. Metabolic disorders in children.
13. Seizures In Children
14. The specificity of hematopoietic diseases in children. Anemia. Thrombocytopenia. Diagnosis and treatment of neutropenia in children.
15. Solid tumors in children.
16. Hematoonkologia. Leukemia. Hodgkin's lymphoma. Non-Hodgkin's lymphomas in children.
17. Battered child syndrome. Sexual abuse.

**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. 7**1. Disorders of thyroid and adrenal glands.
2. Urinary tract infections.
3. Disorders of Calcium and Phosphate Metabolism in children.
4. Eating disorders, Obesity, metabolic syndrome, anorexia, bulimia.
5. Gastroenterological diseases.
6. Allergy in children.

**Sem. 8**1. Seizures, epilepsy, cerebral palsy.
2. Tumors, hematooncology (leukemia, Hodgkin and non-Hodgkin lymphomas)
3. Anaemia, thrombocytopenia.
4. Genetic syndromes.
5. Congenital heart defects.
6. Chronic urinary tract diseases.
7. Paediatric rheumatology.

**Sem. 9**1. Acute diarrhea. Diet for sick children.
2. Chronic diarrhea. Elimination diets.
3. Abdominal pain in children.
4. Celiac disease in children.
5. Functional disorders of the gastrointestinal tract. Gastroesophageal reflux disease. Constipation
6. The most common diseases of the liver and pancreas during childhood.
7. Newborn pathology.
8. Birth defects in the newborn.
9. Urinary tract infection.
10. Chronic diseases of the urinary tract in children. Urinary calculus.
11. Hypertension in children.
12. Acute and chronic renal failure. Kidney transplantation in children.
13. Congenital and acquired heart defects.
14. Diseases of connective tissue in children. Arthritis in children.
15. Growth disorders in children. Hormonal causes of growth deficiency.
16. Disorders of puberty in children. Premature and delayed sexual maturation.
17. Thyroid disease in children.
18. Diseases of the adrenal glands and gonads. Gender identity disorder
19. Diabetes mellitus in children.
20. Selective and population screening for metabolic disorders.
21. Metabolic diseases in pediatrics. Diagnostics. Current treatment options.
22. Prevention of infectious diseases. Calendar of Vaccinations. Compulsory and recommended vaccination.
23. Genetically determined diseases in pediatric practice. Clinical picture. Diagnostics. Current treatment options.
24. Pediatric neurology. Panic states in children. Proceedings in the state of convulsion.
25. Increased intracranial pressure. Brain edema.
26. Meningitis and brain inflammation.
27. Cerebral palsy.
28. Enlarged lymph nodes in children. Signs and symptoms in children hematology.
29. Children's anemia. Laboratory tests in pediatric hematology.
30. Hemorrhagic diathesis.
31. Leukemia in children.
32. Hodgkin's lymphoma. Non-Hodgkin's Lymphoma.
33. Solid cancers in children. Bone marrow transplantation.
34. Menstrual disorders.
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**4.3 Intended learning outcomes**

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| **Code** | **A student, who passed the course** | **Relation to learning 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 | knows and understand the causes, symptoms, principles of diagnosis and therapeutic procedures in the case of the most frequent diseases of children: a) rickets, tetany, seizures, b) heart defects, myocarditis, endocarditis and pericarditis, cardiomyopathy, arrhythmias , heart failure, hypertension, syncope, 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, d) anemia, bleeding disorders, conditions for marrow failure, cancer in children, including solid tumors typical of childhood; 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, 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, g) growth disorders, diseases of the thyroid and parathyroid, adrenal disease, diabetes, obesity, disorders of maturation and gonadal function,h) cerebral palsy, encephalitis and meningitis, epilepsy, i) the most common childhood diseases, j) genetic syndromes, k), connective tissue diseases, rheumatic fever, juvenile arthritis, systemic lupus, skin and muscle inflammation; | 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 the types of biological materials used in laboratory diagnosis and the rules for the collection of research material; | E.W37. |
| 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 | performs basic medical procedures and treatments, including: | 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, g ) epidermal tests, h) intradermal and scarification tests and interpret their results; | E.U30. |
| 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. |

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| * 1. **Methods of assessment of the intended learning outcomes**
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| **Teaching** **outcomes*****(code)*** | **Method of assessment (+/-)** |
| **Exam oral/written\*** | **Test\*** | **Project\*** | **Effort** **in class\*** | **Self-study\*** | **Group work\***  | **Others\*** |
| ***Form of classes*** | ***Form of classes*** | ***Form of classes*** | ***Form of classes*** | ***Form of classes*** | ***Form of classes*** | ***Form of classes*** |
| *L* | *C* | *...* | *L* | *C* | *...* | *L* | *C* | *...* | *L* | *C* | *...* | *L* | *C* | *...* | *L* | *C* | *...* | *L* | *C* | *...* |
| W01 | ***+*** |  |  |  | ***+*** |  |  | ***+*** |  |  | ***+*** | ***+*** |  |  |  |  |  |  |  |  |  |
| W02 | ***+*** |  |  |  | ***+*** |  |  | ***+*** |  |  | ***+*** | ***+*** |  |  |  |  |  |  |  |  |  |
| W03 | ***+*** |  |  |  | ***+*** |  |  | ***+*** |  |  | ***+*** | ***+*** |  |  |  |  |  |  |  |  |  |
| W04 | ***+*** |  |  |  | ***+*** |  |  | ***+*** |  |  | ***+*** | ***+*** |  |  |  |  |  |  |  |  |  |
| W05 | ***+*** |  |  |  | ***+*** |  |  | ***+*** |  |  | ***+*** | ***+*** |  |  |  |  |  |  |  |  |  |
| W06 | ***+*** |  |  |  | ***+*** |  |  | ***+*** |  |  | ***+*** | ***+*** |  |  |  |  |  |  |  |  |  |
| W07 | ***+*** |  |  |  | ***+*** |  |  | ***+*** |  |  | ***+*** | ***+*** |  |  |  |  |  |  |  |  |  |
| U01 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U02 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U03 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U04 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U05 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U06 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U07 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U08 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U09 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U10 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U11 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U12 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U13 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U14 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U15 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U16 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U17 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U18 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U19 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U20 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U21 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U22 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U23 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U24 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U25 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U26 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |
| U27 |  |  |  |  | ***+*** | ***+*** |  | ***+*** | ***+*** |  |  |  |  | ***+*** | ***+*** |  |  |  |  |  |  |

***\*delete as appropriate***

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| * 1. **Criteria of assessment of the intended learning outcomes**
 |
| **Form of classes** | **Grade** | **Criterion of assessment** |
|  **lecture (L)** | **3** | knowledge of each course contents at the level of 61%- 68% |
| **3,5** | knowledge of each course contents at the level of 69%-76% |
| **4** | knowledge of each course contents at the level of 77%-84% |
| **4,5** | knowledge of each course contents at the level of 85%-92% |
| **5** | knowledge of each course contents at the level of 93%-100% |
| **classes (C)\*** | **3** | knowledge of each course contents at the level of 61%- 68% |
| **3,5** | knowledge of each course contents at the level of 69%-76% |
| **4** | knowledge of each course contents at the level of 77%-84% |
| **4,5** | knowledge of each course contents at the level of 85%-92% |
| **5** | knowledge of each course contents at the level of 93%-100% |

1. **BALANCE OF ECTS CREDITS – STUDENT’S WORK INPUT**

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| **Category** | **Student's workload** |
| **Full-time****studies** |
| *NUMBER OF HOURS WITH THE DIRECT PARTICIPATION OF THE TEACHER /CONTACT HOURS/* | **265** |
| *Participation in lectures\** | **75** |
| *Participation in classes, seminars, laboratories\** | **190** |
| *Preparation in the exam/ final test\** |  |
| *Others\** |  |
| *INDEPENDENT WORK OF THE STUDENT/NON-CONTACT HOURS/* | **135** |
| *Preparation for the lecture\** | **50** |
| *Preparation for the classes, seminars, laboratories\** | **75** |
| *Preparation for the exam/test\** | **10** |
| *Gathering materials for the project/Internet query\** |  |
| *Preparation of multimedia presentation* |  |
| *Others (please specify e.g. e-learning)\** |  |
| *TOTAL NUMBER OF HOURS* | **400** |
| ECTS credits for the course of study | **16** |

***\*delete as appropriate***

***Accepted for execution*** *(date and legible signatures of the teachers running the course in the given academic year)*

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