Appendix number 1.5 to The Rector UR Resolution No. *12/2019*

SYLLABUS

**concerning the cycle of education**  2018-2024

Academic year 2021/2022

1. BASIC INFORMATION CONCERNING THIS SUBJECT

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| --- | --- |
| Subject | Pediatrics |
| Course code \* | Pd/E |
| Faculty of (name of the leading direction) | The Faculty of Medicine, the University of Rzeszów |
| Department Name | I Department of Pediatrics and Gastroenterology  II Department of Pediatrics, Endocrinology and Diabetology  MEDYK Medical Center  Department of Neonatology  Department of Allergology and Mucoviscidosis  Department of Children’s Hematooncology  Department of Infectious Diseases |
| Field of study | Medicine |
| Level of education | Uniform master's studies |
| Profile | General academic |
| Form of study | Stationary |
| Year and semester | IV year, VII semester, VIII semester |
| Type of course | Obligatory |
| Language | English |
| Coordinator | Bartosz Romańczuk MD, PhD |
| First and Last Name of the Teachers | Bartosz Romańczuk MD, PhD, Artur Mazur MD, PhD, Prof, Szymon Figurski MD, PhD, Witold Błaż MD, PhD, Marta Rachel MD, PhD, Marian Ołpiński MD, PhD, Elżbieta Drachal, MD, Sieklucki Jerzy MD, PhD, Lisak-Gurba Katarzyna MD, Czajka Hanna MD, PhD, Prof |

\* *-* According to the resolutions of Educational Unit

1.1. Forms of classes, number of hours and ECTS

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Semester No. | Lecture | Exercise | Conversation | Laboratory | Seminar | ZP | Praktical | Other | **Number of points ECTS** |
| VII | 20 | 48 |  |  | 9 |  |  |  | 5 |
| VIII | 20 | 27 |  |  | 6 |  |  |  | 3 |

1.2. The form of class activities

☐ classes are in the traditional form

☐ classes are implemented using methods and techniques of distance learning

1.3 Examination Forms (exam, credit with grade or credit without grade)

2.BASIC REQUIREMENTS

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| Knowledge of human topographic and functional anatomy, neuroanatomy, physiology and human pathophysiology. |

3. OBJECTIVES, OUTCOMES, AND PROGRAM CONTENT USED IN TEACHING METHODS

3.1 Objectives of this course

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| C1 | Acquiring general theoretical and practical basics in the field of pediatrics. |
| C2 | Mastering the skills of collecting medical history, physical examination of a child. |
| C3 | Mastering the practical proceedings with a child coming to the children's clinic (healthy and sick child). |
| C4 | Acquiring outpatient treatment skills and dealing with a child suffering from respiratory and digestive diseases. |

**3.2 OUTCOMES FOR THE COURSE**

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| EK (the effect of education) | The content of the learning effect defined for the subject (module) | Reference to directional effects (KEK) |
| EK­\_01 | knows the environmental and epidemiological conditions of the most common pediatric diseases | E.W2. |
| EK\_02 | knows and understands the causes, symptoms, principles of diagnosis and treatment in most common children’s diseases:  a) acute and chronic diseases of the upper and lower respiratory tract, congenital defects of the respiratory system, tuberculosis, cystic fibrosis, asthma, allergic rhinitis, urticaria, anaphylactic shock, angioedema edema,  b) acute and chronic abdominal pain, vomiting, diarrhea, constipation, gastrointestinal bleeding, peptic ulcer disease, intestinal diseases, pancreatic diseases, cholestasis and liver diseases and congenital gastrointestinal disorders | E.W3. |
| EK\_03 | conducts a medical history with the child and his family | E.U2. |
| EK\_04 | performs physical examination of a child of all ages | E.U4. |
| EK\_05 | compiles anthropometric and blood pressure measurements with data on centile grids | E.U9. |
| EK\_06 | evaluates the degree of advancement of sexual maturation | E.U10. |
| EK\_07 | performs differential diagnosis of the most common diseases of children | E.U12. |
| EK\_08 | interprets laboratory tests and identifies causes of deviations | E.U24. |
| EK\_09 | plans diagnostic, therapeutic and prophylactic procedures | E.U16. |
| EK\_10 | plans specialist consultations | E.U32. |
| EK\_11 | keeps the patient's medical records | E.U38. |
| EK\_12 | can establish and maintain a deep and respectful contact with the patient | K.01. |
| EK\_13 | he is guided by the good of the patient, placing them in the first place | K.02. |
| EK\_14 | respects medical confidentiality and patient's rights | K.03. |

**3.3 CONTENT CURRICULUM**

1. **Problems of the lecture**

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| **Course contents** |
| 1. Childhood functional gastrointestinal disorders. |
| 2. Coeliac disease. |
| 3. Approach to anaemia in children. |
| 4. Short stature. |
| 5. Chronic diseases of the respiratory tract: asthma, cystic fibrosis, primary ciliary dyskinesia, bronchiectasis, interstitial diseases. |
| 6. Food allergy. Atopic dermatitis. |
| 7. Bleeding disorders. |
| 8. Term neonate – physiology and potential problems with adaptation: Apgar score, acid-base balance, neonatal hypoxic-ischemic encephalopathy and therapeutic hypothermia – clinical case. Human milk and breastfeeding. |
| 9. Preterm: prenatal diagnosis and ethical issues. Preterm birth complications - pathophysiology, morbidity and mortality, therapeutic approach. Neonatal discharge planning from NICU (Neonatal Intensive Care Unit) and post-discharge care during first 2 years of life. Outcomes for extremely premature infants – clinical case. |
| 10. Acute and chronic urticaria. Anaphylaxis. |
| 11. Heart arrythmia. Kawasaki disease. |
| 12. Innocent heart murmurs. |
| 13. Thyroid diseases |
| 14. Active and passive prevention of infectious diseases in premature babies and children with chronic diseases |
| 15. Pulmonary emergencies. |

1. **Problems of seminaries**

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| **Course contents** |
| 1. Bacterial and viral infections of the central nervous system. |
| 2. Infections of the upper and lower respiratory tract. |
| 3. Infections of the digestive system (viral, bacterial, parasitic). |
| 4. Viral hepatitis. |
| 5. Perinatal infections. |

1. **Problems of exercises**

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| **Course contents** |
| 1. Symptomatology and diagnostics of gastrointestinal diseases. |
| 2. Diseases with diarrhea and constipation. |
| 3. Autoimmune digestive disorders. |
| 4. Functional gastrointestinal disorders. |
| 5. Medical and physical examination in pediatric cardiology. Non-invasive methods of examining the circulatory system. Cardiomyopathies. |
| 6. Congenital heart defects. Myocarditis. Infective endocarditis. |
| 7. Pericarditis. Heart failure. Hypertension. Kawasaki disease. |
| 8. Cardiac arrhythmia. Chest pain. Syncope. |
| 9. Diagnostics of respiratory system diseases: physical examination, laboratory tests, in vivo tests, functional tests, pleural fluid tests, lung biopsy, polysomnography. |
| 10. Diseases of the respiratory system of the neonatal period: congenital defects, respiratory distress syndrome, bronchopulmonary dysplasia, apnea of premature babies. |
| 11. Infectious diseases of the respiratory system: flu, croup, bronchitis, bronchiolitis, pneumonia, tuberculosis, parasitic diseases, HIV. |
| 12. Chronic diseases of the respiratory tract: asthma, cystic fibrosis, primary ciliary dyskinesia, bronchiectasis, alpha-1-antitrypsin deficiency, pulmonary edema, pneumothorax, foreign body. |
| 13. Symptomatology in hematology. Laboratory diagnostics. Deficiency, aplastic and haemolytic anemia. White blood cells disorders. |
| 14. Acute leukemia. Chronic myeloid leukemia. Myelodysplastic and myeloproliferative diseases. |
| 15. Differential diagnosis of lymphadenopathy and splenomegaly. Hodgkin's lymphoma. Non-Hodgkin's lymphomas. |
| 16. Hemorrhagic diseases. Thrombosis and thrombophilia. |
| 17. Term, healthy neonate: procedures in the delivery room, Apgar scale, clinical examination, adaptation to extrauterine life, birth trauma, breastfeeding, neonatal jaundice, neonatal screening tests, discharge from hospital. |
| 18. Preterm: definition and classification, preterm birth complications, postdischarge care. |
| 19. Resuscitation, acute hypoxic-ischemic encephalopathy and hypothermia treatment, neonatal respiratory support: types and practical approach. |
| 20. Physiology of the fetal and transitional circulation, meconium aspiration syndrome, ethical issues in neonatology, lethal defects, final test. |
| 21. Diagnostics and treatment of patients with endocrine diseases – medical history and physical examination (weight, height, BMI, head circumference, chest circumference, percentile grids). Assessment of maturation on the Tanner scale. Short and tall stature. |
| 22. Puberty disorders: premature and delayed puberty. Congenital adrenal hyperplasia and gender differentiation disorders. |
| 23. Diagnosis and treatment of thyroid and parathyroid diseases. |
| 24. Hypoglycemia, hyperglycemia. Adrenal insufficiency. |

3.4 Didactic methods

Lecture: multimedia presentation

Exercises: practical

Seminaries: multimedia presentation

Self-work: work with book

4. METHODS AND EVALUATION CRITERIA

4.1 Methods of verification of learning outcomes

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| Symbol of effect | Methods of assessment of learning outcomes (Eg.: tests, oral exams, written exams, project reports, observations during classes) | Form of classes |
| EK\_ 01  EK\_02 | Written and oral test | Lectures, Exercises |
| EK\_03  EK\_04  EK\_05  EK\_06  EK\_07  EK\_08  EK\_09  EK\_10  EK\_11  EK\_12  EK\_13  EK\_14 | Practical pass | Exercises |
| EK\_03  EK\_04  EK\_07  EK\_08  EK\_09  EK\_10 | Case study | Exercises |

4.2 Conditions for completing the course (evaluation criteria)

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| The rules of passing the course:  1. Full participation and activity in exercises and seminaries  2. Full participation in lectures  3. Written and oral completion of lectures, exercises and seminaries  Scope of marks: 2.0 -5.0  Knowledge assessment:  5.0 - shows knowledge of education content at the level of 93% -100%  4.5 - shows knowledge of education content at the level of 85% -92%  4.0 - shows knowledge of education content at the level of 77% -84%  3.5 - shows knowledge of education content at the level of 69% -76%  3.0 - shows knowledge of education content at 60% -68%  2.0 - shows knowledge of education content below 60%  Assessment of skills, verified learning outcomes:  5.0 - the student actively participates in exercises, is well prepared, has acquired theoretical and practical knowledge in pediatrics. Student shows a very good level of performance of anamnesis and child physical examination.  4.5 - the student actively participates in exercises, has acquired theoretical and practical knowledge in pediatrics. Student shows a good level of performance of anamnesis and child physical examination.  4.0 – the student actively participates in exercises, with minor corrections of the teacher, has acquired theoretical and practical knowledge in pediatrics. Student shows a good level of performance of anamnesis and child physical examination.  3.5 – the student participates in exercises, his preparation is not comprehensive presentation of the discussed problem of pediatrics, with corrections of the teacher. Student shows a sufficient level of performance of anamnesis and child physical examination.  3.0 - the student participates in exercises, his preparation is not comprehensive presentation of the discussed problem of pediatrics, with often corrections of the teacher. Student shows a basic level of performance of anamnesis and child physical examination.  2.0 – the student passively participates in the exercises, his theoretical and practical knowledge in pediatrics is insufficient. He has not mastered. Student doesn’t show a basic level of performance of anamnesis and child physical examination.  Assessment of social competences:  - continuous assessment by the teacher (observation)  - discussion during exercises |

**5. Total student workload required to achieve the desired result in hours and ECTS credits**

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| --- | --- |
| Activity | Hours / student work |
| Hours of classes according to plan with the teacher | 130 |
| Preparation for classes | 98 |
| Participation in the consultations | 2 |
| The time to write a paper / essay | - |
| Preparation for tests | - |
| Participation in colloquia | **-** |
| Other (e-learning) | **-** |
| SUM OF HOURS | **230** |
| TOTAL NUMBER OF ECTS | **8** |

*\** *It should be taken into account that 1 ECTS point corresponds to 25-30 hours of total student workload.*

6. TRAINING PRACTICES IN THE SUBJECT

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| Number of hours | - |
| Rules and forms of apprenticeship | - |

7. LITERATURE

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| Basic literature: Basic literature:  1. Lissauer Tom, Carroll Will. Illustrated Textbook of Paediatrics, Fifth Edition, 2017  2. Marcdante Karen, Kliegman Robert. Nelson Essentials of Pediatrics, 8th Edition, 2018 |

Acceptance Unit Manager or authorized person