SYLLABUS

concerning the cycle of education 2020-2026

(date range)

1.1. BASIC INFORMATION CONCERNING THIS SUBJECT / MODULE

| Subject / Module | Pediatrics |
|--|---|
| Course code / module * | PD / E |
| Faculty of (name of the leading direction) | Faculty of Medicine, University of Rzeszow |
| Department Name | Faculty of Medicine, University of Rzeszow |
| Field of study | medical direction |
| Level of education | uniform master's studies |
| Profile | practical |
| Form of study | stationary / extramural |
| Year and semester | year VI, semester XI, XII |
| Type of course | obligatory |
| Coordinator | Olga Wolińska MD, PhD |
| First and Last Name of the Teacher | Ewelina Głodek-Brzozowska, Grzegorz Siteń, Witold Błaż, Olga Wolińska |

^{* -} According to the resolutions of the Faculty of Medicine

1.2. Forms of classes, number of hours and ECTS

| Lecture | Exercise | Conversation | Laboratory | Seminar | ZP | Practical | Self- learning | Number of points ECTS |
|---------|----------|--------------|------------|---------|----|-----------|-------------------|-----------------------------|
| - | 100 | - | - | 20 | - | - | 80 | 8 |

1.3. The form of class activities

⊠classes are in the traditional form

□ classes are implemented using methods and techniques of distance learning

1.4. Examination Forms / module (exam, credit with grade or credit without grade)

2. REQUIREMENTS

Knowledge in the field of pediatrics from semesters 7, 8, 9 and 10

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

3.1. Objectives of this course/module

| C1 | Mastering the theoretical basis and practical skills in the diagnosis and therapy of diseases in pediatrics, secondary symptoms. |
|----|--|
| C2 | Collecting medical history, physical examination of a child. |
| СЗ | Mastering the basics of interpretation of basic and additional tests in children. |

$3.2\,$ OUTCOMES FOR THE COURSE / MODULE (TO BE COMPLETED BY THE COORDINATOR)

| 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 principles of nutrition for healthy and sick children, the principles of immunization and keeping the child's health balance | E.W2. |
| EK_02 | knows and understands the causes, symptoms, principles of diagnosing and therapeutic treatment of the most common diseases of children: a) rickets, tetany, convulsions, b) heart defects, myocarditis, endocarditis and pericarditis, cardiomyopathy, arrhythmias, insufficiency heart, hypertension, syncope, c) 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, edema vasomotor, d) anemia, haemorrhagic diathesis, bone marrow failure, neoplastic diseases of childhood, including solid tumors typical of childhood, e) acute and chronic abdominal pain, vomiting, diarrhea, constipation, gastrointestinal bleeding, peptic ulcer disease, inflammatory bowel diseases, pancreatic diseases, cholestasis and liver diseases and other diseases acquired and congenital abnormalities of the gastrointestinal tract, f) urinary tract infections, congenital malformations, nephrotic syndrome, nephrolithiasis, acute and chronic renal failure, acute and chronic kidney disease, renal systemic diseases, urination disorders, vesicoureteral reflux disease, | E.W3. |

| | T |
|--|---|
| g) growth disorders, thyroid and parathyroid diseases, adrenal diseases, diabetes, obesity, puberty disorders and gonad functions, | |
| h) cerebral palsy, inflammation of the brain and meningitis, epilepsy, | |
| i) the most common infectious diseases of childhood, | |
| j) genetic syndromes, | |
| k) connective tissue diseases, rheumatic fever, juvenile arthritis, systemic lupus, inflammation dermatomyositis; | |
| knows the most frequent conditions of life threat in children, and the rules for dealing with these situations | E.W6. |
| conducts a medical interview with the child and his family | E.U2. |
| performs physical examination of a child of all ages | E.U4. |
| evaluates the condition of the newborn in the Apgar scale and assesses its maturity, investigates neonatal reflexes; | E.U8. |
| compiles anthropometric and blood pressure measurements with data on centile grids; | E.U9. |
| evaluates the degree of advancement of sexual maturation; | E.U10. |
| performs differential diagnosis of the most common diseases of children; | E.U12. |
| recognizes states of immediate life threat; | E.U14. |
| plans diagnostic, therapeutic and prophylactic procedures; | E.U16. |
| interprets laboratory tests and identifies causes of deviations; | E.U24. |
| can perform basic procedures and medical procedures, including: a) body temperature measurement, heart rate measurement, non-invasive arterial blood pressure measurement, | |
| b) monitoring of vital signs using a cardiomonitor, pulse oximetry, | |
| c) spirometry test, oxygen treatment, assisted and replacement ventilation, | |
| d) introduction of the oropharyngeal tube, | |
| e) intravenous, intramuscular and subcutaneous injections, peripheral vein cannulation, peripheral blood sampling | E.U29. |
| venous blood collection, arterial blood sampling, arterial capillary blood collection, | |
| f) collecting swabs from the nose, throat and skin, puncture of the pleural cavity, | |
| g) catheterization of the bladder in men and women, probing the | |
| | h) cerebral palsy, inflammation of the brain and meningitis, epilepsy, i) the most common infectious diseases of childhood, j) genetic syndromes, k) connective tissue diseases, rheumatic fever, juvenile arthritis, systemic lupus, inflammation dermatomyositis; knows the most frequent conditions of life threat in children, and the rules for dealing with these situations conducts a medical interview with the child and his family performs physical examination of a child of all ages evaluates the condition of the newborn in the Apgar scale and assesses its maturity, investigates neonatal reflexes; compiles anthropometric and blood pressure measurements with data on centile grids; evaluates the degree of advancement of sexual maturation; performs differential diagnosis of the most common diseases of children; recognizes states of immediate life threat; plans diagnostic, therapeutic and prophylactic procedures; interprets laboratory tests and identifies causes of deviations; can perform basic procedures and medical procedures, including: a) body temperature measurement, heart rate measurement, non-invasive arterial blood pressure measurement, assisted and replacement ventilation, d) introduction of the oropharyngeal tube, e) intravenous, intramuscular and subcutaneous injections, peripheral vein cannulation, peripheral blood sampling venous blood collection, arterial blood sampling, arterial capillary blood collection, f) collecting swabs from the nose, throat and skin, puncture of the |

| | h) standard resting electrocardiogram with interpretation, electrical cardioversion and defibrillation | |
|-------|--|--------|
| | heart's, | |
| | i) simple test strips and blood glucose measurement; | |
| | Assists in the following procedures and medical procedures: | |
| | a) transfusion of blood and blood products, | |
| | b) drainage of the pleural cavity, | |
| | c) puncture of the pericardial sac, | |
| EK_14 | d) puncturing the peritoneal cavity, | E.U30. |
| | e) lumbar puncture, | |
| | f) thin-needle biopsy, | |
| | g) epidermal tests, | |
| | h) intradermal and scarification tests and interprets their results; | |
| EK_15 | can plan specialist consultations | E.U32. |
| EK_16 | recognizes the agony of the patient and determines the patient's death | E.U37. |
| EK_17 | can manage the patient's medical records | E.U38. |
| EK_18 | can establish and maintain a deep and respectful contact with the patient | K.01. |
| EK_19 | he is guided by the good of the patient, placing them in the first place | K.02. |
| EK_20 | respects medical confidentiality and patient's rights | K.03. |

3.3 CONTENT CURRICULUM (filled by the coordinator)

A. Exercises

Course contents

Practical teaching in the field of child gastroenterology:

- a) medical history, physical examination, differential diagnosis
- b) interpretation of laboratory tests
- c) assessment of the patient's condition
- d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations
- e) performing medical procedures and procedures
- f) undertaking preventive and curative measures in the event of a threat to life
- g) keeping medical records

Practical teaching in the field of Pulmonology and Pediatric Allergy:

- a) medical history, physical examination, differential diagnosis
- b) interpretation of laboratory tests
- c) assessment of the patient's condition
- d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations
- e) performing medical procedures and procedures
- f) undertaking preventive and curative measures in the event of a threat to life
- g) keeping medical records

Practical teaching in the field of Pediatric Endocrinology and Diabetology:

- a) medical history, physical examination, differential diagnosis
- b) interpretation of laboratory tests
- c) assessment of the patient's condition
- d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations
- e) performing medical procedures and procedures
- f) undertaking preventive and curative measures in the event of a threat to life
- g) keeping medical records

Practical teaching in the field of Neonatology

- a) medical history, physical examination, differential diagnosis
- b) interpretation of laboratory tests
- c) assessment of the patient's condition
- d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations
- e) performing medical procedures and procedures
- f) undertaking preventive and curative measures in the event of a threat to life
- g) keeping medical records

Practical teaching in the field of child's cardiology:

- a) medical history, physical examination, differential diagnosis
- b) interpretation of laboratory tests
- c) assessment of the patient's condition
- d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations

- e) performing medical procedures and procedures
- f) undertaking preventive and curative measures in the event of a threat to life
- g) keeping medical records

Practical teaching in the field of Pediatric Nephrology:

- a) medical history, physical examination, differential diagnosis
- b) interpretation of laboratory tests
- c) assessment of the patient's condition
- d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations
- e) performing medical procedures and procedures
- f) undertaking preventive and curative measures in the event of a threat to life
- g) keeping medical records

Practical teaching in the field of Oncology and Hematology:

- a) medical history, physical examination, differential diagnosis
- b) interpretation of laboratory tests
- c) assessment of the patient's condition
- d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations
- e) performing medical procedures and procedures
- f) undertaking preventive and curative measures in the event of a threat to life
- g) keeping medical records

Practical teaching in the field of child's Rheumatology:

- a) medical history, physical examination, differential diagnosis
- b) interpretation of laboratory tests
- c) assessment of the patient's condition
- d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations
- e) performing medical procedures and procedures
- f) undertaking preventive and curative measures in the event of a threat to life
- g) keeping medical records

3.4 TEACHING METHODS

Exercises: working with the patient, analyzing diagnostic tests, discussing individual cases **Student's own work**: work with a book

4 METHODS AND EVALUATION CRITERIA

4.1 Methods of verification of learning outcomes

| 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 EK_03 | Exam: practical, written, oral | |
| EK_04 EK_05 EK_06 EK_07 EK_08 EK_09 EK_10 EK_11 EK_12 EK_13 EK_14 EK_15 EK_16 EK_17 EK_18 EK_19 EK_20 | credit with the grade based on the student's observation including: - attendance - implementation of commissioned tasks - Journal of clinical training - Practical assessment | Exercises |

4.2 Conditions for completing the course (evaluation criteria)

Detailed information on the rules of condusting classes is included in the Regulations of clinical classes, which each student is obliged to read before they begin.

- 1. Mandatory presence and active participation in all exercises.
- 2. Completing the procedures assigned to the subject in the Practical Education Diary
- 3. Exam:
- a) in writing on the information covered during all semesters of pediatrics teaching:

Multiple choice

- b) practical part: status praesens patient`s history and phisical examination, interpretation of additional tests, proposed complementary diagnostic, differential diagnosis, proposed treatment and management
- c) oral part- answer to questions asked by the examiner

The condition for passing the course is a positive grade in each part of the exam

Final grade= 50% test mark + 40% oral exam mark+ 10% practical exam mark

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3,0-3,3= satisfactory (3)
3,4-3,8= satisfactory + (3,5)
3,9-4,3= good (4,0)
4,4-4,7 = good + (4,5)
4,8-5 = very good (5)
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Assessment criteria:

- 5.0 has knowledge of the content of education at the level of 93%-100%
- 4.5 has knowledge of the content of education at the level of 85% -92%
- 4.0 has knowledge of the content of education at the level of 77% -84%
- 3.5 has knowledge of the content of education at the level of 69% -76%
- 3.0 has knowledge of the content of education at the level of 60% -68%
- 2.0 has knowledge of the educational content below 60%
- 4. Practical pass to be able to take the theoretical exam:

The student independently performs a complete subjective and objective examination of the selected patient.

The condition for passing is the correct presentation of the basic differential diagnosis, proposing adequate additional tests and methods of therapy.

Skills assessment

- 5,0 The student actively participates in classes, is well prepared, and has acquired theoretical and practical knowledge in the field of pediatrics. He has mastered the skills of collecting medical history and physical examination of the child to a very good extent.
- 4,5 The student actively participates in classes, gained theoretical and practical knowledge in the field of pediatrics at a very good level. He has mastered the skills of collecting medical history and physical examination of the child to a good extent.
- 4,0 The student actively participates in classes, is corrected, and has acquired good theoretical and practical knowledge in the field of pediatrics. He has mastered the skills of collecting medical history and performing physical examination of the child to a good extent.
- 3,5 The student participates in classes, his scope of preparation does not allow for a comprehensive presentation of the discussed problem in the field of pediatrics. He has sufficiently mastered the skills of collecting medical history and performing physical examination of the child.
- 3,0 The student participates in classes and has sufficiently acquired theoretical and practical knowledge in the field of pediatrics. He has mastered the skills of collecting medical history and performing physical examination of the child, but he is often corrected.
- 2.0 the student passively participates in classes, the statements are substantively incorrect, theoretical and practical knowledge in the field of pediatrics is insufficient. He did not master the skills of taking a medical history and performing a physical examination of the child, and mistakes were often made

Assessment of social competences:

- continuous assessment by the teacher (observation)
- discussion during classes
- opinions of patients and colleagues

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

| Activity | Hours / student work |
|---|----------------------|
| Hours of classes according to plan with the | 120 |
| teacher | |
| Preparation for classes | 30 |
| Participation in the consultations | 2 |
| The time to write a paper / essay | - |
| Preparation for tests | 50 |
| Participation in colloquia | 1 |
| Other (e-learning) | - |
| SUM OF HOURS | 203 |
| TOTAL NUMBER OF ECTS | 8 |

6. TRAINING PRACTICES IN THE SUBJECT / MODUL

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

7. LITERATURE

READING:

- 1. Lissauer Tom, Carroll Will. Illustrated Textbook of Paediatrics, Sixth Edition,
- 2. Lissauer Tom, Carroll Will. Self-assessment in Paediatrics, Second Edition,
- 3. Marcdante Karen, Kliegman Robert. Nelson Essentials of Pediatrics, 8th Edition, 2018

Acceptance Unit Manager or authorized person