

## SYLLABUS

Concerning the cycle of education **2021- 2027**

Academic year 2026/2027

### 1. BASIC INFORMATION CONCERNING THIS SUBJECT / MODULE

Subject name	<b>Pediatrics</b>
Course code *	<b>PD / E</b>
Faculty (name of the leading direction)	<b>Faculty of Medicine, University of Rzeszow</b>
Department Name	<b>Faculty of Medicine, University of Rzeszow</b>
Field of study	<b>Medicine</b>
Level of education	<b>Uniform master's studies</b>
Profile	<b>General academic</b>
Form of study	<b>Stationary / non-stationary</b>
Year and semester	<b>Year VI</b>
Type of course	<b>Obligatory</b>
Language of instruction	<b>English</b>
Coordinator	<b>Olga Wolińska MD, PhD</b>
First and Last Name of the Teacher	<b>Olga Wolińska MD, PhD Grzegorz Siteń MD Ewelina Głodek-Brzozowska MD Witold Błaż MD, PhD</b>

\* - according to the resolutions of the Faculty of Medicine

#### 1.1. Forms of classes, number of hours and ECTS

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

#### 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. 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

C <sub>1</sub>	Mastering the theoretical basis and practical skills in the diagnosis and therapy of diseases in pediatrics, secondary symptoms.
C <sub>2</sub>	Collecting medical history, physical examination of a child.
C <sub>3</sub>	Mastering the basics of interpretation of basic and additional tests in children.

### 3.2. Course/Module Learning Outcomes

EK (the effect of education)	The content of the learning effect defined for the subject (module)	Reference to directional effects (KEK)
EK_o1	environmental and epidemiological conditions of the most common diseases;	E. W1.
EK_o2	principles of feeding healthy and sick children, including breastfeeding, vaccinations and keeping a child's health assessment;	E. W2.
EK_o3	causes, symptoms, principles of diagnosis and therapeutic procedures in the case of the most common diseases of children: 1) rickets, tetany, convulsions, 2) heart defects, myocarditis, endocarditis and pericarditis, cardiomyopathy, heart rhythm disorders, heart failure, hypertension, fainting, 3) 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, 4) anemia, hemorrhagic diathesis, bone marrow failure, childhood cancers, including solid tumors typical of childhood, 5) acute and chronic abdominal pain, vomiting, diarrhea, constipation, bleeding from the gastrointestinal tract, peptic ulcer disease, nonspecific intestinal diseases, pancreas diseases, cholestasis and liver diseases and other acquired diseases and congenital defects of the digestive tract, 6) urinary tract infections, congenital defects of the urinary	E. W3.

	tract, nephrotic syndrome, nephrolithiasis, acute and chronic renal failure, acute and chronic nephritis, systemic kidney diseases, urination disorders, vesicoureteral reflux disease, 7) growth disorders, thyroid and parathyroid diseases, adrenal diseases, diabetes, obesity, maturation disorders and gonadal function, 8) cerebral palsy, encephalitis and meningitis, epilepsy, 9) the most common infectious diseases of childhood, 10) genetic syndromes, connective tissue diseases, rheumatic fever, juvenile arthritis, systemic lupus erythematosus, dermatomyositis;	
EK_o4	issues of abused and sexually abused children, mental retardation and behavioral disorders – psychoses, addictions, feeding and excretion disorders in children;	E. W4.
EK_o5	most common life-threatening conditions in children and principles of conduct in these conditions;	E. W6.
EK_o6	causes, symptoms, principles of diagnosis and therapeutic and preventive treatment of the most common bacterial, viral, parasitic and fungal diseases, including pneumococcal infections, viral hepatitis, acquired immunodeficiency syndrome (AIDS), sepsis and hospital infections;	E.W34.
EK_o7	causes, symptoms, principles of diagnosis and therapeutic management of the most common hereditary diseases;	E.W37.
EK_o8	conduct a medical interview with a child and his/her family;	E.U2.
EK_o9	conduct a physical examination of a child of any age;	E.U4.
EK_10	assess the patient's general condition, state of consciousness and awareness;	E.U7.
EK_11	assess the newborn's condition on the Apgar scale and its maturity and examine neonatal reflexes;	E.U8.
EK_12	compare anthropometric and blood pressure measurements with data on centile charts;	E.U9.
EK_13	assess the stage of puberty;	E.U10.
EK_14	perform differential diagnosis of the most common diseases of adults and children;	E.U12.
EK_15	recognize conditions that pose a direct threat to life;	E.U14.
EK_16	plan diagnostic, therapeutic and preventive procedures;	E.U16.
EK_17	interpret laboratory test results and identify causes of deviations from the norm;	E.U24.

EK_18	administer nutritional therapy, including enteral and parenteral nutrition;	E.U25.
EK_19	qualify the patient for vaccinations;	E.U27.
EK_20	perform basic medical procedures and treatments, including: <ul style="list-style-type: none"> <li>1) measurement of body temperature (superficial and deep), pulse measurement, non-invasive blood pressure measurement,</li> <li>2) monitoring of vital signs using a cardiomonitor, pulse oximetry,</li> <li>3) spirometric testing, oxygen therapy, assisted and substitute ventilation,</li> <li>4) insertion of an oropharyngeal tube,</li> <li>5) intravenous, intramuscular and subcutaneous injections, cannulation of peripheral veins, collection of peripheral venous blood, collection of blood for culture, collection of arterial blood, collection of arterialized capillary blood,</li> <li>6) taking swabs from the nose, throat and skin,</li> <li>7) catheterization of the urinary bladder in women and men, gastric probing, gastric lavage, enema,</li> <li>8) standard resting electrocardiogram with interpretation, electrical cardioversion and defibrillation of the heart, simple strip tests and measurement of blood glucose;</li> </ul>	E.U29.
EK_21	assist in performing the following medical procedures and treatments: <ul style="list-style-type: none"> <li>1) transfusion of blood products and blood derivatives,</li> <li>2) drainage of the pleural cavity,</li> <li>3) puncture of the pericardial sac,</li> <li>4) puncture of the peritoneal cavity,</li> <li>5) lumbar puncture,</li> <li>6) fine-needle biopsy,</li> <li>7) skin tests,</li> </ul> intradermal and scarification tests and interpret their results;	E.U30.
EK_22	plan specialist consultations;	E.U32.
EK_23	recognize the patient's agony and confirm his death;	E.U37.
EK_24	maintain the patient's medical records.	E.U38.
EK_25	establish and maintain a deep and respectful contact with the patient, as well as showing understanding for ideological and cultural differences;	K.01.
EK_26	be guided by the patient's best interests;	K.02.
EK_27	comply with medical confidentiality and patient rights;	K.03.
EK_28	take action towards the patient based on ethical principles, with awareness of the social conditions and limitations resulting from the	K.04.

	disease;	
EK_29	detect and recognise his/her own limitations and making self-assessment of educational deficits and needs;	K.o5.
EK_30	promote health-promoting behaviors;	K.o6.
EK_31	use objective sources of information;	K.o7.
EK_32	formulate conclusions from his/her own measurements or observations;	K.o8
EK_33	implement the principles of professional camaraderie and cooperation within a team of specialists, including representatives of other medical professions, also in a multicultural and multinational environment;	K.o9.
EK_34	formulate opinions on various aspects of professional activity;	K.10.
EK_35	accept responsibility for decisions made in the course of professional activity, including those relating to one's own safety and the safety of others.	K.11.

### 3.3. Course content

#### A. Exercises

Course contents
<b>Practical teaching in the field of child gastroenterology:</b> <ul style="list-style-type: none"> <li>a) medical history, physical examination, differential diagnosis</li> <li>b) interpretation of laboratory tests</li> <li>c) assessment of the patient's condition</li> <li>d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations</li> <li>e) performing medical procedures and procedures</li> <li>f) undertaking preventive and curative measures in the event of a threat to life</li> <li>g) keeping medical records</li> </ul>

**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. Methods of Instruction

**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 (E.g.: 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_35	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 conducting 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 examine

**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

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)

4,8-5,0 = very good (5)



**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 INTENDED LEARNING OUTCOMES IN HOURS AND ECTS CREDITS

Activity	Hours / student work
Hours of classes according to plan with the teacher	120
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
<b>TOTAL NUMBER OF ECTS</b>	<b>8</b>

## 6. TRAINING PRACTICES IN THE SUBJECT / MODUL

Number of hours	-
Rules and forms of apprenticeship	-

## 7. LITERATURE

### Basic Literature:

1. Lissauer Tom, Carroll Will. Illustrated Textbook of Paediatrics, Sixth Edition
2. Lissauer Tom, Carroll Will. Self-assessment in Paediatrics, Second Edition

### Additional literature:

1. Marcdante Karen, Kliegman Robert. Nelson Essentials of Pediatrics, 8th Edition, 2018
2. Taczała J., Perenc L., Szmurło M., Wolińska O., Maciąg-Tymecka I., Majcher P. Monitoring the development of infant and children at risk of disability. Recommendations of the Children and Youth Rehabilitation Section of the Polish Rehabilitation Society. Postępy Rehabilitacji, 2021: Vol. 35, s. 47-54

Approved by the Head of the Department or an authorised person