

MEDICAL UNIVERSITY – PLOVDIV

FACULTY OF MEDICINE

DEPARTMENT OF PEDIATRICS AND MEDICAL GENETICS

ACADEMIC STANDARD FOR THE COURSE “PEDIATRICS”

For students in Medical Specialist (“Nurse”)

Bachelor's degree

Of the FACULTY OF PUBLIC HEALTH

1. AIM of the training in “Pediatrics”

The training in the discipline "Pediatrics" in the course of study for the specialty degree "Bachelor" "Registered Nurse" aims to familiarize the students with the anatomical and physiological features (AP) of the child's body and the most common diseases of individual systems. Emphasis is placed on the diseases that future midwives will encounter in their daily practice - diseases of the respiratory, blood, excretory, endocrine, cardiovascular and nervous systems, as well as the specific knowledge they must have to care for these children. An important part of the training is to acquaint them with some acute and emergency conditions in Pediatrics that they will encounter. Emphasis is placed on the approach to communication with the child depending on its condition and overcoming its fear of performing various manipulations. The importance and the place of the Medical Specialist-Registered Nurse as a link in the chain of specialists carrying out the diagnostic and treatment process are determined. In this way, they will be able to successfully and safely apply their knowledge and skills when working with children. The main tasks for achieving the goal are achieved by acquainting students with the peculiarities of the child's body, the specific pathology and the necessary workup and therapeutic interventions:

- Familiarization with AP of the newborn, infant and child at different ages, with the indicators of growth and development and the necessary environmental conditions for optimal development.
- Introduction to the most common diseases in childhood and the necessary diagnostic research and therapeutic interventions.
- Introduction to the importance of environmental factors, prevention and treatment of the most common diseases in children
- Development of students' skills for contact with the child.

After completing the training, students must have the following knowledge and skills:

- To know the AP of the newborn, infant and child at different ages, growth and development indicators
- To know the necessary optimal environmental conditions for the normal development of the child.
- To know the basic principles of nutrition of newborns, infants and children from 1 to 3 years
- To know the epidemiology, etiology and clinical picture of the most common diseases in childhood
- To know the laboratory studies that will be performed in the diagnosis of a pathological condition.
- To be able to make contact with a sick child without causing mental trauma and stress to the fragile child's body

2. Content of the course

	Exam	Academic hours			Academic year/semester
	Semester	Total hrs	Lectures	Practicals	
Pediatrics	IV	30	30	0	II yr/ IV sr.

CURRICULUM

N	Topic	Total hrs	Lecture hrs	Pract.
1	Introduction to pediatrics. Periods of childhood. General biological features of the child.	2	2	0
2	Growth and development. Neuropsychological development of the child.	2	2	0
3	Anatomy - physiological features of the child's body.	2	2	0
4	Rational feeding of the infant and the child. Nutritional problems	2	2	0
5	Well-baby clinic and consultation. Infant morbidity and infant mortality. Basic principles of treatment of children's diseases.	2	2	0
6	Basic principles of prevention in childhood.	2	2	0

	Immunizations and immunization calendar.			
7	Pediatric emergencies	2	2	0
8	Rickets. Diseases of the endocrine system	2	2	0
9	Diseases of the digestive system.	2	2	0
10	Diseases of the respiratory system	2	2	0
11	Diseases of the cardio-vascular system	2	2	0
12	Diseases of the blood	2	2	0
13	Diseases of the excretory system	2	2	0
14	Diseases of the nervous system	2	2	0
15	Diseases of the connective tissues. Diseases of the skin	2	2	0
	Total	30	30	0

3. Prerequisites

Students must have in-depth knowledge of the human anatomy and physiology. Based on this knowledge, they will be able to learn the peculiarities of the anatomy and physiology of the child. It is necessary to be able to learn, analyse and reproduce the provided information about the causes, manifestations, deviations in the physiological constants of the internal environment of the child's body and the possibilities for treatment and prevention of the studied diseases.

4. Academic resources

Pediatrics teachers for the bachelor's degree in Medical Specialist- Registered Nurse must be a habilitated person or a distinguished specialist with the PhD degree of Doctor of Medicine. He must have knowledge and experience in conducting theoretical and practical training of students. The lecturer must have outstanding abilities in the teaching specialty - specialty in "Children's Diseases" and a narrow specialty in the same, scientific publications and participation in national and international scientific forums.

5. Material resources

For the successful conduct of the theoretical and practical classes in "Pediatrics" for the specialty "Bachelor" "Medical Specialist- Registered Nurse" it is necessary to have a room for theoretical classes, equipped with multimedia, screen, computer with the ability to play presentations. Personal protective equipment (aprons, masks, socks) and hand disinfectants need to be available to prevent trainees from becoming infected with infectious diseases.

6. Lecture training

Presentations are prepared and provided to students so that the necessary knowledge can be obtained.

PROGRAM AND ANNOTATION OF THE LECTURE COURSE

Lecture № 1 - 2 hours. Topic: Introduction to pediatrics, general biological features of the child's body, pediatric age.

Introduces students to pediatrics as a discipline, incl. in a historical aspect. The general biological features of the child's organism are considered - thermolability, hydrolability, tropholability, features

of immunity. The peculiarities from the point of view of the physiology and pathology of the different age groups are considered.

Lecture № 2 - 2 hours. Topic: Anatomical and physiological features of the child's body.

The peculiarities from the point of view of the anatomy and physiology of the separate organs and systems of the child are considered.

Lecture №3 - 2 hours. Topic: Features of the newborn and premature child; first care for the newborn; resuscitation in the delivery room; feeding the newborn and premature baby.

The issues of neonatology are considered - features of the newborn and the premature, the nutrition of this particularly risky group of children, the role of natural nutrition is emphasized in the first hours after birth. The first care and resuscitation carried out in the delivery room are considered.

Lecture № 4 - 2 hours. Topic: Diseases of the newborn.

The most common nosological units are considered - diseases of respiratory failure; diseases related to birth injuries; infections of the newborn, etc.

Lecture № 5 - 2 hours. Topic: Rational nutrition of infants and young children.

Issues related to breastfeeding and infant nutrition are addressed. The advantages of natural nutrition and the disadvantages of formula feeding are highlighted. Nutrition at the age of 1 to 3 years is also commented in detail.

Lecture № 6 - 2 hours. Topic: Prevention - importance and types. Hardening - basic principles. Immunizations. Basic principles of treatment of children's diseases.

The issues of prevention, hardening in childhood are considered; immunizations with their indications, contraindications and side effects, the immunization calendar adopted in Bulgaria. The basic principles of treatment of the most common childhood diseases are considered.

Lecture № 7 - 2 hours. Topic: Pediatric consultation, child morbidity and infant mortality.

The principles and essence of the work of the children's consultation are considered in detail. Issues of child morbidity and mortality are discussed in detail.

Lecture № 8 - 2 hours. Topic: Heredity and genetic diseases.

The basic concepts of heredity and types of inheritance of pathological traits are considered. The most common hereditary diseases we encounter are also considered. The issues of medico-genetic consultation and prenatal diagnostics are discussed.

Lecture № 9 - 2 hours. Topic: Emergencies in pediatrics.

The most common emergencies in everyday life are considered - the peculiarities of cardiopulmonary resuscitation, foreign body in the respiratory tract, acute poisoning, seizures in children, dehydration and more.

Lecture № 10 - 2 hours. Subject: Rickets; diabetes mellitus, other diseases of the endocrine system.

The most common metabolic and endocrine diseases in children are considered - their etiology, clinical picture, features of course and treatment.

Lecture № 11 - 2 hours. Topic: Diseases of the digestive system in children.

The main symptoms of GIT diseases, methods of diagnosis and the most common diseases - etiology, features of the clinical picture, course, treatment and prevention are considered.

Lecture № 12 - 2 hours. Topic: Diseases of the respiratory system in children.

The peculiarities of the etiology, clinical picture, course, diagnosis, treatment and prevention of the most common diseases of the respiratory system are considered - acute infections of the gastrointestinal tract, acute pneumonia, asthma, cystic fibrosis and tuberculosis.

Lecture № 13 - 2 hours. Topic: Diseases of the cardiovascular system. Connective tissue diseases.

CHM are considered with their diagnosis, treatment options - these are the most common diseases of CCC in children. The peculiarities of the most common connective tissue diseases are considered.

Lecture № 14 - 2 hours. Topic: Diseases of the urinary system. Diseases of the hematopoietic system.

The peculiarities from the point of view of the paediatrician and the nurse of the most common diseases of these 2 important systems of the child's body are considered.

Lecture № 15 - 2 hours. Topic: neuropsychological development of the child. Diseases of the nervous system.

The factors that determine the peculiarities of the normal neuropsychological development of a healthy child are considered. The role of the nurse in the evaluation is emphasized. the most common diseases of the system in children are considered.

SYLLABUS OF PEDIATRICS

For SPECIALTY: NURSERY

1. Periods of childhood - features, age pathology. General biological features of the child's organism.
2. Physical development of the child.
3. Neuropsychological development of the infant and young child.
4. Heredity and genetic diseases.
5. Anatomical and physiological features of the respiratory and cardiovascular system.
6. Anatomical and physiological features of the digestive and excretory systems.
7. AFO of the hematopoietic and nervous systems.

8. Prevention - importance, types. Children's consultation.
9. Hardening. Massage and gymnastics.
10. Breastfeeding and weaning.
11. Formula and mixed feeding.
12. Features of the nutrition of a child aged 1-3 years.
13. Malnutrition and obesity.
14. Rickets.
15. Diseases of the respiratory system - acute infections of the upper respiratory tract, bronchiolitis, acute pneumonia, foreign bodies in the respiratory tract.
16. Diseases of the respiratory system - asthma, cystic fibrosis, pulmonary tuberculosis.
17. Diseases of the cardiovascular system - CHM, myocarditis and pericarditis.
18. Collagenosis - rheumatism, disseminated lupus, dermatomyositis, nodular panarteritis.
19. Diseases of the digestive system - anomalies, acute digestive disorders, malabsorption syndrome.
20. Diseases of the urinary system - anomalies, pyelonephritis, nephrolithiasis.
21. Diseases of the endocrine system - hypo-, hyperthyroidism, pituitary dwarfism, congenital adrenal hyperplasia.
22. Normal puberty. Early and late puberty.
23. Anemia in children.
24. Diseases with hemorrhagic diathesis. Leukemia.
25. Diseases of the nervous system - congenital anomalies, birth injuries, intracranial hemorrhage.
26. Diseases of the nervous system - neuroinfections, seizures, epilepsy.
27. Diabetes mellitus.
28. Acute poisoning and other accidents.

Recommended reading:

1. Children's diseases for nurses and midwives, edited by Prof. Hr. Mikhov, 1991, 1994
2. Children's diseases for the Medical Colleges under the editorship of Prof. Mumdzhev - 2000
3. Lecture course in pediatrics for midwives and nurses, Prof. T. Shmilev, Laxbook, 2015

7. Information resources. Basic literature. Websites

The teacher must have developed lectures on the subject, which he also presents on paper. The teacher develops a list of recommended literature in the discipline, for each of its components with a priority of the available sources. Each year, students receive a list of sites with relevant and up-to-date information.

8. Control works /tests

The current control of the acquired knowledge is done by conducting tests or clinical tasks. Students are provided with timely information and explanations of the results of the control, which will support their further preparation. The results of these tests are included as a component in the final assessment for the semester.

9. Independent work and commitment of the student

The independent work of the student is guided by the teacher, who guides them in finding literary sources and in the methods of their assimilation. Training tests are provided, incl. on line, for independent work and exercises of students.

10. Cooperation between students and the teaching team

This cooperation should be expressed in:

- Cooperation of the teacher with the student for his preparedness, current difficulties in mastering the material and opportunities with an individual learning program to achieve more.
- Individual consultations are used if necessary.

11. Exams

The semester work marks are provided for the assessment of the students in the curriculum of the specialty: at least two (one in the middle and one at the end of the semester) written tests.

12. Assessment standards:

The standards for assessing the student's achievements are defined as follows:

*Poor (2) receives a student with scarce knowledge, which cannot serve as a basis for upgrading the next levels of education in other clinical disciplines.

*Average (3) receives a student who reproduces the knowledge in a "ready-made scheme", lacking the main points of the developed topic and readiness for independent use of the acquired knowledge and professional skills; the terminology is not mastered in a satisfactory way; the exposition is characterized by poor language; only some basic practical skills have been mastered.

*Good (4) receives a student who develops the topic descriptively, reproductively, has limited independence in using the acquired knowledge and acquired professional competencies; in the exposition, although there is a good language culture, inaccuracies in the concepts used are allowed; basic practical skills have been acquired, but not to their full extent, and there are gaps.

*Very good (5) gets a student who develops the topic independently productively, non-standardly, looking for a new algorithm and analysis of the used literature data; makes an attempt to present and substantiate his thesis; adequately uses the concepts from the scientific field of the studied discipline, has a good language culture; with minimal gaps.

*Excellent (6) is awarded to a student who independently, logically and creatively presents the topic; reasonably and originally uses and interprets the literature related to the specific issue; is well informed and ready to use the acquired knowledge and professional competencies; there is accuracy and a rich linguistic culture of the exposition. There are no gaps.

15. Formation of the final mark

It is determined by:

1. Mark from the final written exam (test)
2. Marks of the assessment of the current control

Final assessment = k_1 * assessment of current control + k_2 * assessment of written exam,

Where $k_1 = 0.3$; $k_2 = 0.7$

If one of the components of the final grade is Poor (2), then the final mark is necessarily Poor (2).

Provision of the students' access to exam materials and results is fixed within 5 working days after the exam.

Updated and approved by The Departmental Council, No. 3 of May 29, 2020.

Approved by:/Signature/

/ Prof. Dr. I. Ivanov, MD /

Head of the Department