MINISTRY OF HEALTH OF UKRAINE

**BUKOVINIAN STATE MEDICAL UNIVERSUTY**

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|  | **"APPROVE"** |
|  | Vice-rector for scientific and pedagogical work |
|  | Associate Professor \_\_\_\_\_\_\_\_\_\_\_\_\_\_I.V. Gerush |
|  | “\_\_\_\_\_” \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2021 |

**STUDENT GUIDE**

**(SYLLABUS)**

**of studying the discipline**

**„PROPEDEUTIC OF PEDIATRICS”**

**Field of knowledge** \_\_22 Healthcare\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­­­­­­­­­\_\_\_\_

(code and name of the field of knowledge)

**Specialty**\_\_\_\_222 Medicine\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(code and name of the specialty)

**Educational degree**\_\_\_Master\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(master, bachelor, junior bachelor)

**Educational year**\_\_\_2021-2022\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Form of study** \_\_\_full-time\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(full-time, part-time, distance)

**Department** of pediatrics, neonatology and perinatal medicine\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(name of the department)

Approved at the methodical session of the department of pediatrics, neonatology and perinatal medicine "20" August 2020 (Protocol №1).

Head of the Department \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Nechytailo Yu. M.

(signature)

Approved by the subject methodical commission on pediatrics, obstetrics and "20" August 2020 (Protocol №1).

Chairman of the subject methodical

commission \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Kravchenko O.V.

(signature)

Chernivtsi – 2021

**GENERAL INFORMATION**

1. **GENERAL INFORMATION ABOUT SCIENTIFIC AND PEDAGOGICAL WORKERS WHO TEACH THE SUBJECT**

|  |  |
| --- | --- |
| **Department** | Pediatrics, neonatology and perinatal medicine |
| **Surname, name of scientific and pedagogical staff, scientific degree, academic status** | Nechytailo Yu. – professor, head of the department  Kovtiuk N. – associated professor, PhD  Nechytailo D. - associated professor, PhD  Buriak O. - associated professor, PhD  Popeliuk N. - associated professor, PhD  Bezruk V. - associated professor, PhD  Godovanets O.- associated professor, PhD  Miheeva T. - assistant professor, PhD  Poniuk V. - assistant professor |
| **Web page of the department on the official website of the university** | https://www.bsmu.edu.ua/pediatriyi-neonatologiyi-ta-perinatalnoyi-meditsini/ |
| **Department website** | https://propped.bsmu.edu.ua |
| **E-mail** | prop\_ped@bsmu.edu.ua |
| **Address** | Bukovinska str. 4 |
| **Contact phone** | 0372564274 |

1. **GENERAL INFORMATION ABOUT THE DISCIPLINE**

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| --- | --- |
| **Status of the discipline** | normative |
| **Number of credits** | 5 |
| **Total amount of hours** | 150 |
| **Lectures** | 30 |
| **Practical lessons** | 70 |
| **Individual work** | 50 |
| **Type of final control** | final module control |

1. **DESCRIPTION OF THE DISCIPLINE (ABSTRACT)**

The work program of the discipline "Propaedeutic of Pediatrics" reflects the current state of the industry and includes issues of the most important achievements of somatic pediatrics, emergencies in pediatrics, prevention and reduction of childhood morbidity. During the study, the student must achieve a high level of theoretical and professional training, knowledge of the history of modern pediatrics, its general concepts and methodological approaches. This provides a comprehensive understanding of the definition of various clinical variants and complications of the most common diseases of childhood, planning examination of a sick child and interpretation of the results of the most common diseases of childhood, differential diagnosis and preliminary clinical diagnosis of the most common diseases of childhood, tactics managing a patient with the most common diseases of childhood, diagnosing emergencies and providing emergency care for major emergencies in the pediatric clinic, demonstrating the ability to keep medical records in the pediatric clinic.

1. **POLICY OF THE SUBJECT**
   1. ***List of normative documents:***

* Regulations on the organization of the educational process (<https://www.bsmu.edu.ua/wp-content/uploads/2020/03/polozhennya-pro-organizacziyu-osvitnogo-proczesu-u-vdnzu-bukovinskij-derzhavnij-medichnij-universitet.pdf>);
* Instructions for assessing the educational activities of BSMU students in the implementation of the European credit transfer system of the educational process (<https://www.bsmu.edu.ua/wp-content/uploads/2020/03/bdmu-instrukcziya-shhodo-oczinyuvannya-%D1%94kts-2014-3.pdf>);
* Regulations on the procedure for reworking missed and uncredited classes (<https://www.bsmu.edu.ua/wp-content/uploads/2019/12/reworks.pdf>);
* Regulations on the appeal of the results of the final control of knowledge of higher education (<https://www.bsmu.edu.ua/wp-content/uploads/2020/07/polozhennya-pro-apelyacziyu-rezultativ-pidsumkovogo-kontrolyu-znan.pdf>);
* Codex of Academic Integrity (<https://www.bsmu.edu.ua/wp-content/uploads/2019/12/kodeks_academic_faith.pdf>);
* Moral and ethical codex of students (<https://www.bsmu.edu.ua/wp-content/uploads/2019/12/ethics_code.docx>);
* Regulations on the prevention and detection of academic plagiarism (<https://www.bsmu.edu.ua/wp-content/uploads/2019/12/antiplagiat-1.pdf>);
* Regulations on the procedure and conditions for students to choose elective courses ([https://www.bsmu.edu.ua/wp- content/uploads/2020/04/nakaz\_polozhennyz\_vybirkovi\_dyscypliny 2020.pdf](https://www.bsmu.edu.ua/wp-%20content/uploads/2020/04/nakaz_polozhennyz_vybirkovi_dyscypliny%202020.pdf));
* Rules of internal labor regulations of the Higher State Educational Institution of Ukraine "Bucovynian State Medical University" (<https://www.bsmu.edu.ua/wp-content/uploads/2020/03/17.1-bdmu-kolektivnij-dogovir-dodatok.doc>).
  1. ***Policy on adherence to the principles of academic integrity of higher education students:***

- independent performance of educational tasks of current and final controls without the use of external sources of information;

- cheating during control of knowledge is prohibited;

- independent performance of individual tasks and correct registration of references to sources of information in case of borrowing of ideas, statements, information.

* 1. ***Policy on adherence to the principles and norms of ethics and deontology by higher education students:***

- actions in professional and educational situations from the standpoint of academic integrity and professional ethics and deontology;

- compliance with the rules of internal regulations of the university, to be tolerant, friendly and balanced in communication with students and teachers, medical staff of health care institutions;

- awareness of the importance of examples of human behavior in accordance with the norms of academic integrity and medical ethics.

* 1. ***Attendance policy for higher education students:***

- attendance at all training sessions (lectures, practical (seminar) classes, final modular control) is mandatory for the purpose of current and final assessment of knowledge (except for respectable reasons).

***4.5. Deadline policy and completion of missed or uncredited classes by higher education students:***

- reworks of missed classes are held according to the schedule of missed or uncredited classes and consultations.

1. **PRECISIONS AND POST-REQUIREMENTS OF THE EDUCATIONAL DISCIPLINE (INTERDISCIPLINARY RELATIONS)**

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| --- | --- |
| **List of disciplines,**  **on which the study of academic discipline is based** | **List of academic disciplines,**  **for which the basis is laid as a result of studying the discipline** |
| Phisiology | Pediatrics |
| Pathofisiology | Children infection diseases |
| Pathology | Neonatology |
| Biochemistry |  |
| Normal anatomy |  |
|  |  |
|  |  |

1. **PURPOSE AND TASKS OF THE EDDUCATIONAL DISCIPLINE:**
   1. The purpose of teaching the discipline - the formation of the initial level of knowledge of students, necessary for the successful study of further disciplines, is the basic discipline for the block of pediatric clinical disciplines, providing professional and practical training in the specialty (direction) 222 "Medicine", field of knowledge 22 “Healthcare".
   2. The main tasks of studying the discipline are: master the subjective and objective examination of the patient (examination, palpation, percussion, auscultation of organs and systems of children of different ages); to make the plan of additional inspection at various diseases; evaluate the results of research (laboratory and instrumental); assess the patient's health; know the current orders of the Ministry of Health of Ukraine; age average values ​​of results of the basic laboratory and instrumental methods of research; leading pathological symptoms and syndromes in the most common diseases of childhood; age average values ​​of indicators of physical and neuropsychological development of children of different age groups and principles of rational feeding and nutrition of healthy children of different ages; moral and deontological principles of a medical specialist and the principles of professional subordination in the pediatric clinic; rules of organization of the regime and care for healthy and sick children; list of necessary medical manipulations, age anatomical and physiological features of the child's body; follow the rules of safety and labor protection in the industry.
2. **COMPETENCIES, THE FORMATION OF WHICH IS CONTRIBUTED BY THE DISCIPLINE:**

***7.1. Integral competence:*** ability to solve typical and complex specialized tasks and practical problems in professional activities in the field of health care, or in the learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements.children

***7.2. General competencies:***

GP1 - Ability to abstract thinking, analysis and synthesis, the ability to learn and be modernly trained.

GP2 - Ability to apply knowledge in practical situations

GP3 - Knowledge and understanding of the subject area and understanding of professional activity

GP4 - Ability to adapt and act in a new situation

GP5 - Ability to make an informed decision; work in a team; interpersonal skills

GP6 - Ability to communicate in the state language both orally and in writing; ability to communicate in a foreign language

GP7 - Skills in the use of information and communication technologies

GP8 - Definiteness and perseverance in terms of tasks and responsibilities

GP9 - The ability to act socially responsibly and consciously

GP10 - The desire to preserve the environment.

***\7.3. Professional (special) competencies:***

The generalized object of professional activity is public health, in particular health maintenance; understanding, prevention, diagnosis and treatment of human diseases, as well as the impact of health problems on patients, their families and populations.

PC1 - Skills of interviewing and clinical examination of the patient

PC2 - Ability to establish a preliminary and clinical diagnosis of the disease

PC3 - Collect data on patient complaints, medical history, life history (including occupational history), in a health care facility, its unit or at the patient's home, using the results of an interview with the patient, according to the standard patient survey scheme.

Under any circumstances (in the health care facility, its unit, at the patient's home, etc.), using knowledge about the person, his organs and systems, according to certain algorithms:

- collect information about the general condition of the patient (consciousness, constitution) and appearance (examination of the skin, subcutaneous fat layer, palpation of lymph nodes, thyroid and mammary glands);

- assess the psychomotor and physical development of the child;

- examine the condition of the cardiovascular system (examination and palpation of the heart and superficial vessels, determination of percussion boundaries of the heart and blood vessels, auscultation of the heart and blood vessels);

- examine the condition of the respiratory organs (examination of the chest and upper respiratory tract, palpation of the chest, percussion and auscultation of the lungs);

- examine the condition of the abdominal organs (examination of the abdomen, palpation and percussion of the intestines, stomach, liver, spleen, palpation of the pancreas, kidneys, pelvic organs, finger examination of the rectum);

- examine the condition of the musculoskeletal system (examination and palpation);

- examine the state of the nervous system;

- examine the condition of the genitourinary system;

- assess the state of fetal development according to the calculation of fetal weight and auscultation of his heartbeat.

PC4 - .In the conditions of the health care institution, its subdivision and among the attached population:

- be able to identify and record the leading clinical symptom or syndrome (according to list 1) by making an informed decision, using preliminary patient history, physical examination of the patient, knowledge of the person, his organs and systems, adhering to relevant ethical and legal norms.

- be able to establish the most probable or syndromic diagnosis of the disease (according to list 2) by making an informed decision, by comparing with standards, using previous patient history and patient examination data, based on the leading clinical symptom or syndrome, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms.

PC5 - In the conditions of a health care institution, its subdivision:

- appoint a laboratory and / or instrumental examination of the patient (according to list 4) by making an informed decision, based on the most probable or syndromic diagnosis, according to standard schemes, using knowledge about the person, his organs and systems, following relevant ethical and legal norms.

- to carry out differential diagnosis of diseases (according to list 2) by making an informed decision, according to a certain algorithm, using the most probable or syndromic diagnosis, laboratory and instrumental examination of the patient, knowledge about the person, his organs and systems, adhering to ethical and legal norms.

- to establish a preliminary clinical diagnosis (according to list 2) by making an informed decision and logical analysis, using the most probable or syndrome diagnosis, data of laboratory and instrumental examination of the patient, conclusions.

- differential diagnosis, knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms.o analyse the age peculiarities of organs’ function in children

1. **RESULTS OF STUDYING THE DISCIPLINE.**

As a result of studying the discipline student must:

***8.1. Know:***

* age mean values ​​of the results of basic laboratory and instrumental research methods,
* leading pathological symptoms and syndromes in the most common diseases of childhood,
* age average values ​​of indicators of physical and neuropsychological development of children of different age groups and principles of rational feeding and nutrition of healthy children of different ages,
* moral and deontological principles of a medical specialist and the principles of professional subordination in the clinic of children's diseases,
* rules of organization of the regime and care for healthy and sick children; list of necessary medical manipulations,
* age anatomical and physiological features of the child's body,
* methods of questioning and physical examination of the child in the pediatric clinic.

***8.2. Be able to:***

* perform clinical examination,
* collect anamnesis,
* identify pathological symptoms and syndromes,
* compose menu for children of 1st year of life,
* estimate the results of laboratory analysis and instrumental survey.

***8.3. Demonstrate:***

* ability to assess the psychomotor and physical development of the child;
* ability to make diets of healthy children of different ages;
* interpret the results of clinical examinations, laboratory and instrumental
* researches at children in norm and at pathology
* ability to keep medical records.

1. **IINFORMATIONAL SCOPE OF THE DISCIPLINE**

***Description of each module of the discipline:***

8.1. Specific objectives of the module.

**Module 1. Development of children and child nutrition.**

Specific objectives:

1.The estimation of physical development in children

2.The interpretation of ascertained changes in newborn children based on anatomical and physiological peculiarities

3.The estimation of neuropsychological development in children

4.The revelation in anamnesis some factors which are influencing on changes of psychomotor development.

**Module 2. Anatomo-physiological peculiarities, methods of investigation and semiotics of injuries in children**

Specific objectives:

1. Methods of clinical investigation of skin, bone and muscular system in chidlren
2. Methods of direct percussion in children
3. Estimation of relative and absolute heart borders in children
4. Pulse and arterial pressure examination.
5. Estimation of lower lung border in children
6. Estimation of respiratory rate in children
7. Palpation of liver, lien and intestine in children
8. Palpation of kidneys, urinary blade in children
9. Assessment of blood analysis results
10. Estimation of brain covers disorders symptoms in children
11. Estimate the sexual development in children

8.2. Thematic structure of the module (content modules).

**MODULE 1. DEVELOPMENT OF CHILDREN AND CHILD NUTRITION.**

**Submodule 1. Pediatrics as a science about healthy and sick child.**

Leaning objectives:

-To know about place of propedeutical pediatrics in whole medicine

-To know about basic principles of children patient care organisation

-To know about rules and regulations in pediatric hospitals

-To discuss the health criteria

-To analyse the basic statistical indexes of pediatric patient health care

-To analyse the peculiarities of different age periods in childhood

**Topic 1**. Object and place of pediatrics, the basic principles of it development

Pediatrics as a science about healthy and sick child, its place in whole medicine system. The importance of pediatrics for medical doctors training. The tasks of propedeutical pediatrics course. Basic historical stages of pediatrics development.

**Submodule 2. The age periods of childhood**

Leaning objectives:

- To collect past and present history

- To estimate the peculiarities of different age periods in children

- To make conclusion about general condition in newborn child

- To interpret the ascertained changes in newborn children based on anatomo-physiological peculiarities

**Topic 2**. The age periods in development.

The age periods in childhood, and adolescent, their characteristic. The peculiarities and principles of patients case history collection. The methods of clinical investigation healthy and sick children. The whole inspection of healthy and sick child. The criteria of estimation of whole health state in sick children. The specificity of the examination of seriously ill children with limited prognosis. Features of the moral and deontological principles in the context of incurable disease.

**Topic 3**. The peculiarities of newborn period.

Newborn child. The physiological and transitional conditions in neonatal period. The conception about maturity of newborn child. The indexes of prematurity. The first care of newborn. The day care of newborn children. The peculiarities of clinical investigation in newborn period of life. The requirements for neonatology departments in hospitals.

**Submodule 3. Physical and neuropsychological development of children**.

Leaning objectives:

- To measure of basic anthropometric parameters of child body (weight, height, head and chest circumference etc)

- To calculate the basic anthropometric indexes

- To estimate the physical development in children

- To estimate the basic criteria and indexes of neuropsychological development in different age children

- To explain the peculiarities of psychomotor development in newborn.

- To estimate the psychomotor development of infants by months.

- To estimate the psychomotor development in different age children.

**Topic 4**. Physical development of children and anthropometry.

The conception about physical development, significance of it estimation. The conception about acceleration and deceleration. Principles of anthropometry.

**Topic 5**. The estimation of physical development in children

Principles of physical development estimation. Semiotics of physical development violation in children. Physical education.

**Topic 6**. Neuropsychological development of children

The conception about neuropsychological development, it peculiarities in different age periods. The day regime for different age children. The types of higher nervous activity and phase conditions in children. Sleeping peculiarities and it significance.

**Topic 7**. The estimation of neuropsychological development in children.

The peculiarities of neuropsychological development in newborn. The semiotics of neuropsychological violence in different age groups. The elements of neuropsychological education in infants and toddlers (emotions development, aesthetic, moral education etc).

Submodule 4. Breastfeeding in infants. Peculiarities of children metabolism.

*Learning objectives*

1. To collect anamnesis about feeding in infants and assess it.

2. To calculate the day volume of food in children.

3. To calculate the necessary volume per every food intake.

4. To make a menu for 1 day in infants

5. To examine the day menu in infants and correct deviations

Topic 8. Breastfeeding in infants. Peculiarities of children metabolism.

The main features of metabolism in childhood. Features energy expenditure in children, their kaloriyna need. Thermogenesis and thermoregulation. Diseases and syndromes violation metabolism in children.

Peculiarities and significance of breastfeeding. Quantitative and quality composition of mother milk. Immunobiological role of breastfeeding. Problems during breastfeeding. Hypogalactia and mastitis prophylaxis. Methods of calculation of day volume of food and volume per every food intake. Principles and rules of breastfeeding. Requirements of protein, carbohydrates, fat and energy intake.

Topic 9. Breastfeeding in infants after feeding up.

Feeding up and correction of diet in children. Requirements of protein, carbohydrates, fat and energy intake.

Submodule 5. Formula feeding in children.

*Learning objectives:*

1. To explain the definition of artificial feeding in children and classification of formulas.
2. To collect anamnesis about feeding in infants and assess it.
3. To calculate the day volume of food in children.
4. To calculate the necessary volume per every food intake.
5. To make a menu for 1 day in infants
6. To examine the day menu in infants and correct deviations

Topic 10. Formula feeding in infants. Formula feeding after feeding up.

The definition of formula feeding in infants. Classification and characteristic of formulas for bottle feeding. Guarantee cow milk. Principles of artificial feeding and criteria of assessment. Requirements of protein, carbohydrates, fat and energy intake. Feeding up and correction of diet in children. Requirements of protein, carbohydrates, fat and energy intake.

Submodule 6. Mixed feeding in infants

*Learning objectives*:

1. To explain the definition of composite feeding in children and classification of formulas.
2. To collect anamnesis about feeding in infants and assess it.
3. To calculate the day volume of food in children.
4. To calculate the necessary volume per every food intake.
5. To make a menu for 1 day in infants
6. To examine the day menu in infants and correct deviations

Topic 11. Mixed feeding in infants.

The definition of composite feeding in infants. Classification and characteristic of formulas for composite feeding. Principles of composite feeding and criteria of assessment. Requirements of protein, carbohydrates, fat and energy intake.

Submodule 7. Nutrition in children after 1 year

*Learning objectives:*

1. To collect anamnesis about feeding in children after 1 year.
2. To calculate the day volume of food in children after 1 year.
3. To calculate the necessary volume per every food intake in children after 1 year.
4. To make a menu for 1 day in children after 1 year
5. To examine the day menu and correct deviations in children after 1 year

**Topic 12.** Organization and principles of nutrition in children after 1 year. Organization and principles of nutrition in sick children

Organization and principles of nutrition in children after 1 year. Organization and principles of nutrition in sick children.

**List of questions for preparing to module control**

*Theoretical question*:

1.Principles of organisation pediatric health care.

2.Structure and organisation of pediatric patient health care establishments

3.Organisation of hygiene and sanitary conditions and antiepidemic regimes in hospitals

4.Volume and forms of paediatrician routine work

5.Long-time permanent observation and observation in out-patients clinics in childhood

6.Sanitary education in paediatrician practise

7.Conception of children state of heath, criteria of estimation and health group.

8.Basic statistical indexes (mortality, morbidity etc) in pediatrics.

9.Basic historical stages of pediatrics development.

10.Periods of childhood, their characteristics and pathology peculiarities in different age groups.

11.Anamnesis, peculiarities of collection in different age groups

12.The estimation of whole state of health estimation in children

13.The newborn child. Physiological and transitional conditions in newborn period.

14.The conception about maturity of newborn child. The indexes of premature. Classification of premature.

15.The first care of newborn. Regular prophylactic and medical attendance.

16.The peculiarities of functional system in neonatal period of life.

17.The estimation of physical development of children

18.The semiotics of physical development

19.The estimation of neuropsychological development of children

20.The semiotics of neuropsychological development

1. Advantages of breastfeeding.
2. Significance of breastfeeding for health of mother and child.
3. Quantitative and quality composition of mother milk.
4. Immunobiological role of breastfeeding.
5. Problems during breastfeeding.
6. Hypogalactia and mastitis prophylaxis.
7. Methods of calculation of day volume of food and volume per every food intake.
8. Feeding up and correction of diet in children.
9. The definition of formula (artificial, bottle) feeding in infants.
10. Classification and characteristic of formulas for bottle feeding.
11. Guarantee cow milk.
12. Requirements of protein, carbohydrates, fat and energy intake in artificial feeding.
13. The definition of composite feeding in infants.
14. Classification and characteristic of formulas for composite feeding.
15. Principles of composite feeding and criteria of assessment.
16. Requirements of protein, carbohydrates, fat and energy intake in composite feeding.
17. Organization and principles of nutrition in children after 1 year.
18. Requirements of protein, carbohydrates, fat and energy intake in children after 1 year.

*Practical skills*:

1.To estimate of age period

2.The measure basic anthropometric parameters

3.To calculate the basic anthropometric indexes

4.To estimate the physical development of child

5.To estimate basic criteria and measure neuropsychological development in children

6.To estimate neuropsychological development in children

7. To make a 1 day diet in healthy infant.

8. To provide the control feeding in infant.

*Professional skills*:

1.The estimation of physical development in children

2.The interpretation of ascertained changes in newborn children based on anatomical and physiological peculiarities

3.The estimation of neuropsychological development in children

4.The revelation in anamnesis some factors which are influencing on changes of psychomotor development.

**MODULE 2. ANATOMO-PHYSIOLOGICAL PECULIARITIES, METHODS OF INVESTIGATION AND SEMIOTICS OF DISEASES IN CHILDREN**

**Submodule 8. Nervous system in children**

Learning objectives:

1.To know anatomic and physiological peculiarities of nervous system in children

2.To choose from anamnesis pathological signs

3.To investigate and assess the nervous system in children

4.To estimate the pathological deviation in laboratory and instrumental data

**Topic 13-14**. Anatomic and physiological peculiarities, methods of investigation and semiotics of nervous system in children. Embryogenesis deviations as a basis of hereditary disorders. The methods of clinical and paraclinical investigation in children. Semiotics of basic diseases in children (hydrocephaly, meningitis, encephalitis, cerebral palsy etc). The peculiarities of cerebrospinal fluid, it semiotics and pathology changes. Patient care of children with nervous system disorders.

**Submodule 9. Skin, subcutaneous adipose tissue, bone and muscular system in children**

Learning objectives:

1.To know anatomic and physiological peculiarities of skin, bone and muscular system in children

2.To collect anamnesis and provide the objective clinical investigation

3.Estimate the pathological deviation in laboratory and instrumental data

4.To estimate the pathological syndromes

**Topic 15**. Anatomic and physiological peculiarities, methods of investigation and semiotics of skin in children. Morphologic and functional peculiarities of skin and it additions in children. The methods of clinical and paraclinical investigation in children. Semiotics of basic changes in children.

**Topic 16**. Anatomic and physiological peculiarities, methods of investigation and semiotics of bone system in children. The methods of clinical and paraclinical investigation in children. Semiotics of basic diseases in children.

**Topic 17**. Anatomic and physiological peculiarities, methods of investigation and semiotics of muscular system in children. The methods of clinical and paraclinical investigation in children. Semiotics of basic diseases in children.

**Submodule 10. Respiratory system in children**

Learning objectives:

1. To know anatomical and physiological peculiarities of respiratory system in children

2. To collect anamnesis and provide the objective clinical investigation

3. To estimate the pathological deviation in laboratory and instrumental data

4. To estimate the pathological syndromes

**Topic 18**. Anatomical and physiological peculiarities, methods of investigation and semiotics of respiratory system in children. The methods of clinical examination in children.

**Topic 19**. Lung percussion in children. Lung auscultation in children. Additional methods. Semiotics of basic diseases in children. Main syndromes.

**Submodule 11. Cardiovascular system in children**

Learning objectives:

1. To know anatomical and physiological peculiarities of cardiovascular in children

2. To collect anamnesis and provide the objective clinical investigation

3. To estimate the pathological deviation in laboratory and instrumental data

4. To estimate the pathological syndromes

**Topic 20**. Anatomical and physiological peculiarities, methods of investigation and semiotics of cardiovascular system in children. The methods of clinical and paraclinical investigation in children. Embryogenesis. Peculiarities of prenatal circulation. ECG and FCG in children. Echocardiography.

**Topic 21**. Heart percussion in children. Heart auscultation in children. Semiotics of basic diseases in children. Main syndromes.

**Submodule 12. Digestive system in children**

Learning objectives:

1. To know anatomical and physiological peculiarities of digestive system in children

2. To collect anamnesis and provide the objective clinical investigation.

3. To estimate the pathological deviation in laboratory and instrumental data.

4. To estimate the pathological syndromes.

**Topic 22**. Anatomical and physiological peculiarities, methods of investigation and semiotics of digestive system in children. Age peculiarities of digestion in children. The methods of clinical investigation in children (inspection, palpation, percussion, auscultation).

**Topic 23**. Semiotics of main diseases in children. Main syndromes. “Acute abdomen” syndrome. Paraclinical methods of investigation.

**Submodule 13. Urinary system in children**

Learning objectives:

1. To know anatomical and physiological peculiarities of urinary system in children

2. To collect anamnesis and provide the objective clinical investigation.

3. To estimate the pathological deviation in laboratory and instrumental data.

4. To estimate the pathological syndromes.

**Topic 24-25**. Anatomical and physiological peculiarities, methods of clinical and paraclinical investigation and semiotics of urinary system in children. Semiotics of main diseases in children. Main syndromes. Acute and chronic renal insufficiency.

**Submodule 14. Endocrine system in children**

Learning objectives:

1. To know anatomical and physiological peculiarities of endocrine system in children

2. To collect anamnesis and provide the objective clinical investigation.

3. To estimate the pathological deviation in laboratory and instrumental data.

4. To estimate the pathological syndromes.

**Topic 26-27**. Anatomical and physiological peculiarities, methods of clinical and paraclinical investigation and semiotics of endocrine system in children. Semiotics of main diseases in children. Main syndromes. Hyper- and hypofunction of main endocrine organs.

**Submodule 15. Blood and immune system in children**

Learning objectives:

1. To know anatomical and physiological peculiarities of blood and immune system in children

2. To collect anamnesis and provide the objective clinical investigation.

3. To estimate the pathological deviation in laboratory and instrumental data.

4. To estimate the pathological syndromes.

**Topic 28**. Anatomical and physiological peculiarities, methods of clinical and paraclinical investigation and semiotics of blood system in children. Semiotics of main diseases in children. Main syndromes

**Topic 29**. Anatomical and physiological peculiarities, methods of clinical and paraclinical investigation and semiotics of immune system in children. Semiotics of main diseases in children. Main syndromes.

**Submodule 16. Metabolism in children**

Learning objectives:

1. To know main peculiarities of metabolism in children

2. To collect anamnesis and provide the objective clinical investigation.

3. To estimate the pathological deviation in laboratory and instrumental data.

4. To estimate the pathological syndromes.

**Topic 30**. Energy metabolism in children. Age peculiarities. Temperature balance.

**Topic 31**. Protein metabolism in children.

**Topic 32**. Carbohydrate metabolism in children.

**Topic 33**. Fat metabolism in children

**Topic 34**. Water and electrolytes metabolism in children

**Topic 35**. Vitamins, significance for children growth and development

**Submodule 17. To writing of patient case history**

Learning objectives:

1. To provide the subjective and objective investigation of children

2. To establish the clinical symptoms

3. To make a syndrome diagnosis.

4. To interpret the laboratory and instrumental data results.

**Topic 36**. Writing the patient case history.

### The control questions for preparing to module control 2

*Theoretical questions:*

1. Anatomical and physiological peculiarities of nervous system in children.
2. Types of high nervous system in children.
3. Semiotics of main syndromes (meningeal, seizes etc) and diseases of nervous system in children (hydrocephaly, cerebral palsy etc).
4. The peculiarities of cerebro-spinal fluid in children.
5. Morphological and functional peculiarities of skin in children
6. Semiotic of skin disorders in children.
7. Anatomical and physiological peculiarities of bone and muscular system in children.
8. Semiotic of main syndromes and diseases of bone and muscular system in children.
9. Anatomical and physiological peculiarities of respiratory system in children.
10. Semiotic of main syndromes and diseases of respiratory system in children
11. Anatomical and physiological peculiarities of cardiac system in children.
12. The peculiarities of embryogenesis of cardiac system.
13. Semiotic of main syndromes and diseases of cardiac system in children
14. Anatomical and physiological peculiarities of digestive system in children.
15. Semiotic of main syndromes and diseases of digestive system in children
16. Abdominal syndrome
17. Syndrome of hepatic functional insufficiency
18. Anatomical and physiological peculiarities of urinary system in children.
19. Semiotic of main syndromes and diseases of urinary system in children
20. Syndrome of acute and chronically renal insufficiency
21. Semiotics of deviation in the urine analysis in children.
22. Anatomical and physiological peculiarities of endocrine system in children.
23. Semiotic of main syndromes and diseases of endocrine system in children
24. Peculiarities of blood system in children of different ages.
25. Clinical and hematological semiotics of main syndromes of blood disorders in children.
26. Immune system in children and it functional peculiarities
27. Peculiarities of immune system function in neonates and older children
28. Immunodeficites in children.
29. Age peculiarities of metabolism in children. Semiotic of main disorders.
30. Age peculiarities of energy metabolism in children. Semiotic of main disorders.
31. Age peculiarities of protein metabolism in children. Semiotic of main disorders.
32. Age peculiarities of carbohydrates in children. Semiotic of main disorders.
33. Age peculiarities of fat metabolism in children. Semiotic of main disorders.
34. Age peculiarities of water balance and hydratation in children. Semiotic of main disorders.
35. Vitamins and their significance in children.
36. Semiotic of hypo- and hypervitaminosis disorders.
37. Termoregulation in children. Peculiarities of termogenesis and termoregulation in children.
38. Semiotics of main disorders of termoregulation in chidlren.
39. Peculiarities of anamnesis collection in chidlren

40. Whole inspection in children

*Practical skills*

1. Methods of clinical investigation of skin, bone and muscular system in chidlren
2. Methods of direct percussion in children
3. Estimation of relative and absolute heart borders in children
4. Pulse and arterial pressure examination.
5. Estimation of lower lung border in children
6. Estimation of respiratory rate in children
7. Palpation of liver, lien and intestine in children
8. Palpation of kidneys, urinary blade in children
9. Assessment of blood analysis results
10. Estimation of brain covers disorders symptoms in children
11. Estimate the sexual development in children
12. **STRUCTURE OF EDUCATIONAL DISCIPLINE**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Topic** | | **Lections** | | **Seminars** | | **ISW** | | **IHSW** |
| ***Content module1. Pediatrics as a science of healthy and sick children*** | | | | | | | | **In the module unexpected** |
| **Topic 1.** The subject and place of pediatrics, the main stages of development. Organization of medical and preventive care for children in Ukraine. | | **1** | | **2** | | **2** | |
| ***Content module 2. Periods of childhood.*** | | | | | | | |
| **Topic 2.** Periods of childhood. General examination of healthy and sick children. Criteria for assessing the general condition of sick children. The specifics of the examination of seriously ill children with limited life expectancy. Features of the use of moral and deontological principles in the context of incurable disease.  **Topic 3.** Features of the neonatal period. | | **1** | | **4** | | **2** | |
| ***Content module 3. Physical and psychomotor development of children.*** | | | | | | | |
| **Topic 4.** Physical development of children and anthropometry.  **Topic 5.** Assessment of physical development of children.  **Topic 6.** Psychomotor development of children.  **Topic 7.** Assessment of psychomotor development of children. | **4** | | | **8** | | | **2** |
| ***Content module 4. Natural breastfeeding of infants.***  ***The main features of metabolism in childhood*** | | | | | | | |
| **Topic 8.** Features of metabolism in childhood. Natural breastfeeding of infants.  **Topic 9.** Natural breastfeeding of infants after the introduction of complementary foods. Features of nutrition correction. | **4** | | | **4** | | | **2** |
| ***Content module 5. Artificial feeding of infants.*** | | | | | | | |
| **Topic 10.** Artificial feeding of infants. Artificial feeding of infants after the introduction of complementary foods. | **1** | | | **2** | | | **2** |
| ***Content module 6. Mixed breastfeeding of infants.*** | | | | | | | |
| **Topic 11.** Mixed feeding. | **1** | | | **2** | | | **2** |
| ***Content module 7. Breastfeeding children older than one year.*** | | | | | | | |
| **Topic 12.** Organization and principles of nutrition of children of different ages older than one year. Organization and principles of medical nutrition in children. | **2** | | | **2** | | | **2** |
| **FINAL MODULAR CONTROL** | **-** | | | **4** | | | **2** |
| **Total hours - 58**  **Total credits – 1,9** | **14** | | | **28** | | | **16** |
| ***Content module 8. Nervous system in children.*** | | | | | | | | - report of the abstract on a practical lesson;  - report at clinical conferences in the departments of the clinical base of the department;  - participation in the work of the student group;  - conducting student research and publishing its results;  - participation in competitions in the discipline;  - preparation of electronic materials for replenishment of educational bases. |
| **Topic 13-14.** Anatomical and physiological features, methods, semiotics of the nervous system in children, additional research methods. | | | **2** | | **4** | **3** | |
| ***Content module 9. Skin, subcutaneous basis and musculoskeletal system in children.*** | | | | | | | |
| **Topic 15.** Anatomical and physiological features, methods, semiotics of the skin, subcutaneous basis in children  **Topic 16.** Anatomical and physiological features, methods, semiotics of the musculoskeletal system in children.  **Topic 17.** Additional methods for the study of the skin, subcutaneous basis and musculoskeletal system in children. | | | **2** | | **6** | **3** | |
| ***Content module 10. Respiratory system in children.*** | | | | | | | |
| **Topic 18.** Anatomical and physiological features, methods of research of respiratory organs in children. Additional functional and instrumental methods of research of breath at children.  **Topic 19.** Lung percussion in children. Auscultation of the lungs in children. Semiotics of respiratory diseases. | | | **2** | | **4** | **3** | |
| ***Content module 11. Cardiovascular system in children.*** | | | | | | | |
| **Topic 20.** Anatomical and physiological features, methods of studying the cardiovascular system in children. Additional functional and instrumental methods of research of breath at children**.**  **Topic 21.** Percussion of the heart in children. Auscultation of the heart in children. Semiotics of diseases of the cardiovascular system. | | | **2** | | **4** | **3** | |
| ***Content module 12. Digestive system in children.*** | | | | | | | |
| **Topic 22.** Anatomical and physiological features, methods of the digestive system in children.  **Topic 23.** Semiotics of lesions, additional methods of research of digestive organs in children. | | | **2** | | **4** | **3** | |
| ***Content module 13. Urinary system in children.*** | | | | | | | |
| **Topic 24-25.** Anatomical and physiological features, methods, semiotics of lesions, additional methods of studying the excretory system in children. | | | **2** | | **4** | **3** | |
| ***Content module 14. Endocrine system in children.*** | | | | | | | |
| **Topic 26-27.** Anatomical and physiological features, methods, semiotics of lesions, additional methods of studying the endocrine system in children. | | | **2** | | **4** | **3** | |
| ***Content module 15. Immune system and blood system in children.*** | | | | | | | |
| **Topic 28.** Anatomical and physiological features, methods, semiotics of the immune system in children.  **Topic 29.** Anatomical and physiological features, methods, semiotics of the blood system in children. | | | **2** | | **4** | **3** | |
| ***Content module 16. Metabolism in children.*** | | | | | | | |
| **Topic 30.** Energy metabolism in children.  **Topic 31.** Protein metabolism in children.  **Topic 32.** Carbohydrate metabolism in children.  **Topic 33.** Lipid metabolism in children.  **Topic 34.** Water-electrolyte and acid-base metabolism in children.  **Topic 35.** Vitamins, their importance for child development. | | | **-** | | **-** | **4** | |
| ***Content module 17. Writing a medical history.*** | | | | | | | |
| **Topic 36.** Writing and defending a medical history. | | |  | | **4** | **3** | |
| **FINAL MODULAR CONTROL** | | | **-** | | **4** | **3** | |
| **Total hours - 92**  **Total credits – 3,1** | | | **16** | | **42** | **34** | |
| **TOTAL HOURS** | | | **30** | | **70** | **50** | |  |

1. **THEMATIC PLAN OF LECTURES**

| **TOPIC** | **Hours** |
| --- | --- |
| Module 1 | |
| 1. Pediatrics as a science. Periods of childhood. The newborn child. The specificity of the examination of seriously ill children with limited prognosis. Features of the moral and deontological principles in the context of incurable disease. | 2 |
| 1. Physical development of children. | 2 |
| 1. Neuropsychological development of children. | 2 |
| 1. Peculiarities of children metabolism. Breastfeeding in infants. | 2 |
| 1. Correction of nutrition. Mixed feeding. Solid food introducing and supplementation. Feeding of immature child. | 2 |
| 1. Formula feeding in infants. Classification of mixes. | 2 |
| 1. Nutrition after 1st year. Nutrition of sick children | 2 |
| Module 2 | |
| 1. Nervous system in children. | 2 |
| 1. Skin, bones and muscular system in children | 2 |
| 1. Respiratory system in childhood | 2 |
| 1. Cardiac system in childhood | 2 |
| 1. Digestive system in children | 2 |
| 1. Excretory system, in children | 2 |
| 1. Endocrine system in children | 2 |
| 1. Blood and immune system in children | 2 |

1. **THEMATIC PLAN OF PRACTICAL (SEMINAR) CLASSES**

|  | **Topic** | Hours |
| --- | --- | --- |
| **Module 1: Development of children and child nutrition** | | |
|  | The organisation of health care in pediatric patients | 2 |
|  | Periods of childhood, its characteristics and peculiarities. The specificity of the examination of seriously ill children with limited prognosis. Features of the moral and deontological principles in the context of incurable disease. | 2 |
|  | The newborn child. | 2 |
|  | Physical development of children | 4 |
|  | Neuropsychological development of children | 4 |
|  | Breastfeeding in infants | 4 |
|  | Formula feeding in infants | 2 |
|  | Mixed feeding. | 2 |
|  | Nutrition after 1st year. Nutrition of sick children | 2 |
|  | Module 1 exam | 4 |
| **Total** | | 28 |
| **Module 2:Anatomical and physiological peculiarities, methods of examinationa and semiotics of system anf organs in children** | | |
|  | Nervous system in children | 4 |
|  | Skin, subcutaneous adipose tissue, bone and muscular system in children | 6 |
|  | Respiratory system in children | 4 |
|  | Cardiovascular system in children | 4 |
|  | Digestive system in children | 4 |
|  | Urinary system in children | 4 |
|  | Endocrine system in children | 4 |
|  | Blood and immune system in children | 4 |
|  | Writing and defence of patient case history | 4 |
|  | Module 2 exam: | 4 |
| Total | | **42** |
| Total hours for practical classes: | | **70** |
| Module control for all modules | | **8** |

1. **THEMATIC PLAN OF INDIVIDUAL WORK**

|  | **Topic** | **Hours** | **Control** |
| --- | --- | --- | --- |
| **Module 1: Development of children and child nutrition** | | | |
| 1. | Preparing to practical classes: preparing theoretical knowledge and practical skills | 24 | Practical classes |
| 2. | Preparing Off-class topics:  Principles of organizations of pediatric patients he  Periods of childhood, their characteristics and peculiarities.  The peculiarities of newborn period.  Physical development of children.  Main statistical indexes of health care.  Neuropsychological development of children  Peculiarities of the feeding of immature child.  Conception of “free feeding” | 10 | Module control |
|  | Preparing for module control | 6 | Module control |
| Total | | 40 | |
| **Module 2:Anatomical and physiological peculiarities, methods of examinationa and semiotics of system anf organs in children** | | | |
| 1 | Preparing for practical classes: theoretical questions and practical skills | 37 | Practical classes |
| 2 | Off-class studying:  Energy metabolism in children. Age peculiarities. Temperature balance. Protein metabolism in children.  Carbohydrate metabolism in children.  Fat metabolism in children  Water and electrolytes metabolism in children  Vitamins, significance for children growth and development | 10 | Module control |
| 3 | Writing a patient history case | 2 | Module control |
| 4 | Preparing for module control | 6 | Module control |
|  | **Total** | **55** |  |
|  | **Total for all modules**  **Incl. module control preparing** | **95**  **12** |  |

1. **LIST OF THEORETICAL TASKS TO THE FINAL MODULE CONTROL**
2. Principles of organisation pediatric health care.
3. Structure and organisation of pediatric patient health care establishments
4. Organisation of hygiene and sanitary conditions and antiepidemic regimes in hospitals
5. Volume and forms of paediatrician routine work
6. Long-time permanent observation and observation in out-patients clinics in childhood
7. Sanitary education in paediatrician practise
8. Conception of children state of heath, criteria of estimation and health group.
9. Basic statistical indexes (mortality, morbidity etc) in pediatrics.
10. Basic historical stages of pediatrics development.
11. Periods of childhood, their characteristics and pathology peculiarities in different age groups.
12. Anamnesis, peculiarities of collection in different age groups
13. The estimation of whole state of health estimation in children
14. The newborn child. Physiological and transitional conditions in newborn period.
15. The conception about maturity of newborn child. The indexes of premature. Classification of premature.
16. The first care of newborn. Regular prophylactic and medical attendance.
17. The peculiarities of functional system in neonatal period of life.
18. The estimation of physical development of children
19. The semiotics of physical development
20. The estimation of neuropsychological development of children
21. The semiotics of neuropsychological development
22. Anatomical and physiological peculiarities of nervous system in children.
23. Types of high nervous system in children.
24. Semiotics of main syndromes (meningeal, seizes etc) and diseases of nervous system in children (hydrocephaly, cerebral palsy etc).
25. The peculiarities of cerebro-spinal fluid in children.
26. Morphological and functional peculiarities of skin in children
27. Semiotic of skin disorders in children.
28. Anatomical and physiological peculiarities of bone and muscular system in children.
29. Semiotic of main syndromes and diseases of bone and muscular system in children.
30. Anatomical and physiological peculiarities of respiratory system in children.
31. Semiotic of main syndromes and diseases of respiratory system in children
32. Anatomical and physiological peculiarities of cardiac system in children.
33. The peculiarities of embryogenesis of cardiac system.
34. Semiotic of main syndromes and diseases of cardiac system in children
35. Anatomical and physiological peculiarities of digestive system in children.
36. Semiotic of main syndromes and diseases of digestive system in children
37. Abdominal syndrome
38. Syndrome of hepatic functional insufficiency
39. Anatomical and physiological peculiarities of urinary system in children.
40. Semiotic of main syndromes and diseases of urinary system in children
41. Syndrome of acute and chronically renal insufficiency
42. Semiotics of deviation in the urine analysis in children.
43. Anatomical and physiological peculiarities of endocrine system in children.
44. Semiotic of main syndromes and diseases of endocrine system in children
45. Peculiarities of blood system in children of different ages.
46. Clinical and hematological semiotics of main syndromes of blood disorders in children.
47. Immune system in children and it functional peculiarities
48. Peculiarities of immune system function in neonates and older children
49. Immunodeficites in children.
50. Age peculiarities of metabolism in children. Semiotic of main disorders.
51. Age peculiarities of energy metabolism in children. Semiotic of main disorders.
52. Age peculiarities of protein metabolism in children. Semiotic of main disorders.
53. Age peculiarities of carbohydrates in children. Semiotic of main disorders.
54. Age peculiarities of fat metabolism in children. Semiotic of main disorders.
55. Age peculiarities of water balance and hydratation in children. Semiotic of main disorders.
56. Vitamins and their significance in children.
57. Semiotic of hypo- and hypervitaminosis disorders.
58. Termoregulation in children. Peculiarities of termogenesis and termoregulation in children.
59. Semiotics of main disorders of termoregulation in chidlren.
60. Peculiarities of anamnesis collection in chidlren

**15. LIST OF PRACTICAL SKILLS AND TASKS TO THE FINAL MODULE CONTROL**

1. To estimate of age period
2. The measure basic anthropometric parameters
3. To calculate the basic anthropometric indexes
4. To estimate the physical development of child
5. To estimate basic criteria and measure neuropsychological development in children
6. To estimate neuropsychological development in children
7. To make a 1 day diet in healthy infant.
8. To provide the control feeding in infant.
9. Methods of clinical investigation of skin, bone and muscular system in chidlren
10. Methods of direct percussion in children
11. Estimation of relative and absolute heart borders in children
12. Pulse and arterial pressure examination.
13. Estimation of lower lung border in children
14. Estimation of respiratory rate in children
15. Palpation of liver, lien and intestine in children
16. Palpation of kidneys, urinary blade in children
17. Assessment of blood analysis results
18. Estimation of brain covers disorders symptoms in children
19. Estimate the sexual development in children

**16. METHODS AND FORMS OF IMPLEMENTATION OF THE CONTROL**

During the study of the discipline, all types of student activities are subject to control, both current (at each lesson) and final (during control activities).

Modular control is a diagnosis of the student's assimilation of the module material (credit).

The initial control of students' knowledge is carried out during practical classes and includes testing knowledge of theoretical and practical material studied in previous courses, conducted by frontal oral examination, or writing tests, which uses questions for tests.

The current control of students' knowledge is carried out during practical classes and includes testing of knowledge of theoretical material and control of mastering practical skills, which are provided by methodical development of classes on relevant topics. Testing of students' knowledge is carried out with the help of oral face-to-face interviews, solving test problems of varying severity, solving typical and atypical situational problems, as well as during checking the correctness of laboratory research tasks.

Intermediate control of students' knowledge is carried out during the final tests during the last lesson of the content module.

Assessment per module is defined as the sum of assessments of current learning activities (in points) and assessment of final modular control (in points) and assessment of final modular control (in points), which is set when assessing theoretical knowledge and practical skills according to the lists defined by the discipline program.

The maximum number of points assigned to students when mastering each module (credit) - 200, including for current educational activities - 120 points (60%), according to the results of the modular final control - 80 points (40%).

Final control of students' knowledge is carried out at the last practical lesson after completion of the module in the form of final modular control. Students find out the knowledge of theoretical material (according to the list of questions). In addition, students perform practical work that is attached to the ticket and solve situational problems, which is also taken into account when assessing their knowledge.

The final module control (PMC) is carried out after the completion of the study of all topics of the module at the last control session of the module.

Students who have attended all the classes provided by the curriculum in the discipline and received positive marks ("5", "4", "3"), as well as scored the number of points during the study of the module, not less than minimal.

A student who, for good or bad reasons, has missed classes, is allowed to work off academic debt for a certain period of time.

The maximum number of points that a student can score during the final module control is 80.

The final module control is considered credited if the student has scored at least 50 points.

Thus, the shares of the results of the assessment of current educational activities and the final module control are 60% and 40%, respectively.

**17. EVALUATION OF THE LEVEL OF STUDENT TRAINING IN THE DISCIPLINE**

**Evaluation of training of the students in the discipline.** Weight of each topic within a module must be the same, but it may be different for different modules of a subject and determined the number of topics in the module. Evaluation of current educational activities of students described in the work study program with a subject matter of discrimination and conducted according to the "Instructions for the evaluation of learning activities of students of Bukovinian State Medical University in the implementation of the European credit transfer system of the educational process" (approved by the decision of the Academic Council of 29 May 2014, protocol number 9).

**Distribution of points that are awarded to students.** When learning each topic of module studing activity to the student score for the traditional 4-point scale, which are converted into grades depending on the topics in the module. The program was applied to this system in the traditional system of assessment scores:

|  |  |  |  |
| --- | --- | --- | --- |
| **Traditional mark** | **Convertation of points** | | |
| **Module 1**  Submodules 7  **(№№ 1-7)** | **Module 2** | |
| Submodules 10  **(№№ 8-17)** | **ISW** |
| “5” | 10 | 6 | 6 |
| “4” | 8 | 5 |
| ”3” | 6 | 4 |
| “2” | 0 | 0 | 0 |

The maximum amount that can be collected by a student during a module is 120 points. It is calculating by multiplying the number of points that corresponds with "5" on a number of topics in the module with the addition of scores for individual independent work.

The minimum number of points that the student can get when a module is calculated by multiplying the number of points that corresponds with "3", the number of topics in the module.

**The final module control:**

The final module control carried out on completion of all topics on the last module it control class in the module.

Before final control students who complete all work according to the educational program, and when the module entered score not less than the minimum.

The form of the final module control must be standardized and include contractual role of theoretical and practical training. The specific form of the final module control defined in the work study program.

The maximum number of points final module control is 80.

The final module control is passed if the student scored at least 50 points.

**LITERATURE**

1. Growth and development of the child / Nechytailo Yu.M., Nechytailo D. Yu, Buriak O.G. – Chernivtsi, 2012. – 145 p.
2. Manual of propedeutic pediatris / Nykytyuk S.O. et all. - Ternopil “Ukrmedkniga”, 2005.- 467 p.
3. Nelson textbook of pediatrics / R.E.Behrman, V.C.Vaughan. - W.B.Saunders.-2020.-1899 p.
4. A guide for physical examination and history talking / B.Bates. - Lippincott, 7th ed.-2019.-661 p.
5. Physical examination and health assesment / C.Jarvis. - W.B.Saunders.-2018.- 952 p.
6. Zitelli and Davis' Atlas of Pediatric Physical Diagnosis 7th Edition / Basil J. Zitelli, Sara C McIntire, Andrew J Nowalk. – Elsevier. – 2018. – 876p.

**INFORMATION RESOURCES**

1. <http://moz.gov.ua/ua/portal/>
2. <http://moodle.bsmu.edu.ua>
3. <http://medlib.bsmu.edu.ua>
4. <http://www.bsmu.edu.ua/uk/edu/220-navchalna-literatura>

**18. AUTHORS OF THE STUDENT`S GUIDE (SILABUS)**

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