1. General information on the course

Full course name	Pediatrics
Full official name of a higher education institution	Sumy State University
Full name of a structural unit	Postgraduate Medical Educational Faculty. Кафедра педіатрії
Author(s)	Petrashenko Viktoriia Oleksandrivna
Cycle/higher education level	The Second Level Of Higher Education, National Qualifications Framework Of Ukraine – The 7th Level, QF-LLL – The 7th Level, FQ-EHEA – The Second Cycle
Semester	4 тижні протягом 9-го семестру
Workload	The volume of the discipline is 3.5 ECTS credits, 105 hours, of which 56 hours is contact work with the teacher (50 hours of practical classes and 6 hours of lectures), 49 hours is independent work
Language(s)	English

2. Place in the study programme

Relation to curriculum	Compulsory course available for study programme "Medicine"				
Prerequisites	Krok-1, Krok-1, Required knowledge of: Latin and medical terminology, - medical biology, - medical informatics, - human anatomy, - physiology, - histology, cytology and embryology, - biological and bioorganic chemistry, - microbiology, virology and immunology, - pathomorphology, - pathophysiology, - pharmacology, - hygiene and ecology, - propaedeutics of pediatrics, - nursing practice, - radiology - pediatrics				
Additional requirements	There are no specific requirements				
Restrictions	There are no specific restrictions				

3. Aims of the course

The aim of the discipline is to achieve modern knowledge and professional skills in neonatology, pediatric endocrinology and pediatric hematology based on knowledge of age anatomical and physiological features of the child's body and skills of clinical, laboratory and instrumental examination of the child in accordance with medical ethics and deontology.

4. Contents

Module 1. Neonatology

Topic 1 Organization of neonatal care in Ukraine. Medical care for a healthy newborn baby. Organization of neonatal care in Ukraine. Medical care for a healthy newborn baby

Topic 2 Neonatal asphyxia . Birth trauma

Neonatal asphyxia: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. Primary resuscitation of newborns. Birth trauma. Perinatal CNS lesions in newborns. Etiology. Pathogenesis. Classification. Clinic. Diagnosis. Differential diagnosis. Treatment from the standpoint of evidence-based medicine. Prevention. Prognosis

Topic 3 Premature babies. Children with intrauterine growth retardation.

Criteria for determining prematurity. Features of adaptation of premature babies. Etiological factors of prematurity. Anatomical and physiological features. Classification of premature infants by birth weight and the ratio of physical development and gestational age. Assessment of morphological and neuro-functional maturity of premature infants (Ballard scale). Principles of nursing premature babies. Features of breastfeeding premature babies. Emergency care for major emergencies in premature infants from the standpoint of evidence-based medicine: hypothermia, respiratory failure, hypoglycemia. Intrauterine growth retardation: causes, postnatal diagnosis, features of early neonatal adaptation.

Topic 4 Neonatal respiratory distress syndrome (RDS). Neonatal pneumonia.

Respiratory distress syndrome of newborns: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment from the standpoint of evidence-based medicine, prevention, prognosis. Neonatal pneumonia: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis.

Topic 5 Hemolytic disease of newborn. Hemorrhagic disease of newborn

Hemolytic disease of newborn: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment from the standpoint of evidence-based medicine, prevention, prognosis. Hemorrhagic disease of newborn: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis.

Topic 6 6 Intrauterine infections of newborns (TORCH - infections).

TORCH-infections of newborns: etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment from the standpoint of evidence-based medicine, prevention, prognosis.

Topic 7 Bacterial infections of newborns.

Purulent-inflammatory diseases of the skin and subcutaneous fat of newborns, diseases of the umbilical cord, umbilical wound and umbilical vessels: classification, etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. Neonatal sepsis: definition, classification, etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment from the standpoint of evidence-based medicine, prevention, prognosis.

Module 2. Hematological diseases in children

Topic 8 Anemia in children (deficient, posthemorrhagic, hemolytic, due to hematopoiesis)

Anemia in children (deficient, posthemorrhagic, hemolytic, due to hematopoietic disorders): definition, etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment from the standpoint of evidence-based medicine, prevention, prognosis.

Topic 9 Hemorrhagic diseases in children.

Coagulopathies (hemophilia) in children: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment from the standpoint of evidence-based medicine, prevention, prognosis. Thrombocytopenia (idiopathic thrombocytopenic purpura) in children: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. Hemorrhagic vasculitis in children: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, classification, clinic, diagnosis, memorrhagic vasculitis in children: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. Emergency care for bleeding in children.

Topic 10 Leukemias and lymphomas in children

Leukemias in children: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. Lymphomas in children: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment from the standpoint of evidence-based medicine, prevention, prognosis.

Module 3. Endocrinological diseases in children

Topic 11 Diabetes mellitus in children.

Diabetes mellitus in children: definition, etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment from the standpoint of evidence-based medicine, prevention, prognosis. Acute and chronic complications of diabetes mellitus in children. Hyperglycemic ketoacidotic and hypoglycemic coma in children: causes, pathogenesis, clinic, diagnosis, differential diagnosis, emergency care, prevention

Topic 12 Diseases of thyroid gland in children.

Classification of thyroid gland diseases in children. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment from the standpoint of evidence-based medicine, prevention and prognosis of diffuse toxic goiter, hypothyroidism, autoimmune thyroiditis, endemic goiter in children. Emergency care for thyrotoxic crisis in children.

Topic 13 Diseases of hypothalamic-pituitary system. Obesity in children

Etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment from the standpoint of evidence-based medicine, prevention, prognosis of Biseases of hypothalamic-pituitary system and obesity in children.

Topic 14 Congenital adrenogenital syndrome. Acute and chronic adrenal insufficiency.

Etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment from the standpoint of evidence-based medicine, prevention, prognosis.

Topic 15 Defence of case history. Final module control

Defence of case history. Final module control

Topic 16 Exam

Passing a practice-oriented exam

5. Intended learning outcomes of the course

After successful study of the course, the student will be able to:

LO1	To get skills of questioning and objective examination of patient. To ground and apply clinical methods for understanding of displays of illness in child's age.		
LO2	To conduct differential diagnostics of diseases of child's age, formulate a clinical diagnosis on the basis of evaluation of results of laboratory and instrumental methods of researches.		
LO3	Be able to determine the tactics of behavior of patients with different pathological conditions		
LO4	To master the basic classes of pharmacological preparations that are used in pediatric practice, apply apply corresponding clinical and pharmacological principles for the conduct of patients of child's age, to expect the doses of preparations for children.		
LO5	To conduct the differential diagnosis of basic syndromes that happen in the clinic of the urgent states for children in practice		
LO6	To apply in practice the algorithms of examination and conduct of sick children with the urgent states, to capture the methods of treatment of the urgent states for children		
LO7	To ground application of basic invasive and non-invasive diagnostic methods, be able to execute medical manipulation		
LO8	To demonstrate possessing of moral and deontological principles of a medical specialist and the principles of professional subordination.		

6. Role of the course in the achievement of programme learning outcomes

Programme learning outcomes achieved by the course.

For 222 Medicine:

PO1	To detect and identify the leading clinical symptoms and syndromes (according to the List 1); to establish the most probable nosological or syndromic preliminary clinical diagnosis of diseases (according to the List 2) using standard methods, preliminary data of the patient's anamnesis, patient's examination data, and knowledge about a human, his organs and systems
PO2	To collect information about the patient's general condition; to assess the patient's psychomotor and physical development and the state of organs and systems of the body; to assess information on the diagnosis (according to the List 4) based on laboratory and instrumental findings.
PO3	To order and analyze additional (mandatory and optional) examinations (laboratory, radiological, functional and/or instrumental) (according to the List 4) in order to perform a differential diagnosis of diseases (according to the List 2).
PO4	To establish a final clinical diagnosis at a medical institution under control of a supervising doctor by means of informed decision and logical analysis of the obtained subjective and objective data of clinical and additional examinations, and differential diagnosis, following the relevant ethical and legal norms (according to the List 2).

PO5	To detect the key clinical syndrome or the reason for patient's condition severity (according to the List 3) via informed decision and evaluation of the person's state under any circumstances (at home, in the street, at a healthcare facility), including under emergency and military operation conditions, in the field, with a lack of information and limited time.
PO6	To determine the nature and treatment principles (conservative, operative) in patients with diseases (according to the List 2) at a healthcare facility, at patient's home or during medical evacuation process (including in the field), based on the provisional clinical diagnosis and observing the relevant ethical and legal norms, by making a reasonable decision according to existing algorithms and standard procedures based on the principles of evidence-based medicine; if needed to go beyond the standard scheme, to substantiate the personalized recommendations under control of a supervising doctor at a medical facility.
PO7	To determine an appropriate work and rest mode in the treatment of diseases (according to the List 2) at a healthcare institution, at patient's home and during medical evacuation (including in the field), based on the provisional clinical diagnosis and observing the relevant ethical and legal norms, by making a reasonable decision according to existing algorithms and standard procedures
PO8	To determine an appropriate diet in the treatment of diseases (according to the List 2) at a healthcare institution, at patient's home and during medical evacuation (including in the field), based on the provisional clinical diagnosis and observing the relevant ethical and legal norms, by making a reasonable decision according to existing algorithms and standard procedures.
PO10	To assess the general condition of a newborn child by making an informed decision according to existing algorithms and standard schemes and adhering to the relevant ethical and legal norms.
PO11	To determine the appropriate approach in emergency medical care case under any circumstances, adhering to the relevant ethical and legal norms, by making an informed decision based on the main clinical syndrome (disease severity) and emergency diagnosis (according to the List 3) using standard schemes under limited time conditions based on the principles of evidence-based medicine
PO12	To provide emergency medical assistance under any circumstances, adhering to the relevant ethical and legal norms, by making an informed decision based on the main clinical syndrome (disease severity) and emergency diagnosis (according to the List 3) using standard schemes and predetermined approach under limited time conditions based on the principles of evidence-based medicine.
PO14	To perform medical procedures (according to the List 5) at a medical facility, at home or at work on the basis of a provisional clinical diagnosis and/or health parameters through making an informed decision and adhering to the relevant ethical and legal norms.
PO15	To perform procedures related to emergency medical assistance within a limited time and under any circumstances, using standard schemes on the basis of a medical emergency diagnosis (according to the List 3).
PO16	To plan and implement a system of sanitary and preventive measures against the occurrence and spread of diseases among the population

PO18	To search for the necessary information in the professional literature and databases; to analyze, evaluate, and apply this information. To apply modern digital technologies, specialized software, statistical methods of data analysis to solve complex health problems.
PO19	To estimate influence of environment on the state of health of population

7. Teaching and learning activities

7.1 Types of training

Topic 1. Organization of neonatal care in Ukraine. Medical care for a healthy newborn baby.

pr.tr.1 ""Organization of neonatal care in Ukraine. Medical care for a healthy newborn baby"" (full-time course)

"Organization of neonatal care in Ukraine. Medical care for a healthy newborn baby". Study of this topic involves theoretical work in the classroom. The use of virtual simulation (watching educational films about method of examination of newborn babies) followed by discussion.

Topic 2. Neonatal asphyxia . Birth trauma

lect.1 "Neonatal asphyxia" (full-time course)

Neonatal asphyxia: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. Teaching is conducted in the form of multimedia lectures (in the presence of quarantine - on-line).

pr.tr.2 "Neonatal asphyxia" (full-time course)

Neonatal asphyxia: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. The study of this topic involves theoretical work in the classroom. Using a virtual simulation (watching educational films on the methods of primary care for newborns) with further discussion. Work in the simulation center: practicing the tactics of providing primary care for newborn child on a phantom

pr.tr.3 "Primary resuscitation of newborns" (full-time course)

Primary resuscitation of newborns. Indications. Features of carrying out. The study of this topic involves theoretical work in the classroom. Using a virtual simulation (watching movies on the methods of primary care for newborns) with further discussion. Work in the simulation center: practicing the tactics of providing primary care to a newborn child on a phantom

pr.tr.4 "Perinatal CNS lesions in newborns" (full-time course)

Perinatal CNS lesions in newborns. Etiology. Pathogenesis. Classification. Clinic. Diagnosis. Differential diagnosis. Treatment. Prevention. Forecast. Study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions on work in the profile department of the medical institution (according to the agreement on cooperation between the medical institution and the university).

pr.tr.5 "Birth trauma" (full-time course)

Birth trauma.Etiology. Pathogenesis. Classification. Clinic. Diagnosis. Differential diagnosis. Treatment. Prevention. Forecast. Study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions on work in the profile department of the medical institution (according to the agreement on cooperation between the medical institution and the university).

Topic 3. Premature babies. Children with intrauterine growth retardation.

pr.tr.6 "Premature newborns" (full-time course)

Premature babies. Criteria for determining prematurity. Features of adaptation of premature babies. Etiological factors of prematurity. Anatomical and physiological features. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions on work in the profile department of the medical institution (according to the agreement on cooperation between the medical institution and the university). The use of virtual simulation (watching films on the methods of caring for a premature newborn) with further discussion. Work in the simulation center: practice the technique of feeding a premature newborn baby on a phantom

pr.tr.7 "Intrauterine growth retardation" (full-time course)

Intrauterine growth retardation: causes, postnatal diagnosis, features of early neonatal adaptation. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions on work in the profile department of the medical institution (according to the agreement on cooperation between the medical institution and the university). Work in the simulation center: testing the technique of feeding a newborn child with IGR on a phantom

Topic 4. Neonatal respiratory distress syndrome (RDS). Neonatal pneumonia.

lect.2 "Respiratory distress syndrome of newborns" (full-time course)

Respiratory distress syndrome of newborns: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. . Teaching is conducted in in the form of multimedia lectures (in the presence of quarantine - on-line).

pr.tr.8 "Respiratory distress syndrome of newborns" (full-time course)

Respiratory distress syndrome of newborns: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university). The use of virtual simulation (watching films on methods of respiratory support of newborns) with further discussion. Work in the simulation center: testing the technique of providing respiratory support for the phantom

pr.tr.9 "Neonatal pneumonia" (full-time course)

Neonatal pneumonia: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university). The use of virtual simulation (watching films on methods of respiratory support of newborns) with further discussion. Work in the simulation center: testing the technique of providing respiratory support for the phantom

Topic 5. Hemolytic disease of newborn. Hemorrhagic disease of newborn

pr.tr.10 "Hemolytic disease of newborns" (full-time course)

Hemolytic disease of newborns: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university).

pr.tr.11 "Hemorrhagic disease of newborns" (full-time course)

Hemorrhagic disease of newborns: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university). In addition, when studying this system, role-playing games are provided

Topic 6. 6 Intrauterine infections of newborns (TORCH - infections).

pr.tr.12 "TORCH infections of newborns" (full-time course)

TORCH-infections of newborns: etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university).

Topic 7. Bacterial infections of newborns.

pr.tr.13 "Purulent-inflammatory diseases of the skin and subcutaneous fat of newborns, diseases of the umbilical cord, umbilical wound and umbilical vessels." (full-time course)

Purulent-inflammatory diseases of the skin and subcutaneous fat of newborns, diseases of the umbilical cord, umbilical wound and umbilical vessels. Clinic, diagnosis, treatment. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university).

pr.tr.14 "Newborn sepsis" (full-time course)

Neonatal sepsis: definition, classification, etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university).

Topic 8. Anemia in children (deficient, posthemorrhagic, hemolytic, due to hematopoiesis)

lect.3 "Anemia in children" (full-time course)

Anemia in children: definition, etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. Teaching is conducted in in the form of multimedia lectures (in the presence of quarantine - on-line).

pr.tr.15 "Anemia in children" (full-time course)

Anemia in children: definition, etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university). The use of virtual simulation (watching films on methods of treating anemia in children) with further discussion. In addition, when studying this system, role-playing games are provided. Interpretation of the results of laboratory and instrumental methods of examination, making a plan of treatment.

Topic 9. Hemorrhagic diseases in children.

pr.tr.16 "Coagulopathies (hemophilia, idiopathic thrombocytopenic purpura, hemorrhagic vasculitis)" (full-time course)

Coagulopathies (hemophilia, idiopathic thrombocytopenic purpura, hemorrhagic vasculitis): in children: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university). The use of virtual simulation (watching films on the differential diagnosis of hemorrhagic syndrome in children) with further discussion. Interpretation of the results of laboratory and instrumental methods of examination, preparation of a treatment plan.

Topic 10. Leukemias and lymphomas in children

pr.tr.17 "Leukemias and lymphomas in children" (full-time course)

Leukemias and lymphomas in children: etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university).

Topic 11. Diabetes mellitus in children.

pr.tr.18 "Diabetes mellitus in children" (full-time course)

Diabetes mellitus in children: definition, etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university). In addition, when studying this system, role-playing games are provided

pr.tr.19 "Acute complications of diabetes in children" (full-time course)

Acute complications of diabetes in children. Hyperglycemic ketoacidotic and hypoglycemic coma in children: causes, pathogenesis, clinic, diagnosis, differential diagnosis, emergency care, prevention. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university). Interpretation of the results of laboratory and instrumental methods of examination, preparation of a treatment plan.

Topic 12. Diseases of thyroid gland in children.

pr.tr.20 "Diseases of thyroid gland in children." (full-time course)

Diseases of thyroid gland in children. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment, prevention and prognosis of diffuse toxic goiter. Emergency care for thyrotoxic crisis in children. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university). Interpretation of the results of laboratory and instrumental methods of examination, preparation of a treatment plan.

pr.tr.21 "Congenital hypothyroidism" (full-time course)

Congenital hypothyroidism: etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment, prevention and prognosis. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university). Interpretation of the results of laboratory and instrumental methods of examination, preparation of a treatment plan.

Topic 13. Diseases of hypothalamic-pituitary system. Obesity in children

pr.tr.22 "Diseases of hypothalamic-pituitary system. Obesity in children" (full-time course)

Diseases of hypothalamic-pituitary system. Obesity in children. Etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university). Interpretation of the results of laboratory and instrumental methods of examination, preparation of a treatment plan.

Topic 14. Congenital adrenogenital syndrome. Acute and chronic adrenal insufficiency.

pr.tr.23 "Congenital adrenogenital syndrome. Acute and chronic adrenal insufficiency." (full-time course)

Definition, etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention, prognosis of congenital adrenogenital syndrome in children. Emergensy care for babies with Congenital adrenogenital syndrome. The study of this topic involves theoretical work in the classroom. In the absence of quarantine restrictions, work in the specialized department of the medical institution (according to the agreement on cooperation between the medical institution and the university). Interpretation of the results of laboratory and instrumental methods of examination, preparation of a treatment plan.

Topic 15. Defence of case history. Final module control

pr.tr.24 "Defence of case history." (full-time course)

Defence of case history.

pr.tr.25 "Defence of case history." (full-time course)

Defence of case history.

Topic 16. Exam

assessm.26 "Exam" (full-time course)

Passing a practice-oriented exam

7.2 Learning activities

LA1	Writing and defence of case history	
LA2	Self-study	
LA3	Preparing for KROK 2	
LA4	Interpretation of laboratory (clinical analysis of blood, urine, biochemical analysis of blood, immunological tests, etc.) examination methods.	
LA5	Preparation for practical classes	
LA6	Analysis of clinical cases	
LA7	Practical work with the patient in the specialized departments of the hospital	
LA8	E-learning in systems (Zoom,MIX.sumdu.edu.ua)	
LA9	Preparation for exam	
LA10	Viewing of educational films	
LA11	Individual research project (student scientific work, article, thesis, etc.)	
LA12	Work with textbooks and relevant information sources	
LA13	Practice of practical skills in the simulation center	

8. Teaching methods

Course involves learning through:

TM1	Interactive lectures
TM2	Case- based learning (CBL)
TM3	Team-based learning (TBL).
TM4	Research-based learning (RBL).
TM5	Role game
TM6	Brain storm
TM7	Educational discussion / debate

The discipline is taught using modern teaching methods (CBL, TBL, RBL), which not only promote the development of professional skills, but also stimulate creative thinking

The discipline provides students with the following soft skills: 1. Ability to abstract thinking, analysis and synthesis. 2. Ability to learn, master modern knowledge and apply them in practical situations. 3. Knowledge and understanding of the subject industry and understanding of professional activity. 4. Ability to adapt and act in a new situation. 5. Ability to make informed decisions; work in a team; skills interpersonal interaction. 7. Ability to use information and communication technologies. 8. Definiteness and persistence in relation to the set tasks and responsibilities.

9. Methods and criteria for assessment

ECTS	Definition	National scale Rating scale	
	Outstanding performance without errors	5 (Excellent)	$170 \le RD \le 200$
	Above the average standard but with minor errors	4 (Good)	$140 \le \text{RD} < 169$
	Fair but with significant shortcomings	3 (Satisfactory)	$120 \le RD < 139$
	Fail – some more work required before the credit can be awarded	2 (Fail)	$0 \le \text{RD} < 119$

9.1. Assessment criteria

9.2 Formative assessment

FA1	Peer assessment	
FA2	Defence of case history	
FA3	Testing	
FA4	Defense of an individual research project (presentation at a conference, competition of scientific works)	
FA5	Teacher's instructions in the process of performing practical tasks.	
FA6	Interviews and oral comments of the teacher on his results	
FA7	Verification and evaluation of written assignments	
FA8	Solving clinical cases	

9.3 Summative assessment

SA1	Valuation of written works, surveys, solving a clinical case	
SA2	Defence of case history	
SA3	Testing	
SA4	4 Final control: practice-oriented exam (according to the regulations)	
SA5	Protection of an individual research project (incentive activities, additional points)	

Form of assessment:

9 semester		200 scores
SA1. Valuat	SA1. Valuation of written works, surveys, solving a clinical case	
		100
SA2. Defend	ce of case history	10
		10
SA3. Testing	SA3. Testing	
		10
SA4. Final c	SA4. Final control: practice-oriented exam (according to the regulations)	
	Answer to theoretical questions (3x15)	45
	Performing a practical task	15
	Emergency care	20

Form of assessment (special cases):

9 semester		200 scores
SA1. Valuation of written works, surveys, solving a clinical case		100
	In case of quarantine restrictions, practical classes are conducted remotely using the platform Mix.sumdu.edu.ua, Zoom, Google meet	100
SA2. Defence of case history		10
	In case of quarantine restrictions, the exam is conducted remotely using Zoom, Google meet.	10
SA3. Testing		10
	In case of quarantine restrictions, testing is performed remotely using the platform Mix.sumdu.edu.ua	10
SA4. Final control: practice-oriented exam (according to the regulations)		80
	in case of quarantine restrictions, testing is performed remotely using the platform Mix.sumdu.edu.ua, Zoom, Google meet.	80

When mastering the materials of the module, the student is assigned a maximum of 5 points for each practical lesson (the grade is set in the traditional 4-point grading system). At the end of the academic year, the arithmetic mean of student performance is calculated. The maximum number of

points that a student can get in practical classes during the academic year - 100. The number of points of the student is calculated by the formula 100 multiplied by the arithmetic mean and divided by 5. For writing a medical history are assigned the following points: "5" - 5 points, "4 "- 4 points," 3 "- 3 points," 2 "- 0 points. Protection of medical history: "5" - 5 points, "4" - 4 points, "3" - 3 points, "2" - 0 points. In general, for the history of the disease the student can get a maximum of 10 points, the minimum required score of 6. For diagnostic testing, the student receives a maximum of 10 points. The minimum number of points that a student must receive is 6 points. The maximum number of points for the current educational activity of the student is 120. The student is admitted to the exam if the requirements of the curriculum are met and if he scored at least 72 points for the current educational activity: 60 points during ractical classes, 6 points for medical history and 6 points for testing. The practice-oriented exam is held according to the schedule at the end of the semester. Exam tickets contain 3 theoretical questions on various topics and cover all sections of the discipline (15 points each), 1 practical task (15 points) and the issue of emergency care (20 points). The exam is credited to the student if he scored at least 48 points out of 80. Incentive points are added to the grade for the discipline for the implementation of an individual research project (defense of student work 12 points, presentation at the conference 5 points, poster presentation at the conference 4 points points). The total score in the discipline may not exceed 200 points.

10. Learning resources

10.1 Material and technical support

MTS1	Information and communication systems	
MTS2	Library	
MTS3	Computers, computer systems and networks	
MTS4	Simulation center (phantom of the newborn for primary resuscitation with a set of equipment)	
MTS5	Non-commercial Enterprise of Sumy Regional Council «Regional Children Clinical Hospital»	
MTS6	Multimedia, video and sound reproduction, projection equipment (video cameras, projectors, screens, smart boards, etc.)	
MTS7	Software (to support distance learning), 3-D virtual training on "congenital heart disease"	
MTS8	Medical equipment (spirometer, peak flowmeter, electrocardiograph, height meter, scales, fibrogastroscope, tonometer, phonendoscope, etc.)	

10.2 Information and methodical support

Essential Reading		
1	Nelson Textbook of Pediatrics [Text] / R. M. Kliegman [et al.] ; ed. R. E. Behrman 21th ed Edinburgh [etc.] : Elsevier, 2020.	
4	The Standards of Practical Skills in Neonatology : study guide / Ye. Ye. Shunko, A. M. Loboda, I. V. Tarasova etc. ; eds: Ye.Ye. Shunko, A.M. Loboda. — Sumy : Sumy State University, 2018. — 315 p.	
Supplemental Reading		

1	Neonatology.Introduction:studyguide/ O. K. Redko, V. O. Petrashenko, I. V. Tarasova, I. E. Zait sev.Sumy : SumyState University, 2017.182 p.	
Web-based and electronic resources		
11	https://www.who.int/ World Health Organization	
12	https://www.ecdc.europa.eu/en European Centre for Disease Prevention and Control	
13	https://pubmed.ncbi.nlm.nih.gov/ PubMed	