

SYLLABUS OF THE ELECTIVE DISCIPLINE

«Main clinical conditions and diseases prevention in children»

Level of highest education - second (master's)

Educational program - «Medicine»

1. Annotation of the course:

Semesters: VI - VII

Quantity of hours:

total – 90, including:

practical – 26 hrs.,

lectures – 4 hrs.,

independent work – 60 hrs.

ECTS credits number – 3.0.

The purpose of teaching the elective discipline "Main clinical conditions and diseases prevention in children" is to acquire knowledge and master general and professional competencies in the prevention of the most common clinical conditions in children of different ages to achieve their harmonious development on the basis of knowledge of age-related anatomical and physiological features of the child's body, human anatomy, normal physiology, histology, cytology and embryology, biological and bioorganic chemistry, microbiology, virology and immunology, pathomorphology, pathophysiology, pharmacology and radiology.

Formation of the ability to apply the acquired knowledge, skills, and understanding to solve typical tasks of a doctor's activity in the field of health care, the scope of which is provided by certain lists of syndromes and symptoms that require special tactics for managing children of different ages.

According to the requirements of the educational program, the elective discipline "Main clinical conditions and prevention of diseases in children" ensures the acquisition of the following competencies by students:

- Integral ones:

Ability to solve complex problems, including research and innovation in the field of medicine.
Ability to continue learning with a high degree of autonomy.

1. General:

GC1. Ability to abstract thinking, analysis, and synthesis.

GC2. Ability to learn and master modern knowledge.

GC3. Ability to apply knowledge in practical situations.

GC4. Knowledge and understanding of the subject area and understanding of professional activities.

GC5. Ability to adapt and act in a new situation.

GC6. Ability to make informed decisions.

GC7. Ability to work in a team.

GC8. Ability to interpersonal communication.

GC9. Ability to communicate in a foreign language.

GC10. Ability to use information and communication technologies.

GC11. Ability to search, process and analyze information from various sources.

GC12. Certainty and perseverance in relation to the tasks and responsibilities assumed.

GC13. Awareness of equal opportunities and gender issues.

GC14. Ability to exercise one's rights and duties as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.

GC15. The ability to preserve and multiply moral, cultural, scientific values and achievements of society on the basis of understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, equipment and technology, to use various types and forms of physical activity for active recreation and a healthy lifestyle.

2. special (professional, subject) ones:

PC1. Ability to collect medical information about the patient and analyze clinical data.

PC2. Ability to determine the necessary list of objective examination methods.

PC3. Ability to establish underlying clinical conditions.

PC4. Ability to determine the necessary mode of work and rest in the prevention of diseases.

PC5. Ability to determine the type of nutrition for the prevention of diseases.

PC6. Ability to define general principles of disease prevention.

PC7. Ability to diagnose major syndromes.

PC8. Ability to determine patient management tactics

PC10. Ability to perform medical manipulations.

PC13. Ability to carry out sanitary, hygienic and preventive measures.

PC 16. Ability to maintain medical records.

PC17. Ability to assess the impact of the environment, socio-economic and biological determinants on the health of an individual, family and population.

PC 21. Ability to convey one's own knowledge, conclusions and arguments on health problems and related issues to specialists and non-specialists, in particular to students.

PC 24. Compliance with ethical principles when working with patients.

PC 25. Observance of professional and academic integrity.

Results of discipline study

The student should know:

1. recommendations for a couple at the stage of pregnancy planning, types of teratogenic factors, the consequences of the impact of negative factors on the fetus and safety measures for a pregnant woman in order to prevent the formation of pathology in the child;
2. the main aspects of the management of the baby in the infant period, as a stage of maturation of the nervous system and the most intense, possible clinical conditions, threatening symptoms in this period;

3. peculiarities of the child's management from infancy to the school period, as stages of the child's greatest knowledge of the environment, probable risk factors, clinical conditions, the possibility of developing certain diseases and pathologies, preventive measures;
4. peculiarities of management of children of primary school age, as a period of maturation of many organs and systems and the first growth spurt, possible risks, clinical conditions, measures to prevent pathology for children of this age;
5. peculiarities of observation of children in adolescence, as a period of restructuring of the endocrine and nervous systems, the emergence of bad habits and the most likely formation of chronic pathology, clinical conditions in this period, preventive measures;
6. the concept of rare diseases in pediatrics, manifestations of dysmorphism in children with orphan pathology, possible symptoms and syndromes in this category of patients, the concept of neonatal screening of orphan diseases in childhood to improve the quality of life in the future, reduce the level of disability and mortality of patients;
7. the history of vaccination, the prevention of epidemically dangerous infectious diseases, which must be routinely carried out for children at different ages, the concept of anti-vaccination movements and their threat;
8. the concept of the formation of the child's eating behavior, the basics of healthy nutrition of children and the formation of healthy eating habits in children of different ages, as one of the important preventive measures in the development of somatic pathology, the concept of the nutritional status of the child;
9. basic principles of medical ethics and deontology in professional communication with a sick child and caregivers;
10. Basic principles of professional subordination in pediatrics.

The student should be able to:

1. Collect complaints, medical history, life history, assess the psychomotor and physical development of the patient, the state of organs and body systems on the basis of objective examination methods in patients of different ages (PRS1)
2. Identify the leading clinical symptoms and syndromes according to standard methods, using preliminary data of the patient's anamnesis, data from the patient's examination, knowledge about the person, his organs and systems (PRS2)
3. Analyze possible threatening conditions for patients of different ages, during the observation of the patient, identify conditions that require further medical supervision or provision of medical care at the highest level (PRS3)
4. Determine the required work, rest and nutrition regimen based on knowledge of the characteristics of a certain age group of patients, adhering to the relevant ethical and legal standards, by making an informed decision according to existing algorithms and standard schemes (PRS4)
5. Determine the nature and principles of preventive measures for various diseases and pathological conditions, taking into account the age of the patient, adhering to the relevant ethical and legal standards, by making an informed decision according to existing algorithms and standard schemes (PRS5)
6. Determine the tactics of managing patients of different ages in order to prevent pathologies and the development of diseases in the future, adhering to the relevant ethical and legal standards by making an informed decision according to existing algorithms and standard schemes (PRS 6)
7. Perform medical manipulations in a medical institution, at home, based on a preliminary clinical diagnosis and/or indicators of the patient's condition by making an informed decision, adhering to the relevant ethical and legal standards (PRS 7)
8. Find the necessary information in professional literature and databases and other sources, analyze, evaluate and apply this information (PRS 8)
9. Organize the necessary level of individual safety (his/her own and those of the persons he/she cares for) in a case of typical dangerous situations in the individual field of activity (PRS 9)

10. Make effective decisions on health issues, assess the resources needed, and consider social, economic and ethical implications (PRS 10)
11. Clearly and unambiguously convey knowledge, conclusions and arguments on health problems and related issues to specialists and non-specialists (PRS 11)
12. Communicate fluently in the state language and English, both orally and in writing, to discuss professional activities, research and projects (PRS13).

The student should be able to demonstrate:

- Ability to abstract thinking, analysis and synthesis (GC1)
- Ability to learn and master modern knowledge (GC2)
- Ability to apply knowledge in practical situations (GC3)
- Knowledge and understanding of the subject area and understanding of professional activities (GC4)
- Ability to adapt and act in a new situation (GC5)
- Ability to make informed decisions (GC6)
- Ability to work in a team (GC7)
- Ability to interpersonal interaction (GC8)
- Ability to communicate in a foreign language (GC9)
- Ability to use information and communication technologies (GC10)
- Ability to search, process and analyze information from various sources (GC11)
- Certainty and perseverance in terms of tasks and responsibilities (GC12)
- Awareness of equal opportunities and gender issues (GC13)
- Ability to realize rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine (GC14)
- Ability to preserve and multiply moral, cultural, scientific values and achievements of society based on an understanding of the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, equipment and technology, to use various types and forms of physical activity for active recreation and a healthy lifestyle (GC15)
- Ability to collect medical information about the patient and analyze clinical data (PC1)
- Ability to determine the necessary list of objective methods of examination and evaluation of results (PC2).
- Ability to establish underlying clinical conditions (PC3)
- Ability to determine the necessary mode of work and rest in the prevention of diseases (PC4)
- Ability to determine the nature of nutrition in the prevention of diseases (PC5)
- Ability to define general principles of disease prevention (PC6)
- Ability to diagnose major syndromes (PC7)
- Ability to determine patient management tactics (PC8)
- Ability to perform medical manipulations (PC10)
- Ability to carry out sanitary and hygienic and preventive measures (PC13)
- Ability to keep medical records (PC16)
- Ability to assess the impact of the environment, socio-economic and biological determinants on the health of an individual, family, population (PC17)
- Clearly and ambiguously convey their own knowledge, conclusions and arguments on health problems and related issues to specialists and non-specialists, in particular to students (PC21)
- Compliance with ethical principles when working with patients (PC24)
- Adherence to professional and academic integrity (PC25).

To master skills:

PSO 1. Collect complaints, medical history, life history, assess the psychomotor and physical development of the patient, the state of organs and body systems on the basis of objective examination methods in patients of different ages

PSO 2. Identify the leading clinical symptoms and syndromes according to standard methods, using preliminary data of the patient's anamnesis, data from the patient's examination, knowledge about the person, his organs and systems.

PSO 3. Analyze possible threatening conditions for patients of different ages, during the observation of the patient, identify conditions that require further medical supervision or provision of medical care at the highest level.

PSO 4. Determine the necessary mode of work, rest and nutrition based on knowledge about the characteristics of a certain age group of patients, adhering to the relevant ethical and legal standards, by making an informed decision according to existing algorithms and standard schemes.

PSO 5. Determine the nature and principles of preventive measures for various diseases and pathological conditions, taking into account the age of the patient, adhering to the relevant ethical and legal standards, by making an informed decision according to existing algorithms and standard schemes.

PSO 6. Determine the tactics of managing patients of different ages in order to prevent pathologies and the development of diseases in the future, adhering to the relevant ethical and legal standards, by making an informed decision according to existing algorithms and standard schemes.

PSO 7. Perform medical manipulations in a medical institution, at home, based on a preliminary clinical diagnosis and/or indicators of the patient's condition by making an informed decision, adhering to the relevant ethical and legal standards

PSO 8. Find the necessary information in professional literature and databases and other sources, analyze, evaluate and apply this information.

PSO 9. Organize the necessary level of individual safety (his/her own and those of the persons he/she takes care of) in case of typical dangerous situations in the individual field of activity.

PSO 10. Make effective decisions on health problems, assess the resources needed, and consider social, economic, and ethical implications.

PSO 11. Clearly and unambiguously convey own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists.

PSO 12. Communicate fluently in the state language and English, both orally and in writing, to discuss professional activities, research and projects.

To independently estimate:

- necessary regime of work, rest and nutrition based on knowledge about the characteristics of a certain age group of patients, adhering to the relevant ethical and legal standards, by making an informed decision according to existing algorithms and standard schemes (PRN4)

- preventive measures for various diseases and pathological conditions, taking into account the age of the patient, adhering to the relevant ethical and legal standards, by making an informed decision according to existing algorithms and standard schemes (PRN5).

Note:

GC – general competencies

PC – professional competencies of the specialty

PSO – program study outcomes

The main tasks of studying the elective discipline "Main clinical conditions and diseases prevention in children" are:

- Assimilation of basic theoretical knowledge about the characteristics of the child's organism in different periods of life, possible risks, pathological effects for children of different ages, tactics of managing children of different ages to prevent the development of diseases of all organs and systems.

- Mastering the basic practical skills and abilities to distinguish the main clinical conditions, the main clinical syndromes, symptoms of danger in children of different ages.

- Formation of students' moral, ethical and deontological qualities in professional communication with parents of children of different ages.

Required Learning Components

Prerequisites:

1. latin and medical terminology,
2. medical biology,
3. medical informatics,
4. human anatomy,
5. physiology
6. histology, cytology and embryology,
7. biological and bioorganic chemistry,
8. microbiology, virology and immunology,
9. pathomorphology,
10. pathophysiology
11. pharmacology
12. hygiene and ecology,
13. propaedeutics of pediatrics,
14. nursing practice,
15. radiology,
16. pediatrics.

Co-requisites:

17. internal medicine,
18. surgery,
19. social medicine, public health and health economics.

Postrequisites:

20. Pediatrics.

Content of the discipline

Component 1. OBSERVATION OF CHILDREN OF DIFFERENT AGES

Topic 1. Interdisciplinary approach to pregnancy planning. Educational work among the population for the preparatory period. The desired pregnancy is the beginning of the development of a healthy child in the future. The problem of infertility, miscarriage, possible pathological influencing factors. The influence of artificial insemination, surrogate motherhood on the formation of the unborn child and its health, myths and reality. Medical and genetic counseling of future parents. Identification of risks and the possibility of having a child with a genetic disease. Risks on the part of the mother for the formation of pathology in the unborn child. Multiple pregnancies, possible risks. Alcohol consumption as one of the most dangerous teratogenic factors. Fetal alcohol spectrum disorders. Pathological impact of perinatal infections on the fetus, possible consequences. Medication use and pregnancy. Influence of other teratogenic factors on fetal formation. Recommendations for limiting and preventing the impact of teratogenic factors, measures after exposure to teratogenic factors.

Topic 2. Peculiarities of the child's organism from the neonatal period to one year. The main aspects of the management of the baby in the infant period, as a stage of maturation of the nervous system and the most intensive physical development. Manifestations of atopic dermatitis as the realization of a hereditary predisposition at this age. Identification of threatening clinical symptoms at this age, such as: hyperthermic syndrome, convulsive syndrome, sudden death syndrome, shaken baby syndrome, meningeal syndrome, underweight, diarrhea, blood in the stool, vomiting. Prevention of deficiency states. Required examination and examination of specialists at this age.

Topic 3. Disclosure of issues related to the implementation of the most common multifactorial genetically determined diseases. Interaction of external factors and phenotypic signs of predisposition to allergic diseases, connective tissue dysplasia, metabolic diseases and the course of infectious pathology. Injuries, foreign bodies of the respiratory tract and gastrointestinal tract, chemical and thermal burns, as urgent medical and social problems of children of the first three years of life, associated with a rapid pace of physical development and peculiarities of the child's perception of the world. The main clinical syndromes at this age, threatening conditions. Mandatory examinations and examinations by specialists at this age.

Topic 4. Features of primary school age as a period of maturation of many organs and systems and two growth spurts. Favorable and unfavorable factors influencing the processes of development of the body in primary school age. Indicators of the level of biological development of boys and girls of primary school age. Causes of behavioral disorders and learning difficulties. Risks of forming bad habits. Formation of organic pathology of the digestive system, musculoskeletal system, upper respiratory tract: tonsillitis, pharyngitis, chronic otitis media, which can lead to disability, recurrent infectious diseases genitourinary system. Threatening conditions: convulsions, hemorrhagic skin rashes, unmotivated fever, loss of consciousness, cough for more than 3 months, weight loss, rapid weight gain.

Topic 5. The peculiarity of adolescence as a period of restructuring of the endocrine and nervous systems, the appearance of bad habits and the most likely formation of chronic pathology. The realization of a hereditary predisposition to diseases in bronchial asthma development. "Red flags" (threatening conditions) in adolescence. Hyperthermia of unknown origin, dizziness and loss of consciousness, convulsions, yellowing of the skin, sudden weight loss, cough for more than a month, swollen lymph nodes. Deficiency conditions that occur in adolescence and their prevention: anemia, iodine deficiency, vitamin D deficiency. Nervous adaptation of the child in adolescence (disorders of the nervous system) and hormonal disorders. Physical inactivity and obesity; The impact of gadgets on psycho-emotional development of the child; the negative effects of alcohol, tobacco smoking and drugs. Sex education is the education of an adequate attitude to one's body, the formation of safe and responsible behavior.

Component 2. NEONATAL SCREENING. VACCINE PROPHYLAXIS.

Topic 6. The concept of rare diseases in pediatrics, the main clinical syndromes and the concept of dysmorphism in orphan diseases, clinical and laboratory diagnostic methods for early detection of rare diseases in childhood to improve the quality of life in the future, reduce the level of disability and mortality of sick children. Availability of genetic screening. Children with dysmorphism as a risk group for the presence of an orphan disease. Symptoms of congenital metabolic disorders in different age groups: hypoglycemia, seizures, neonatal sepsis, neurological disorders, mental retardation. Treatment prospects.

Topic 7. Vaccination history. Types of vaccines. Advantages and disadvantages. The concept of immunity. The calendar of preventive vaccinations approved by the Ministry of Health of Ukraine. Absolute and relative contraindications to vaccination. Complications during vaccination. Vaccination and prevention of infectious diseases that are not regulated by the vaccination schedule. Anti-vaccination movements and their consequences for society. Vaccination of children with chronic diseases, features, regulated recommendations. Vaccination of children with violation of the vaccination schedule.

Component 3. NUTRITION OF A HEALTHY CHILD

Topic 8. Basic concepts of healthy eating. Principles of a quantitatively and qualitatively balanced diet. The difference in the diet of children aged from one to 18 years. Features of nutrition of vegan children and children who are professionally involved in sports. Healthy eating in pediatrics: myths and prejudices. Myths about the harmfulness of lactose, milk protein, milk with casein A1, the benefits of vegetarianism for the child, the safety of salt and sugar, the undoubted benefits of fruits. Basics of assessment of the nutritional status of a child: clinical assessment, analysis of the food diary and nutritional analysis, functional, laboratory and instrumental diagnostics. Clinical signs of malnutrition. The main emphasis of counseling a child on nutrition by a pediatrician. The period of formation of eating behavior: importance and features. Activities aimed at fostering constructive patterns of eating behavior. Factors influencing the child's appetite and measures aimed at forming an adequate appetite of the child. Differentiation of eating disorders caused by factors of impaired formation of the regimen, appetite and process of eating and eating disorders caused by somatic, psychiatric pathology and other reasons that require professional profile correction.

Educational classes types: practical classes, student's independent work, lectures

Teaching Methods:

1. method of clinical cases,
2. problem-oriented method,
3. method of individual educational, research and practical tasks,
4. method of competitive groups,
5. method of training technologies,
6. the "business game" method,
7. "brainstorming" method,
8. method of holding conferences using interactive, interdisciplinary and information and computer technologies.

Control methods:

Theoretical knowledge:

1. written and computer-based testing,
2. individual survey, interview,
3. structured written works.

Practical skills and abilities:

1. control over the implementation of practical skills standardized according to the methodology, provided for by the plan of practical training of the student in the discipline;
2. analysis of laboratory and instrumental studies;
3. performing medical manipulations in pediatrics;
4. providing assistance in case of emergencies in children.

Final control form: differential credit (semesters VII - VIII).

Means of diagnosing the success of learning: individual tasks, questions for current control, tests, tasks, questions for final control.

Language of study: Ukrainian, English.

1. Evaluation

Distribution of points received by students

Current evaluation (including SIW)										Sum
T1	T2	T3	T4	T5	T6	T7	T8			
13-25	13-25	13-25	13-25	13-25	13-25	13-25	13-25			111-200

№	Topics	Number of points corresponding to traditional mark			
		«5»	«4»	«3»	«2»
1.	Pregnancy planning. Influence of teratogenic factors on fetal formation	21-25	16-20	13-15	0
2.	The infant period as a key to the development of a healthy child	21-25	16-20	13-15	0
3.	Child management from infancy to school	21-25	16-20	13-15	0
4.	Management of children of early school age	21-25	16-20	13-15	0
5.	Observation of children in adolescence	21-25	16-20	13-15	0
6.	Early diagnosis of rare diseases. Neonatal screening	21-25	16-20	13-15	0
7.	Vaccine prophylaxis of infectious diseases	21-25	16-20	13-15	0
8.	Nutrition of a healthy child, formation of the child's eating behavior	21-25	16-20	13-15	0
Total points for discipline		Maximum – 200			
		Minimum – 111			

Final control – differential credit.

It is given at the last classroom lesson by the teacher of the academic group to the student based on the results of all current grades with conversion to points on a 200-point scale with the appropriate conversion on the traditional scale.

Correspondence of the scales of assessment of the quality of assimilation of educational material

Assessment according to the national scale	Assessment in points	Assessment according ECTS	Notes
Excellent	170-200	A	Excellent (excellent performance with only few errors)
Good	155-169	B	Very good (above average with a few bugs)
	140-154	C	Good (generally correct execution with a certain number of significant errors)
Satisfactory	125-139	D	Satisfactory (with a significant number of disadvantages)
	111-124	E	Sufficient (fulfillment meets minimum criteria)
Unsatisfactory	60-110	FX	Unsatisfactory (reassembling)
	1-59	F	Unsatisfactory (with mandatory re-study of the discipline)

3. Course policy: mandatory observance of academic integrity by students, namely:

- independent performance of all types of work, tasks, forms of control provided for by the work program of this discipline;
- references to sources of information in the case of using ideas, developments, statements, information;
- compliance with the norms of copyright and international rights;
- providing reliable information about the results of their own educational (scientific) activities, research methods used and sources of information.

Procedure for liquidation of academic debt

When receiving an unsatisfactory grade in the discipline in the range of 60-110 points (FX), the student has the right to re-pass it 2 times: one - to the departmental commission with the participation of the head of the department and the last time – with the participation of the commission: the head of the department and the dean.

Re-taking of disciplines with unsatisfactory grades is carried out according to the schedule drawn up by the department, agreed with the dean (the interval between attempts or disciplines is at least 3 days). The disciplines studied in the relevant course must be completed before the beginning of the new academic year. The presence of academic arrears before the beginning of the new academic year is the basis for expulsion of a student from the university for non-fulfillment of the requirements of the curriculum (or registration of academic leave and re-course of study for health reasons).

In case of receiving an unsatisfactory grade in the discipline in the range of 1-59 points (F), the student is obliged to re-study it in extracurricular time on a paid basis. Repeated receipt by a student of an unsatisfactory grade as a result of its repeated study, taking into account two retakes of the discipline or unsatisfactory grades in 3 disciplines, as well as the presence of missed classroom classes without valid reasons, the amount of absences of which is 120 hours or more, causes his expulsion from the university for non-fulfillment of the curriculum.

Discussed and approved at the pediatric department № 1 meeting,
protocol from 29.08.2025 № 1

The Head of the department, professor

A handwritten signature in blue ink, appearing to be 'Berezenko V.S.', written in a cursive style.

Berezenko V.S.

Lecturer, associated professor of the department

Selska Z.V.