

**MINISRTY OF HEALTH OF UKRAINE  
ODESSA NATIONAL MEDICAL UNIVERSITY  
Department of Pediatrics №1**

**Syllabus of educationally selective discipline  
Emergency pediatric care for bleeding, accidents and poisoning. Practice  
practical skills on simulation equipment "**

<b>Scope:</b>	<i>Total hours for discipline:</i> 45 hours, 1.5 credits. Semester XI – XII. 6 year
<b>Days, hours, place:</b>	According to the schedule of classes. Department of Pediatrics No. 1. St. Ac. Vorobyova 3, Communal non-commercial enterprise "Odessa Regional Children's Clinical Hospital" of the Odessa Regional Council, 9-storey building, 7th floor.
<b>Teacher (s)</b>	Aryayev M.L. Corresponding Member National Academy of Medical Sciences of Ukraine, Doctor of Medical Sciences, Professor, Head of the Department. Associate professors: PhD Kaplina L.E., Biryukov V.S., Senkivska L.I. Assistants: Ph.D. doctor of philosophy Usenko D.V. Assistants: Pavlova V.V., Selimkhanova D.S., Bishley N.O., Streltsov M.S., Talashova I.V.
<b>Contact information:</b>	Information by phone: Kaplina Larisa Evgenievna, head teacher: 0509707163. Senkivska Liudmyla Ivanivna, responsible for organizational and educational work at the department: 0679590334 or by landline of the department: (048) 705 53 21 - laboratory assistant, Olkhovska Veronika Olexandrivna. <b>E-mail:</b> pediatrics50@gmail.com. <b>Personal consultations:</b> from 2:00 pm to 5:00 pm every Thursday and from 9:00 am to 2:00 pm every Saturday. <b>On-line consultations:</b> from 4:00 pm to 6:00 pm every Thursday and from 9:00 am to 2:00 pm every Saturday. A link to an online consultation is provided to each group separately during the class.

### **COMMUNICATION**

Communication will be carried out in the classroom .

During distance learning, communication is carried out through the Microsoft Teams platform, as well as through e-mail correspondence, through messengers. Viber (through groups created in Viber for each group separately through the head of the group).

### **ANNOTATION OF THE EDUCATIONAL DISCIPLINE**

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***Subject study of selective discipline* - emergency pediatric care for bleeding, accidents and poisoning. Practice practical skills on simulation equipment.**

Prerequisites and postrequisites of the discipline (the place of the discipline in the educational program):

**Prerequisites:** Ukrainian language (professional), foreign language (professional), Latin language and medical terminology, medical biology, medical and biological physics, medical chemistry, biological and bioorganic chemistry, human anatomy, histology, cytology and embryology, physiology, microbiology, virology and immunology, life safety; fundamentals of bioethics and biosafety, pathomorphology, pathophysiology, pharmacology, hygiene and ecology, propaedeutics of pediatrics.

**Postrequisites:** pediatrics, internal medicine, surgery, obstetrics and gynecology, infectious diseases, epidemiology and principles of evidence-based medicine, oncology and radiation medicine, traumatology and orthopedics, anesthesiology and intensive care, emergency medical care, hygiene and ecology, internal medicine, surgery, obstetrics and gynecology, infectious diseases, palliative medicine, general practice (family medicine).

**Purpose:** The application's acquisition of the higher education of additional knowledge and mastery of professional competences in providing emergency care to children, based on the competences obtained during the study of previous disciplines.

**Tasks:**

1. Formation of skills and communication skills with a sick child or his parents.
2. Improving the skills of substantiating a clinical diagnosis, drawing up a plan for laboratory and instrumental research, in cases of bleeding, accidents and poisoning in children.
3. Mastering the ability to determine tactics provision of emergency aid at bleeding, accidents and poisoning in children.

**Expected learning outcomes.**

**As a result of studying the academic discipline, the applicant of the higher education must:**

**Know:** An algorithm for providing emergency medical aid for bleeding, drowning, thermal burns, poisoning, and animal and insect bites. Algorithm for providing medical care in acute renal and hepatic failure.

**Be able to:**

Provide emergency medical care for bleeding with subsequent stopping of bleeding on the manikin.

Carry out measures to restore the patency of the respiratory tract on the dummy.

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Conduct cardiopulmonary resuscitation on a Simulator.  
Provide emergency medical care to a child with thermal injury.  
Provide emergency medical care for various types of acute poisoning according to the algorithm.  
Perform gastric lavage on a dummy.  
Provide emergency medical care for bites from domestic and wild animals, ticks and insects, poisonous snakes and spiders.  
Conduct clinical examination of children different ages according to standard methods.  
Analyze the results of laboratory, functional and instrumental research.  
Carry out differential diagnosis and substantiate the clinical diagnosis.  
Determine the tactics and provide emergency medical care in emergency situations in children.  
Determine the nature and principles treatment the sick children on the basis of a preliminary clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.  
Perform medical manipulations (according to list 5) for common diseases in children.  
Keep medical records for common diseases in children

**DESCRIPTION OF THE EDUCATIONAL DISCIPLINE**

The discipline will be conducted in the form of seminars (16 classroom hours); organizing the student's self-make work (29 hours).

**Teaching methods:** discussion of theoretical issues, frontal survey on basic terminology, testing, role-playing games for mastering communication skills with a child or his parents, planning and carrying out preventive vaccinations for children and adults (work in a team).

**The content of the educational discipline**

**Topic №1 Emergency medical care, bleeding** . Etiology, pathogenesis, clinic, diagnosis. Changes in the body during bleeding. The main types of bleeding (nasal, oral, pulmonary, gastrointestinal, urinary tract, acute blood loss). Indicators of hemodynamics in normal and pathological conditions. Pediatric trauma assessment scale.

**Topic №2 Algorithm for providing emergency medical care for bleeding.** Practicing the skills of stopping bleeding on a dummy.

**Topic №3 Emergency medical care, accidents.** Drowning. Causes, mechanism of development and emergency aid algorithm. Practicing cardiopulmonary resuscitation skills on a Simulator.

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**Topic №4 Burns and electric shock.** Types of burns. Damage severity index. Emergency care for a child with heat damage. Methods of anesthetizing the patient. Peculiarities of the caveat when providing assistance.

**Topic №5 Emergency medical care, poisoning and animal bites.**

Poisoning. Etiology, pathogenesis, clinic. Drug overdose. Types of intoxications and periods of poisoning. Antidote therapy. Algorithm of emergency medical care for various types of acute poisoning.

**Topic №6 Emergency medical care, poisoning and animal bites.**

Animal and insect bites. Etiology of bites (domestic and wild animals, ticks and insects, bites of poisonous snakes and spiders). Geographic distribution of poisonous animals on the territory of Ukraine. Principles of providing emergency care.

**Topic №7 Emergency medical care, toxic emergencies.**

**Etiology, pathogenesis, clinic, diagnosis of acute renal failure in children.** Principles of management and treatment of children with acute renal failure.

**Topic №8 Acute liver failure.** Diagnosis, differential diagnosis and treatment of acute liver failure.

***List of recommended literature:***

**Main:**

1. **Nelson textbook** of pediatrics, 2 volume set. **Edition : 21st** , 2019. PDF format. <http://pediacalls.com/e-books/nelson-textbook-of-pediatrics-21st-edition/>

**Additional**

1. Emergency **MEDICAL** CARE : a NEW CLINICAL protocol \_ [translation into English](#).
2. Order of the Ministry of Health of Ukraine on December 30, 2015 No. 916 Unified clinical protocol for emergency, primary, secondary (specialized) and tertiary (highly specialized) medical care drug allergy, including anaphylaxis - [translation into English](#)
3. Goyal A. \_ Cardiopulmonary Resuscitation / Amandeep Goyal; Joseph C. Sciammarella; Austin S. CusiSC; Pujan H. Patel// Last Update: June 8, 2021. <https://www.ncbi.nlm.nih.gov/books/NBK470402/>
4. Pediatric Cardiac Arrest. Written by Priscilla Yu, Ivie D. Esangbedo, Lakshmi Raman and Cindy Darnell Bowens. Submitted: January 17th, 2020 Reviewed: April 5th, 2020 Published: May 19th, 2020. DOI: 10.5772/intechopen.92381 <https://www.intechopen.com/chapters/72241>

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5. Clinical Practice Guideline for Screening and Management of High Blood Pressure in Children and Adolescents Pediatrics (2017) 140 (3): e20171904.  
<https://doi.org/10.1542/peds.2017-1904> Volume 140, Issue 3 September 2017  
<https://publications.aap.org/pediatrics/article/140/3/e20171904/38358/Clinical-Practice-Guideline-for-Screeningnd?autologincheck=redirected>
6. Updated GUIDELINE. Paediatric emergency triage, assessment and treatment Care of critically ill children/ WHO 2016  
[https://apps.who.int/iris/bitstream/handle/10665/204463/9789241510219\\_eng.pdf](https://apps.who.int/iris/bitstream/handle/10665/204463/9789241510219_eng.pdf)

**EVALUATION**

Forms and methods of current control: oral (survey, participation in a role-playing game), practical (working with the patient and his parents), assessment of communication skills and activity in the class

**EVALUATION OF KNOWLEDGE (DISTRIBUTION OF POINTS)**

Forms and methods of current control: oral, written, practical.

*Final control* - a test

Means of diagnosing learning success: questions for current control, clinical tasks, role-playing cases, questions for final control, performance of practical skills on simulation equipment, individual tasks.

Current assessment criteria for the seminar session:

Excellent "5"	The applicant for higher education is fluent in the material, takes an active part in role games, discussing and solving a situational clinical problem, confidently demonstrates practical skills during the examination of a sick child and interpretation of clinical, laboratory and instrumental studies, expresses his opinion on the topic of the lesson, demonstrates clinical thinking.
Good "4"	The applicant for higher education is well versed in the material, participates in the role games, discussion and solution of the situational clinical problem, demonstrates practical skills during the examination of a sick child and interpretation of clinical, laboratory and instrumental studies with some errors, expresses his opinion on the topic, demonstrates clinical thinking.
Satisfactorily "3"	The applicant for higher education does not have enough material, insecurely participates in the role games, discussion and solution of the situational clinical problem, demonstrates practical skills during the examination of a sick child and interpretation of clinical, laboratory and instrumental studies with significant errors.

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Unsatisfactorily "2"	The applicant for higher education does not have the material, does not participate in the role games, discussion and solution of the situational clinical problem, does not demonstrate practical skills during the examination of a sick child and the interpretation of clinical, laboratory and instrumental studies.
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FINAL EXAMINATION - a credit given to the applicant for higher education who has completed all sections of the educational program of a selective discipline, actively participated in seminars, has an average current grade of at least 3.0 and has no academic debt. Possibility and conditions of obtaining additional (bonus) points: not provided.

### **SELF-MAKE WORK OF HIGHER EDUCATION ACQUIRES**

Self-make work involves only preparation for each seminar session.

Self-make study of the algorithm of emergency care for bleeding

Self-make study of the cardiopulmonary resuscitation algorithm

Self-study of the algorithm for providing emergency medical aid for various types of acute poisoning

Self-make study of the algorithm for providing emergency medical care to a child with thermal damage

Self-make study of the algorithm for providing emergency medical aid for bites of domestic and wild animals, ticks and insects, poisonous snakes and spiders

### **POLICY OF THE EDUCATIONAL DISCIPLINE**

*Deadline and retake policy:*

1. Class absences for disrespectful reasons are worked out according to the schedule of the teacher on duty.
2. Class absences for valid reasons are worked out according to the individual schedule with the permission of the dean's office.

*Policy of the academic integrity:*

Adherence to academic integrity by students involves:

- ♦ independent performance of educational tasks, tasks of current and final control of studying outcomes (for persons with special educational needs this requirement is applied taking into account their individual needs and capabilities);
  - links to sources of information in the case of the use of ideas, developments, statements, information;
  - compliance with the law on copyright and related rights;
  - providing reliable information about the results of their own (scientific, creative) activities, used research methods and sources of information.



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Unacceptable in educational activities for participants in the educational process are:

- ♦ use of family or business relationships to obtain a positive or higher assessment in the implementation of any form of control over learning outcomes or preferences in scientific work;
- ♦ use of prohibited auxiliary materials or technical means (cheat sheets, abstracts, headphones, telephones, smartphones, tablets, etc.) during control measures;
- ♦ passing the procedures of control of learning outcomes by fictitious persons.

For violation of academic integrity, students may be held subject to the following academic liability:

- reduction of the results of assessment of exams, tests, etc.;
- re-assessment (exam, test, etc.);
- appointment of additional control measures (additional individual tasks, tests, etc.);

**Policy of the attendance and lateness:**

***Dress code:*** a medical gown that completely covers outerwear or medical pajamas, a medical cap, a mask, changeable shoes.

***Equipment:*** notebook, pen, stethoscope, medical latex gloves.

***Health status:*** the applicant of the higher education suffering from acute infectious diseases, including respiratory diseases, are not allowed to study.

***Start of classes:*** 8.30 am.

The applicant who is late for class may be present, but if the teacher put "absence" in the journal, he must work it out in the general order.

**Mobile devices:** can be used with the permission of the teacher, if they are needed to perform the task.

**Behavior in the audience:** working, calm.