Department of simulation medical technologies

Syllabus of the academic discipline «Nursing practice. Simulation training»

Scope of the academic discipline	Total number of hours per discipline: 90 hours, 3 ECTS credits Semester: V — VI 3 years of study
Days, time, place of educational discipline	According to the schedule of classes Department of simulation medical technologies Odesa, Valikhovsky Lane, 3
Teacher(s)	Head of the department, Doctor of Economics, Doctor of Medicine, Associate Professor Oleksandr ROGACHEVSKYI Assistant of professor Olha YEHORENKO Associate professor, PhD Mykhailo PERVAK Associate professor, PhD Vasyl GLADCHUK Associate professor, PhD Igor SHEVCHENKO Associate professor, PhD Yuriy PETROVSKIY Assistant of professor Viacheslav ONYSHCHENKO Assistant of professor Dmytro KARAKONSTANTYN Assistant of professor Svitlana TRISHCHENKO Assistant of professor Hennadii CHEREMNYKH Assistant of professor Andrii DOBROVOLSKYI
Contact Information	E-mail: simmedtech@onmedu.edu.ua Consultations: from 14.30 to 16.30 every working day

COMMUNICATION

Communication with students of higher education will be conducted in the classroom (face-to-face).

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

ABSTRACT OF THE ACADEMIC DISCIPLINE

The subject there is a complex of functional duties, professional actions and practical skills of a nurse, as well as a set of measures aimed at creating favorable conditions for the successful treatment of patients.

Prerequisites: based on the knowledge gained during the study of the previous disciplines: medical biology, normal human anatomy and physiology, medical physics, bioorganic and biological chemistry, simulation medicine (patient care), as well as the study of microbiology, virology and immunology, clinical anatomy and operative surgery, pathological anatomy, pathological physiology, with which the program of this discipline is integrated.

Post-requisites: improves the theoretical knowledge and practical skills of performing medical manipulations of a nurse. Forms the basis of the student's study of further clinical disciplines - internal medicine, pediatrics, surgery, anesthesiology and intensive care, which involves "vertical" integration

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with these disciplines and the formation of skills to apply knowledge from nursing in the process of further education and in professional activities.

The aim is formation of relevant competencies and mastery of skills in the organization of regime and care for patients with various diseases of therapeutic and surgical profile, healthy and sick children. Improvement of manipulation skills and competences acquired during the study of previous disciplines. Mastering by students of the basic techniques of the professional activity of a nurse based on deep knowledge and understanding of the peculiarities of the functioning of a sick person's body in compliance with the principles of medical ethics and deontology.

Task:

- 1. Formation and assimilation of practical skills of a nurse in the surgical and therapeutic departments of a hospital.
- 2. Deepening of theoretical knowledge and improvement of competencies to ensure favorable and comfortable conditions of stay in the hospital in the most frequent cases that occur in the hospitals of departments of internal medicine, pediatrics and surgical profile, and providing the necessary care for them.
- 3. Mastering the basic practical skills of a nurse, the ability to apply methods of management and prevention of complications in the treatment of various diseases that occur in hospitals of the departments of internal medicine, pediatrics and surgical profile.
- 4. Improvement of moral and ethical and deontological qualities of students in the implementation of patient care measures.

Expected results:

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

- Anatomical structure of organs and systems in adults and children of different ages
- Basics of organizing a rational regimen and treatment in a surgical hospital
- Basics of organizing a rational regime and treatment in departments of therapeutic and pediatric profile
- Perform medical manipulations that are part of the functional duties of a nurse in the conditions of a medical institution, using knowledge about a person, his organs and systems, observing the relevant ethical and legal norms
- Theoretical foundations of modern antiseptics
- General issues of surgical infection, HIV and hepatitis
- Theoretical aspects of dressing material and methods of its application
- Provide emergency medical care, under any circumstances, using knowledge about a person, his organs and systems, observing the relevant ethical and legal norms, by making a reasoned decision, based on the detection of an emergency condition in a limited time according to the defined tactics, using standard schemes
- To ensure compliance with the necessary therapeutic nutrition during the treatment of the disease, in the conditions of a health care institution, using knowledge about a person, his organs and systems, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes
- Principles of medical ethics
- Concepts, indications, contraindications, technique, algorithm and complications of manipulations:
 - 1. temporary stoppage of external bleeding
 - 2. primary surgical treatment of the wound, bandaging, removal of skin sutures, in particular in field conditions
 - 3. applying a bandage, incl. in field conditions
 - 4. transport immobilization
 - 5. administration of medicinal substances (intravenous jet and drip, intraosseous), in

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particular in field conditions

- 6. provision of peripheral venous and intraosseous access
- 7. bladder catheterization with a soft probe

Be able:

- Orientate yourself in the anatomical structure of organs and systems in adults and children of different ages
- Be able to analyze the patient's general condition
- Name pathological changes in human organs and systems
- Determine the sequence of actions when providing assistance
- Perform the necessary manipulations: temporary stoppage of external bleeding, primary surgical treatment of the wound, bandaging, removal of skin sutures, application of a bandage, transport immobilization, provision of peripheral venous and intraosseous access, determination of blood group, Rh status
- Monitor the patient's condition after performing practical skills
- Solve deontological tasks related to professional activity
- Have professional communication skills

DESCRIPTION OF THE ACADEMIC DISCIPLINE

Forms and methods of education. The discipline will be taught in the form of practical classes (30 hours) and organization of students' individual work (60 hours).

Consultations are individual.

Teaching methods.

Practical classes: conversation, role-playing, solving clinical situational problems, practice and control of practical skills on simulation models and mannequins (according to list 5), passing simulation scenarios, solving test tasks.

Individual work: individual work with the recommended basic and additional literature, electronic information resources, individual work with the bank of Step-1 test tasks, preparation for practical classes.

Content of the academic discipline:

- Topic 1. Bleeding and blood loss. Types of haemostasis. Stopping external bleeding from the limbs, trunk and head
 - Topic 2. Traumatism and damage. Desmurgy
 - Topic 3. Surgical infection. Aseptic and antiseptic bandages. Postoperative wound treatment
 - Topic 4. Ways and methods of administration of medicines
- Topic 5. Technique of injections in children and adults. Peculiarities of providing intravenous access in patients with varicose veins
 - Topic 6. Bladder catheterization technique in adults and children of different ages
 - Topic 7. Stomach probing. Tubage: indications, contraindications, performance technique
 - Topic 8. Final lesson

List of recommended literature:

Main:

- Patient care and nursing: study guide / O.O. Yakymenko; edited by Yakymenko O.O., 2021
 — 178 p.
- 2. Nursing in internal medicine/ O.S. Stasyshyn, V.V. Stasiuk, I.M. Bandura et al., K.: VSV —Medytsina, 2019. 496 p.
- 3. Basics of nursing: / V.M. Lisovyi, L.P. Olkhovska, V.A. Kapustnyk// K.: VSV Medicine, 2018. 912 p.

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4. Basics of nursing in modules: study guide / N.M. Kasevich — 3rd ed., edition// K.: VSV — Medytsina, 2018. — 480 p.

Additional:

- Nursing: a textbook (university I-III years) / N.M. Kasevich, I.O. Petryashev, V.V. Slipchenko and others; under the editorship V.I. Lytvynenko 3rd ed., edition// K.: VSV Medytsina, 2017. 816 p.
- 2. Care for patients. Practice. Textbook / O. M. Kovalova, V. M. Lisovyi, S. I. Shevchenko, T. V. Frolova. Kyiv: Medicine, 2013. 488 p.

Electronic resources:

- 1. http://moz.gov.ua Ministry of Health of Ukraine
- 2. www.who.int World Health Organization
- 3. http://www.nbuv.gov.ua/ National Library of Ukraine
- 4. https://gmka.org/uk/category/dlya-medykiv/nevidkladna-hirugiya/ Global Alliance for Medical Knowledge
- 5. Order of the Ministry of Health of Ukraine No. 460 dated 01.06.13 On the approval of protocols of a nurse (paramedic, midwife) for patient care and the performance of basic medical procedures and manipulations. [electronic resource] Access mode: http://mozdocs.kiev.ua
- 6. Order of the Ministry of Health No. 149 of March 20, 2008 "On approval of the clinical protocol for medical care of a healthy child under the age of 3" [electronic resource] Access mode: http://mozdocs.kiev.ua
- 7. Order of the Ministry of Health of Ukraine No. 152 dated 04/04/2005 "On approval of the Protocol of medical care for a healthy newborn child". [electronic resource] Access mode: http://mozdocs.kiev.ua
- 8. Order of the Ministry of Health of Ukraine No. 798 dated 21.09.2010 On approval of methodological recommendations "Surgical and hygienic treatment of hands of medical personnel" [electronic resource]. Access mode: http://medsoft.ucoz.ua
- 9. Order of the Ministry of Health of Ukraine No. 110 dated 14.02.2012 On the approval of the forms of primary accounting documentation and instructions for filling them out, which are used in health care institutions regardless of the form of ownership and subordination [electronic resource]. Access mode: http://medsoft.ucoz.ua
- 10. Order of the Ministry of Health of Ukraine No. 223 of 10/22/1993 On the collection, disinfection and delivery of used single-use medical products made of plastic materials [electronic resource]. Access mode: http://medsoft.ucoz.ua

EVALUATION

Forms and methods of current control:

- oral control: individual survey on questions of the relevant topic;
- written control: assessment of the solution of clinical situational problems, assessment of the performance of practical skills on simulation models and mannequins;
- test control: assessment of solving test tasks.

Current evaluation criteria in practical training

Rating	Evaluation criteria
Excellent "5"	The applicant takes an active part in the lesson; demonstrates deep knowledge, gives complete and detailed answers to questions. Thoroughly and comprehensively knows the content of theoretical issues, fluent in professional

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	and scientific terminology. Thinks logically and constructs an answer, freely uses acquired theoretical knowledge when analyzing practical tasks. When solving a clinical problem, he correctly interprets the anamnesis data, the results of clinical, laboratory and instrumental studies, correctly answers all the questions and convincingly substantiates his point of view, can propose and justify an alternative version of the decision on individual issues. When solving a practical task according to the OSCE type, he correctly demonstrates the performance of practical skills on simulation models and mannequins, strictly adheres to the algorithm of their implementation
Good "4"	The acquirer participates in the class; knows the material well; demonstrates the necessary knowledge, but answers the questions with some errors. He knows the content of theoretical issues deeply and comprehensively, and has professional and scientific terminology. Thinks logically and constructs an answer, uses acquired theoretical knowledge when analyzing practical tasks. But when teaching some questions, there is not enough depth and argumentation, it makes insignificant mistakes, which are eliminated by the student himself when the teacher points them out. When solving a clinical problem, minor errors or inaccuracies are assumed in the interpretation of anamnesis data, results of clinical, laboratory and instrumental studies, he answers all the questions without significant errors, fully substantiates his point of view, but proposals for an alternative option cause difficulties. When solving a practical task according to the OSCE type, minor errors in the algorithm and technique of performing skills on simulation models and mannequins are corrected at the instruction of the teacher
Satisfactory "3"	The acquirer sometimes participates in the activity; partially speaks and asks questions; makes mistakes when answering questions. Possesses a basic amount of theoretical knowledge, uses professional and scientific terminology inaccurately. Experiences significant difficulties in constructing an independent logical answer, in applying theoretical knowledge in the analysis of practical tasks. There are significant errors in the answers. When solving a clinical problem, he interprets the history data, the results of clinical, laboratory and instrumental studies with errors, does not know individual details, allows inaccuracies in the answers to questions, does not adequately justify his answers and interprets the wording, experiences difficulties in completing tasks and proposing alternative options. When solving a practical task according to the OSCE type, significant errors are assumed in the algorithm and technique of performing skills on simulation models and mannequins
Unsatisfactory "2"	The acquirer does not participate in the lesson, is only an observer; never speaks or asks questions, disinterested in learning the material; gives incorrect answers to questions. Has not mastered the basic amount of theoretical knowledge, shows a low level of mastery of professional and scientific terminology. Answers to questions are fragmentary, inconsistent, illogical, cannot apply theoretical knowledge when analyzing practical tasks. There are a significant number of gross errors in the answers. When solving a clinical problem, he cannot interpret the received history data, the results of clinical, laboratory and instrumental studies, answer the questions, or makes significant mistakes in the answers; could not justify his decisions or does it unconvincingly. It does not offer alternative options. When solving a practical task according to the OSCE type, gross errors and errors in the algorithm and technique of performing skills on simulation

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models and mannequins will not be demonstrated or assumed

Forms and methods of final control: test

Test is given to the applicant who completed all tasks of the work program of the academic discipline, took an active part in practical classes, completed and defended an individual assignment and has an average current grade of at least 3.0 and has no academic debt.

Test is carried out: at the last lesson before the beginning of the examination session — at ribbon system teaching, on to the last occupation — with a cyclical system of education. The test score is the arithmetic mean of all components on a traditional four-point scale and has a value that is rounded using the statistical method with two decimal places after the decimal point.

INDIVIDUAL WORK OF HIGHER EDUCATION ACQUIRES

Individual work: individual work with the recommended basic and additional literature, electronic information resources, individual work with the bank of test tasks Step-1, preparation for practical classes.

ACADEMIC DISCIPLINE POLICY

Deadlines and Rescheduling Policy:

- absences from classes due to non-respectable reasons are worked out according to the schedule of the teacher on duty;
- absences due to valid reasons are worked out according to an individual schedule with the permission of the dean's office.

Academic Integrity Policy:

Applicants must observe academic integrity, namely:

- independent performance of all types of work, tasks, forms of control provided for by the work program of this educational discipline;
- references to sources of information in case of use of ideas, developments, statements, information:
- compliance with the legislation on copyright and related rights;
- provision of reliable information about the results of one's own educational (scientific) activity, used research methods and sources of information.

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

- the use of family or official ties to obtain a positive or higher grade during any form of control of academic performance or academic merit;
- use of prohibited auxiliary materials or technical means (cheat sheets, notes, micro-earphones, telephones, smartphones, tablets, etc.) during control measures;
- going through procedures for monitoring the results of training by fake persons.

For violation of academic integrity, students of higher education may be held to the following academic responsibility:

- decrease in the results of assessment of individual survey, performance of test tasks, assessment for solving situational tasks, performance of individual task, credit, etc.;
- retaking the assessment (test tasks, situational tasks, individual tasks, assessment, etc.);
- assignment of additional control measures (additional situational tasks, individual tasks, tests, etc.);
- conducting an additional inspection of other works authored by the violator.

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Attendance and Tardiness Policy:

State of health: applicants suffering from acute infectious diseases, including respiratory diseases, are not allowed to attend classes.

Lateness to classes is not acceptable. A student who is late for class can attend it, but if the teacher has put "nb" in the journal, he must complete it in the general order.

Use of mobile devices:

The use of any mobile devices is prohibited. In case of violation of this clause, the student must leave the class and the teacher will write "nb" in the journal, which he must complete in the general order. Mobile devices may be used by students with the permission of the instructor if they are needed for the assignment.

Behavior in the audience:

The behavior of applicants and teachers in the classrooms must be working and calm, strictly comply with the rules established by the Regulations on academic integrity and ethics of academic relations at Odesa National Medical University, in accordance with the Code of Academic Ethics and University Community Relations of Odesa National Medical University, Regulations on Prevention and detection of academic plagiarism in the research and educational work of students of higher education, scientists and teachers of Odesa National Medical University.