

SYLLABUS

1. General information on the course

Full course name	Integrated Course of Clinical Subjects
Full official name of a higher education institution	Sumy State University
Full name of a structural unit	Medical Institute. Department of Public Health
Author(s)	Holubnycha Viktoriia Mykolaivna
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	18 тижнів протягом 12-го семестру
Workload	3 ECTS, 90 hours, 20 contact hours with the lecturer (2 hours of lectures, 18 hours of seminars) and 70 hours self-preparation
Language(s)	English

2. Place in the study programme

Relation to curriculum	Compulsory course available for study programme "Medicine"
Prerequisites	Krok-1, Knowledge of therapy, surgery, orthopedics, pediatrics, infectious diseases, obstetrics and gynecology, hygiene and public health
Additional requirements	There are no specific requirements
Restrictions	There are no specific restrictions

3. Aims of the course

to achieve the ability to solve complex problems and solve problems in the field of health care with the formation and acquisition of special competencies of a doctor, skills, abilities, and understanding of professionally-oriented disciplines for further professional activity

4. Contents

Topic 1 Modern comprehensive ideas about the diagnosis, treatment and prevention of therapeutic diseases in adults.

Features of examination of patients and clinical course of internal diseases, their differential diagnostic features, methods of treatment and prevention with the use of modern tools and methods. Features of emergency care. Prevention of internal diseases at the level of the individual and society.

Topic 2 Modern comprehensive ideas about the diagnosis, treatment and prevention of surgical diseases in the work of a general practitioner

Differential-diagnostic features of surgical diseases of the chest and thoracic cavity. Traumatic injuries of the abdominal cavity, head, chest, gunshot wounds. Surgical purulent infection, methods of treatment and prevention. Surgical gastroenterology, differential diagnosis, features of treatment and prevention with the use of modern tools and methods. Surgical diseases of arterial and venous vessels, thyroid gland, urinary system. Features of emergency care. Prevention of surgical diseases at the level of the individual and society.

Topic 3 Modern complex ideas about pediatrics

Diseases of young children. Respiratory diseases in children. Allergic diseases in children. Pediatric cardiorheumatology. Digestive diseases in children. Diseases of the urinary system in children. Neonatology. Diseases of the blood system in children. Diseases of the endocrine system in children. Differential diagnosis, features of treatment and prevention of pediatric diseases with the use of modern tools and methods. Features of emergency care. Disease prevention in children at the level of the individual and society

Topic 4 Modern complex ideas about infectious diseases and epidemiology as a component of medical care.

Infectious diseases with fecal-oral transmission mechanism in adults and children. Infectious diseases with airborne transmission in adults and children. Viral hepatitis. HIV infection. Infectious diseases with a transmissible transmission mechanism. Infectious diseases with wound and multiple transmission mechanisms. Tuberculosis. Features of differential diagnosis, treatment and prevention in adults and children. Providing assistance in emergencies.

Topic 5 Modern comprehensive ideas about the provision of obstetric and gynecological care in the practice of general practitioners

Organization of medical care for pregnant women, mothers and mothers in Ukraine. Physiological and pathological childbirth, diagnosis and management tactics, treatment of complications of pregnancy, childbirth, postpartum period in an obstetric hospital. Gynecological pathology and management of patients with diseases of the genital organs. Providing care in emergencies.

Topic 6 Modern comprehensive ideas about oncology as a component of medical care.

Etiology and epidemiology of cancer. Theories and pathogenesis of carcinogenesis. Typical clinical manifestations of cancer. Methods of diagnosis and treatment of malignant tumors, rehabilitation of cancer patients. Features of differential diagnosis and prevention of tumors. Providing assistance in emergencies.

Topic 7 Modern complex ideas about hygiene and ecology in the conditions of work of the general practitioner

Environmental hygiene. Water hygiene and water supply. Soil hygiene and cleaning of settlements. Air hygiene. Food hygiene. Study of the impact of environmental factors on the human body and public health and their evaluation.

<p>Topic 8 Modern ideas about public health and the basics of evidence-based medicine</p> <p>Features of analysis and evaluation of state, social and medical information using standard approaches and computer information technology. Biostatistics. Population health statistics. Healthcare organization. Research, analysis and assessment of public health indicators, development of evidence-based recommendations for the prevention and elimination of harmful effects of factors and to improve the organization of medical care</p>
<p>Topic 9 Final control</p> <p>Assessment of knowledge acquired during the study of the discipline</p>

5. Intended learning outcomes of the course

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

LO1	To be able to abstract thinking, analysis, and synthesis.
LO2	To be able to learn, master modern knowledge, and apply the knowledge in practice.
LO3	To have knowledge and understanding of the subject area and professional activity comprehension.
LO4	To have ability to adapt and act in a new situation.
LO5	To have ability to make reasoned decisions; teamwork ability; interpersonal skills.
LO6	To do determination and persistence on the tasks and commitments undertaken.
LO7	To have ability to collect medical information about the patient and analyze clinical data.
LO8	To have ability to determine the required set of laboratory and instrumental studies and to evaluate their results.
LO9	To have ability to establish a provisional and clinical diagnosis of disease.
LO10	To have ability to determine the necessary mode of work, rest, and diet in the treatment course.
LO11	To have ability to determine the principles of treatment and treatment modality and to perform medical procedures
LO12	To have ability to diagnose medical emergencies, determine the approach to emergency medical care, implement medical evacuation procedures
LO13	To have ability to solve medical problems in new or unfamiliar environments given incomplete or limited information, taking into account aspects of social and ethical responsibility.
LO14	To have ability to determine the approach to physiological pregnancy, physiological delivery, and postpartum period. Skills in counseling with regard to family planning and contraceptive method selection.
LO15	To be able to perform sanitary and preventive measures
LO16	To be able to plan and conduct preventive and disease control measures for infectious diseases

LO17	To be able to perform disability examination.
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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 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.
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.
PO9	To determine an appropriate approach, plan, and management of physiological pregnancy, physiological delivery, and postpartum period 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.
PO13	To organize medical evacuation procedures among the population and the military under emergency and military operation conditions (including in the field), and during the phases of medical evacuation, given the existing system of medical evacuation provision.
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.
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 assess environmental impact on public health.
PO21	To organize an appropriate level of individual safety (own and of those cared for) in case of typical dangerous situations in the individual field of activity.

7. Teaching and learning activities

7.1 Types of training

<p>Topic 1. Modern comprehensive ideas about the diagnosis, treatment and prevention of therapeutic diseases in adults.</p>
<p>lect.1 "Modern comprehensive ideas about the diagnosis, treatment and prevention of therapeutic diseases in adults." (full-time course)</p> <p>The role of discipline in the training of general practitioners. Features of the use of complex systemic clinical knowledge in the diagnosis and treatment of infectious and non-infectious diseases.</p>

pr.tr.1 "The role of discipline in the training of general practitioners. Features of the use of complex systemic clinical knowledge in the diagnosis and treatment of infectious and non-infectious diseases." (full-time course)

Solving practical problems on the use of complex system knowledge about the course of infectious and non-infectious pathology in the diagnosis and treatment of therapeutic and pediatric diseases.

Topic 2. Modern comprehensive ideas about the diagnosis, treatment and prevention of surgical diseases in the work of a general practitioner

pr.tr.2 "Modern comprehensive ideas about the diagnosis, treatment and prevention of surgical diseases in the work of a general practitioner" (full-time course)

Solving practical problems on the use of complex system knowledge about surgical pathology in the diagnosis and treatment of major surgical diseases.

Topic 3. Modern complex ideas about pediatrics

pr.tr.3 "Modern complex ideas about pediatrics" (full-time course)

Solving practical problems related to the use of complex system knowledge about pediatrics in the diagnosis and treatment of children's diseases.

Topic 4. Modern complex ideas about infectious diseases and epidemiology as a component of medical care.

pr.tr.4 "Modern complex ideas about infectious diseases and epidemiology as a component of medical care." (full-time course)

Solving practical problems on the use of comprehensive systemic knowledge about infectious diseases and epidemiology as a component of medical care in the diagnosis and treatment of infectious diseases.

Topic 5. Modern comprehensive ideas about the provision of obstetric and gynecological care in the practice of general practitioners

pr.tr.5 "Modern comprehensive ideas about the provision of obstetric and gynecological care in the practice of general practitioners" (full-time course)

Organization of medical care for pregnant women, mothers and mothers in Ukraine. Physiological and pathological childbirth, diagnosis and management tactics, treatment of complications of pregnancy, childbirth, postpartum period in an obstetric hospital. Gynecological pathology and management of patients with diseases of the genital organs.

Topic 6. Modern comprehensive ideas about oncology as a component of medical care.

pr.tr.6 "Modern comprehensive ideas about oncology as a component of medical care." (full-time course)

Solving practical problems in the use of comprehensive systemic knowledge about oncology as a component of medical care, in the diagnosis and treatment of cancer

Topic 7. Modern complex ideas about hygiene and ecology in the conditions of work of the general practitioner

<p>pr.tr.7 "Modern complex ideas about hygiene and ecology in the conditions of work of the general practitioner" (full-time course)</p> <p>Solving practical tasks on the use of comprehensive system knowledge about hygiene and ecology for the conduct of sanitary and epidemiological surveillance of objects and components of the national economy, planning of anti-epidemic measures, sanitary protection of the population.</p>
<p>Topic 8. Modern ideas about public health and the basics of evidence-based medicine</p>
<p>pr.tr.8 "Modern ideas about public health and the basics of evidence-based medicine" (full-time course)</p> <p>Solving practical problems on the use of comprehensive systemic knowledge about public health and the basics of evidence-based medicine in the implementation of measures aimed at protecting public health.</p>
<p>Topic 9. Final control</p>
<p>pr.tr.9 "Final control" (full-time course)</p> <p>Final control</p>

7.2 Learning activities

LA1	Preparation for practical classes
LA2	Preparing for Step 2
LA3	Analysis of clinical cases
LA4	E-learning in systems (the list is specified by the teacher, for example, Google Classroom, Zoom and in the format of the YouTube channel)

8. Teaching methods

Course involves learning through:

TM1	Interactive lectures
TM2	Case-study
TM3	Educational discussion / debate
TM4	Brain storm

The lecture provides students with materials on the place of discipline in doctor training and the role of comprehensive knowledge about therapy, surgery, pediatrics, obstetrics and gynecology, hygiene and public health in the diagnosis and treatment of diseases, which is the basis for self-study of higher education. 3). The lecture is complemented by practical classes that give students the opportunity to apply theoretical knowledge on practical examples (PH 6-17). Practice-oriented learning involves the definition of students' leading syndromes based on the solution of clinically-oriented situational problems (learning outcomes RN 6-17). Independent learning will be facilitated by preparation for lectures, practical classes, as well as discussion in a group of possible solutions to the problem situation and explanation of possible erroneous solutions. During the discussion, students will acquire critical thinking skills

Ability to work in a team, solve collective problems, effectively persuade.

9. Methods and criteria for assessment

9.1. Assessment criteria

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

9.2 Formative assessment

FA1	Interviews and oral comments of the teacher on his results.
FA2	Test

9.3 Summative assessment

SA1	Assessment of written works, surveys, rapid testing
SA2	Final control: differentiated test (according to the regulations)

Form of assessment:

The semester of teaching		200 scores
SA1. Assessment of written works, surveys, rapid testing		120
		120
SA2. Final control: differentiated test (according to the regulations)		80
		80

Form of assessment (special cases):

The semester of teaching		200 scores
SA1. Assessment of written works, surveys, rapid testing		120
	In case of quarantine restrictions of testing / interrogation, solving situational practice-oriented tasks within the topics of practical classes are carried out remotely using the platform Mix.sumdu.edu.ua, Zoom, Google meet.	120
SA2. Final control: differentiated test (according to the regulations)		80
	In case of quarantine restrictions, the final testing is carried out remotely using the platform Mix.sumdu.edu.ua, Zoom, Google meet.	80

Grade from the discipline is defined as the sum of points for the current educational activity (not less than 72) and points for the final modular control (not less than 48). The number of points for

current activities is calculated as the sum of 16 arithmetic mean of student performance in 4 points grading system / 5 based on the results of the survey / written work and 8x arithmetic mean for testing. The maximum number of points for the current educational activities of the student - 120. The student is admitted to the test provided that the requirements of the curriculum and if for the current educational activities he scored at least 72 points during practical classes. The final module control is carried out at the end of the semester in the form of a written test, with a score of "5" corresponds to 80 points, "4" - 64 points, "3" - 48 points, "2" - 0 points. In case of unsatisfactory result for the final module control, the student has the right to retake the test. Students who fail to take the test without good reason are considered to have received an unsatisfactory grade. The student's refusal to perform the final modular task is certified as an unsatisfactory answer.

10. Learning resources

10.1 Material and technical support

MTS1	Computers, computer systems and networks
MTS2	Library funds

10.2 Information and methodical support

Essential Reading	
1	1. Obstetrics and gynecology: in two volumes [Текст] : textbook. Vol.1 : Obstetrics / V. I. Gryshchenko, M. O. Shcherbina, B. M. Ventskiivskiyi etc. ; edit. by: V.I. Gryshchenko, M.O. Shcherbina. — 2-nd edition. — K. : AUS Medicine Publishing, 2018. — 392 p.
2	Internal Medicine [Текст] : textbook: in 2 books. Book 1 : Diseases of the Cardiovascular and Respiratory Systems / I. P. Vakaliuk, R. I. Yatsyshyn, M. M. Ostrovskyy et al. — K. : Medicine, 2019. — 664 c.
3	Pediatrics [Текст] : textbook / O. V. Tiazhka, T. V. Pochinok, A. M. Antoshkina etc. ; edited by O.V. Tiazhka. — 3-rd edition, reprint. — Vinnytsia : Nova Knyha, 2018. — 544 p
4	Introduction to Surgery for Students [Електронний ресурс] / edited by Rebecca A. Fisher, Kamran Ahmed, Prokar Dasgupta. — 1st ed. 2017. — Cham : Springer International Publishing, 2017. — XVII, 416 p.
5	Hygiene and ecology [Текст] : підручник / В. Г. Бардов, В. Ф. Москаленко, С. Т. Омельчук etc. ; ред.: І.І. Швайко, А.В. Благая. — second edition, updated. — Vinnytsia : Nova Knyha, 2018. — 688 p.
Supplemental Reading	
1	Concepts, Methods and Practical Applications in Applied Demography [Електронний ресурс] : An Introductory Textbook / by Richard K. Thomas. — 1st ed. 2018. — Cham : Springer International Publishing, 2018.
2	Evidence-Based Critical Care [Електронний ресурс] : A Case Study Approach / edited by Robert C. Hyzy. — 1st ed. 2017. — Cham : Springer International Publishing, 2017.

3	Tkachenko, Y. A. Introduction to infusion therapy [Текст] : study guide / Y. A. Tkachenko, S. I. Redko, S. M. Kasyan. — Sumy : Sumy State University, 2021. — 166 p.
Web-based and electronic resources	
6	Test center base https://www.testcentr.org.ua/uk/ispity/dokumenty-i-materialy/ekzamenatsiini-buklety