

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	Academic and Research Medical Institute. Кафедра громадського здоров'я
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, 18 contact hours with the lecturer (2 hours of lectures, 16 hours of seminars) and 72 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 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.

Topic 7 Modern ideas about public health and the basics of evidence-based medicine

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

Topic 8 Final control

Assessment of knowledge acquired during the study of the discipline

5. Intended learning outcomes of the course

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

LO1	To have ability to collect medical information about the patient and analyze clinical data, to determine the required set of laboratory and instrumental studies and to evaluate their results with use complex data.
LO2	To have the ability to establish a preliminary and clinical diagnosis of the disease base on complex data
LO3	To have ability to determine the necessary mode of work, rest, and diet in the treatment course based on complex knowledges
LO4	To be able to determine the principles of treatment, treatment modality and prophylaxis in general and in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility.
LO5	To be able to diagnose medical emergencies, to determine the approach to do emergency medical care, implement medical evacuation procedures and implement medical evacuation procedures.
LO6	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.
LO7	To be use knowledges on sanitary and preventive measures, conduct preventive and control measures for infection desiases as well
LO8	To be able to perform disability examination.

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

Programme learning outcomes achieved by the course.

For 222 Medicine:

PO1	To have profound knowledge of the structure of professional activity; to be able to carry out professional activities that require updating and integration of knowledge; to take responsibility for professional development and further professional training with a high level of self-sufficiency.
PO4	To detect and identify the leading clinical symptoms and syndromes (according to List 1); to establish the most probable preliminary clinical diagnosis of diseases (according to 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.
PO5	To collect information about the patient's complaints, anaemnesis vitae and morbi; 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 based on laboratory, instrumental findings (according to the List 4) and patient age.

PO6	To establish a final clinical diagnosis at a medical institution under control of a supervising doctor by means of informed decision and 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).
PO7	To order and analyze additional (mandatory and optional) examinations (laboratory, functional, and/or instrumental) (according to List 4) in order to perform a differential diagnosis of diseases (according to List 2).
PO8	To detect the key clinical syndrome or the reason for patient's condition severity (according to List 3) via informed decision and evaluation of the person's state under any circumstances (at a medical institution, outside it), including under emergency and military operation conditions, in the field, with a lack of information and limited time.
PO9	To determine the nature and principles of treatment of patients (conservative, operative) with diseases (according to list 2), taking into account the age of the patient, in a health care facility, outside it and at the stages of medical evacuation, including in the field, on the basis of a preliminary clinical diagnosis, adhering to the relevant ethical and legal norms, by making an informed decision on existing algorithms and standard schemes, if necessary to expand the standard scheme be able to justify personalized recommendations under the supervision of a physician.
PO10	To determine an appropriate work, rest and diet mode based on the final clinical diagnosis and observing the relevant ethical and legal norms, by making a reasonable decision according to existing algorithms and standard procedures.
PO11	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.
PO12	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.
PO14	To determine the appropriate approach and provide emergency medical assistance in case of emergency diagnosis (according to List 3) using standard schemes under limited time conditions based on the principles of evidence-based medicine.
PO15	To organize providing medical care and medical evacuation procedures among the population and the military under emergency and military operation conditions, including in the field.
PO16	To develop rational clinical pathways for patients; to organize the interaction with colleagues in one's institution and other healthcare institutions, subordinates and managers; to apply the tools of medical service promotion in the market based on the analysis of population needs under conditions of healthcare institution functioning in a competitive environment.
PO17	To perform medical procedures (according to 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.

PO21	To search for the necessary information in the professional literature and databases; to analyze, evaluate, and apply this information
PO23	To assess the impact of the environment on human health to assess the incidence of the population.
PO24	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>
<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)</p> <p>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.</p>
<p>Topic 2. Modern comprehensive ideas about the diagnosis, treatment and prevention of surgical diseases in the work of a general practitioner</p>
<p>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)</p> <p>Solving practical problems on the use of complex system knowledge about surgical pathology in the diagnosis and treatment of major surgical diseases.</p>
<p>Topic 3. Modern complex ideas about pediatrics</p>
<p>pr.tr.3 "Modern complex ideas about pediatrics" (full-time course)</p> <p>Solving practical problems related to the use of complex system knowledge about pediatrics in the diagnosis and treatment of children's diseases.</p>
<p>Topic 4. Modern complex ideas about infectious diseases and epidemiology as a component of medical care.</p>
<p>pr.tr.4 "Modern complex ideas about infectious diseases and epidemiology as a component of medical care." (full-time course)</p> <p>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.</p>

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 complex ideas about hygiene and ecology in the conditions of work of the general practitioner
pr.tr.6 "Modern complex ideas about hygiene and ecology in the conditions of work of the general practitioner" (full-time course) 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.
Topic 7. Modern ideas about public health and the basics of evidence-based medicine
pr.tr.7 "Modern ideas about public health and the basics of evidence-based medicine" (full-time course) 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.
Topic 8. Final control
pr.tr.8 "Final control" (full-time course) Final control

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	Case-study
TM2	Educational discussion / debate
TM3	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

During the practical classes students will acquire soft skills, namely working in a team, solve collective problems, effectively persuade, think abstractly, analyze, learn and master modern knowledge, apply knowledge in practical situations, adapt to a new situation and make informed decisions.

9. Methods and criteria for assessment

9.1. Assessment criteria

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 с.
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. Huzy. — 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/ispyty/dokumenty-i-materialy/ekzameniatsiini-buklety