



Syllabus of the discipline

“Modern aspects of clinical anatomy in abdominal surgery”

1. General information	
Name of faculty	Medical
Educational programe (branch, speciality, level of high education, form of education)	22 Health care, 222 Medicine, second (master's) level of high education, daily form
Educational year	2022-2023
Name of discipline, code (<i>e-mail on the site of Danylo Halyckyy LNMU</i>)	Modern aspects of clinical anatomy in abdominal surgery (https://new.meduniv.lviv.ua/kafedry/kafedra-operatyvnoyi-hirurgiyi-z-topografichnoyu-anatomiyeu/)
Department (<i>name, adress, telephone e-mail</i>)	Operative surgery and topographic anatomy, +380322755931, kaf_operative_surgery@meduniv.lviv.ua
Department leader (<i>contact e-mail</i>)	Professor Masna Zoryana Zenoviivna masna.zz@gmail.com
The year of study (<i>year, of realisation of discipline study</i>)	Second year of study
Semester (<i>semester at what realisation of discipline education is performed</i>)	IV semester
Type of discipline/module (<i>obligatory/of choice</i>)	Obligatory
Teachers (<i>names, surnames, scientific degree and ranks of teachers, who teach the discipline, contact e-mail</i>)	Department leader, professor Masna Zoryana Zenoviivna (masna.zz@gmail.com) Ass. prof. PhD, Haba Marianna Yevgenivna (gabamarianna@gmail.com) Ass. prof. PhD, Rudnytska Khrystyna Ihorivna (khrystynapavliv@gmail.com) Senior lecturer, Orel Mariya Hlibivna (orelmasha@ukr.net) Assistant of prof. Sohuyko Rostyslav Romanovych (rostyslavsohuyko@gmail.com) Ass. prof. PhD, Paltov Evheniy Volodymyrovych (evgenpaltov@gmail.com)
Erasmus yes/no (<i>availability of the discipline for the students within the program Erasmus+</i>)	
Person, who is responsible for syllabus (<i>a person, who has to give commentary on syllabus contact e-mail</i>)	Department leader, professor Masna Zoryana Zenoviivna (masna.zz@gmail.com) Ass. prof. PhD, Rudnytska Khrystyna Ihorivna (khrystynapavliv@gmail.com) Senior lecturer, Orel Mariya Hlibivna (orelmasha@ukr.net)
Count of credits ECTS	3
Count of hours (<i>lectures/practical classes/out of class work of students</i>)	60 (Practical classes 26, out of class work 34)
Education language	Ukrainian, English
Information about consultations	According schedule

Address, telephone and regulations of work of clinical base ...	Absent
2. Short annotation to the course	
<p>Combination of students theoretical knowledge of normal human anatomy with their practical application in the clinical activity in various narrow specialties, most of all in surgical disciplines.</p> <p>Advantage is mastering of the practical skills of primary surgical technique and more difficult surgical manipulations on cadaveric animal material and phantoms.</p> <p>The course is including practical classes (26 hrs.) and out of class work of students (34 hrs. at out of class time), that allows to provide theoretical (knowledge) and practical (skills and competences) education.</p>	
3. Purposes and goals of course	
<p>1. <u>Purpose of course:</u> «Modern aspects of clinical anatomy in abdominal surgery» is in the deepening of theoretical knowledge through the study of topics that were not included or incompletely or in overview in the program of the discipline "Clinical Anatomy", improvement and assimilation of practical skills, acquisition of a professional level of readiness of future doctors of various specialties..</p> <p>2. <u>Goal of education:</u> a) based on student's study of the morphological discipline – human anatomy; histology, cytology and embryology; physiology, pathomorphology; pathophysiology; propedeutics of internal medicine; propedeutics of paediatrics; radiology and are integrated with these disciplines; b) give the base for student's studies of surgery, where surgical methods of treatment are provided, what provides integration of education with these disciplines and forming skills to apply knowledge in the process of next education and professional activity; c) give the opportunity of mastering the practical skills and form the professional facility for for the medical care at separate pathologic conditions and at surgical patients care. As the result of discipline study student has to: -know structure, topography and syntopy of human body areas; -to demonstrate mastering of basic operative procedures techniques on animal material.</p> <p>3. <u>Competencies and results of education:</u> - <i>general</i>: ability of abstract thinking, analysis and synthesis; the ability to learn and master modern knowledge; ability to apply knowledge in practical situations; knowledge and understanding of the subject field and understanding of professional activity; ability to adapt and act in a new situation; the ability to make informed decisions; ability to work in a team; the ability for interpersonal interaction; the ability to communicate in a foreign language; the ability to use information and communication technologies; the ability to search, process and analyze information from various sources; determination and persistence in relation to the assigned tasks and assumed responsibilities; awareness of equal opportunities and gender issues; the ability to realize one's rights and responsibilities as a member of society, to realize the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of a person and a citizen in Ukraine; the 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, technology and technologies, to use various types and forms of motor activity for active recreation and leading a healthy lifestyle. Basics for students to study clinical anatomy and operative surgery, histology, normal physiology, propaedeutics of clinical disciplines. -<i>special (professional and subject)</i> : Ability to collect medical information about the patient and analyze clinical data; the ability to determine the necessary list of laboratory</p>	

and instrumental studies and evaluate their results; the ability to determine the principles and nature of treatment and prevention of diseases; the ability to diagnose emergency conditions; the ability to determine tactics and provide emergency medical assistance; Ability to perform medical manipulations; the ability to solve medical problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility; clearly and unambiguously convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists, in particular to persons who are studying; the ability to develop and implement scientific and applied projects in the field of health care; compliance with ethical principles when working with patients and laboratory animals; observe professional and academic integrity, bear responsibility for the reliability of the obtained scientific results.

4. Prerequisite of course

It is indicated information about discipline, basic skills, basic knowledge and educational results, which student need (to be registered) for successful study and mastering of the competencies of the discipline:

1. Normal anatomy (structure of organs and systems of human body)
2. Histology (microstructure of the tissues of the organs and structures of the organism)
3. Normal physiology (principles of functioning of organs and systems of the organism)
4. Biology (general patterns of live organisms structures)
5. Biophysics (biophysical patterns of vital processes in the organism, influence of physical factors on the structure and functions of living organisms)
6. Pathological anatomy (basics of pathological processes in the human body and general pathological changes of organs and tissues).
7. Pathological physiology (patterns of development of pathological processes).
8. General surgery (pathological conditions and diseases treated with the help of an operative method).

5. Programme learning outcomes

The list of education results

Code of education result	Content of education result	Link to the code of competence matrix
<i>Kn-1</i>	-the essence, fundamental features of layered structure of human organism;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Kn-2</i>	-types of body structure;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Kn-3</i>	-concept of norm, variants, anomalies;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Kn-4</i>	-concept of individual variability;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Kn-5</i>	-concept of constitution of the trunk;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Kn-6</i>	- layered structure of the abdominal wall;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Kn-7</i>	- features of the topographical anatomy of the abdomen;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Kn-8</i>	-topography of the peritoneum;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Kn-9</i>	- features of the topographical anatomy of the upper floor of the abdominal cavity;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Kn-10</i>	-porto-caval anastomoses;	<i>PRE 1, 2, 3, 4, 7, 8</i>
<i>Kn-11</i>	- features of the topographical anatomy of the lower floor of the abdominal cavity;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Kn-12</i>	-principles of laparoscopic operations;	<i>PRE 1, 2, 3, 4, 8, 9, 21, 22, 27</i>

<i>Kn-13</i>	- types of intestinal sutures;	<i>PRE 1, 2, 3, 9, 17, 21, 22, 27</i>
<i>Kn-14</i>	- requirements for intestinal sutures;	<i>PRE 1, 2, 3, 9, 17, 21, 22, 27</i>
<i>Kn-15</i>	- types of intestinal anastomoses;	<i>PRE 1, 2, 3, 9, 17, 21, 22, 27</i>
<i>Kn-16</i>	-principles of operations on the colon;	<i>PRE 1, 2, 3, 7, 8, 9, 17, 21, 22, 27</i>
<i>Kn-17</i>	-volumes and technique of colon resection;	<i>PRE 1, 2, 3, 4, 7, 8, 9, 17, 21, 22, 27</i>
<i>Kn-18</i>	- the technique of suturing a perforated stomach ulcer;	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 27</i>
<i>Kn-19</i>	- types of gastrostomies;	<i>PRE 1, 2, 3, 4, 8, 9, 14, 17, 21, 22, 27</i>
<i>Kn-20</i>	- gastrectomy technique;	<i>PRE 1, 2, 3, 4, 8, 9, 17, 21, 22, 27</i>
<i>Kn-21</i>	- technique of creation of gastroentero-anastomosis;	<i>PRE 1, 2, 3, 4, 8, 9, 17, 21, 22, 27</i>
<i>Kn-22</i>	- types of gastric resection and their modifications;	<i>PRE 1, 2, 3, 4, 8, 9, 17, 21, 22, 27</i>
<i>Kn-23</i>	-topography of the branches of the vagus nerve and innervation of the stomach;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Kn-24</i>	- splenectomy technique;	<i>PRE 1, 2, 3, 4, 8, 9, 14, 17, 21, 22, 27</i>
<i>Kn-25</i>	-principles of operations on the pancreas;	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 17, 21, 22, 27</i>
<i>Kn-26</i>	- types of liver resections;	<i>PRE 1, 2, 3, 4, 8, 9, 14, 17, 21, 22, 27</i>
<i>Kn-27</i>	- the technique of imposing bilio-digestive anastomoses;	<i>PRE 1, 2, 3, 4, 8, 9, 17, 21, 22, 27</i>
<i>Kn-28</i>	- types of cholecystectomies;	<i>PRE 1, 2, 3, 4, 8, 9, 17, 21, 22, 27</i>
<i>Kn-29</i>	- typical localization and ways of spread of purulent processes in the abdominal cavity;	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 21, 22, 27</i>
<i>Sk-1</i>	- solve situational problems from the main sections of the discipline;	<i>PRE 1, 2, 3, 21, 22, 27, 28</i>
<i>Sk-2</i>	- determine the features of the layered structure of the abdominal wall;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Sk-3</i>	- determine the structure and function of the organs of the abdominal cavity;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Sk-4</i>	- to differentiate the layers of the intestinal wall;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Sk-5</i>	- to be able to apply different types of intestinal sutures;	<i>PRE 1, 2, 3, 4, 9, 17, 21, 22, 27</i>
<i>Sk-6</i>	-to demonstrate the imposition of various types of intestinal sutures on animal cadaver material;	<i>PRE 1, 2, 3, 9, 17, 21, 22, 27</i>
<i>Sk-7</i>	-to demonstrate different types of intestinal anastomoses on animal cadaver material;	<i>PRE 1, 2, 3, 9, 17, 21, 22, 27</i>
<i>Sk-8</i>	- to determine the blood supply of the stomach and its clinical significance;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Sk-9</i>	- to determine the innervation of the stomach and its clinical significance;	<i>PRE 1, 2, 3, 21, 22, 27</i>

<i>Sk-10</i>	-to demonstrate different types of gastrostomies on animal cadaver material;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Sk-11</i>	- to demonstrate gastrectomy on animal cadaver material;	<i>PRE 1, 2, 3, 4, 9, 14, 17, 21, 22, 27</i>
<i>Sk-12</i>	- to demonstrate gastroenterostomy on animal cadaver material;	<i>PRE 1, 2, 3, 4, 9, 17, 21, 22, 27</i>
<i>Sk-13</i>	- to demonstrate suturing of gastric perforation on animal cadaver material;	<i>PRE 1, 2, 3, 4, 9, 17, 21, 22, 27</i>
<i>Sk-14</i>	- to demonstrate different types of stomach resections on animal cadaver material;	<i>PRE 1, 2, 3, 4, 9, 14, 17, 21, 22, 27</i>
<i>Sk-15</i>	-to determine the topography of the branches of the vagus nerve;	<i>PRE 1, 2, 3, 4, 9, 17, 21, 22, 27</i>
<i>Sk-16</i>	- to determine options for blood supply to the gallbladder and their clinical significance;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Sk-17</i>	- to determine the topography of the gall bladder;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Sk-18</i>	- to determine the anatomical areas of formation and confluence of bile ducts;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Sk-19</i>	- to demonstrate cholecystectomy technique on animal cadaver material;	<i>PRE 1, 2, 3, 21, 22, 27</i>
<i>Sk-20</i>	- to demonstrate hepatic sutures on a wet specimen;	<i>PRE 1, 2, 3, 4, 9, 17, 21, 22, 27</i>
<i>Sk-21</i>	- to demonstrate different types of gastrostomies on animal cadaver material;	<i>PRE 1, 2, 3, 4, 9, 14, 17, 21, 22, 27</i>
<i>GC-1</i>	-ability of abstract thinking, analysis and synthesis	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>GC-2</i>	-the ability to learn and master modern knowledge	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>GC-3</i>	-the ability to apply knowledge in practical situations	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>GC-4</i>	-knowledge and understanding of the subject area and understanding of professional activity	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>GC-5</i>	-the ability to adapt and act in a new situation	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>GC-6</i>	-the ability to make informed decisions	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>GC-7</i>	-ability to work in a team	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>GC-8</i>	-the ability for interpersonal interaction	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>GC-9</i>	-the ability to communicate in a foreign language	<i>PRE 27</i>
<i>GC-10</i>	-the ability to use information and communication technologies	<i>PRE 21, 22, 25, 27</i>
<i>GC-11</i>	-the ability to search, process and analyze information from various sources	<i>PRE 1, 2, 3, 21, 22, 25, 27, 28</i>

<i>GC-12</i>	-certainty and perseverance regarding the assigned tasks and assumed responsibilities	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>GC-13</i>	-awareness of equal opportunities and gender issues	<i>PRE 1, 2, 3, 21, 22, 25, 27, 28</i>
<i>GC-14</i>	-the ability to realize one's rights and responsibilities as a member of society, to be aware of the values of civil (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of a person and a citizen in Ukraine	<i>PRE 1, 2, 3, 9, 21, 22, 25, 27, 28</i>
<i>GC-15</i>	-the ability to preserve and multiply the 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, technology and technologies, to use different types and forms of motor activity for active recreation and leading a healthy lifestyle	<i>PRE 1, 2, 3, 9, 21, 22, 25, 27, 28</i>
<i>PC-1</i>	Ability to collect medical information about the patient and analyze clinical data	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 21, 22, 25, 27, 28</i>
<i>PC-2</i>	Ability to determine the necessary list of laboratory and instrumental studies and evaluate their results	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 21, 22, 25, 27, 28</i>
<i>PC-6</i>	Ability to determine the principles and nature of treatment and prevention of diseases	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>PC-7</i>	Ability to diagnose emergency conditions	<i>PRE 1, 2, 3, 4, 5, 8, 9, 14, 21, 22, 25, 27, 28</i>
<i>PC-8</i>	Ability to determine tactics and provide emergency medical care	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>PC-10</i>	Ability to perform medical manipulations	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>PC-11</i>	Ability to solve medical problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>PC-21</i>	Clearly and unambiguously convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists, in particular to students	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>PC-23</i>	Ability to develop and implement scientific and applied projects in the field of health care	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>PC-24</i>	Compliance with ethical principles when working with patients and laboratory animals	<i>PRE 1, 2, 3, 4, 5, 7, 8, 9, 14, 17, 21, 22, 25, 27, 28</i>
<i>PC-25</i>	Observance of professional and academic integrity, bear responsibility for the reliability of the obtained scientific results	<i>PRE 1, 2, 3, 21, 22, 25, 27, 28</i>
<i>AR-1</i>	- acquisition of practical skills in the use of surgical	<i>PRE 1, 2, 3, 9, 14,</i>

	instruments and suture material;	17, 21, 22, 27
AR-2	- the technique of sewing intestinal sutures;	PRE 1, 2, 3, 9, 14, 17, 21, 22, 27
AR-3	- technique of performing intestinal anastomoses;	PRE 1, 2, 3, 9, 17, 21, 22, 27
AR-4	- technique of operations on the small and large intestine;	PRE 1, 2, 3, 9, 17, 21, 22, 27
AR-5	- technique of operations on the stomach (gastrostomy, resection of the stomach);	PRE 1, 2, 3, 9, 17, 21, 22, 27
AR-6	- techniques of operations on the spleen;	PRE 1, 2, 3, 9, 14, 17, 21, 22, 27
AR-7	- technique of operations on the liver and gall bladder (cholecystectomy);	PRE 1, 2, 3, 9, 14, 17, 21, 22, 27

6. Format and scope of course

Format of course (indicate full-time, or external)	Full-time	
Education type	Count of hours	Count of groups
Lectures	-	23
Practical	26	23
Seminars	-	-
Out of class work	34	23

7. Topics and content of the course

Code of lesson type	Topic	Content of education	Code of educational result	Teacher
P-1 (practical lesson 1)	Intestinal sutures and anastomoses. Resection of the small intestine with "end-to-end", "side-to-side" and "end-to-side" anastomosis: indications, operation technique, complications. Life safety during wartime, provision of emergency medical aid, psychological aid, crisis management.	To determine the topography of various sections of the small and large intestine, their location in relation to the peritoneum and blood supply. Indications for resection of the small and large intestine. Identify the location of the layers of the small intestine. Classification of intestinal sutures. Requirements for intestinal sutures. Albert's double-row suture. Peculiarities of applying Lambert, Mateshuk, Joly (Cherney) and Schmiden sutures. Demonstrate the technique of applying an intestinal suture. Features of applying	Kn 1, 2, 3, 4, 5, 7, 8, 9, 11, 13, 14, 15, 16. Sk 1, 3, 4, 5, 6, 7, . GC 1-15. PC 6, 8, 10, 11, 21, 23, 24, 25. AR 1, 2, 3, 4.	Senior lecturer OreIM.G. Ass. prof. Rudnytska K.I.

		different types of intestinal anastomoses. Advantages and complications when creating intestinal anastomoses "end-to-end", "side-to-side", "end-to-side".		
P-2 (<i>practical lesson 2</i>)	Operations on the large intestine: resection of the large intestine, colostomy, surgery to create an artificial shunt, appendectomy. Indications, operation technique, complications.	Topographic anatomy of the colon. Blood supply of the large intestine and ways of venous outflow. Identify the location of the layers of the large intestine. Topography of the appendix, topographic and anatomical variants of location. Demonstrate the technique of applying an intestinal suture on the colon. Features of colon anastomosis and small-colon anastomoses. Appendectomy technique.	Kn 1, 2, 3, 4, 5, 7, 8, 11, 13, 14, 15, 16, 17. Sk 1, 3, 4, 5, 6, 7. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 2, 3, 4.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
P-3 (<i>practical lesson3</i>)	Gastrostomy according to the methods of Witzel, Toprover, Kader, indications, operation technique, complications.	Topographic anatomy of the stomach. Indications for performing gastrostomies. Peculiarities of performing gastrostomies according to Witzel, Toprover and Kader methods, technical features of their performance.	Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 19. Sk 1, 2, 3, 5, 6, 8, 9, 10, 11. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 2, 5.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
P-4 (<i>practical lesson 4</i>)	Gastrectomy. Gastroenterostomy. Indications, operation technique, complications.	Topography of the organs of the upper abdominal cavity. Topographic anatomy of the stomach. The layered structure of the stomach. Peculiarities of applying intestinal sutures to the stomach wall and creating a joint between the stomach and the small intestine. Indications, features and methods of gastrectomy and their complications. Indications and technique of gastroenterostomy.	Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 20, 21, 22, 23. Sk 1, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 2, 5.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
P-5 (<i>practical lesson 5</i>)	Perforating stomach ulcer. Complications and	Topographic anatomy of the stomach. Perforating gastric ulcer: features and	Kn 1, 2, 3, 4, 5, 7, 8, 9, 13, 14, 18, 21, 22,	Senior lecturer OrelM.G. Ass. prof.

	technique of operative treatment.	extent of surgical treatment.	23. Sk 1, 3, 5, 6, 7, 8, 9, 10, 14. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 2, 5.	Rudnytska K.I.
P-6 (practical lesson 6)	Stomach resection according to the Billrot I method, indications, technique of operations, modifications and complications.	Topographic anatomy of the stomach, features of the blood supply of the stomach. Surgical approaches to the stomach. Indications for gastric resection according to the method of Billroth I. Advantages and complications of stomach resection according to the method of Billroth I. Modifications and ways of preventing complications of gastric resections according to Billroth I.	Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 14, 16, 15, 22, 23, . Sk 1, 2, 3, 5, 6, 7, 8, 9, 10, 15, 16. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 2, 5.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
P-7 (practical lesson 7)	Stomach resection according to the Billrot II method, indications, technique of operations, modifications and complications.	Topographic anatomy of the stomach, features of the blood supply of the stomach. Surgical approaches to the stomach. Indications for resection of the stomach according to the method of Bilcrot II. Advantages and complications of gastric resection according to the Billrot II method. Modifications and methods of prevention of complications of gastric resections according to Bilkrot II.	Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 14, 16, 15, 22, 23, . Sk 1, 2, 3, 5, 6, 7, 8, 9, 10, 15, 16. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 2, 5.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
P-8 (practical lesson 8)	Vagotomy: classification, technique, complications. Operative treatment of pylorostenosis.	Features of innervation of the stomach and topography of the branches of the vagus nerve. Classification of vagotomy, execution technique and complications. Operative treatment of pylorostenosis: indications, types and technique of operations.	Kn 1, 2, 3, 4, 5, 6, 7, 9, 13, 14, 23, Sk 1, 3, 5, 6, 8, 9, 10, 16, . GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 2, 5.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
P-9 (practical lesson 9)	Operations on the spleen. Indications, operation technique, complications.	Topography and blood supply of the spleen. Splenectomy: indications, technique, complications.	Kn 1, 2, 3, 4, 5, 7, 8, 9, 10, 24. Sk 1, 3, 8. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 6.	Senior lecturer OrelM. G. Ass. prof. Rudnytska K.I.

P-10 (<i>practical lesson 10</i>)	Operations on the pancreas. Pancreatoduodenal resection. Indications, operation technique, complications.	Topography of the pancreas. Operations on the pancreas: indications and features of the surgical technique. Operative treatment of complicated pancreatitis. Pancreatoduodenal resection. Indications, operation technique, complications.	Kn 1, 2, 3, 4, 5, 7, 8, 9, 25, 27, 29. Sk 1, 3. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 7.	Senior lecturer Orel M.G. Ass. prof. Rudnytska K.I.
P-11 (<i>practical lesson 11</i>)	Principles of operations on the liver and biliary tract, indications, technique, operations, complications.	Features of the topography and blood supply of the liver, gall bladder and biliary tract. Liver resection: indications, classification and technique of liver sutures. Biliodigestive anastomoses. Operative interventions in gallstone disease and choledocholithiasis. Endoscopic methods of treatment of choledocholithiasis.	Kn 1, 2, 3, 4, 5, 7, 8, 9, 12, 26, 28,. Sk 1, 3, 17, 18, 19, 20, 21. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 7.	Senior lecturer Orel M.G. Ass. prof. Rudnytska K.I.
P-12 (<i>practical lesson 12</i>)	Antegrade cholecystectomy (from the bottom). Retrograde cholecystectomy (from the neck). Indications, operation technique, complications.	Features of the topography and blood supply of the liver and gall bladder. Principles of surgical interventions on the gall bladder and biliary tract. Advantages and complications of different types of cholecystectomies.	Kn 1, 2, 3, 4, 5, 7, 8, 9, 12, 26, 28,. Sk 1, 3, 17, 18, 19, 20, 21. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 7.	Senior lecturer Orel M.G. Ass. prof. Rudnytska K.I.
P-13 (<i>practical lesson 13</i>)	Purulent processes of the abdominal cavity: localization, ways of spreading, principles of treatment.	Topographic anatomy of the peritoneum. Ligaments, bursae, sinuses and nooks and crannies of the abdominal cavity. Typical localization and causes of purulent processes in the abdominal cavity. Ways of spread of purulent processes in the abdominal cavity. Principles of surgical treatment of purulent processes in the abdominal cavity.	Kn 1, 2, 3, 4, 5, 7, 8, 9, 11, 29. Sk 1, 2, 3. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1.	Senior lecturer Orel M.G. Ass. prof. Rudnytska K.I.
OCW-1 (<i>out of class work 1</i>)	Individual independent work of students on the topic (literature review) "Laparoscopic operations on the intestine".	Indications for laparoscopic operations on the small and large intestine and their complications. Laparoscopic approaches in operations on the small and large intestine. Technical features of performing resections and anastomoses. Laparoscopic	Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15. Sk 1, 2, 3, 4, 5, 6, 7. GC 1-15. PC 1, 2, 6, 10, 21, 23, 24, 25. AR 1, 2, 3.	Senior lecturer Orel M.G. Ass. prof. Rudnytska K.I.

		appendectomies: advantages, disadvantages and performance technique.		
OCW-2 (<i>out of class work 2</i>)	Individual independent work of students on the topic (literature review) "Endoscopic colon interventions"	Fibrocolonoscopy technique. Diagnostic value of fibrocolonoscopy. Possibilities of biopsy and removal of colon tumors by minimally invasive methods.	Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17. Sk 1, 2, 3, 4, 5, 6, 7. GC 1-15. PC 1, 2, 6, 10, 21, 23, 24, 25. AR 1, 2, 3.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
OCW-3 (<i>out of class work 3</i>)	Individual independent work of students on the topic (literature review) "Endoscopic interventions on the stomach and duodenum"	Technique of esophagogastroduodenoscopy. Diagnostic value. Possibilities of biopsy and removal of tumors. Endoscopic papillotomy: indications, performance technique, complications.	Kn 1, 2, 3, 4, 5, 7. Sk 1, 3, 8. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 4, 5.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
OCW-4 (<i>out of class work 4</i>)	Individual independent work of students on the topic (literature review) "Gastrointestinal bleeding. Principles of surgical treatment".	Causes of gastrointestinal bleeding. Methods of operative treatment. Methods of endoscopic stopping of bleeding from varicose veins of the esophagus and erosive bleeding of the stomach and duodenum.	Kn1, 2, 3, 4, 5, 7, 9, 10, 11, 16, . Sk1, 3, 8. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 4, 5.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
OCW-5 (<i>out of class work 5</i>)	Individual independent work of students on the topic (literature review) "Diseases of the operated stomach".	Complications of surgical interventions on the stomach and duodenum: causes of their occurrence. Postgastroresection syndromes. Prevention and correction methods.	Kn 1, 2, 3, 4, 5, 7, 9, 13, 14, 15, 18, 19, 20, 21, 22, 23, . Sk 1, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 5.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
OCW-6 (<i>out of class work 6</i>)	Individual independent work of students on the topic (literature review) "Biliodigestive anastomoses"	Performance technique, indications and complications in applying biliodigestive anastomoses.	Kn 1, 2, 3, 4, 5, 7, 8, 9, 11, 13, 14, 15, 25, 26, 27, 28, 29. Sk 1, 3, 4, 5, 6, 7, 18, 19, 20, 21. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 2, 3, 7.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
OCW-7 (<i>out of class work 7</i>)	Individual independent work of students on the topic (literature review) "Portal	Anatomy of the portal system. Portocaval anastomoses. Causes of portal hypertension, complications and methods of operative and	Kn 1, 2, 3, 4, 5, 7, 9, 10, 11. Sk 1, 3, 8. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23,	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.

	hypertension. Portocaval anastomoses."	minimally invasive treatment.	24, 25. AR 1.	
OCW-8 (<i>out of class work 8</i>)	Individual independent work of students on the topic (literature review) "Laparoscopic operations on the liver and biliary tract".	Principles and advantages of performing laparoscopic operations. Laparoscopic interventions on abdominal organs. Technical features of laparoscopic operations on the liver and biliary tract.	Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14, 15, 26, 27, 28. Sk 1, 2, 3, 17, 18, 1, 20, 21. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 7.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
OCW-9 (<i>out of class work 9</i>)	Individual independent work of students on the topic (literature review) "Methods of drainage of the abdominal cavity".	Topography of the peritoneum. Typical localization and distribution of purulent processes in the abdominal cavity. Methods of operative treatment of peritonitis. Abdominal drainage methods.	Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 29. Sk 1, 2, 3. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 23, 24, 25. AR 1.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.

It is necessary to present the system of organization of classes, the use of interactive methods, educational technologies used for the transfer and assimilation of knowledge, skills and abilities.

8. Verification of education results

Continuous control

Performed at educational lessons and has the aim of control of students studies of the educational materials (it's necessary to describe form of educational continuous control performance at the educational classes). Forms of assessment of current educational activities have to be standard and have to include control of theoretical and practical preparation. Final mark for the continuous educational activity, are given according 4-th stage (national) scale.

Code of educational results	Code of lesson type	Method of educational results verification	Criteria of crediting
Kn 1, 2, 3, 4, 5, 7, 8, 9, 11, 13, 14, 15, 16. Sk 1, 3, 4, 5, 6, 7, . GC 1-15. PC 6, 8, 10, 11, 21, 23, 24, 25. AR 1, 2, 3, 4.	P-1	Oral questioning (student receives final mark "3" (satisfactory), "4" (good) or "5" (excellent) according 4 pointed national scale. Testing control in 10 test (1 test – 0,5 points). Practical work ("credited" – 1 point, "noncredited" – 0 points).	After implementation of control tasks student receives final mark "3" (satisfactory), "4" (good) or "5" (excellent) according 4 pointed national scale.
Kn 1, 2, 3, 4, 5, 7, 8, 11, 13, 14, 15, 16, 17. Sk 1, 3, 4, 5, 6, 7. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 2, 3, 4.	P-2	Oral questioning (student receives final mark "3" (satisfactory), "4" (good) or "5" (excellent) according 4 pointed national scale. Testing control in 10 test (1 test – 0,5 points). Practical work ("credited" – 1 point, "noncredited" – 0 points).	After implementation of control tasks student receives final mark "3" (satisfactory), "4" (good) or "5" (excellent) according 4 pointed national scale.
Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 19. Sk 1, 2, 3, 5, 6, 8, 9, 10, 11. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 2, 5.	P-3	Oral questioning (student receives final mark "3" (satisfactory), "4" (good) or "5" (excellent) according 4 pointed national scale. Testing control in 10 test (1 test – 0,5 points). Practical work ("credited" – 1 point, "noncredited" – 0 points).	After implementation of control tasks student receives final mark "3" (satisfactory), "4" (good) or "5" (excellent) according 4 pointed national scale.
Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 14, 15,	P-4	Oral questioning (student receives final mark "3" (satisfactory), "4" (good) or	After implementation of control tasks student

20, 21, 22, 23. Sk 1, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 2, 5.		“5” (excellent) according 4 pointed national scale. Testing control in 10 test (1 test – 0,5 points). Practical work (“credited” – 1 point, “noncredited” – 0 points).	receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale.
Kn 1, 2, 3, 4, 5, 7, 8, 9, 13, 14, 18, 21, 22, 23. Sk 1, 3, 5, 6, 7, 8, 9, 10, 14. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 2, 5.	P-5	Oral questioning (student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale. Testing control in 10 test (1 test – 0,5 points). Practical work (“credited” – 1 point, “noncredited” – 0 points).	After implementation of control tasks student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale.
Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 14, 16, 15, 22, 23, . Sk 1, 2, 3, 5, 6, 7, 8, 9, 10, 15, 16. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 2, 5.	P-6	Oral questioning (student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale. Testing control in 10 test (1 test – 0,5 points). Practical work (“credited” – 1 point, “noncredited” – 0 points).	After implementation of control tasks student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale.
Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 14, 16, 15, 22, 23, . Sk 1, 2, 3, 5, 6, 7, 8, 9, 10, 15, 16. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 2, 5.	P-7	Oral questioning (student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale. Testing control in 10 test (1 test – 0,5 points). Practical work (“credited” – 1 point, “noncredited” – 0 points).	After implementation of control tasks student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale.
Kn 1, 2, 3, 4, 5, 6, 7, 9, 13, 14, 23, Sk 1, 3, 5, 6, 8, 9, 10, 16, . GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 2, 5.	P-8	Oral questioning (student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale. Testing control in 10 test (1 test – 0,5 points). Practical work (“credited” – 1 point, “noncredited” – 0 points).	After implementation of control tasks student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale.
Kn 1, 2, 3, 4, 5, 7, 8, 9, 10, 24. Sk 1, 3, 8. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 6.	P-9	Oral questioning (student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale. Testing control in 10 test (1 test – 0,5 points). Practical work (“credited” – 1 point, “noncredited” – 0 points).	After implementation of control tasks student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale.
Kn 1, 2, 3, 4, 5, 7, 8, 9, 25, 27, 29. Sk 1, 3. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 7.	P-10	Oral questioning (student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale. Testing control in 10 test (1 test – 0,5 points). Practical work (“credited” – 1 point, “noncredited” – 0 points).	After implementation of control tasks student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale.
Kn 1, 2, 3, 4, 5, 7, 8, 9, 12, 26, 28,. Sk 1, 3, 17, 18, 19, 20, 21. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 7.	P-11	Oral questioning (student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale. Testing control in 10 test (1 test – 0,5 points). Practical work (“credited” – 1 point, “noncredited” – 0 points).	After implementation of control tasks student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale.
Kn 1, 2, 3, 4, 5, 7,	P-12	Oral questioning (student receives final	After implementation of

8, 9, 12, 26, 28., Sk 1, 3, 17, 18, 19, 20, 21. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 7.		mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale. Testing control in 10 test (1 test – 0,5 points). Practical work (“credited” – 1 point, “noncredited” – 0 points).	control tasks student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale.
Kn 1, 2, 3, 4, 5, 7, 8, 9, 11, 29. Sk 1, 2, 3. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1.	P-13	Oral questioning (student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale. Testing control in 10 test (1 test – 0,5 points). Practical work (“credited” – 1 point, “noncredited” – 0 points).	After implementation of control tasks student receives final mark “3” (satisfactory), “4” (good) or “5” (excellent) according 4 pointed national scale.
Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15. Sk 1, 2, 3, 4, 5, 6, 7. GC 1-15. PC 1, 2, 6, 10, 21, 23, 24, 25. AR 1, 2, 3.	OCW-1	Writing short literature review on topic. Oral questioning (“credited”, “noncredited”).	After implementation of tasks student receives final mark (“credited”, “noncredited”).
Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17. Sk 1, 2, 3, 4, 5, 6, 7. GC 1-15. PC 1, 2, 6, 10, 21, 23, 24, 25. AR 1, 2, 3.	OCW-2	Writing short literature review on topic. Oral questioning (“credited”, “noncredited”).	After implementation of tasks student receives final mark (“credited”, “noncredited”).
Kn 1, 2, 3, 4, 5, 7. Sk 1, 3, 8. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 4, 5.	OCW-3	Writing short literature review on topic. Oral questioning (“credited”, “noncredited”).	After implementation of tasks student receives final mark (“credited”, “noncredited”).
Kn1, 2, 3, 4, 5, 7, 9, 10, 11, 16, . Sk1, 3, 8. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 4, 5.	OCW-4	Writing short literature review on topic. Oral questioning (“credited”, “noncredited”).	After implementation of tasks student receives final mark (“credited”, “noncredited”).
Kn 1, 2, 3, 4, 5, 7, 9, 13, 14, 15, 18, 19, 20, 21, 22, 23., Sk 1, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 5.	OCW-5	Writing short literature review on topic. Oral questioning (“credited”, “noncredited”).	After implementation of tasks student receives final mark (“credited”, “noncredited”).
Kn 1, 2, 3, 4, 5, 7, 8, 9, 11, 13, 14, 15 25, 26, 27, 28, 29. Sk 1, 3, 4, 5, 6, 18, 19, 20, 21. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 2, 3, 7.	OCW-6	Writing short literature review on topic. Oral questioning (“credited”, “noncredited”).	After implementation of tasks student receives final mark (“credited”, “noncredited”).
Kn 1, 2, 3, 4, 5, 7, 9, 10, 11. Sk 1, 3, 8.	OCW-7	Writing short literature review on topic. Oral questioning (“credited”, “noncredited”).	After implementation of tasks student receives final mark (“credited”,

GC 1-15. PC 1, 2, 67, 8, 10, 11, 21, 23, 24, 25. AR 1.			“noncredited”).
Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14, 15, 26, 27, 28. Sk 1, 2, 3, 17, 18,1, 20, 21. GC 1-15. PC 1, 2, 6, 10, 11, 21, 23, 24, 25. AR 1, 7.	OCW-8	Writing short literature review on topic. Oral questioning (“credited”, “noncredited”).	After implementation of tasks student receives final mark (“credited”, “noncredited”).
Kn 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 29. Sk 1, 2, 3. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 23, 24, 25. AR 1.	OCW-9	Writing short literature review on topic. Oral questioning (“credited”, “noncredited”).	After implementation of tasks student receives final mark (“credited”, “noncredited”).
Final control			
General evaluation system	Credit		
Scales of evaluation	Traditional 4 pointed scale, multipointed (200-pointed) scale, range scale of ECTS		
Conditions of admission to final control	Student attended all the practical (laboratory and seminary) lessons and received not less then 120 points for the current continuous learning success.		
Type of final control	Method of final control	Criteria of crediting	
Credit	Topography of the peritoneum. Typical localization and distribution of purulent processes in the abdominal cavity. Methods of operative treatment of peritonitis. Abdominal drainage methods.	The maximum number of points is 200. The minimum number of points is 120	
Criteria of exam/differentiated credit evaluation			
Not performed			
The maximum number of points that a student can score for the current educational activity while studying the discipline is 200 points. The minimum number of points that a student must score for the current educational activity in order to enroll in the discipline is 120 points. The calculation of the number of points is carried out on the basis of the grades received by the student on a 4-point (national) scale during the study of the discipline, by calculating the arithmetic mean (CA), rounded to two decimal places. The obtained value is converted into points on a multi-point scale as follows: $X = \frac{CA \times 200}{5}$			
9. Politics of course			
The policy of the academic discipline is determined by the system of requirements for the student when studying "Clinical Anatomy and Operative Surgery" and is based on the principles of academic integrity. Students are explained the value of acquiring new knowledge, academic norms that must be followed, why they are important, what academic integrity is, what its values and functions are, how students can contribute to its development by their actions; the essence, peculiarities and reasons for the inadmissibility of academic plagiarism are explained, students of higher education are encouraged to independently perform educational tasks, correctly refer to sources of information in case of borrowing ideas, statements, and information. The policy of the academic discipline is in 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 for the academic 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			

<p>methods and sources of information.</p> <p>Compliance with the principles and norms of ethics and deontology by students of higher education:</p> <ul style="list-style-type: none"> • actions in professional and educational situations from the standpoint of academic integrity and professional ethics and deontology; • awareness of the importance of examples of human behavior in accordance with the norms of academic integrity and medical ethics. <p>Attendance of classes by students of higher education:</p> <ul style="list-style-type: none"> • Attendance at all classes is mandatory for the purpose of current and final assessment of knowledge (unless there is a valid reason).
10. Literature
<p><u>Obligatory</u></p> <ol style="list-style-type: none"> 1. Френк Неттер. Атлас анатомії людини. Видавничий дім «НАУТИЛІУС», 2004 р. 2. O.V.Tsyhykalo. Topographical anatomy and operative surgery. Textbook for english-speaking foreign students. Vinnytsia, Nova Knyha Publishers, 2011. <p><u>Additional</u></p> <ol style="list-style-type: none"> 1. Bernard C. Illustrated Manual of Operative Surgery and Surgical Anatomy. - 1991. 2. Pemberton L.B. Workbook of Surgical Anatomy. - 1990. 3. Gliedman M.L. Atlas of Surgical Techniques. - New York etc., McGraw - Hill. - 1990. 4. Sabiston D.C. Atlas of General Surgery. - Philadelphia etc., Saunders. - 1994. 5. Chassin J.L. Operative Strategy in General Surgery. New York etc., Springer. - 1994.
11. Equipment, material-technical and programed procuring of discipline/Course
<p>Methodical directions for the students and teachers, workbooks, tables, phantoms, schemes, educational videos, surgical instruments, suturing material dry preparations, organs and tissues of animals.</p>
12. Additional information
<p>Lessons of students scientific circle of operative surgery and topographical anatomy department are carried out according timetable in educational rooms of the department for the students of second, third, fourth, fifth and sixth courses of medical and dentistry departments of Ukrainian and English-medium departments. The head of the scientific circle senior lecturer Orel M. G.</p>

Sylabus compilers

Ass prof., PhD Rudnytska Kh. I.	(Signature)
Senior lecturer, Orel M. G. .	(Signature)
Head of the department, Prof. Masna Z. Z. .	(Signature)