

Syllabus of the discipline "Clinical anatomy and operative surgery" **1.** General information Name of faculty Medical 22 Health care, 222 Medicine, second (master's) level of high **Educational programe** (brunch, speciallity, education, daily form level of high education, form of education) Educational year 2022-2023 Name of discipline, code (e-**Clinical anatomy and operative surgery** (https://new.meduniv.lviv.ua/kafedry/kafedra-operatyvnoyi-hirurgiyi-zmail on the site of Danylo topografichnoyu-anatomiyeyu/) Halyckyy LNMU) **Operative surgery and topographic anatomy**, +380322755931, Department (name, adress, kaf_operative_surgey@meduniv.lviv.ua *telephone e-mail)* Professor Masna Zoryana Zenoviivna masna.zz@gmail.com Department leader (contact email) Second year of study The year of study (year, of *realisation of discipline study*) Semester (semester at what IV semester realisation of discipline *education is performed*) Obligatory Type of discipline/module (*obligatory/of choice*) Department leader, professor Masna Zoryana Zenoviivna Teachers (names, surnames, (masna.zz@gmail.com) scientific degree and ranks of Ass. prof. PhD, Haba Marianna Yevgenivna (gabamarianna@gmail.com) teachers, who teach the Ass. prof. PhD, Rudnytska Khrystyna Ihorivna (khrystynapavliv@gmail.com) *discipline, contact e-mail)* 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 (availability of the discipline for the students *within the program Erasmus+)* Department leader, professor Masna Zoryana Zenoviivna Person, who is responsable for (masna.zz@gmail.com) sylabus (a person, who has to Ass. prof. PhD, Rudnytska Khrystyna Ihorivna (<u>khrystynapavliv@gmail.com</u>) give commentary on syllabus Senior lecturer, Orel Mariya Hlibivna (orelmasha@ukr.net) *contact e-mail*) Count of credits ECTS 3 Count of hours 90 (Lectures 10, practical classes 34, out of class work 46) (lectures/practical classes/out *f* class work of students) Education language Ukrainian, English Information about According schedule consultations Address, telephone and Absent regulations of work of clinical base ... 2. Short annotation to the course

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. Advantage is mastering of the practical skills of primary surgical technique and more difficult surgical manipulations on cadaveric animal material and phantoms.

The course is including lectures segment (10 hrs.), practical classes (34 hrs.) and out of class work of students (46 hrs. at out of class time), that allows to provide theoretical (knowledge) and practical (skills and competences) education.

3. Purposes and goals of course

 Purpose of course: «Clinical anatomy and operative surgery» derived from the purpose of educational-professional program of education of medical university graduates and governed by the contents of systematic knowledge and skills, what medical specialist has to master. Knowledge, what students are mastering at educational discipline "Clinical anatomy and operative surgery" are basic for the block of disciplines, that provide nature-scientifical (block NS) and professionalpractical (PP) education.

2. Goal of education:

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, traumatology, surgical dentistry, neurosurgery, anaesthesiology and intensive care and other educational disciplines, 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.

3. <u>Competencies and results of education:</u>

- *general:* basics for students studies of clinical anatomy and operative surgery, histology, normal physiology, propedeutics of clinical disciplines.

-special (professional and subject): formation of the skills of application of knowledge in clinical anatomy and operative surgeryin the process of next studies of all the clinical disciplines and next professional activity.

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)

5. Programme learning outcomes			
	The list of education results		
Code of education result	Link to the code of		
		competence matrix	
Kn-1	-the essence, fundamental features of lyered	PRE 1, 2, 3, 4, 5, 21, 22,	
	structure of human organism;	25, 27	
Kn-2	-features of structure of the head;	PRE 1, 2, 3, 4, 7, 21, 22,	
		25, 27	

Kn-3	-features of topographic anatomy of the neck;	PRE 1, 2, 3, 4, 7, 21, 22, 25, 27
Kn A	features of topographic anatomy of the chest:	PRE 1 2 3 4 7 21 22
	-reatures of topographic anatomy of the cliest,	25 27
Kn 5	concept of norm variants anomalies:	DPE 1 2 3 4 5 7 8
Kn-J	-concept of norm, variants, anomalies,	$\begin{array}{c} 1 \text{ KL } 1, 2, 3, 4, 3, 7, 0, \\ 21 \ 22 \ 25 \ 27 \end{array}$
V. 6	concent of individual variability	21, 22, 23, 27
K <i>n</i> -0	-concept of individual variability;	PRE 1, 2, 3, 4, 3, 7, 0,
<i>V</i> 7		21, 22, 23, 27 DDE 1, 2, 2, 4, 5, 7, 9
Kn-/	-concept of constitution of the chest;	PKE 1, 2, 3, 4, 5, 7, 8,
		21, 22, 23, 27
Kn-8	-features of topographic anatomy of abdomen;	PRE 1, 2, 3, 4, 7, 21, 22,
		25, 27
Kn-9	-types of body structure;	PRE 1, 2, 3, 4, 5, 7, 8,
		21, 22, 25, 27
Kn-10	-features of topographic anatomy of lumbar	PRE 1, 2, 3, 4, 7, 21, 22,
	region and retroperitoneal space;	25, 27
Kn-11	-features of topographic anatomy of small	PRE 1, 2, 3, 4, 7, 21, 22,
	pelvice;	25, 27
Kn-12	-features of topographic anatomy of upper	PRE 1, 2, 3, 4, 7, 21, 22,
	extremity;	25, 27
Kn-13	-features of topographic anatomy of lower	PRE 1, 2, 3, 4, 7, 21, 22,
	extremity;	25, 27
Sk-1	- to confirm situational tasks from the main	PRE 1, 2, 3, 4, 5, 7, 8, 9,
	parts of discipline:	14, 21, 22, 25, 27, 28
Sk-2	to define the features of lavered structure of the	PRF 1 2 3 1 7 21 22
58-2	areas of the head:	25 27
Sh 3	to be able to de debridement of wounds of	23, 27
3K-3	soull:	$\begin{array}{c} I \text{ KL } 1, \ 3, \ 4, \ 5, \ 7, \ 6, \ 9, \\ 14 \ 17 \ 25 \ 27 \ 28 \end{array}$
Sh 4	to demonstrate the enerthesis on the mondible	14, 17, 23, 27, 20
5K-4	-to demonstrate the anestnesia of the manufole	$\begin{array}{c} FKE \ 1, \ 2, \ 3, \ 4, \ 7, \ 0, \ 9, \\ 14 \ 17 \ 21 \ 22 \ 25 \ 27 \end{array}$
<u> </u>	and maxima of fantom;	14, 17, 21, 22, 23, 27
5K-5	-to differentiare external and internal caroud	PKE 1, 2, 3, 4, 7, 21, 22,
	artery in the triangle;	23, 27
56-0	-to define the lingual artery in Pyrogov's	PRE 1, 2, 3, 4, 7, 21, 22,
	triangle;	25, 27
Sk-7	-to demonstrate thoracic wall structure on dry	PRE 1, 2, 3, 4, 7, 21, 22,
<u> </u>	preparation;	25, 27
Sk-8	-to define structure and function of thoracic	PRE 1, 2, 3, 4, 7, 21, 22,
<u> </u>	cavity organs;	25, 27
Sk-9	-to define location and structure of cava veins;	PRE 1, 2, 3, 4, 7, 21, 22,
~1. 1.0		25, 27
Sk-10	-to be able to perform puncture of pleural space;	PRE 1, 2, 3, 4, 5, 7, 8, 9,
		14, 17, 25, 27, 28
Sk-11	-to define structure and function of abdominal	PRE 1, 2, 3, 4, 7, 21, 22,
	organs;	25, 27
Sk-12	-to differentiate topography of periferial nerve	PRE 1, 2, 3, 4, 7, 21, 22,
	and vessel brunches of the trunk;	25, 27
Sk-13	-to demonstrate intestinal sutures application on	PRE 1, 2, 3, 4, 5, 7, 8, 9,
	wet preparations;	17, 25, 27, 28
Sk-14	-to demonstrate suturing of liver on wet	PRE 1, 2, 3, 4, 5, 7, 8, 9,
	preparation;	17, 25, 27, 28
Sk-15	-to demonstrate paranephral block on a	PRE 1, 2, 3, 4, 5, 7, 8, 9,
	phantom;	17, 25, 27, 28
Sk-16	-to define anatomic areas of lymphatic duct	PRE 1, 2, 3, 4, 7, 21, 22,

	termination into the venous angle;	25, 27
Sk-17	-to define structure and function of mall pelvice	PRE 1. 2. 3. 4. 7. 21. 22.
	organs:	25. 27
Sk-18	- to demonstrate catheterisation of urinary	PRE 1. 2. 3. 4. 5. 7. 8. 9.
~	bludder on phantom:	17. 25. 27. 28
Sk-19	-to demonstrate bones and muscles on dry	PRE 1. 2. 3. 4. 7. 21. 22.
	preparation of pelvice:	25. 27
Sk-20	-to define structure and function of the upper	PRE 1 2 3 4 7 21 22
	extremity:	25. 27
Sk-21	-to demonstrate on dry preparations the structure	PRE 1. 2. 3. 4. 7. 21. 22.
517 21	of upper extremity joints:	25. 27
Sk-22	- to demonstrate veinpuncture on the upper	PRE 1 2 3 7 8 9 14
517 22	extremity fantom:	17. 25. 27. 28
Sk-23	-to demonstrate on wet preparations the layered	PRE 1, 2, 3, 4, 7, 21, 22
517 20	structure of lower lymb:	25. 27
Sk-24	-to analise features of venous vessel topography:	PRE 1. 2. 3. 4. 7. 21. 22.
510 2 1	to unumbe reactives of venous vesser topography,	25. 27
Sk-25	-to analise structure and clinical value of venous	PRE 1 2 3 4 7 21 22
	anastomosis.	25. 27
GC-1	-ability of abstract thinking analysis and	PRE 1 2 3 4 5 7 8 9
001	synthesis	14 17 21 22 25 27 28
GC-2	-the ability to learn and master modern	PRE 1 2 3 4 5 7 8 9
002	knowledge	14 17 21 22 25 27 28
GC-3	-the ability to apply knowledge in practical	PRE 1 2 3 4 5 7 8 9
005	situations	14 17 21 22 25 27 28
GC-4	-knowledge and understanding of the subject	PRF 1 2 3 4 5 7 8 9
	area and understanding of professional activity	14 17 21 22 25 27 28
GC-5	-the ability to adapt and act in a new situation	PRE 1 2 3 4 5 7 8 9
005	the denity to deupt and det in a new situation	14 17 21 22 25 27 28
GC-6	-the ability to make informed decisions	PRE 1 2 3 4 5 7 8 9
	the domey to make informed decisions	14. 17. 21. 22. 25. 27. 28
<i>GC-7</i>	-ability to work in a team	PRE 1. 2. 3. 4. 5. 7. 8. 9.
		14. 17. 21. 22. 25. 27. 28
GC-8	-the ability for interpersonal interaction	PRE 1. 2. 3. 4. 5. 7. 8. 9.
		14. 17. 21. 22. 25. 27. 28
GC-9	-the ability to communicate in a foreign	PRE 27
	language	
GC-10	-the ability to use information and	PRE 21, 22, 25, 27
	communication technologies	, , , , , , , , , , , , , , , , , , ,
GC-11	-the ability to search, process and analyze	PRE 1. 2. 3. 21. 22. 25.
0011	information from various sources	27. 28
GC-12	-certainty and perseverance regarding the	PRE 1. 2. 3. 4. 5. 7. 8. 9.
	assigned tasks and assumed responsibilities	14, 17,21, 22, 25, 27, 28
GC-13	-awareness of equal opportunities and gender	PRE 1. 2. 3. 21. 22. 25.
issues		27. 28
GC-14	-the ability to realize one's rights and	PRE 1, 2, 3, 9, 21, 22.
	responsibilities as a member of society, to be	25. 27.28
	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	
GC-15	-the ability to preserve and multiply the moral.	PRE 1, 2, 3, 9, 21, 22,
	cultural, scientific values and achievements of	25. 27. 28

	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	
PC-1	Ability to collect medical information about the	PRF 1 2 3 4 5 7 8 9
	patient and analyze clinical data	21. 22. 25. 27. 28
PC-2	Ability to determine the necessary list of	PRE 1 2 3 4 5 7 8 9
	laboratory and instrumental studies and evaluate	21 22 25 27 28
	their results	21, 22, 23, 27, 20
PC-6	Ability to determine the principles and nature of	PRF 1 2 3 4 5 7 8 9
10-0	treatment and prevention of diseases	$1 \land 17 \ 21 \ 22 \ 25 \ 27 \ 28$
PC 7	A bility to diagnose emergency conditions	$\begin{array}{c} 14, 17, 21, 22, 23, 27, 20 \\ \hline \mathbf{D}\mathbf{P}\mathbf{F} \ 1 \ 2 \ 2 \ 4 \ 5 \ 8 \ 0 \end{array}$
<i>I</i> C-7	Ability to diagnose emergency conditions	I KL 1, 2, 3, 4, 3, 6, 9, 14 21 22 25 27 28
	Ability to determine testing and provide	$\begin{array}{c} 14,21,\ 22,\ 23,\ 27,\ 20 \\ \hline \\ \mathbf{D}\mathbf{D}\mathbf{F} \ 1 \ 2 \ 2 \ 4 \ 5 \ 7 \ 8 \ 0 \\ \hline \end{array}$
<i>I</i> C-0	Ability to determine tactics and provide	I RE 1, 2, 3, 4, 3, 7, 0, 9,
DC 10	Ability to perform medical manipulations	14, 17, 21, 22, 23, 27, 20 DDE 1, 2, 2, 4, 5, 7, 9, 0
PC-10	Ability to perform medical manipulations	PKE 1, 2, 3, 4, 3, 7, 8, 9,
DC 11		14, 17, 21, 22, 23, 27, 28 DDE 1, 2, 2, 4, 5, 7, 9, 0
PC-11	Ability to solve medical problems in new or	PRE 1, 2, 3, 4, 5, 7, 8, 9,
	unfamiliar environments in the presence of	14, 17, 21, 22, 23, 27, 28
	incomplete or limited information, taking into	
	account aspects of social and ethical	
DCAL	responsibility	
PC-21	Clearly and unambiguously convey one's own	PRE 1, 2, 3, 4, 5, 7, 8, 9,
	knowledge, conclusions and arguments on	14, 17, 21, 22, 25, 27, 28
	health care problems and related issues to	
	specialists and non-specialists, in particular to	
2.2.2.2	students	
PC-23	Ability to develop and implement scientific and	PRE 1, 2, 3, 4, 5, 7, 8, 9,
	applied projects in the field of health care	14, 17, 21, 22, 25, 27, 28
<i>PC-24</i>	Compliance with ethical principles when	PRE 1, 2, 3, 4, 5, 7, 8, 9,
	working with patients and laboratory animals	14, 17, 21, 22, 25, 27, 28
PC-25	Observance of professional and academic	PRE 1, 2, 3, 21, 22, 25,
	integrity, bear responsibility for the reliability of	27, 28
	the obtained scientific results	
AR-1	-mastering the practical skills of surgical	PRE 1, 2, 3, 9, 14, 17,
	instruments and suturing material use;	21, 22, 25, 27
AR-2	-technique of the operations on trachea	PRE 1, 2, 3, 4, 5, 7, 8, 9,
	(tracheotomy, conicotomy);	14, 17, 21, 22, 25, 27, 28
AR-3	-definition of the conditional line on the surface	PRE 1, 2, 3,21, 22, 25,
	of the chest;	27
AR-4	-technique of the operative procedures on	PRE 1, 2, 3, 4, 5, 7, 8, 9,
	stomach (gastrostomy, stomach resections));	17, 21, 22, 25, 27, 28
AR-5	-technique of the operations on small and large	PRE 1, 2, 3, 4, 5, 7, 8, 9,
	intestine;	17, 21, 22, 25, 27, 28
AR-6	-technique of the operations on liver and gall	PRE 1, 2, 3, 4, 5, 7, 8, 9,
	bladder (cholecystectomy);	17, 21, 22, 25, 27, 28
AR-7	-technique of the operations on the vessels and	PRE 1, 2, 3, 4, 5, 7, 8, 9,
	nerves;	14, 17, 21, 22, 25, 27, 28
AR-8	- technique of the operations on muscles and	PRE 1, 2, 3, 4, 5, 7, 8, 9.
	tendons;	17, 21, 22, 25, 27, 28
AR-9	-technique of the operations on the extremities	PRE 1, 2, 3, 4, 5, 7, 8, 9.

(amputations and exarticulations).				17, 21, 22, 25, 27, 28	
	6. Format and scope of course				
Format of course (<i>indicate full-time</i> , or <i>external</i>)		Full-time			
Education tipe			Count of hours		Count of groups
Lectures			10		37
Practical			34		37
Seminars			-		- 27
Out of class work			40		57
		7. Topic	es and content of the c	course	
type		Торіс	education	educational result	Teacher
L-1 (lecture-1)	Introd topogi and o Classi anaest operat Princi operat	uction to the raphical anatomy perative surgery. fication of hesia; types of ive procedures. ples of the ions.	Classification of anesthesia; types of the operative treatments. Principles of the operations.	Kn 1, 5, 6, 9. Sk 1. GC 1-15 PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25 AR 1.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
L-2 lecture -2)	Topog operat cerebr head. structu Scull Topog area Fascia spaces Surgic wound Incisio proces Conce proceo parana Surgic the ne the treatm neck.	raphy and ive surgery of al part of the Leyered ure of calvaria. trepannings. graphy of facial of the head. and cellular of the face. cal treatment of is of the face. ons at purulent eses on the face. pt of operative lures on sal sinuses. cal anatomy of ck. Principles of operative ents on the	Leyered structure of calvaria. Scull trepannings. Fascia and cellular spaces of the face.Debridement of the facial wounds. Insisions at purulent processes of the face. Concept about operative procedures on paranasal sinuses. Topography of areas, cellular spaces, neurovascular bundles and organs of the neck. Principles of the operative procedures on the neck.	Kn 1, 2, 3, 5, 6, 9. Sk 1, 2, 3, 4, 5, 6, 16. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 2, 7.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
L-3 lecture -3)	Topog anator surger wall. diaphr its s Media heart a Opera Pleura Thora Opera heart.	raphical ny and operative y of thoracic Breast, agm, pleura and inuses. Lungs. stinum organs, and pericardium. tions at mastitis. 1 puncture. cotomy. tions on the	Topographic anatomy and operative surgery of thoracic wall, breast, diaphragm pleura and its sinuses, lungs. Operations at mastitis. Pleural puncture. Thoracotomies. Topography of mediastinum. Operations on esophagus and heart.	Kn 1, 4, 5, 6, 7, 9. Sk 1, 7, 8, 9, 10, 12, 16, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 3, 7, 8.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
L-4 (lecture -4)	Topog operat anterio abdom	raphy and ive surgery of pr-lateral ninal wall. Types	Topography of anterior- lateral abdominal wall. Paracenthesis of abdomen. Treatment of	Kn 1, 5, 6, 8, 9, 10. Sk 1, 9, 11, 12, 13, 14, 24, 25.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.

	of abdominal wall incisions. Paracenthesis. Hernia treatment. Topographical anatomy and operative surgery of abdominal cavity organs. Main principles of the operative procedures on the empty organs. Intestinal sutures. Resections of small and large intestine. Types of gastrostomy. Stomach resections. Operationa on liver. Removal of gall bladder.	hernia. Topography of abdominal organs. Main principles of the operative procedures on empty organs of abdomen. Intestinal sutures. resrction of small and large intestine. Gastrostomy types. Stomach resection. Apendectomy. Operations on liver. Gall bladder removal.	GC 1-15 PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 4, 5,6, 7, 8.	
L-5 (lecture -5)	Topographical anatomy and operative surgery of lumbar region, retroperitoneal space and pelvis. Resection of kidney. Operations on urinary bladder. Urinary bladder puncture. Topographical anatomy and operative surgery of upper and lower extremities. Operations on extremities: ligature of the vessels, vascular sutures. Operations on nerves. Suture of tendon. Amputations and exarticulations.	Topographical anatomy and operative surgery of lumbar region, retroperitoneal space and pelvis. Operations on kidneys, suprarenal glands and ureters. Operations on urinary bladder. Urinary bladder puncture. Operations on rectum. Phymosis and paraphymosis. Topograpy of upper and lower extremities. Operative procedures on extremities: Vessel ligature and vessel suturing. Operations on nerves. Tendon suturing. Operations on joints. Panaris. Methods of bleedings arrest. Amputations and exarticulations.	Kn 1, 5, 6, 9, 10, 11, 12, 13. Sk 1, 17, 18, 19, 20, 21, 22, 23, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 7, 8, 9.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
P-1 (practical lesson 1)	Introduction into topographical anatomy. Classification of anesthesia. Types of the operative interventions. Principles of the operations. Surgical instruments. Life safety during wartime, emergency medical care, psychological care, crisis management.	To define the role of knowledge in topographic anatomy, types of operative approaches and methods in doctors education. To classify surgical operations. To identify modern surgical instruments. To demonstrate technique of wounds debridement. Do differ types of surgical interventions, transplantation and explantation of the organs and tissues. Hystory of the	Kn 1, 5, 6, 9. Sk 1. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.

P-2 (practical lesson 2)	Technique of tissue dissecting and connection. Primary surgical technique.	discipline developement. Methods of topographic anatomy studies. Classification of surgical operations. Surgical instruments and suturins devices. Principles of wounds debridement. methods of local anesthesia. Types of transplantation and explantation of the organs and tissues, methods of skin transplantation.	Kn 1, 5, 6, 9. Sk 1. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
P-3 (practical lesson3)	Topographical anatomy and operative surgery of cerebral-cranial area. Topographical anatomy and operative surgery of cranial cavity.	Borders, layers, vessels and nerves, cellular spaces of fronto- parieto-occipital and temporal regions. Meninges of the brain and spaces between them. Analysis of the age features of topographic anatomy of the head. Scheme of cranio-cerebral topography of the head. Cranio-cerebral topography scheme. Topography scheme. Topographic anatomy background for clinical manifestation of pathologic processes at the areas of the head. Debridement of the cranial wounds. Different methods of debridement of wounds of the head. Principles of decompressed and bone-reconstructive scull trepannings. Antrotomy.	Kn 1, 2, 5, 6, 9. Sk 1, 2, 3, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
P-4 (practical lesson 4)	Topography of face. Orbit, nasal cavity. Operative treatment of purulent processes of the face.	Borders, leyered structure, vessels and nerves, cellular spaces of lateral, deep and anterior face region. Debridement of maxillary-facial wounds. Operations at inflammatory and pyogenic processes of the face. Choice and methods of the operative interventions	Kn 1, 2, 5, 6, 9. Sk 1, 2, 3, 4, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 7.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.

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		at pyogenic processes		
		on the face. Typical		
		incisions at abscesses		
		and phlegmons of the		
		face. Operations at		
		temporo-mandibular		
		joint ankylosis.		
		Topohraphic anatomy		
		features of orbit		
		structure with the parts		
		of the face. Lacrimal		
		apparatus of the eye.		
		Area of the nose		
		(external nose, nasal		
		cavity, paranasal		
		sinuses). Incision of the		
		frontal sinus. Oral area		
		(oral cavity, floor of the		
		oral cavity, tongue).		
		Operations on maxilla		
		and mandible.		
		Classifications of		
		congenital anomalies of		
		the face and surgical		
		methods of their		
		corrections. Principles		
		of reconstructive		
		procedures on the face.		
		Operations at partial		
		and total congenital		
		fissures of the lip.		
		Operations at congenital		
		fissures of palatine		
		(uranoplasty). Teeth,		
		features of structure,		
		blood supply and		
		innervation. Types of		
		anestnesia. Methods of		
		local anestnesia at		
		surgical interventions in		
		Infiltrative and		
		conductive anosthosia		
		on the face Operations		
		of teeth extractions		
D 5 (practical	Topography of grass	Fascia and cellular	Kn 1 3 5 6	Senior lecturer OrelM G
r-S (practical	of the neck External	spaces of the neck	9.	Ass. prof. Rudnytska K.I.
lesson 5)	and common carotid	Analisis of the age	Sk 1, 5, 6, 16,	1 2
	artery exposure and	features of topographic	24, 25.	
	ligature.	anatomy of the neck.	GC 1-15.	
	Exposure and	Topographic anatomy	PC 1, 2, 0, 7, 8 10 11 21	
	ligature of external	background of	23, 24, 25.	
	and common carotid	development of clinical	AR 1, 7.	
	artery.	manifestation of		
		pathologic processes on		
		the neck. Operations at		
		congenital fissures and		

		cysts on the neck. Different methods of debridement of wounds on the neck. Exposure and ligature of common and external carotid arteries.		
P-6 (practical lesson 6)	l opography of organs of the neck (pharynx, larynx, trachea, oesophagus, thyroid gland). Operative procedures on the organs of the neck. Tracheotomy, tracheostomy.	of the neck, age and gender features of structure of organs of the neck. Operative methods at conicotomy, tracheotomy and tracheostomy performance. Operations on thyroid gland. Principles of the operative procedures at different forms of goiters. Nerves and vessels of the neck.	Kn 1, 3, 5, 6, 9. Sk 1. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 2, 7, 8.	Ass. prof. Rudnytska K.I.
P-7 (practical lesson 7)	Topographical anatomy and operative surgery of thoracic wall, breast, pleura and lungs.	Constitutional features of structure of the chest. Types of pneumothorax. Technique of pneumothorax closure. Pleural puncture. Thoracotomies. Segmentectomy. Lobectomy. Lung resections. Rib resection. Topographic anatomy and operations on the breast.	Kn 1, 4, 5, 6, 7, 9. Sk 1, 7, 8, 9, 10, 12, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 3, 7, 8.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
P-8 (practical lesson 8)	Topography and operative surgery of mediastinum.	Surgical approaches to esophagus, methods of esophagus reconstructions. Sternotomies. Operations at wounding of the heart. Pericardium puncture. Congenital and acquired heart defects principles of their surgical treatment. Aorto- coronary shunting, stenting of coronary arteries. Extracorporal blood circulation. Heart transplantation.	Kn 1, 5, 6, 7, 9. Sk 1, 7, 8, 9, 12, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 3, 7, 8.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
P-9 (practical lesson 9)	Topography and operative surgery of anterior-lateral abdominal wall. Surgical anatomy and operative treatment of anterior abdominal wall hernias.	Surgical approaches to the abdominal cavity. Optimal methods of laparotomies at different diseases of abdominal cavity organs. Laparoscopic surgery. Hernia of anterior-lateral abdominal wall. Optimal methods of	Kn 1, 5, 6, 8, 9. Sk 1, 9 11, 12, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 8.	Senior lecturer OrelM. G. Ass. prof. Rudnytska K.I.

		operations at abdominal hernia. Inguinal area, inguinal canal. Operations at inguinal hernia. Operative treatments of congenital incarcerated and sliding hernia. Topography of femoral canal femoral hernia. Operations at femoral hernia. Diastasis. Umbilical hernia. Operations at umbilical hernia and diastasis.		
P-10 (practical lesson 10)	Topography of peritoneum and abdominal cavity superior floor organs.	Relations of the peritoneum to the organs of abdomen. Bursa canals and recesses of abdomen. Topographic anatomy of stomach, liver, gall bladder, biliary tract, pancreas and spleen. Topographic anatomy background of methods of organ saving operations on stomach.	Kn 1, 5, 6, 8, 9. Sk 1, 11, 12, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
P-11 (practical lesson 11)	Topography of abdominal cavity inferior floor organs. Operations on the abdominal cavity organs: intestinal sutures and resections. Appendectomy. Operations on large intestine.	Topographic anatomy of small and large intestine. Intestinal sutures. Resections of intestine. Different types of enteroanastomosis: "end-to-end", "side-to- side", end-to-side". Operations on large intestine: colostomy, anus praetter naturalis, lagre intestine resections. Colectomy. Removal of appendix (operative approaches, methods of stump preparations, retrograde resection).	Kn 1, 5, 6, 8, 9. Sk 1, 11, 12, 13, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 5, 7, 8.	Senior lecturer Orel M.G. Ass. prof. Rudnytska K.I.
P-12 (practical lesson 12)	Operations on stomach (gastrostomy, stomach resections, gastroenterostomy). Operations on liver, gall bladder, biliary tract, pancreas and spleen.	Operations on stomach: gastrotomy, suturing gastrostomy, gastroenterostomy. Principles of stomach resections. Operations on liver, gall bladder, bile ducts, pancreas. Resections of spleen. Basic principles of laparoscopic interventions on superior abdominal cavity floor organs.	Kn 1, 5, 6, 8, 9. Sk 1, 11, 12, 13, 14, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 4, 6, 7, 8.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
P-13 (practical lesson 13)	Topography and operative surgery of lumbar region and retroperitoneal	Topographic anatomy of fascia, cellular spaces and organs of retroperitoneal space.	Kn 1, 5, 6, 9, 10. Sk 1, 12, 15, 24, 25.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.

	space. Basics of transplantology.	Weak places of lumbar area. Paranephron block. Operative approaches to kidneys, suprarenal glands and ureters. Operations on kidneys, suprarenal glands and ureters. Principles of laparoscopic operations on these organs. Kidney transplantations. Congenital anomalies of vertebra development. Spinal puncture. Operations on spine.	GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 7, 8.	
P-14 (practical lesson 14)	Topography and operative surgery of pelvic walls, floors, nerves and vessels, cellular tissue spaces and pelvic organs.	Fascia and fibrous spaces of the pelvis. Age and gender features of the topographical anatomy of the pelvis. Choice of methods of operations on the urinary bladder, prostate gland, rectum, uterus, testicle, external genitalia. Urinary bladder puncture. High dissection of the bladder. Approach to the prostate. Operations for abscesses and fistulas of the rectum. Cesarean section. Operations for ectopic pregnancy. Operations for testicular torsion, cryptorchidism, phimosis and paraphimosis.	Kn 1, 5, 6, 9, 11. Sk 1, 12, 17, 18, 19, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 7, 8.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
P-15 (practical lesson 15)	Topography and operative surgery of shoulder, arm, cubital fossa, forearm and hand.	Topographic anatomy of upper extremity: shoulder, arm, cubital fossa, forearm and hand. Borders of the regions. Projections of neuro-vascular bundles. Cellular spaces and their connections. Pathways of pyogenic processes spreading. Manifestation of pathologic process on extrenities.	Kn 1, 5, 6, 9, 12. Sk 1, 20, 21, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
P-16 (practical lesson 16)	Topography and operative surgery of the lower extremity: gluteal area, femoral area, popliteal fossa, knee joint, crural area and foot.	Topographic anatomy of lower extremity: gluteal region, hip, popliteal fossa, crural region and foot. Borders of the regions. Projections of neuro- vascular bundles. Cellular spaces and their connections. Pathways of pyogenic	Kn 1, 5, 6, 9, 13. Sk 1, 23, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.

		processes spreading. Manifestation of pathologic process on extremities		
P-17 (practical lesson 17)	Operations on the extremities. Operative treatment of panaris and tendosynovitis. Veinsection, veinpuncture. Vessel ligature and vessel suturing. Intramuscular injections. Treatment of abscesses. Principles of operative procedures on bones (amputation, exarticulation, joint resection).	Methods of wounds debridement on the extremities. Surgical approaches to the axillary, subclavian, brachial, ulnar and radial arteries. Approaches to the nerves and vessels on the thigh leg and foot. Operations on tendons, nerves and vessels of the extremities. Exposure and ligature of trunkal vessels. Principles of desobliterative operations on trunkal vessels. Principles of operations on nerves: neurolisis, nerve suturing, neurotomy, nerve reconstruction and transplantation. Tendon suturing. Microsurgical technique. Pathways of pyogenic processes spreading. Incisions at panaris and phlegmones of leg and foot. Principles of joint puncture, arthrotomy, joint reconstruction, arthrodesis. Principles of intramedullary osteosinthesis. Amputations and exarticulations at different levels of upper and lower extremities.	Kn 1, 5, 6, 9, 12, 13. Sk 1, 20, 21, 22, 23, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 7, 8, 9.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
OCW-1 (out of class work 1)	History of the subject.	History of topographic anatomy and operative surgery development.	Kn 1, 5, 6, 9. Sk 1. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 2, 7, 8.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
OCW-2 (out of class work 2)	Principles of skin transplantation. Congenital anomalies of the face. Congenital fissures of lip and palatine. Uranoplasty, labioplasty. Principles of plastic	Features of skin structure. Types of transplants. Indications and methods of skin transplantation. Congenital anomalies of the face. Congenital fissures of the lip and palatine and their reconstruction. Principles of aesthetic	Kn 1, 2, 3, 5, 6, 9. Sk 1, 2, 3, 4. GC 1-15. PCK 6, 8, 10, 11, 21, 23, 24, 25. AR 1.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.

	surgery on the face. Aesthetic surgery.	and reconstructive surgery of the face.		
OCW-3 (out of class work 3)	Operations on esophagus. Surgical approaches to the cervical part of spine and to esophagus. Vagosympathetic block by Vishnevski L. V.	Indications for operative procedures on esophagus. Congenital anomalies of esophagus. Complications of chemical burnts of esophagus. Methods of esophagus reconstructions. Vagosympathetic block by Vishnevski L. V. Surgical approaches to the cervical part of esophagus.	Kn 1, 3, 4, 5, 6, 7, 8, 9. Sk 1, 7, 8, 11, 12, 13. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 3, 4, 5, 8.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
OCW-4 (out of class work 4)	Operations on the thyroid gland.	Indications for the operative procedures on thyroid gland. Operative approaches to the thyroid gland. Methods of the operative treatment of thyroid gland pathologies.	Kn 1, 3, 4, 5, 6, 7, 9. Sk 1, 24. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 7, 8.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
OCW-5 (out of class work 5)	Resection of the rib. Operations at pneumothorax	Indications for rib resection. Use of bony transplants in the reconstructive surgery. Thoracic outlet syndrome. Classification of phneumothoraxes, their diagnostics and treatment.	Kn 1, 4, 5, 6, 7, 9. Sk 1, 7, 8, 10, 12, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 3, 7, 8.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
OCW-6 (out of class work 6)	Principles of bariatric surgery. Abdominoplasty.	Topography of stomach. Features of blood supply and innervation of the stomach. Bariatric operations on stomach and intestine. Abdominoplasty technique of performance.	Kn 1, 5, 6, 8, 9. Sk 1, 11, 13. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 4.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
OCW-7 (out of class work 7)	Porto-caval anastomoses. Methods of portal hypertension surgical treatment.	Topographic anatomy features of portal system. Porto-caval anastomoses. Methods of the operative treatments at portal hypertension.	Kn 1, 4, 5, 6, 8, 9. Sk 1, 9, 11, 12, 14, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 6, 7.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
OCW-8 (out of class work 8)	Laparoscopic operations on the abdominal organs.	Laparoscopic approaches at different operations on abdominal organs. Principles and technique of laparoscopic operations on parenchimatic and empty organs of abdomen.	Kn 1, 5, 6, 8, 9. Sk 1, 11, 12, 13, 14. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 4, 5, 6, 7, 8.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.

OCW-9 (out of class work 9)	Principles of organ transplantations. Transplantation of kidney.	Principles of different organs and structures transplantation. Definition of donor and recipient. Technical features and methods of kidney transplantation.	Kn 1, 4, 5, 6, 7, 8, 9, 10, 11. Sk 1, 7, 8, 11, 12, 13, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 3, 4, 5, 6, 7, 8.	Senior lecturer OrelM.G. Ass. prof. Rudnytska K.I.
OCW-10 (out of class work 10)	Operations at tendon, nerve and vessel injuries (suturing of vessel, tendon and nerve).	Indications for the operative treatment of tendon, nerve and vessel injuries. Technique of nerve suturing. Tendon suturing. Vessel suturing. Methods of tendon and nerve reconstruction.	Kn 1, 3, 5, 6, 9, 12, 13. Sk 1, 3, 5, 6, 12, 20, 21, 22, 23, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1,7, 8, 9.	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	Code of lesson	Method of educational results	Criteria of crediting
educational	type	verification	C C
results			
Kn 1, 5, 6, 9.	L-1	Presence at lecture, writing	"credited"/"noncredited"
Sk 1.		conspect of lecture	
GC 1-15			
PC 1, 2, 6, 7, 8, 10,			
11, 21, 23, 24, 25			
AR 1.			
Kn 1, 2, 3, 5, 6, 9.	L-2	Presence at lecture, writing	"credited"/"noncredited"
Sk 1, 2, 3, 4, 5, 6, 16.		conspect of lecture	
GC 1-15.		•	
PC 1, 2, 6, 7, 8, 10,			
11, 21, 23, 24, 25.			
AR 1, 2, 7.			
Kn 1, 4, 5, 6, 7, 9.	L-3	Presence at lecture, writing	"credited"/"noncredited"
Sk 1, 7, 8, 9, 10, 12,		conspect of lecture	
16, 24, 25. CC 1 15			
C = 1 + 15.			
$PC 1, 2, 0, 7, 0, 10, \\ 11 21 22 24 25$			
AP 1 3 7 8			
Kn 1 5 6 8 9 10	I A	Prosonas et lactura, writing	"credited"/"noncredited"
Sk 1 9 11 12 13	L-4	consport of locture	created / noncreated
14 24 25		conspect of lecture	
GC 1-15			
PC 1. 2. 6. 7. 8. 10.			
11, 21, 23, 24, 25.			
AR 1, 4, 5,6, 7, 8.			
Kn 1, 5, 6, 9, 10, 11,	L-5	Presence at lecture, writing	"credited"/"noncredited"
12, 13.		conspect of lecture	
Sk 1, 17, 18, 19, 20,		1 · · · · · · ·	
21, 22, 23, 24, 25.			
GC 1-15.			

PC 1, 2, 6, 7, 8, 10,			
11, 21, 23, 24, 25.			
AR 1, 7, 8, 9.	D 1	Out a setimine (d. land as si se Carl	A Construction of the second second
Kn 1, 5, 6, 9.	P-1	Oral questioning (student receives final	After implementation of control
SK 1.		mark 5 (satisfactory), 4 (good) of "5" (availant) according 4 nainted	"2" (actisfactors) "4" (cood) or
DC 1 - 15.		5 (excellent) according 4 pointed	5 (satisfactory), 4 (good) or "5" (eventlent) according 4
$PC 1, 2, 0, 7, 0, 10, \\ 11 21 22 24 25$		test (1 test 0.5 points). Prostical work	5 (excellent) according 4
11, 21, 25, 24, 25.		("credited" 1 point "poperadited"	pointed national scale.
AK I.		(credited – 1 point, noncredited –	
Kn 1 5 6 0	D 2	Oral questioning (student receives final	After implementation of control
Sk 1	P-2	mark "3" (satisfactory) "4" (good) or	tasks student receives final mark
GC 1-15		"5" (excellent) according 4 pointed	"3" (satisfactory) "4" (good) or
PC 1 2 6 7 8 10		national scale. Testing control in 10	"5" (excellent) according 4
11. 21. 23. 24. 25.		test (1 test -0.5 points). Practical work	pointed national scale.
AR 1.		("credited" – 1 point, "noncredited" –	Pomoo nanona oraioi
		0 points).	
Kn 1, 2, 5, 6, 9.	P-3	Oral questioning (student receives final	After implementation of control
Sk 1, 2, 3, 24, 25.	1.5	mark "3" (satisfactory), "4" (good) or	tasks student receives final mark
GC 1-15.		"5" (excellent) according 4 pointed	"3" (satisfactory), "4" (good) or
PC 1, 2, 6, 7, 8, 10,		national scale. Testing control in 10	"5" (excellent) according 4
11, 21, 23, 24, 25.		test (1 test – 0,5 points). Practical work	pointed national scale.
AR 1.		("credited" - 1 point, "noncredited" -	
		0 points).	
Kn 1, 2, 5, 6, 9.	P-4	Oral questioning (student receives final	After implementation of control
Sk 1, 2, 3, 4, 24, 25.		mark "3" (satisfactory), "4" (good) or	tasks student receives final mark
GC 1-15.		"5" (excellent) according 4 pointed	"3" (satisfactory), "4" (good) or
PC 1, 2, 6, 7, 8, 10,		national scale. Testing control in 10	"5" (excellent) according 4
11, 21, 23, 24, 25.		test (1 test – 0,5 points). Practical work	pointed national scale.
AR 1, 7.		("credited" – 1 point, "noncredited" –	
		0 points).	
Kn 1, 3, 5, 6, 9.	P-5	Oral questioning (student receives final	After implementation of control
Sk 1, 5, 6, 16, 24, 25.		mark "3" (satisfactory), "4" (good) or	tasks student receives final mark
GC 1-15.		"5" (excellent) according 4 pointed	"3" (satisfactory), "4" (good) or
PC 1, 2, 6, 7, 8, 10,		national scale. Testing control in 10	"5" (excellent) according 4
11, 21, 23, 24, 25.		("araditad" 1 point "poparaditad"	pointed national scale.
AK 1, 7.		(created – 1 point, noncreated –	
Kn 1 3 5 6 9	D C	Oral questioning (student receives final	After implementation of control
Sk 1	P-0	mark "3" (satisfactory) "4" (good) or	tasks student receives final mark
GC 1-15		"5" (excellent) according 4 pointed	"3" (satisfactory) "4" (good) or
PC 1. 2. 6. 7. 8. 10.		national scale. Testing control in 10	"5" (excellent) according 4
11. 21. 23. 24. 25.		test (1 test -0.5 points). Practical work	pointed national scale.
AR 1. 2. 7. 8.		("credited" – 1 point, "noncredited" –	Pomoo muona oomoi
7 7 7		0 points).	
Kn 1, 4, 5, 6, 7, 9.	P-7	Oral questioning (student receives final	After implementation of control
Sk 1, 7, 8, 9, 10, 12,		mark "3" (satisfactory), "4" (good) or	tasks student receives final mark
24, 25.		"5" (excellent) according 4 pointed	"3" (satisfactory), "4" (good) or
GC 1-15.		national scale. Testing control in 10	"5" (excellent) according 4
PC 1, 2, 6, 7, 8, 10,		test (1 test – 0,5 points). Practical work	pointed national scale.
11, 21, 23, 24, 25.		("credited" - 1 point, "noncredited" -	
AR 1, 3, 7, 8.		0 points).	
Kn 1, 5, 6, 7, 9.	P-8	Oral questioning (student receives final	After implementation of control
Sk 1, 7, 8, 9, 12, 24,		mark "3" (satisfactory), "4" (good) or	tasks student receives final mark
25.		"5" (excellent) according 4 pointed	"3" (satisfactory), "4" (good) or
GC 1-15.		national scale. Testing control in 10	"5" (excellent) according 4
PC 1, 2, 6, 7, 8, 10,		test (1 test -0.5 points). Practical work	pointed national scale.
11, 21, 23, 24, 25.		(credited -1 point, "noncredited" $-$	
$\frac{\text{AK } 1, \mathfrak{I}, \mathfrak{I}, \mathfrak{I}, \mathfrak{I}}{\text{Kr} 1 + 5 + 6 + 9 + 6}$	DO	Opol questioning (student and in find	After implementation of control
$\mathbf{K} \Pi \ \mathbf{I}, \mathbf{J}, 0, 0, 0, 9.$	P-9	Utal questioning (student receives final	After implementation of control
SK 1, 9 11, 12, 24, 25.		mark 5 (satisfactory), 4" (good) or "5" (excellent) according 4 pointed	"3" (satisfactory) "4" (good) or
PC = 1 - 13.		national scale. Testing control in 10	5 (Sausiaciory), 4 (good) or "5" (excellent) according 1
10, 1, 2, 0, 7, 0, 10, 11, 21, 23, 24, 25		test (1 test $= 0.5$ points) Practical work	pointed national scale
AR 1 8		("credited" – 1 point "noncredited" –	ponneu national scale.
· · · · · · · · · · · · · · · · · · ·	1	(ereanea - point, noncreanea -	

		0 points).	
Kn 1, 5, 6, 8, 9. Sk 1, 11, 12, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1.	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, 5, 6, 8, 9. Sk 1, 11, 12, 13, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 5, 7, 8.	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, 5, 6, 8, 9. Sk 1, 11, 12, 13, 14, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 4, 6, 7, 8.	P-12	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, 5, 6, 9, 10. Sk 1, 12, 15, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 7, 8.	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, 5, 6, 9, 11. Sk 1, 12, 17, 18, 19, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 7, 8.	P-14	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, 5, 6, 9, 12. Sk 1, 20, 21, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1.	P-15	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, 5, 6, 9, 13. Sk 1, 23, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1.	P-16	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, 5, 6, 9, 12, 13. Sk 1, 20, 21, 22, 23, 24, 25. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 7, 8, 9.	P-17	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, 5, 6, 9. Sk 1. GC 1-15. PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25. AR 1, 2, 7, 8.	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, 5, 6, 9.	OCW-2	Writing short literature review on	After implementation of tasks

Sk 1, 2, 3, 4.		topic. Oral questioning ("credited",	student receives final mark
CC 1-15. PCK 6, 8, 10, 11, 21,		noncredited").	("credited", "noncredited").
23, 24, 25.			
AR 1. Kn 1. 3. 4. 5. 6. 7. 8.	OCW-3	Writing short literature review on	After implementation of tasks
9.	001-5	topic. Oral questioning ("credited",	student receives final mark
Sk 1, 7, 8, 11, 12, 13.		"noncredited").	("credited", "noncredited").
PC 1. 2. 6. 7. 8. 10.			
11, 21, 23, 24, 25.			
AR 1, 3, 4, 5, 8.	OCW 4	Writing short literature review on	After implementation of tasks
Sk 1, 24.	UC W-4	topic. Oral questioning ("credited",	student receives final mark
GC 1-15.		"noncredited").	("credited", "noncredited").
PC 1, 2, 6, 7, 8, 10,			
AR 1, 7, 8.			
Kn 1, 4, 5, 6, 7, 9.	OCW-5	Writing short literature review on	After implementation of tasks
SK 1, 7, 8, 10, 12, 24,		topic. Oral questioning ("credited", "noncredited")	student receives final mark ("credited" "noncredited")
GC 1-15.			(
PC 1, 2, 6, 7, 8, 10,			
AR 1, 3, 7, 8.			
Kn 1, 5, 6, 8, 9.	OCW-6	Writing short literature review on	After implementation of tasks
Sk 1, 11, 13.		topic. Oral questioning ("credited",	student receives final mark
PC 1, 2, 6, 7, 8, 10,		noncreatica j.	(creatica , noncreatica).
11, 21, 23, 24, 25.			
AR 1, 4. Kn 1 4 5 6 8 9	OCW-7	Writing short literature review on	After implementation of tasks
Sk 1, 9, 11, 12, 14,	00	topic. Oral questioning ("credited",	student receives final mark
24, 25.		"noncredited").	("credited", "noncredited").
PC 1. 2. 6. 7. 8. 10.			
11, 21, 23, 24, 25.			
AR 1, 6, 7.	OCW 9	Writing short literature review on	After implementation of tasks
Sk 1, 11, 12, 13, 14.	UCW-8	topic. Oral questioning ("credited",	student receives final mark
GC 1-15.		"noncredited").	("credited", "noncredited").
PC 1, 2, 6, 7, 8, 10,			
AR 1, 4, 5, 6, 7, 8.			
Kn 1, 4, 5, 6, 7, 8, 9,	OCW-9	Writing short literature review on	After implementation of tasks
10, 11. Sk 1 7 8 11 12 13		topic. Oral questioning ("credited", "noncredited")	student receives final mark ("credited" "poncredited")
24, 25.		honoredited).	(creatica , noncreatica).
GC 1-15.			
PC 1, 2, 6, 7, 8, 10, 11, 21, 23, 24, 25,			
AR 1, 3, 4, 5, 6, 7, 8.			
Kn 1, 3, 5, 6, 9, 12,	OCW-10	Writing short literature review on	After implementation of tasks
15. Sk 1, 3, 5, 6, 12, 20,		"noncredited").	("credited", "noncredited").
21, 22, 23, 24, 25.			
GC 1-15.			
11, 21, 23, 24, 25.			
AR 1,7, 8, 9.			
Concert 1		Final control	
General evolution system	Differentiated cred	lit	
Scales of	Traditional 4 point	ed scale multipointed (200-pointed	d) scale range scale of FCTS
	riadicional – politi	ea seure, manipolitica (200-politica	a, source, runge source of LC15

avaluation				
Conditions of	Student attended all the prestical (laboratory and carried	inomy) lossons and received		
Conditions of	Student attended all the practical (laboratory and semi	inary) lessons and received		
admission to final	not less then 120 points for the current continuous lea	rning success.		
control				
Type of final control	Method of final control	Criteria of crediting		
Differentiated	Test control	Maximum points score –		
credit		80. Minimum points score		
		50.		
	Criteria of exam/differentiated credit evaluati	ion		
Differentiated	Test control 80 test tasks, performed at 90 min.	Maximum points score –		
credit		80 (1 point for 1 correctly		
		solved question).		
Student has to collect n	ninimum 50 points at differentiated credit. Maximum amount of th	e points is 80 points		
Assessment is one of t	he final stages of educational activity and determination of learni	ng success. Assessment of current		
educational activities.	Current control is carried out at each classroom session of the acad	emic discipline in accordance with		
the approved work edu	cational programs and taking into account the evaluation of the s	tudent's independent work. During		
the evaluation of maste	ery of each topic of the module, the student is given grades on a	4-point (traditional) scale and on a		
multi-point scale using	the evaluation criteria adopted by the university and approved	for the relevant discipline. At the		
same time, all types of	works provided for by methodical development for studying the	topic are taken into account. The		
class for which a stude	nt received an unsatisfactory grade is carried out at a time convent	ient for the teacher and the student		
outside of classes, char	ging the topic during ongoing training and final control in order to	increase the grade is not allowed.		
The marks given in ea	ich lesson on the traditional scale are added up in the last lesso	on, the average traditional mark is		
calculated, which is co	nverted into points. The weight of each topic within one module	in points is the same. Assessment		
forms for current educa	tional activities should be standardized and include control of theo	pretical and practical training.		
The final score for the	The final score for the current activity is defined as the arithmetic sum of points for each lesson and for individual work.			
The maximum amount of points, which student can receive at current educational activity during study of a discipline is 120				
The minimum amount	of <i>noints</i> , which student has to receive at current educational activ	ity for enrollment of subjects is 72		
points.	<i>The minimum amount of points</i> , which student has to receive at current educational activity for enrollment of subjects is 72 points			
<i>Calculation of points</i> is based on student assessments obtained by traditional scale in the study subjects during the semester.				
by calculating the arithmetic mean (CA), rounded to two decimal places. The resulting value is converted into points by				
multi-scale as follows:				
	CA::100			
	$\chi = \frac{\chi \times 120}{5}$			
Assessment of individu	al student knowledge.			
Completion of individu	al tasks is taken into account when deriving a grade for a practicity of the form	ical lesson under the conditions of		
their successful completion and defense.				
Assessment of students	independent work	15.		
Independent work of students, which is provided for by the topic of the lesson along with classroom work, is evaluated				
during the current control of the topic in the corresponding lesson.				
The final control of the content module 1 is made at the last practical session by the teacher of the department in accordance				
with the schedule approved at the educational and methodological meeting.				
In the case of completion of the academic discipline by passing the final control, 60% of the points on the 200-point scale the student receives for the current educational activity, and 40% for the final control. The final test is considered received if				
the student receives for the current educational activity, and 40% - for the final control. The final test is considered passed if				
The grade for the disci	pline on a 200-point scale is formed by adding the sum of points f	For the student's current educational		
activity and final contra	rol. The assessment on a 200-point scale is transformed into an	assessment on a traditional (four-		
point) scale and, after r	anking, into an assessment on the ECTS scale.	`		
The objectivity of the	evaluation of students' educational activity should be checked by	statistical methods (the correlation		
coefficient between the	current academic performance and the results of the final control)			
Convertation of the nu	mber of points for the semester control in evaluations according	to the ECTS scale and according		
Points for the semaster	<i>control are independently converted to both the ECTS scale and</i>	d the four-point scale ECTS scale		
points are not converted into a four-point scale and vice versa.				

Students studying in the same course in the same specialty, based on the number of points scored for the semester control,

are ranked as follows:	
Mark of ECTS	A statistical measure
«A»	Best 10 % of students
«B»[sep]	Best 25 % of students
«C»[sep]	Best 30 % of students
«D»: <u>sep</u>	Best 25 % of students
«E»	Last 10 % of students

Ranking with the assignment of grades "A", "B", "C", "D", "E" is carried out by the dean's offices or others. a structural subdivision by decision of the academic council, an educational department for students of this course who are studying in one specialty and have successfully completed the study of the discipline. The ranking of students who are citizens of foreign countries is recommended by the decision of the academic council to be conducted in the same array as students who are citizens of Ukraine studying the same specialty.

Students who receive grades of "FX" and "F" ("2") are not listed as graded students, even after the module is retaken. Such students automatically receive an "E" grade after retaking.

Discipline grades "FX" and "F" ("2") are issued to students who have not been credited with at least one module in the discipline after completing its study.

The grade "FX" is assigned to students who have obtained the minimum number of points for the current educational activity, but who have not passed the final control of the module. This category of students has the right to reschedule the final examination according to the approved schedule (but no later than the beginning of the next semester). Retaking the final control is allowed no more than two times.

The grade "F" is assigned to students who attended all classroom classes of the module, but did not score the minimum number of points for the current educational activity and were not admitted to the final examination. This category of students has the right to repeat the module. With the permission of the rector, the student can increase the grade in the discipline by retaking the final examination (no more than three times during the entire period of study). Points for semester control for students who have successfully completed the discipline program are also converted by the department to a traditional four-point scale based on absolute criteria, as shown in the table below.

Evaluation on a multi-point (200) scale	Evaluation on a four-point scale
From 170 to 200 points	«5»
From 140 to 169 points	«4»
From 139 to 122 points	«3»
Less 121 point	«2»

Note 1. According to the decision of the academic council, the higher education institution can set criteria of 180-200 points for grade "5", and criteria of 140-179 points for grade "4".

Note 2. When using other multi-point scales, proportional criteria are applied.

Note 3: These criteria also apply when determining the grade for a module where appropriate.

The ECTS score is NOT converted to a traditional four-point scale, as the ECTS scale and the four-point scale are independent.

Multi-point and four-point scales characterize the actual success rate of each student in mastering the academic discipline. The EKTS scale is relative, comparative, rating, which establishes the student's belonging to the group of better or worse among the reference group of fellow students (faculty, specialty). Therefore, the "A" grade on the scale cannot be equal to the "excellent" grade, and the "B" grade to the "good" grade, etc. As a rule, when converting from a multi-point scale, the limits of grades "A", "B", "C", "D", "E" according to the ECTS scale do not coincide with the limits of grades "5", "4", "3" according to the traditional scale.

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 methods and sources of information.

Compliance with the principles and norms of ethics and deontology by students of higher education:

• 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.

Attendance of classes by students of higher education:

• Attendance at all classes is mandatory for the purpose of current and final assessment of knowledge (unless there is a valid reason).

10. Literature

Obligatory

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16. А.Г. Попов, В.К.Красницкий, ВИ.Горовенко. Учебное пособие «Тестовые задачи» по курсу оперативной хирурги и топографической анатомии. Одесса, 2004. - 120 с.

11. Equipment, material-technical and programed procuring of discipline/Course

Methodical directions for the students and teachers, workbooks, tables, phantoms, schemes, educational videos, surgical instruments, suturing material dry preparations, organs and tissues of animals.

12. Additional information

Lessons of students scientific circle of operative surgery and topographical anatomy department are

cerried 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 Englishmedium departments. The head of the scientific circle senior lecturer Orel M. G.

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