

ODESSA NATIONAL MEDICAL UNIVERSITY
 Medical faculty,
 Department of Normal and Pathological Clinical Anatomy

SYLLABUS OF ACADEMIC DISCIPLINE
«Clinical Anatomy and Operative Surgery»

The course volume	Mtdical faculty - 90 hours, 3.0 credits
Semester, year of study	Students: II year IV semester Bachelors: III year V semester
Days, time, location	Lectures are delivered in large and small anatomical auditory according to the schedule. Practical and seminar classes are held in the classrooms of the department according to the schedule.
Teachers	1. Appelhans Elena, Head of the Department, Professor, DM 2. Nescoromna Natalia, Associate Professor, Phd. 3. Koshelnyk Elena, Associate Professor, Phd 4. Chebotarova Svetlana, senior teacher 5. Antsut Olga, department assistant 6. Ursu Alexandr, department assistant
Contact numbers	1. Appelhans Elena 0674842052 2. Nescoromna Natalia 0936082720 3. Koshelnyk Elena 0679905679 4. Chebotarova Svetlana 0674838985 5. Antsut Olga 0504561236 6. Ursu Alexandr 0971677773
E-mail	sonshine22@ukr.net

Teacher's workplace	<ol style="list-style-type: none"> 1. Nescoromna Natalia - anatomy hall № 2 2. Koshelnyk Elena - study room № 1 3. Chebotarova Svetlana - anatomy hall № 2 4. Antsut Olga - study room № 2 5. Ursu Alexandr - study room № 3
Counseling for students	<p>Tuesday, Thursday - 14.30 - 17.30. Conducted by the teacher on duty according to the duty schedule. During the quarantine period - on-line Zoom.</p>

The communication is done: with help of E-mail of the department: anatomy@onmedu.edu.ua, as well as for additional messengers **Viber** and **Telegram**, as well as www.anatom.in.ua, <https://anatom.ua>/<https://meduniver.com> / **Medical / Anatom**

COURSE ANNOTATION

Subject of study: Dual discipline, which includes clinical anatomy, as a set of applied areas of modern anatomy, which study the structure and topography of organs and areas in normal and pathology in the interests of various branches of clinical medicine and surgical surgery - part of surgery that studies types, justification, principles and techniques of surgical operations.

Prerequisites and postrequisites of the discipline (interdisciplinary links):

Prerequisites. "Clinical Anatomy and Operative Surgery" as a discipline is based on the study by students of human anatomy, histology, physiology, cytology and embryology, biochemistry, Latin, ethics, philosophy;

Postrequisites. The discipline "Clinical Anatomy and Operative Surgery" lays the foundations for students to study normal physiology, pathomorphology, pathological physiology, propaedeutics of clinical disciplines and the formation of skills to apply knowledge of clinical anatomy and operative surgery in the further study of all clinical disciplines and future professional activities.

The purpose of the course is the acquisition by each student of specific knowledge on clinical anatomy, necessary to substantiate the clinical diagnosis, understanding the pathogenesis of various diseases, the development of possible complications, as well as the choice of the most rational methods of surgical intervention, mastering the techniques and skills of surgical interventions.

The task of the discipline:

- to acquaint students with operative surgery and clinical anatomy of areas, organs and systems of the human body;

- to teach to interpret topographic - anatomical relationships from the standpoint of variation and age-related clinical anatomy;

- to form the ability to apply knowledge of clinical anatomy to substantiate the diagnosis and understand the pathogenesis of various pathological processes;

- to form the skills of choosing the most rational methods of surgical intervention

- to teach to master the technique of performing basic surgical interventions on human corpses, and simulators.

As a result of the study of the discipline the student should:

Know:

- Clinical anatomy of human body parts and internal organs;

- Age and individual features of the structure, shape, topography of internal organs and other anatomical formations;

- Basic principles and techniques of using surgical instruments;

- Principles of primary surgical treatment of wounds;

- The basic stages of surgical interventions in accordance with the curriculum.

Be able to:

- demonstrate and describe the clinical anatomy of human body areas, internal organs, cellular spaces, vascular and nerve bundles;

- use knowledge of clinical anatomy for substantiation of various pathological conditions and methods of surgical intervention

- Use general surgical instruments;

- Master the technique for performing basic surgical interventions on cadaveric material and simulators.

COURSE DESCRIPTION

The course will be presented in the form of lectures (10 hours), practical classes (30 hours), organization of independent work (50 hours).

Teaching methods

Lectures: perception of the presented material and compilation of the synopsis.

Practical classes: conversation, solving situational problems, demonstration and practice of skills of manipulation according to the list on simulation models and in a special classroom equipped as an operating room.

Independent work: independent work with a textbook, independent practice of some practical skills (for example, tying surgical knots), viewing videos and presentations, working with a bank of test tasks.

Content of the discipline

Topic 1. Introductory to discipline. General surgical instruments. Dissection and suturing of tissues. Surgical sutures and knots.

Topic 2. Clinical anatomy of the cerebral part of the Head. Operations on the cerebral part of the Head. Primary surgical treatment of wounds in the cerebral section of the Head. Trepanation of skull. Antrotomy.

Topic 3. Clinical anatomy of facial part of the head. Facial and trigeminal nerves. Operations on facial part of the head. Rational incisions on the face. Opening of maxillary and frontal sinuses.

Topic 4. Clinical anatomy of the Neck. Regions, triangles. Fascia of neck and interfascial fatty cellular spaces. Carotid triangle. Clinical anatomy of larynx, pharynx, thyroid and parathyroid glands, cervical part of oesophagus. First medical aid for asphxia: tracheotomy, cricotomy, conicotomy. Resection of thyroid gland according to Nikolaev O.V.

Topic 5. Clinical anatomy of the Chest. Mammary gland. Topography of pleura, pleural sinuses. Topography of lungs, trachea, bronchi. Operative accesses to lungs. Puncture of pleural cavity. Types of pneumothorax, surgical intervention for their removal.

Topic 6. Clinical anatomy of mediastinum. Clinical anatomy of heart, pericardium. Functional anatomy of cardiac valvular system. Congenital and acquired heart defects. Operative accesses to heart. Surgery of heart: aortocoronary bypass, stent of coronary vessels, transplantation of heart.

Topic 7. Clinical anatomy of anteriolateral abdominal wall. Regions, layers, "weak" places. Surgical anatomy and treatment of inguinal, femoral, umbilical hernias. Hernias of linea alba.

Topic 8. Clinical anatomy of abdominal cavity. Division on storeys. Laparotomy. Laparoscopy. Types of intestinal sutures. Peculiarity of structure of wall of organs of digestive system. Clinical anatomy of stomach, duodenum. Resection of stomach. Vagotomy. Clinical anatomy of liver, gall bladder, bile ducts. Cholecystectomy. Choledochotomy. Clinical anatomy and operations on pancreas and spleen.

Topic 9. Clinical anatomy of large and small intestine. Morphological differences. Appendectomy. Colostomy and Artificial anus-functional peculiarities.

Topic 10. Clinical anatomy of lumbar region and retroperitoneal space. Regions. Organs of retroperitoneal space. Operations on organs of retroperitoneal space. Pyelotomy. Nephrotomy. Nephrectomy.

Topic 11. Clinical anatomy of male and female pelvis: bones, fasciae, fatty cellular

spaces. Storey of pelvis. Organs of male and female pelvis. Operations on urinary bladder, testes, rectum. Puncture of posterior fornix of vagina. Operation for ectopic pregnancy.

Topic 12. Clinical anatomy of upper extremity. Regions of shoulder girdle: subclavicular, axillary, scapular and deltoid regions. Brachial regions and shoulder joint. Clinical anatomy of elbow joint. Topology of forearm and hand. Pirogov's space. Operative treatment of purulent diseases of hand.

Topic 13. Clinical anatomy of gluteal region: quadrants, supra- and infrapiriform foramina, their contents. Infectious spreading from pelvis to hip. Clinical anatomy of femoral region, popliteal fossa, leg, knee joint, foot. Muscles, grooves, canals of lower extremity.

Topic 14. Operations on bones and joints of the limbs. Osteotomy. Osteosynthesis. Amputations of the limbs. Operations on vessels and nerves of upper and lower limbs. Control of bleeding. Vascular sutures.

Topic 15. Differential test

List of basic recommended literature

1. Koshelnyk E.L. Basics of clinical anatomy and operative surgery: study guide for students / E.L.Koshelnyk, A.G.Popov. – Odessa: Odessa State Medical University, 2019. – 103 p.
2. Topographical anatomy and operative surgery: Textbook for english-speaking foreign students. | Tsyhykalo O.V. - Vinnytsia : Nova Knyha Publishers, 2011.- 528p.;
3. Gvalani AK. Manual of Instruments and Operative Surgery. - Paperback – 2016. – 995 p.;
4. Wiesel Samuel W. Operative Techniques in Orthopaedic Surgery. - Hardcover – 2015. – 1021 p.;
5. Wolfe Scott W. Pederson William C. Green's Operative Hand Surgery, 2-Volume Set 28. – 2016. – 1002 p.;
6. Mulholland Michael W., Albo Daniel. Operative Techniques in Surgery. - 2014. – 1433 p.;
7. Topographic Anatomy and Operative Surgery: Course of the lectures/ A.G. Popov, E.L. Koshelnyk, V.V. Desyatsky; Edited by prof. A.Popov. - Odessa, 2011;
8. Zollinger's Atlas of Surgical Operations _ R.M. Zollinger, E.C. Ellison. - 9th ed. - McGraw-Hill, 2011. - 514 p.
9. Snell Richard S. Clinical Anatomy by Regions / R. S. Snell, 2012. - 754 p.

Evaluation

Current success. Evaluation of the success of the study of each topic of the discipline is performed on a traditional 4-point scale. At least 50% of students should be interviewed in a practical lesson, and at least 30% in a seminar. At the end of the semester (cycle) the number of grades for students in the group should be the same on average. At the end of the course, the current performance is calculated as the average current score, ie the arithmetic mean of all grades obtained by the student on a traditional scale, rounded to 2 (two) decimal places, for example 4.75. At the last practical lesson, the teacher is obliged to announce to students the results of their current academic performance, academic debt (if any). Only those students who have no academic debt and have an average score of at least 3.00 for their current academic activity are allowed to take the final attestation.

Forms of final control: Differential test.

It conducted at the last practical lesson in oral form with the obligatory performance of all types of student work, provided by the working curriculum and assessed for the current educational activities of not less than 3.00 on average. Assessment of knowledge is conducted by a committee of the faculty of the department. The grades of "good" and "satisfactory" received by the student in compiling the final control (differential credit) do not add up. A student who was allowed to take the differential exam and did not show up for it without a valid reason is considered to have received an unsatisfactory grade.

Final control of knowledge in the discipline. The grade for the discipline is 50% of the current performance (arithmetic mean of all current grades of the student) and 50% - the grade on the differential test.

To evaluate a discipline on a 4-point traditional (national) scale, the average score for the discipline is first calculated as the arithmetic mean of the two components: the average current score as the arithmetic of all current grades (calculated as a number rounded to 2 (two) decimal places, for example, 4,76); traditional assessment for differential credit.

The average score for the discipline is translated into the traditional grade from the discipline on a 4-point scale and is regarded as the ratio of this arithmetic mean to the percentage of mastering the required amount of knowledge in the subject.

Example:

- average current score - 4.75
- assessment on differential test - 4
- average score for the discipline - $(4.75 + 4) : 2 = 4.38$
- traditional assessment for the discipline – 4

Independent work of students: The content of independent work is determined by the working curriculum of the discipline and methodical recommendations of the teacher. Students are also recommended for independent study of relevant scientific literature and periodicals. Methodical support of independent work of students provides means of self-control (tests, a package of control tasks). The teacher analyzes the results of independent educational work of each student, develops methodological tools for conducting and evaluating. The current and final control evaluation criteria are the same as for assessing the current performance and final control of students.

COURSE POLICY

The policy of the academic discipline is built taking into account the norms of the legislation of Ukraine on academic integrity, the Statute and provisions of ONMedU and other normative documents.

Discipline requirements: mandatory attendance of classes, active participation in discussions, preliminary preparation for lectures and classes with textbooks and basic literature, quality and timely performance of tasks for independent work, participation in all types of control (current control , IWS control, boundary control, final control).

Observance of academic integrity presupposes independent performance of tasks of current and final control of results of training; references to sources of information in the case of the use of ideas, statements; providing reliable information about the results of their own educational (scientific, creative) activities.

Rework policy: To increase the grade point average in the discipline, the current grades "3" or "4" are not reassigned. Grades "good" and "satisfactory", obtained by the student in the final control (differential test), are not re-added. A student who has been admitted to the differential test and did not appear for it without good reason is considered to have received an unsatisfactory grade.

Mobile devices: Before the lesson begins, the student should turn off the sound in the mobile phone and other devices that can play it. This is an international rule of etiquette that applies to the educational process. It is not allowed to use them during the lessons, for purposes that are not related to or disrupt the learning process. Attempting to talk during class is considered a gross violation of ethical rules of conduct.

Behavior in the audience: students must monitor their appearance, monitor their speech, to avoid the use of obscene words. Familiarity, rudeness, disrespect in communication with the interlocutor, indecent behavior in any form are inadmissible. It is strictly forbidden to use narcotic and toxic drugs. It is not allowed to use alcoholic and low-alcohol beverages or to be in a condition, which is conditioned by it, at any time on the territory of the university. Takes care of the material and technical base and educational literature of the university.