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

SYLLABUS OF ACADEMIC DISCIPLINE «Clinical Anatomy and Operative Surgery»

Course scope	Total hours/credits – 74 / 2,5
Semester, year of study	Second year of university III semester
Days, time, location	According to the schedule. Lectures are delivered in large and small anatomical auditory according to the schedule. Practical classes are held in the classrooms of the department according to the schedule.
Teachers	1. Appelhans Elena, Head of the Department, Professor, PHD 2. Nescoromna Natalia, Associate Professor, phd. 3. Koshelnyc Elena, Associate Professor, phd 4. Chebotarova Svetlana, senior teacher 5. Antsut Olga, department assistant 6. Ursu Alexandr, department assistant
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Teacher's workplace	1. Nescoromna Natalia - anatomy hall № 2 2. Koshelnyc Elena - study room № 1 3. Chebotarova Svetlana - anatomy hall № 2 4. Antsut Olga - study room № 3 5. Ursu Alexandr - anatomy hall № 1
Counseling for students	Tuesday, Thursday - 14.30 - 17.30. Conducted by the teacher on duty according to the duty schedule. During the quarantine period - on-line Zoom.

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**

THE EXPLANATORY NOTE

Course policy: The policy of academic discipline is determined by the system of requirements that the educator imposes on the student in the study of the discipline and is based on the principles of academic integrity. Requirements relate to attendance (inadmissibility of absences, tardiness), active participation in the discussion of issues, previous preparation for lectures and seminars with the help of educational-methodical manuals and basic literature, quality and timely performance of tasks for independent work, participation in all types of control (current control, ISW control, boundary control, the final control); rules of conduct in the classroom (active participation, fulfillment of the required minimum of educational work, disconnection of telephones, observance of the established form of clothing in the operating room, etc.) incentives and penalties (for which points can be accrued or deducted, etc.). 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.

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.

Purpose of the discipline: The discipline is aimed at the formation of knowledge to justify the diagnosis, the choice of rational access, determining the method of surgery, prevention of intraoperative errors and complications due to topographic and anatomical features of the region.

The aim of the discipline - to form a system of knowledge necessary to substantiate the clinical diagnosis, understanding the pathogenesis of various diseases, the development of possible complications, as well as choosing the most rational methods of surgery, mastering techniques and skills of surgical interventions in the program.

Tasks of the discipline:

- formation of knowledge of clinical anatomy of the head and neck;
- ability to interpret topographic and anatomical relationships from the standpoint of variation and age clinical anatomy;
- formation of skills to apply knowledge of clinical anatomy to substantiate the diagnosis and understand the pathogenesis of various pathological processes;

- formation of skills to choose the most rational methods of surgical intervention;

- mastery of the technique of performing basic surgical interventions.

The discipline provides students with the acquisition of competencies:

Integral competencies (IC):

Ability to solve typical and complex specialized tasks and problems in the field of health care in the specialty "Dentistry", in professional activities or in the learning process, which involves research or innovation and is characterized by complexity and uncertainty of conditions and requirements.

General competencies (GQ):

1. Ability to abstract thinking, analysis and synthesis.
2. Knowledge and understanding of the area of subject and understanding of professional activity.
3. Ability to apply knowledge in practice.
4. Ability to communicate in the state language both orally and in writing.
5. Ability to communicate in English.
6. Have the skills to use information and communication technologies.
7. Ability to search, process and analyze information from various sources.
8. Ability to adapt and act in a new situation.
9. Ability to identify, pose and solve problems.
10. Ability to be critical and self-critical.
11. Ability to work in a team.
12. The desire to preserve the environment.
13. Ability to act socially responsibly and consciously.
14. Ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.

15. Ability to preserve and multiply moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the area of subject, its place in the general system of knowledge about nature and society and in the development of society, technology and technology, use different types and forms of motor activities for active recreation and a healthy lifestyle.

Professional competencies of the specialty (FC):

1. Ability to plan and implement measures for the prevention of diseases of organs and tissues of the oral cavity and maxillofacial region.

2. Ability to perform medical and dental manipulations.

3. Ability to treat major diseases of organs and tissues of the oral cavity and maxillofacial region.

4. Ability to determine tactics, methods and provide emergency medical care.

5. Ability to assess the impact of the environment on the health of the population (individual, family, population).

6. Ability to provide home care according to the protocols of tactical medicine.

Program learning results (PLR I):

- Identify and identify the leading clinical symptoms and syndromes in accordance with the approved list 1 in the educational-professional program "Dentistry";

- According to standard methods, using preliminary patient history, patient examination data, knowledge of the person, his organs and systems, to establish a probable nosological or syndromic preliminary clinical diagnosis of dental disease in accordance with the approved list 2 in the educational program "Dentistry".

COURSE DESCRIPTION

Discipline "Clinical Anatomy and Operative Surgery" offers a holistic system of theoretical and practical knowledge. Training consists of classroom activities, including a lecture course, practical classes, and independent work.

The discipline "Clinical Anatomy and Operative Surgery" for students of the Faculty of Dentistry consists of two sections:

1. Clinical anatomy and operative surgery of the head.
2. Clinical anatomy and operative surgery of the neck.

Thematic plan of the lectures

№	Theme	Hours
1.	Introductory lecture. Subject, aims and history of topographic anatomy and operative surgery. Clinical anatomy ad operative surgery of cerebral region of the head	2
2.	Clinical anatomy ad operative surgery of facial region of the head	2
3.	Clinical anatomy of the neck.	2
4.	Operative surgery of the neck	2
	Total	8

Thematic plan of the practical classes

№	Theme	Hours
1.	General surgical instruments. Tissue separation and joining technique. Types of surgical sutures and nodes.	2
2.	Clinical anatomy of the cerebral part of the head. Regions, their layered structure. Operations on the cerebral part of the head. Debride of short skull wounds. Skull trepanation. Anthrotomy.	2
3.	Clinical anatomy of the lateral region of the facial region. Facial nerve. Clinical anatomy of the deep part of the face. Maxillary artery. Venous plexuses. Trigeminal nerve.	2
4.	Clinical anatomy of the anterior part of the face. Eye area. Nose area, paranasal sinuses. Clinical anatomy of the oral cavity. Tongue. Teeth. The bottom of the oral cavity.	2
5.	Facial surgery. Surgical interventions on the paranasal sinuses. Topographic and anatomical substantiation of rational incisions on the face.	2
6.	Border control from the section: "Clinical anatomy and operative surgery of the head".	2
7.	Clinical anatomy of the neck. Regions, triangles. Fasciae of the neck and	2

	interfascial fatty cellular spaces. Suprahyoid area.	
8.	Clinical anatomy of the infrahyoid area. Vascular-nervous bundle, cervical plexus. Clinical anatomy of the lateral triangle of the neck. Topographic anatomy of organs of neck: larynx, trachea, thyroid and parathyroid glands, esophagus.	2
9.	Operations on the Neck: Tracheotomy. Tracheostomy. Conicotomy. Cricotomy. Resection of the thyroid gland by OV Nikolaev. Neck wounds. Ligation of the neck vessels.	2
10.	Differential test	2
Total		20

Thematic plan of independent (individual) work of students

№	Theme	Hours
1.	Preparation to practical lessons- theoretical preparation and ability to demonstrate practical skills.	30
2.	Elaboration of topics that are not included in the lesson plan	
2.1	The types of local anaesthesia. Preparation of surgeon hands and operative field. Techniques of tissue separating and suturing. General and special surgical instruments. Techniques of knitting and suturing.	4
2.2	Debride of the short wounds of the neck. Vagosympathetic blockade by Vishnevsky. Localization of abscesses, phlegmons, fistulas.	4
3.	Preparation to differential test	8
Total		46

Questions to the differential test

1. Clinical anatomy of the fronto-parieto-occipital region.
2. Clinical anatomy of the temporal region.
3. Clinical anatomy of the mastoid process. Anthrotomy.
4. Brain meninges, subarachnoid space, arteries of the dura mater.
5. Venous sinuses of the dura mater, their connection with the veins of the face and veins of the cerebral region.
6. Primary surgical treatment of wounds of skull.

7. Technique to stop bleeding in soft tissue injuries, bones of the skull and venous sinuses of the dura mater.

8. Osteoplastic trepanation of the skull.

9. Decompressive trepanation of the skull.

10. Clinical anatomy of the buccal region.

11. Clinical anatomy of the parotideo-masseteric region.

12. Clinical anatomy of facial nerve branches. Substantiation of rational incisions on face.

13. Clinical anatomy of the deep regio of the face.

14. Clinical anatomy of the branches of the trigeminal nerve.

15. Temporal and pterygo-palatine fossae (vessels, nerves, muscles).

16. Clinical anatomy of the oral region: vestibule, the oral cavity itself, hard and soft palate.

17. Pirogov-Valdeyer lymphatic ring.

19. The structure of the teeth, their innervation, blood supply. Rationale and technique of conduction anesthesia.

20. Tongue: innervation, blood supply.

21. Clinical anatomy of the nasal region. The paranasal sinuses.

22. Features of the structure of the orbit and its contents.

23. Primary surgical treatment of facial wounds.

24. Typical incisions for abscesses and phlegmons of the facial region.

25. Opening of the frontal sinus.

26. Opening of the maxillary sinus according to Caldwell-Luke.

27. Maxillary artery and its branches.

28. Skin flap grafting according to V.P. Filatov.

29. The division of the neck into regions and triangles. Triangles of the neck.

30. Clinical anatomy of fascia and interfascial fatty spaces of the neck.

31. Clinical anatomy of the submandibular and submental triangle of the neck. Pirogov's triangle.

32. Clinical anatomy of the carotid triangle and the main vascular-nervous bundle of the neck.

33. Clinical anatomy of the sterno-cleido-mastoid region.

34. Clinical anatomy of the omo-clavicular triangle of the neck. Spatium antescalenum and interscalenum.

35. Clinical anatomy of the thyroid and parathyroid glands.

36. Clinical anatomy of the pharynx and pharyngeal fatty cellular spaces.

37. Clinical anatomy of the larynx.

38. Types of tracheotomy. Crico- and conicotomy.

39. Ligation of the external carotid and lingual arteries.

40. Vagosympathetic blockade according to A.V. Vyshnevsky.

41. Debride of the short wounds of the neck.

List of practical skills and abilities:

1. Freely use surgical instruments:
   - to separate tissues;
   - to stop bleeding;
   - for holding and fixing tissues;
   - to connect tissues;
2. Soft tissue dissection.
3. Temporary stopping of bleeding in the wound.
4. The final stoping of bleeding in the wound.
5. Soft tissue connection.
6. Possession of surgical sutures and nodes.
7. Primary surgical treatment of head wounds.
8. Conicotomy, conic puncture.

List of recommended literature

Basic:

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.Hansen John T. Netter's Clinical Anatomy [Text] / J. T. Hansen, 2016. - 470 p.

3. Tsyhykalo O. V. Topographical anatomy and operative surgery [Text]: textbook for english-speaking foreign students of higher educational institutions of III-IV levels of accreditation /O.V. Tsyhykalo, 2011. - 528 c.

***Additional**:*

1. Snell Richard S. Clinical Anatomy by Regions / R. S. Snell, 2012. - 754 p.

2. John T. Hansen. Netter's Clinical Anatomy / John T. Hansen, 3 rdedition, 2014. - 546 p.: ill.

Evaluation criteria

Various forms of knowledge control are used (oral, written, combined, testing, practical skills, etc.).

The results of the academic progress of students are put in the form of grades on a national scale, 200-point and ECTS scale and have standardized generalized criteria for assessing knowledge:

1. National scale:

- grade ***"excellent"*** is awarded to a student who systematically worked during the semester, showed during the exam versatile and deep knowledge of the program material, is able to successfully perform the tasks provided by the program, has mastered the content of basic and additional literature, has realized the relationship of individual sections of the discipline, their importance for the future profession, found creative abilities in understanding and using the educational and program material, has shown the ability to independently update and replenish knowledge. The level of competence is high (creative);

- a ***"good"*** grade is given to a student who found full knowledge of the curriculum material, successfully completes the assignments included in the program, has absorbed the basic literature recommended by the program, has sufficient knowledge of the discipline and is able to independently update and refresh them during further study and professional activities; the competence level is sufficient (constructively-variant);

- assessment ***"satisfactory"*** is awarded to a student who found knowledge of the basic curriculum material to the extent necessary for further study and subsequent work in the profession, copes with the tasks provided by the program, made some mistakes in answering the exam and in the performance of examination tasks, but has the necessary knowledge to overcome the mistakes made under the guidance of a scientific and pedagogical employee. The level of competence is average (reproductive);

- the grade ***of "unsatisfactory"*** is given to the student who did not reveal sufficient knowledge of the basic curriculum material, made fundamental mistakes in the performance of the tasks provided by the program, cannot use the knowledge without the help of the teacher to further study, could not master the skills of independent work; the competence level is low (receptive - productive).

The final control in the form of credits is evaluated on a two-point scale:

- The mark "passed" is given to a student who has fulfilled the curriculum of the discipline, has no academic arrears; the level of competence is high (creative)

- The grade "failed" is given to a student who didn't follow the study plan of the discipline, has academic debts (grade point average is less than 3.0 and / or absences) level of competence - low (receptive - productive).

2**. Multi-point scale** characterizes the actual performance of each student in mastering the academic discipline. The conversion of the traditional grade for the discipline into a 200-point grade is performed by the University Information and Computing Center with the "Contingent" program according to the formula: grade point average (current / in discipline) x 40. A national grade of "5" scores 185-200, "4" scores 151-184. "3" - 120-150.

3. **The ECTS rating scale evaluates the achievements of students** in the discipline, who are studying in the same course in the same major, according to the points they received, by ranking, namely: ECTS Statistical Score "A" top 10% of students, "B" next 25% of students, "C" next 30% of students, "D" next 25% of students, "E" last 10% of students. The ECTS scale establishes whether a student belongs to the group of the best or the worst among the reference group of fellow students (department, specialty) is his/her rating. When converting from a multi-point scale, as a rule, the boundaries of grades "A", "B", "C", "D", "E" do not coincide with the boundaries of grades "5", "4", "3" on the traditional scale. An "A" grade on the ECTS scale cannot equal an "excellent" grade and a "B" grade cannot equal a "good" grade. Students who receive grades of "FX" and "F" ("2") are not entered into the list of students ranked. Such students automatically receive a grade of "E" after retake. A grade of "FX" is assigned to students who have earned the minimum number of points for current academic activities, but who are not given credit for the final control. The grade of "F" is given to students who attended all classroom sessions in the discipline, but did not get an average score (3.00) for the current academic activities and are not allowed to the final control.

1. Current progress:

Assessment of the success of the study of each topic of the discipline "Clinical Anatomy and Operative Surgery" is performed on the traditional 4-point scale. At the

practical training, students must be surveyed at least once every 2 practical sessions, at least 75% of the students. At the end of the semester the number of grades of students in the group on average should be the same. At the end of each class, the instructor should announce to students their grades, make a corresponding entry in the Journal of Student Attendance and Progress and the Student Attendance Record Sheet. At the end of the discipline, the current grade is calculated - the average current grade (the arithmetic mean of all current grades on a traditional scale, rounded to two decimal places). At the last practical lesson, the instructor must provide students with information about the results of their current academic progress and academic arrears (if any). Current grades of "3" or "4" are not retaken to increase the average grade in the discipline.

2. Type of final control: differential credit

Final control is conducted at the last practical lesson in the oral form with the obligatory performance of all types of work by the student, provided by the working curriculum, and assessed for the current academic activities of an average of not less than 3.00. Assessment of knowledge is conducted by a commission of the faculty of the department. The grades of "good" and "satisfactory" received by the student in the final control (differential credit) are not retaken. A student who was allowed to take a differential exam and did not attend without a valid reason receives an unsatisfactory grade.

3. Grades for the course

The grade received for the answer to the differential exam and the average score of the current progress during the discipline are used to calculate the arithmetic mean, which forms an overall grade for the discipline. The results of the exams are evaluated on a 4-point national scale ("excellent", "good", "satisfactory", "unsatisfactory") and a 200-point scale, and are entered on the examination record and the student's record book. Grades "good" and "satisfactory" received by the student in compiling the final control (differential credit) are not retaken. A student who was allowed to take an exam or differential credit and did not show up for it without a valid reason receives an unsatisfactory grade.