

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

**SYLLABUS OF ACADEMIC DISCIPLINE
 «HUMAN ANATOMY»**

Course scope	Total hours/credits – 435 / 14,5
Semester, year of study	First year of university: I semester - 150 hours/ 5 credits II semester - 195 hours/ 6,5 credits Second year of university: III semester – 90 hours/ 3 credits
Days, time, location	According to the schedule. Practical and seminars classes are held in the 1st and 2nd anatomy halls, as well as in the academic rooms of the department, according to the schedule of classes.
Teachers	<ol style="list-style-type: none"> 1. Appelhans Elena, Head of the Department, Professor, PHD 2. Nescoromna Natalia, Associate Professor, PhD. 3. Matiushenko Phylip, senior teacher 4. Kuznyetsova Elena, senior teacher 5. Chebotarova Svetlana, senior teacher 6. Antonova Natalya, senior teacher 7. Kozhukharenko Tatiana, assistant 8. Ursu Alexandr, assistant 9. Ostapenko Andrey, assistant 10. Prus Ruslan, assistant, PhD 11. Kozachenko Anastasia, assistant

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E-mail	sonshine22@ukr.net
Teacher's workplace	<ol style="list-style-type: none"> 1. Nescoromna Natalia – anatomy hall N 2 3. Matiushenko Phylyp – study room N 3 4. Kuznyetsova Elena – study room N 1 5. Chebotarova Svetlana - anatomy hall N 2 6. Antonova Natalya - anatomy hall N 1 7. Kozhukharenko Tatiana - study room N 1 8. Ursu Alexandr - anatomy hall N 1 9. Ostapenko Andrey - anatomy hall N 2 10. Prus Ruslan - study room N 2 11. Kozachenko Anastasia study room N 2
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 ANOTATION

The subject of the study discipline "human anatomy" is the science of the form, structure, origin and development of organs, systems and the human body as a whole.

Human anatomy as an academic discipline:

a) is based on students' study of medical biology, histology, cytology and embryology, biophysics, Latin, ethics, philosophy, ecology, and is integrated with these disciplines;

b) provides the basis for the study of normal and pathological physiology, pathological anatomy, operative surgery and topographic anatomy, deontology, propaedeutics of clinical disciplines and the formation of abilities to apply the knowledge of human anatomy in the further study of all clinical disciplines and in the future professional activity.

The goal of the course is for each student to acquire knowledge of anatomy in the world of scientific ideas about the structure and functions of the human body as a whole, the ability to use the acquired knowledge in the further study of other fundamental sciences of medicine and in the practical work of a doctor.

Final goals of the discipline:

-Analyze information about the structure of the human body, systems, organs and tissues;

-Provide insight into the interdependence and unity of structures and functions of human organs and their variability under the influence of environmental factors;

-Determine the influence of social and working conditions on the development and structure of the human body;

-Demonstrate knowledge of moral and ethical principles of relating to the living human being and the human body as an object of anatomical and clinical study.

The main objectives of the study of the discipline of "human anatomy" as a science is a systematic approach to describing the form, structure of organs in unity with the functions performed:

Know

a) the form and structure of the organs combined into systems;

b) location of organs, vessels, nerves in different parts of the body, which is of great importance for surgery;

c) aspects of anatomical features of human individual development at different stages of ontogenesis;

d) regularities of perinatal and early postnatal development of human organs.

be able to:

- demonstrate and describe the anatomical structure of human organs, organ systems;

-identify on anatomical preparations the parts, surfaces, edges, angles of organs and formations on them;

- evaluate the influence of social and working conditions on the development and structure of the human body;
- use Latin anatomical terms according to the international anatomical nomenclature
- be able to analyze the results of laboratory and instrumental methods of examination of human organs and systems.

Learning outcomes for the discipline

know:

- The shape and structure of organs combined into systems:
- shape and structure of bones (Osteologia)
- bone connections (Arthrologia)
- muscles (Myologia)
- innards (Splanchnologia)
- central and peripheral nervous system (including the autonomous part of the peripheral nervous system (Neurologia)
- endocrine glands (glandulae endocrinae)
- lymphoid system (systema lymphoideum)
- sense organs (organa sensoria)
- cardiovascular system (systema cardiovasculare)

be able to:

- demonstrate and describe the anatomical structure of human organs, organ systems;
- identify anatomical relationships of human organs and organ systems on anatomical preparations (organ topography);
- be able to evaluate the impact of social and working conditions on the development and structure of the human body
- to be able to apply Latin anatomical terms according to the requirements of the international anatomical nomenclature (Sao Paulo, 1997; Kiev, 2001);

COURSE DESCRIPTION

Forms and methods of teaching:

The course will be presented in the form of lectures, practical classes and organization of students' independent work.

Content of the course

1. Introduction to anatomy.
2. anatomy of the bones of the skeleton.
3. Connection of the bones of the skeleton.
4. Myology.
5. Anatomy of the digestive system.
6. Anatomy of the respiratory system.
7. Anatomy of the urinary system.
8. Anatomy of the genital organs.
9. Anatomy of the organs of the immune and endocrine systems.
10. Anatomy of the spinal cord.
11. Anatomy of the brain.

12. The organs of the senses.
13. Cranial nerves.
14. Anatomy of the heart.
15. Vessels and nerves of the head and neck.
16. Vessels and nerves of the trunk.
17. Vessels and nerves of the extremities.

List of recommended literature

Basic literature

1. Human anatomy: a textbook: in 3 volumes, V 3 / A.S. Golovatsky, V.G.Cerkasov, M.R. Sapin and others - Est. 3rd, finished - Vinnitsa: Nova kniga, 2015. - 376 pp. : il.
2. Cherkasov V.G., Bobryk I.I., Guminsky Yu.Y., Kovalchuk O.I. International Anatomical Terminology (Latin, Ukrainian, Russian and English equivalents) Vinnitsa: Nova kniga, 2010. - 392 p. (Tutorial)
3. Cherkasov V.G., Khmara T.V., Makar B.G., Pronyaev D.V. Human anatomy. Chernivtsi: Medical University. 2012. - 462 pp. (textbook)
4. Human anatomy. V.G. Cherkasov, S.Yu. Kravchuk - Vinnytsya: Nova kniga, 2011. – 640p. (teaching tutorial)
5. Human anatomy / [Koveshnikov V.G., Bobryk I.I., Golovatsky A.S. et al.]; ed.by V.G. Kovezhnikov - Lugansk: Virtual Reality, 2008. - Vol.3.- 400.
6. Sobotta. Atlas of human anatomy. In two volumes. Edited by Ukrainian edition: V.G. Cherkasov., transl. by O. I. Kovalchuk. - Kyiv: Ukrainian Medical Bulletin, 2009.

Additional

1. Cherkasov V.G., Guminsky Yu.Y., Cherkasov E.V., Shkolnikov V.C. History of Anatomy (developmental history and outstanding anatomists). Lugansk: LTD "Virtual Reality", 2012. - 148 p. (tutorial manual).
2. Mcq for "KROK-1" – human anatomy / Edition 4, revised / Edited by V.G.Cherkasov, I.V.Dzevulskaya IV, O.I.Kovalchuk. Tutorial.
3. Educational manual. Control of independent preparation for practical classes. Module 1 "Anatomy of the locomotor aparate", Module 2 - Splanchonology. Central nervous system. Organs of Sense ", Module 3 -" Heart. Anatomy of the cardiovascular system. " [for the students of higher medical school (pharmaceutical) training. of IV level of accreditation] / Edited by V.G. Cherkasov, I.V. Dzevulskaya, O.I. Kovalchuk.
4. Netter F. Atlas of Human Anatomy / Frank Netter [trans. from english A.A. Zegelsky]. - Lviv: Nautilus, 2004 - 529 p.

5. Frederic Martini Atlas of Human Anatomy: Transl. from the 8th English ed [science adv. V.G.Cherkasov], VSV "Medicine", 2011. - 128 p. (Atlas)

Informational recourses

<http://anatom.in.ua>

<https://anatom.ua/>

<https://meduniver.com/Medical/Anatom/>

<https://www.primalpictures.com/>

<https://www.visiblebody.com/>

<https://3d4medical.com/>

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" (5) 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 (4) 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" (3) 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" (2) 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:

At the last practical lesson, the teacher is to announce to students the results of their current academic grades, academic debt (if any). Only those students who have no academic debts and have an average grade of at least 3.00 for the current academic activities are allowed to take part in the final attestation.

2. Type of final control

In the discipline "Human Anatomy" final control is in the form of an exam.

3. Grades for the course

To grade a discipline on a 4-point traditional (national) scale, the average score for the discipline is calculated as the arithmetic mean of two components:

1) the current grade point average as the arithmetic average of all current grades (calculated as a number rounded to 2 decimal places)

4,45 - 5,0 «5»

3,75 - 4,44 «4»

3,0 - 3,74 «3»

2) the traditional exam grade.

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.

Example:

- Current grade point average is 4.75

- Examination grade - 4

- average grade for the discipline - $(4.75 + 4) : 2 = 4.38$

- traditional grade for the discipline – 4

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". Converting the result of the student's study of the discipline on a 200-point scale and further ranking on a rating scale (ECTS) is necessary to implement the academic mobility of students. This allows the student to continue his or her studies in that discipline at another institution or in another country.

170 to 200 - Excellent (A) (excellent performance with only minor errors)
155 to 169 - Very good (B) (above average with few errors)
140 to 154 - Good (C) (generally satisfactory, with some significant errors)
125 to 139 - Satisfactory (D) (not bad, but with some significant deficiencies)

111 (min) to 124 - Sufficient (E) (performance satisfies the minimum criteria)
60 to 110 - Satisfactory (D) (not bad, but with some significant deficiencies)
1 to 59 - Unsatisfactory (F) (with obligatory repeat course of the discipline)

Assessment of the student's independent work

Material for independent work of students, which is provided in the topic of practical training simultaneously with the classroom work, is assessed during the current control topics at the appropriate classroom training.

Evaluation of topics that are carried out for independent work and are not included in the topics of classroom training are controlled during the final control of the topic.

Evaluation of the Student's Individual Work

A maximum of 4 points is awarded for the student's individual work. Grades for individual work are added to the sum of the grades for the student's current course work.

Points for individual work may be awarded to students who have written and reported on essays from the recommended topics with the use of additional literature and have won prizes for participation in the Olympiad in the discipline among students of their university and higher educational institutions of Ukraine.

Recommendations of the Department of Human Anatomy on the system of making up missed training classes.

A student who has missed practical training classes must process them independently (without grades).

To work on the missed class the student should have:

- a dictionary of Latin terms on the topic of the class;
- a lecture conspectus;
- diagrams, drawings, provided in the process of independent work of the student
- A short synopsis, which reflects the basic factual material of the topic.

The instructor marks the presence of this list in the journal.

Recommendations on the methodology of students' independent preparation for practical exercises:

1. Read the topic of the class from the textbook;
2. During the second, more in-depth reading, prepare a brief outline of the topic;
3. Write out in the dictionary and study the Latin terms on the topic of the lesson;
4. Review in the atlas the anatomical structures described in the material of the topic of the class.
5. Prepare answers to questions on the topic of the missed class, which are specified in the methodological developments of the department.
6. Prepare diagrams and pictures of the structure of different anatomical structures, which are provided by the methodical developments of the department "Educational-methodical manual. Control of independent preparation for practical classes". [For

students of higher medical (pharmaceutical) educational institutions. IV accreditation level]. stamp of Ministry of Health of Ukraine, Ministry of Education and Science of Ukraine, protocol № 1 / 11-1165 from 23.02.2010.

7. The anatomical structures in the sectional hall should be examined and studied using anatomical specimens in accordance with the questions listed in the guidelines (list of practical skills);

The most difficult and incomprehensible for the student questions you can ask the teacher at the beginning of the missed lesson.

During the workout, the student:

- answers the teacher's basic and finite level questions;
- answers the teacher's questions about the definition of anatomical structures on X-ray, CT, MRI, angiograms (visualization of anatomical formations by modern clinical research methods)
- demonstrates knowledge of practical skills on cadaveric material, individual anatomical preparations, skull, skeleton, plaster casts, tables;
- gives answers to 10 standardized test questions (CRQ-1).

Attendance at all types of classroom sessions (lectures, practical classes) is mandatory.

Late attendance at all types of classroom lessons (lectures, practical classes) is not allowed.