MINISTRY OF HEALTH OF UKRAINE

ODESSA NATIONAL MEDICAL UNIVERSITY

Faculty of medicine, international

Department of Human Anatomy

Syllabus of the elective discipline

"Age and individual characteristics and anomalies of human body development"

Scope of the academic discipline	Total number of hours per discipline: 90 hours / 3.0 credits. II year of study
Days, time, place carrying out	Classes are held in the classrooms of the department according to the class schedule.
Teacher (-s)	1. Matyushenko Pylyp. *Senior Teache,* *2.* Kuznetsova Olena. *Senior Teacher* *3.* Antonova Natalya, *Senior Teacher,* *Head of the Museum of Human Anatomy.*
Contact information	Help by phone: Antsut Olga, Head Teacher of the department 0504561236 E-mail: olha.antsut@onmedu.edu.ua 1. Matyushenko Ph. M. 0672999553 2. Kuznetsova O.A. 0632979525 3. Antonova N.A. 0633547515 Consultations and practice of missed lessons: from 2:30 p.m. to 5:30 p.m., on Tuesday and Thursday.

Purpose. The acquisition of specific knowledge by each applicant of higher medical education, namely: age-related and individual features of the structure of the human body and the occurrence of major anomalies in the development process.

Acquiring competences and knowledge of the features of the anatomical structure of the human body by the student is necessary for the further practical work of the doctor, for substantiating the clinical diagnosis, understanding the pathogenesis of diseases, the development of possible complications, as well as choosing the most rational methods of treatment, mastering technical techniques and skills of medical interventions.

The main task of studying the discipline is a systematic approach to describing the form, structure of organs, position (topography) of parts and organs of the body in unity with the performed functions, taking into account the age, gender, individual characteristics of a person and developmental disabilities.

Task.

- Formation of abilities and skills to analyze information about the structure of the human body, the systems that make it up, organs and tissues;

- Formation of abilities and skills to determine the topographical-anatomical relationships of human organs and systems;

- Formation of knowledge of clinical anatomy of body parts;

- The ability to interpret topographical-anatomical relationships from the standpoint of variational and age-related anatomy;

- Formation of abilities and skills to interpret patterns of prenatal and early postnatal development of human organs, variants of variability of organs, developmental defects;

- Formation of abilities and skills to interpret gender, age and individual features of the structure of the human body;

- Formation of abilities and skills to predict interdependence and unity of structures and functions of human organs, their variability under the influence of environmental factors;

- Formation of abilities and skills to determine the influence of social conditions and work on the development and structure of the human body;

- Formation of abilities and skills to demonstrate mastery of moral and ethical principles of attitude towards a living person and his body as an object of anatomical and clinical research.

- Formation of skills to apply knowledge of anatomy to substantiate the diagnosis and understand the pathogenesis of various pathological processes, developmental defects.

As a result of studying the academic discipline, the applicant must:

Know:

1. Age and individual characteristics of human body systems (structure, shape, topography of internal organs and other anatomical formations);

2. Differences in concepts about normal variants, developmental anomalies, congenital defects of the human body;

3. Basic concepts of teratology.

4. Mechanisms of abnormality of the human body.

5. Peculiarities of the anatomical structure of the human body with anomalies of the development of locomotor, digestive, respiratory, endocrine, cardiovascular, urinary, sexual, nervous systems and sensory organs.

Be able:

1. Use knowledge of individual, age-related features of the anatomy of the human body to substantiate the development of various pathological conditions;

2. To use knowledge of teratology to assess the general state of the human body, justify the conduct of diagnostic studies and the choice of treatment methods;

Master the skills: describe anatomical spacimen and the results of X-ray examinations of the human body of different age groups and with developmental anomalies.

DESCRIPTION OF THE EDUCATIONAL DISCIPLINE (COURSE)

Forms and methods of education

The discipline is taught in the form of seminar classes (30 hours) and organization of independent work (60 hours).

Teaching methods:

- verbal (answer, explanation, report, conversation, solving clinical situational problems, working with a book);
- face-to-face (demonstration of presentations and anatomical spacimen, Anatomag computer desk, drawing);
- practical (description of anatomical spacimen).

Forms of independent and individual work of applicant

- theoretical preparation for the next practical lesson

- preparation of reports and presentations

- solution of thematic test tasks

- familiarization with the department's anatomical spacimens

Content of the academic discipline

Content module 1. Development and age-related features of the structure of internal organs and systems. The concept of anatomical norms and individual characteristics.

Topic 1. Concept of anatomical norm and individual characteristics. Human anatomy in different periods of life.

Topic 2. Development and age-related features of the structure of the musculoskeletal system.

Topic 3. Development and age-related features of the structure of the digestive system.

Topic 4. Development and age-related features of the structure of the respiratory system.

Topic 5. Development and age-related features of the structure of the urinary system, male and female genital organs.

Topic 6. Development and age-related features of the structure of the nervous system.

Topic 7. Development and age-related features of the structure of the cardiovascular system.

Content module 2. Introduction to teratology. Basic concepts. Anomalies of development.

Topic 8. Introduction to teratology. Basic concepts. Anomalies of the development of the face and oral cavity.

Topic 9. Anomalies and variants of the structure of organs of movement.

Topic 10. Anomalies of the development of the digestive system.

Topic 11. Anomalies of the development of the larynx, trachea, and endocrine organs. Variants of the structure and anomalies of the lungs.

Topic 12. Anomalies of the development of the urinary system and genitals.

Topic 13. Anomalies of the development of the nervous system and sense organs.

Topic 14. Anomalies of the development of the heart and blood vessels.

Topic 15. Anomalies of skin development. The role of pharmacotherapy in the formation of congenital malformations.

List of recommended literature:

Main:

1. Age-related human anatomy and physiology: textbook / T. E. Komisova, A. V. Mamotenko, L. P. Kovalenko, I. A. Ionov, O. O. Katerynych, G. I. Sakhatskyi. - Kh.: FOP Petrov V. V., 2021. - 112 p.

2. Silkina Yu.V. Medical embryology with the basics of teratology: a study guide / Yu. V. Silkina, M. P. Veropotvelyan, N. O. Dankovich; in general ed. Yu. B. Tchaikovsky. – Vinnytsia: Nova Kniga, 2019. – 208 p.

Additional:

1. Zaporozhan V.N. Embryology, teratology and the basics of human reproduction: [study guide for medical students. university] / [study guide V. M. Zaporozhan, V. K. Naphanyuk, E. L. Kholodkova; Odessa National Medical Univ. - Odesa: OGMU, 2000. - 377 p. - (Medical student library);

2. Congenital malformations: practical guide / V. M. Zaporozhan, I. L. Babii, S. R. Halych [and others]; Odesa National Medical University. - Odesa: ONMedU, 2012. - 319 p.

Forms of control and evaluation methods (including criteria for evaluating learning outcomes)

Current control:

It is carried out during training sessions and is aimed at checking the mastering of the educational material by students of the VMO, the level of theoretical and practical training.

Forms of ongoing control - survey, conversation, report, testing, solving situational problems, solving a clinical situational problem, demonstration of practical skills or abilities. Forms for evaluation of current educational activities are standardized and correspond to standards of answers. Evaluation of the success of studying each topic of the discipline is carried out according to a traditional 4-point scale.

Criteria for the current assessment in a practical lesson:

Grade	Evaluation criteria
Excellent "5"	The applicant has flawlessly mastered the theoretical material, demonstrates deep and comprehensive knowledge of the topic, the main provisions of scientific primary sources and recommended literature, freely uses the acquired theoretical knowledge when analyzing practical material, expresses his attitude to certain problems, demonstrates a high level of mastery of practical skills.

Well «4»	The applicant has mastered the theoretical material well, possesses the main aspects from primary sources and recommended literature, presents it in a reasoned manner; has practical skills, expresses his thoughts on certain problems, but certain inaccuracies and errors are assumed in the logic of the presentation of theoretical content or in the analysis of practical ones.
Satisfactory "3"	The applicant has mainly mastered the theoretical knowledge of the educational topic, orients himself in primary sources and recommended literature, but answers unconvincingly, confuses concepts, additional questions cause uncertainty or lack of stable knowledge in the applicant; when answering questions of a practical nature, reveals inaccuracies in knowledge, does not know how to evaluate facts and phenomena, connect them with future activities.
Disappointing «2»	The applicant has not mastered the educational material of the topic, does not know scientific facts, definitions, hardly orients himself in primary sources and recommended literature, lacks scientific thinking, practical skills are not formed.

Final control: credit.

Credit is awarded to the applicant who has completed all sections of the educational program of the selected discipline, has no academic debt, and has an average current grade of at least 3.0.

COURSE POLICY

The policy of the academic discipline complies with the rules established by the "Regulations on Academic Integrity and Ethics of Academic Relations" at Odessa National Medical University, in accordance with the Code of Academic Ethics and Relations of the University Community of Odessa National Medical University, Regulations on the Prevention and Detection of Academic Plagiarism in Research and educational work of applicants of higher education, scientists and teachers of Odesa National Medical University

Discipline requirements: mandatory attendance of classroom classes, active participation in discussion of issues, preliminary preparation for seminar classes with the help of teaching and methodical manuals and basic literature, high-quality and timely performance of tasks for independent work, participation in all types of control (current control, control IWS, final control).

Adherence to academic integrity involves: independent performance of all types of work, tasks, forms of control provided for by the work program of this academic discipline;

• references to sources of information in the case of using 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.

Unacceptable in educational activities for participants of the educational process are:

• using family or official ties to obtain a positive or higher grade during any form of control of learning outcomes or academic performance;

• use of prohibited auxiliary materials or technical means (cheat sheets, notes, micro-earphones, telephones, smartphones, tablets, etc.) during control measures;

• passing procedures for control of training results by fake persons.

For violation of academic integrity, applicants may be held to the following academic responsibility:

• a decrease in the results of assessment of control work, assessment in class, credit, etc.;

• retaking the assessment (control work, credit, etc.);

• appointment of additional control measures (additional individual tasks, control works, tests, etc.);

• conducting an additional inspection of other works authored by the violator.

Policy on deadlines and rescheduling: absences of classes for non-respectable reasons will be made up according to the schedule of the teacher on duty. Absences for valid reasons are worked out according to an individual schedule with the permission of the dean's office. A applicant who is late for a class can attend it, but if the teacher marked "absent" in the logbook, he must complete it in the usual way.

Behavior in the classroom: applicants must monitor their appearance, monitor their language, behavior. Be careful with the material and technical base and educational literature of the educational institution