

**ODESSA NATIONAL MEDICAL UNIVERSITY**  
**Stomatological faculty**  
**Department of Forensic Medicine**

**Course syllabus**  
**Forensic medicine**

Volume	1,5 ECTS credits, total -45 academic hours Lectures-8 academic hours , practical classes -22 academic hours , SIW-15 academic hours
Semester, academic year	VI semester, 3 <sup>rd</sup> academic year
Days, time, month	Discipline is carried out according to the approved schedule, in the premises of the Department of Forensic Medicine
Teachers	Teachers of the Department of Forensic Medicine
Telephone number	(048) 723-76-90
E-mail	Larsonlarisa2@gmail.com
Workplace	Premises of the Department of Forensic Medicine
Consultations	Online consultations – microsoftteams

**COMMUNICATION**

Communication with students will be carried out by E-mail, Microsoft Teams, by phone, in the classroom on schedule.

**COURSE ANNOTATION**

**The subject of study** of the discipline is the theory and practice of forensic examination as a practical branch of medicine.

**Prerequisites**

The basis for mastering the discipline is the knowledge, skills and abilities acquired in the study of anatomy, pathological anatomy, histology, cytology and embryology, medical biology, parasitology and genetics, physiology, biological chemistry, pathological physiology.

**Postrequisites**

Forensic medicine as a discipline involves the study of the relationship with the following disciplines: internal medicine, surgery, neurology, epidemiology, traumatology, neurology, neurosurgery.

**Course purpose:**

1) study of typical general pathological processes, which determine the morphological manifestations of diseases and injuries.

2) study of the structural basis in the formation of various types of traumatic injuries, their complications and consequences,

3) forensic explanation of the mechanism of injury and cause of death due to exposure to various external factors,

4) study of methods of forensic and pathomorphological examinations: autopsy, examination of biomaterial, material evidences of biological origin and instruments of crime in different divisions of the department of forensic examination of material evidence.

**Tasks of the discipline:**

1) understanding the basics of the mechanism of injury and the formation of injuries in the development of general pathological processes of the human body as a result of injury, combination of which determines the morphological manifestations;

2) mastering the algorithm for dividing injuries by degree of severity;

3) the ability to describe the corpse at the place of its discovery (scene),

4) the concept of forensic medical criminalistic examination of objects,

5) obtaining skills of clinical and anatomical analysis, synthetic generalization of diagnostic signs of traumatic injuries and their correct interpretation in causal relations.

**Expected results:**

**As a result of studying the discipline the student must:**

***know:***

- laws, turned on the protection of inviolability of the individuality;
- rules and duties and responsibility of the medical staff for the professional offence, and also main laws, which regulate the practice of the medical staff;
- the modern scientific data from all parts of the forensic medicine, and also use the main methods of examination of the main objects of forensic-medical examination (examination of the corpses, alive persons and material evidences)

***be able to do:***

- Demonstrate the skills of description and extraction of the material evidences of the biological origin.
- Demonstrate the ability to describe the body injuries
- Demonstrate the ability to perform the forensic-medical examination of the victim, accused and other persons
- Demonstrate the ability to perform forensic-medical examination of the corpse and detect the cause of the violent death
- Ability to describe the dental status of the victim.
- Understand the principles of forensic dental identification of an unknown person.

- The ability to use the signs of the severity of injuries in determining their severity on the face.

### **DESCRIPTION OF THE COURSE**

The course will be presented in the form of lectures (8 hours), practical classes (22 hours), organization of independent work of students (15 hours)

Forms and methods of teaching:

1) lectures (topics of the lecture course reveal the problematic issues of the relevant sections of the discipline. Lecturers can use such options for lectures as educational, informational, lecture-visualization, lecture-discussion, lecture-consultation);

2) practical classes (during the practical class oral and written interviews, solving test tasks, solving situational problems are done);

3) independent work (SIW) with active consultation of the teacher (during independent work students master the material of the next practical lesson. At the consultations the student can get answers to complex questions of the topic).

### **Content of the discipline**

**Section 1. Organization of forensic medical examination and general principles of examination of the influence of environmental factors on the human body.**

**Topic 1.** Subject of forensic medicine. History of its development as an independent science. Organization aspects of performing of forensic-medical examination. Forensic dentistry in the system of forensic knowledge.

**Topic 2.** General aspects of forensic tanatology. Process of dying and death. Clinical and biological death, their diagnosing. Early and late body changes. Diagnosis of the time of death occurrence. Examination of the corpse on the scene of its detection. Role of forensic expert during the examination of the corpse on the place of its detection.

**Topic 3.** General aspects of the forensic traumatology. Environmental factors, which cause injuries. Outcomes of the injury. Description of the injuries. Injuries caused by blunt objects. Classification of the blunt objects. Bruises, abrasions, hurt wounds. Bone fractures. General aspects of craniocerebral injury. Fractures of the bones of the maxillofacial region. Determination of the viability and duration of damage to the soft tissues of the face and teeth.

**Topic 4.** Forensic examination of gun-shot injuries. Forensic explanation of the mechanism of injury and death caused by gun-shot weapons.

**Topic 5.** Forensic examination of the detection of degree of the body injuries, condition of the health and age, disputed sexual conditions and sexual crimes. Detection of degree of the body injury in the case of dental injury.

**Topic 6.** Forensic examination of mechanic asphyxia. Forensic explanation of the mechanism of the injury and death caused by the mechanic asphyxia.

**Topic 7.** Forensic toxicology. General data about poisons and poisonings. Forensic examination of alcohol intoxication. Forensic examination of the death, resulted by drugs (narcotics)

**Topic 8.** Forensic examination of material evidences of biological origin. Forensic-criminalistic researches of the forensic objects.

**Topic 9.** Forensic examination in the cases of malpractice of medical staff's

## Literature

1. Babanin A.A., Belovitskiy O.V., Skrebkova O.Yu. Forensic medicine: Textbook. – Simferopol, 2007. – 464 p.; 24 sh.ill.
2. Franchuk V.V. Forensic Medicine : practical guide / V.V. Franchuk. – Ternopil : TSMU, 2011. – 204 p.
3. Journal of Clinical Forensic Medicine ## 1- 6 – 1999
4. Narayan Reddy K.S. The essentials of forensic medicine and toxicology. – 24<sup>th</sup> edition – India. – 2005. – 569 p
5. Apurba Nandy. Principles of forensic medicine. – Calcutta, India. – 2004. – 673 p.
6. Williams D.J., Ansford A.J., Priday D.C., Forrest A.S. Forensic pathology. – 1996. – 139 p.
7. DiMaio Vincent J., DiMaio D. Forensic pathology: Practical Aspects of Criminal and Forensic Investigations Series – 2<sup>nd</sup> ed. – CRC Press LLC,. – 2001. – 565 p.
8. Knight B. Simpson's forensic medicine. – 1997. – 212 p.
9. Parikh C.K. Parikhs textbook of medical jurisprudence, forensic medicine and toxicology. – 2002. – 1249 p.

## Information resources

University websites and electronic resources of the Internet

## Assessment

### Methods of assessment of current control:

The following methods of current control are used in each practical lesson:

- 1) tests on the topic of practical class
- 2) oral answer to standardized questions on the material of the current topic, previous topics and lecture material
- 3) filling out oriental cards on the topic of the lesson.
- 4) control of student activity in small groups

### Criteria of assessment of student's work on the practical class

«5»	«4»	«3»	«2»
<i>Criteria for assessing the theoretical knowledge of the student</i>			
The student	the student orients	Knows the actual	the student does

independently, clearly and consistently, completely answered all questions.	in the material, but in answering made two or three not important mistakes.	material in the full course, but finds it difficult to present answers independently and systematically, forcing the teacher to offer leading questions.	not show knowledge and is poorly oriented in the main theoretical material of the course, which is manifested by offering him additional questions.
<b><i>Criteria for assessing the performance of test tasks</i></b>			
90-100 %	70-80 %	50-60 %	Less than 50 %
<b><i>Criteria for assessing student activity</i></b>			
Very active	Active	Less active	Passive
The student actively works during the practical class, is able to express own attitude to this problem, shows the ability to independently study the material, to draw independent conclusions. Is the leader in the group.	The student actively works during the practical class, the presentation of the material is logical, with conclusions, is able to perform educational tasks. Able to work in a group, but to show qualities needs a stimulus from the outside.	The student as a whole has mastered the essence of questions on this topic, tries to draw conclusions and solve problems. But in class behaves passively, responds only to the call of the teacher. In the group does not show activity.	The student is not active in independent work and in a group. Shows lack of interest and desire to work.

The final grade for all types of student activities during the practical lesson.

At the end of the course, the current performance is calculated as the average score of all grades obtained by the student on the traditional scale, rounded to 2 (two) decimal places.

**Forms and methods of final control:**

**Differential offset** is conducted at the last lesson by an oral interview, performed by the head of the department together with an associate professor or two associate professors. Differentiated student's offset is assessed on a 4-point (traditional) scale. To differential offset only those students who do not have

academic debt and have an average score for current academic activity of at least 3.00 are allowed to take part.

#### **Accrual and distribution of points received by students.**

To assess the 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:

- 1) the average current score as the arithmetic of all current scores (calculated as a number rounded to 2 (two) decimal places, for example, 4.76);
- 2) traditional assessment for differentiated 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. The obtained average score for the discipline allows you to convert to a score on a 200-point scale.

**Conditions for obtaining additional (bonus) points.** Participation in the research of the department, preparation of reports and speeches at student conferences.

#### ***Independent work of students.***

##### **Tasks for independent work:**

- 1) ***preparation for practical classes*** (theoretical training, work with indicative maps, test tasks, solving situational problems)
- 2) ***preparation for the differential offset.***

Assessment of independent work, which is provided in the topic along with the classroom work, is carried out during the current control on the topic in the relevant classroom.

#### **Policy of the course**

**Deadline and recompilation policy:** Dean's permission is required to clear missed lectures and practical classes (more than 1 day). Practices are carried out daily after classes (not more than one pass) and on Saturday (three passes). After clearing the passes, the student makes a differential offset by oral examination, which is conducted by the head of the department together with the associate professor, or two associate professors.

**Academic Integrity Policy:** Write-offs during the current control test and differential offset are prohibited (including with the use of mobile devices).

**Attendance policy:** Attendance at lectures and practical classes is mandatory, points for attending lectures are not accrued, but with lectures not completed during the cycle, the student is not allowed to take the differential offset. An important

reason for absence from classes is an illness, which is confirmed by a certificate from the dean's office.

**Mobile devices:** not used in class.