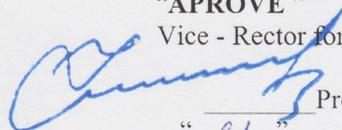


National Pirogov Memorial Medical University, Vinnytsya

“APROVE ”

Vice - Rector for Academic Affairs

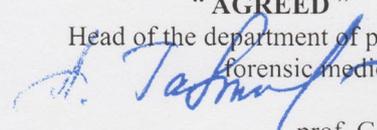


Prof. Y.I. Guminskiy

“ 31 ” 08 20 20 year

“ AGREED ”

Head of the department of pathanatomy,
forensic medicine and law



prof. Gavriluk A.O.

“ 31 ” 08 20 20 year

SYLLABUS
of academic discipline
“Forensic medicine”

Specialty	222 Medicine
Educational level	the second (master's) level
Educational programme	EPP Medicine, 2020
Academic year	2020-2021
Department	Pathanatomy, forensic medicine and law
Lecturer (if lectures are given)	Doc. Bondarchuk H.O.
Contact information	<i>Department of pathanatomy, forensic medicine and law, forensic@vnmnu.edu.ua, National Pirogov Memorial Medical University, Vinnytsya, Pirogov's st. 56</i>
Syllabus compiler	Doc. Bondarchuk H.O.

1. Status and structure of the discipline

Discipline status	Compulsory
Discipline code in EPP/discipline place in EPP	EC 45, discipline of general training
Course / semester	4th year (VII-VIII semesters)
The amount of discipline (the total number of hours / number of credits ECTS)	45 hours / 1.5 credits ECTS
The structure of the discipline	Lectures - 10 hours Practical classes 34 hours Independent work 1 hour
Language of study	English
Form of study	Full-time (<i>or remote full-time by order</i>)

2. Description of the discipline

Short annotation of the course, relevance. Forensic medicine is a clinical discipline that studies medical, biological and forensic issues that arise in the practice of justice and the judiciary. Carrying out criminal and civil proceedings requires, in cases provided by current legislation, expert consideration of issues in the field of medicine and biology. The need to acquire knowledge of the theory and practice of forensic medicine is due to the fact that, according to current legislation, law enforcement agencies have the right to involve in the performance of expert functions of a doctor of any specialty, regardless of which faculty he received medical education. In this regard, forensic knowledge is important for every doctor, who, if necessary, must correctly apply them in practice. The main objectives of the study of forensic medicine are to master the modern possibilities of forensic examination and the structure of the forensic service, the functions of the bureau and its units; organizational and procedural principles of forensic examination; diagnostics of the fact of occurrence of biological death of the person; corpse phenomena as absolute signs of death; forensic significance and substantiation of expert research of objects of forensic medical research; description of injuries according to existing algorithms; determination of types of bodily injury and the mechanism of its occurrence; use criteria to determine the severity of injuries; requirements that must be met when withdrawing physical evidence of biological origin and the concept of forensic research methods. to inspect the corpse at the scene

Prerequisites - the discipline "Forensic Medicine" is based on the study of medical biology, human anatomy, histology and embryology, normal physiology, pathological anatomy, pathological physiology, operative surgery and topographic anatomy, microbiology, infectious diseases, biochemistry, respiratory diseases vascular system, which provides the ability to apply knowledge of forensic medicine in the process of further training and professional activities.

The purpose of the course and its significance for professional activities. Providing modern knowledge on procedural and organizational bases of examination, forensic examination of living persons, corpses, material evidence, materials of criminal and civil proceedings, participation in the inspection of the scene as a specialist in forensic examination, as well as the acquisition of skills and abilities to conducting forensic expert examinations.

Postrequisites - knowledge gained during the course of Forensic Medicine is further used by students in the study of clinical disciplines (therapeutic profile, surgical profile, including traumatology, neurosurgery and other narrow disciplines, which are primarily associated with injuries from the action various factors) for the development of clinical and morphological and expert thinking, as well as the solution of diagnostic and expert problems.

3. Learning outcomes.

After successful study of the discipline the applicant will be able to:

to know: procedural and organizational principles of forensic medical service in Ukraine, structural subdivisions and their possibilities of bureau of forensic medical examination, professional and legal offenses of medical workers;
 be able to: conduct external and internal examination of the corpse, forensic examination of the victim, description of skin and bone injuries; to describe bodily injuries, to examine the corpse at the scene, to establish the fact of biological death, to describe and seize material evidence of biological origin during the inspection of the scene, to describe corpse phenomena, to describe bodily injuries and determine their type, nature, severity, to conduct forensic medical examination of the corpse and to establish the cause of violent and non-violent death;
 to solve independently: questions concerning a category and a kind of death, the characteristic of a damaging factor.

4. Content and logistic of the discipline

Module 1 «Subject and tasks of forensic medicine. History of its development, procedural and organizational bases of forensic examination»	7 or 8 semester 45 h/1.5 cr	Lectures №№ 1-5 Practical classes №№ 1-17 Topics for self- study №№ 1
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The course includes 23 topics, which are divided into 3 thematic modules

Module 1. Subject and tasks of forensic medicine. History of its development, procedural and organizational bases of forensic examination.

Topic 1. Organizational and procedural principles of forensic examination in Ukraine and in the world. Documentation of forensic medical examinations

Topic 2. Early and late postmortem signs, their forensic value

Topic 3. Demonstration of the examination of the corpse. Autopsy technique and documentation. Registration of "Expert's Conclusion", formation of forensic diagnosis, filling out a medical certificate of death

Topic 4. Examination of the corpse at the scene with formation of preliminary conclusions

Topic 5. Forensic examination of newborn corpses.

Topic 6. Forensic examination of injuries caused by sharp and blunt objects.

Topic 7. Forensic examination of road-traffic injuries.

Topic 8. Forensic examination of railway, aviation and other types of transport injuries and injuries due to falling from a height

Topic 9. Forensic examination of gunshot injuries of clothing, skin and bones

Topic 10. Forensic examination of explosive trauma, injuries caused by non-lethal weapons

Topic 11. Forensic examination of injuries from the action of physical factors: the action of high and low temperatures

Topic 12. Forensic examination of injuries from the action of physical factors: technical and atmospheric electricity, changes in atmospheric pressure, radiation, etc

Topic 13. Forensic examination of mechanical asphyxia.

Topic 14. Forensic examination of poisonings by different groups of poisons.

Topic 15. Methods of forensic medical examination of victims, accused and other persons. Determining the severity of injuries

Topic 16. Demonstration examination of the victim (accused or other person). Forensic examination of health, age, disputed sexual conditions, in cases of so-called sexual crimes.

Topic 17. The causative agent of whooping cough. Credit

Types of education according to the curriculum are: a) lectures, b) practical classes, c) independent work of students, d) consultations.

The lecture course discovers the problematic issues of the relevant sections of forensic.

Practical classes provide a theoretical justification of the main issues of the topic and the acquisition of the following practical skills:

- 1) to conduct external and internal examination of the corpse, forensic examination of the victim, description of skin and bone injuries; to describe bodily injuries, to examine the corpse at the scene, to establish the fact of biological death, to describe and seize material evidence of biological origin during the inspection of the scene, to describe corpse phenomena, to describe bodily injuries and determine their type, nature, severity, to conduct forensic medical examination of the corpse and to establish the cause of violent and non-violent death;
- 2) solving situational problems on the subject of forensic medicine, relating to the autopsy, examination of the corpse at the scene and examination of victims, accused and other persons.

In practical classes, students write down protocols of their research in workbooks, make a summary on the topic and solve clinically-oriented situational tasks.

The student's independent work involves preparation for practical classes and development of practical skills, study of topics for independent extracurricular work, preparation of presentations, tables, processing of scientific literature and writing reviews of the provided topics for individual work. Control of mastering the topics of independent extracurricular work is carried out at final control of the discipline.

Thematic plans of lectures, calendar plans of practical classes, thematic plan of independent extracurricular work, volume and directions of individual work are published on the site of the department.

The route for obtaining materials: Forensic medicine / for students / Full-time education / medicine / 4 course / Educational materials / or through the link <https://www.vnmdu.edu.ua/> Forensic medicine and law department #58. Access to the materials is carried out through the student's corporate account s000XXX@vnmdu.edu.ua.

5. Forms and methods of monitoring academic performance

Current control in practical studies	Methods: oral or written survey, testing, electronic survey, solving situational problems, conducting laboratory studies, interpreting them and evaluating their results (drawing up a protocol in a workbook)
Final control of the discipline - Forensic medicine (<i>credit</i>)	Methods: pre-examination testing, oral questioning (according to the Regulation of the Academic process in National Pirogov Memorial Medical University, Vinnytsya (link https://www.vnmdu.edu.ua/General information))
Learning success diagnostic tools	Theoretical questions, clinically-oriented situational tasks, practical tasks, practical skills demonstration

6. Assessment criteria

Knowledge assessment is carried out in accordance with the Regulations of the Academic process in National Pirogov Memorial Medical University, Vinnytsya (link <https://www.vnmdu.edu.ua/General> information))

Continuous assessment	On a four point system of traditional assessments: 5 «excellent», 4 «good», 3 «satisfactory», 2 «unsatisfactory»
Control of practical skills	According to the four-point system of traditional assessments
Final control of the discipline	Final credit grade: 71-80 points - "excellent" 61-70 points - "good" 50-60 points - "satisfactory" Less than 50 points - "unsatisfactory" / did not pass
Discipline assessments:	Current academic assessment - from 72 to 120 points (conversion of the average traditional assessment of practical class on a 120-point scale): 60% of the grade

	for the discipline Final control - from 50 to 80 points: 40% of the grade for the discipline Individual work - from 1 to 12 points From 122 to 200 points in total.
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Discipline Score Scale: National and ECTS

The sum of grades for all types of educational activities	Score ECTS	Score on a national scale	
		For exam, course project (work), practice	for credit test
180-200	A	excellent	credited
170-179,9	B	good	
160-169,9	C		
141-159,9	D	satisfactory	-
122-140,99	E	satisfactory	
120-140,99	E	-	
119-61	FX	unsatisfactory with the possibility of reassembly	is not credited with the possibility of reassembling
1-60	F	unsatisfactory with a mandatory reexamination of discipline	is not credited with mandatory reexamination of discipline

Criteria for student knowledge assessment

Assessment of oral / written response during the current assessment

The grade "excellent" is given to a student who has deeply and comprehensively mastered the theoretical material, competently and logically teaches it. He is fluent in Latin terminology, clearly answers non-standard questions on the topic of the lesson, is able to link the material of the topic with previously studied sections, which indicates knowledge of the recommended literature and the ability to analyze the material studied, and clearly demonstrates the importance of theoretical knowledge for practice.

The grade "good" is given to a student who knows and has a good theoretical material, teaches it correctly, does not allow inaccuracies in the answer, is able to reveal the topic from the standpoint of its medical significance and practical application, but the answers do not go beyond the textbook, guidelines.

A grade of "satisfactory" is given to a student who knows the basic concepts and definitions of the studied topic, but admits significant inaccuracies or has difficulty in formulating the answer, does not understand the medical aspects of the topic, can not relate theoretical material to practice.

The grade "satisfactory" is given to a student who knows the basic concepts and definitions of the studied topic, but admits significant inaccuracies or has difficulty in formulating the answer, does not understand the medical aspects of the topic, can not relate theoretical material to practice.

The grade "unsatisfactory" is given to a student who does not know the theoretical foundations of the topic, makes gross mistakes in answering, does not understand the basic concepts and definitions, can not explain the importance of theoretical material for practical medicine.

Assessment of the oral answer during the final control (credit)

The grade "excellent" is given to the student competently and in a logical sequence provides answers to the questions of the exam ticket. During the answer demonstrates the ability to analyze theoretical material, makes thorough conclusions about the importance of theoretical material for practical medicine, provides clear correct answers to additional non-standard questions, can explain main tasks of forensic medicine.

The grade "good" is given to a student who has a good knowledge of theoretical material and in a logical sequence provides answers to the questions of the examination ticket, but admits minor inaccuracies, which are quickly corrected when answering clarifying questions of the examiner. When answering questions on forensic medicine can explain how to make forensic conclusions according to different causes of death.

A grade of "satisfactory" is given to a student who demonstrates knowledge of basic concepts and definitions when answering an exam ticket, admits significant inaccuracies or has difficulties in answering questions on forensic medicine, cannot sufficiently disclose the principles of making forensic conclusions.

The grade "unsatisfactory" is given to a student who does not know the answer to one of the questions of the exam ticket, makes serious mistakes when answering questions on forensic medicine, can not explain the basic concepts and definitions, does not know the principles of forensic conclusions.

The calculation of individual points is carried out on the basis of the Regulation of the Academic process in National Pirogov Memorial Medical University, Vinnytsya (link <https://www.vnmu.edu.ua/General> information).

12 points - added to the assessment of the discipline for a student who won a prize at the interuniversity competitions in the discipline or a prize at the Ukrainian competition of student research reports or a prize at the interuniversity / international scientific conference with the published work;

11 points - are added to the assessment of the discipline for a student who won the first prize at the intra-university Olympiad in the discipline or the first place at the student scientific conference with the published work, or participated in the Ukrainian competition of student research papers;

10 points - are added to the assessment of the discipline for a student who won a prize (II-III) at the intra-university Olympiad in the discipline or at the student scientific conference with the availability of printed work; or for participation (without a prize place) in interuniversity competitions in the discipline or a prize place in an interuniversity / international scientific conference with the availability of published work.

9 points - are added to the assessment of the discipline for a student who participated (without a prize) in the intra-university Olympiad in the discipline or student scientific conference with the presence of published work

8 points - are added to the assessment of the discipline for a student who actively participated in the student scientific group, published a paper with results of scientific and practical research, but did not personally participate in the student scientific conference, prepared a poster report.

6-7 points - are added to the assessment of the discipline for a student who has made at least 20 smears or at least 3 tables, or an educational video to replenish the visual support of teaching the discipline (taking into account the volume and importance of work performed).

3-5 points are added to the assessment of the discipline for a student who has made at least 2 tables, or created a thematic illustrated presentation (at least 2) to supplement the visual support of teaching the discipline (taking into account the volume and importance of work).

1. Policy of discipline / course

The student has the right to receive high-quality educational services, access to contemporary scientific and educational information, qualified tutoring during the study of discipline and mastering practical skills. The policy of the department during the providing of educational services is a student-centered, based on normative documents of the Ministry of Education and the Ministry of Health of Ukraine, the Statute of the University and the Procedure for the Providing of Educational Services regulated by the main principles of the organization of the educational process in National Pirogov Memorial Medical University, Vinnytsya and the principles of academic integrity (link <https://www.vnmu.edu.ua/General> information).

Adherence to the rules of National Pirogov Memorial Medical University, Vinnytsya, safety techniques in practical classes.

Observance of the rules of the National Pirogov Memorial Medical University, Vinnytsya regulations, safety precautions at practical classes. Instruction on biosafety, safety of handling

chemical reagents and burners is conducted at the first practical lesson by the teacher. The instructed students are registered in the Safety Instruction Journal. A student who has not been instructed is not allowed to perform practical work.

Requirements for preparation for practical classes.

The student should be prepared for a practical lesson, testing tasks for the current topic should be solved in a workbook, diagrams and tables are filled.

A student should come to class on time, without delay. A student who is more than 10 minutes late is not allowed to the practical class and must work it in the prescribed manner.

In practical classes, the student must have a work uniform (medical gown, hat). Students who do not have a work uniform are not allowed to practice in forensic office.

The student must follow the rules of safety in practical rooms and at the department of forensic medicine office.

When discussing theoretical issues, students should demonstrate tolerance, courtesy and respect for their colleagues and the teacher; when performing practical tasks, the workplace should be kept in order and be cleaned after performing practical work.

Usage of mobile phones and other electronic devices.

The use of mobile phones and other electronic devices in the classroom is allowed by teacher.

Academic integrity. When studying the discipline, the student must be guided by the Code of Academic Integrity and Corporate Ethics of National Pirogov Memorial Medical University, Vinnytsya (link : <https://www.vnmu.edu.ua/General> information)/ Code of Academic Integrity).. In case of violation of the norms of academic integrity during the current and final controls student receives a grade of "2" and must work it out to his teacher in the prescribed manner within two weeks after receiving an unsatisfactory assessment).

Missed classes. Missed classes are working out in the manner prescribed by Regulations of the Academic process in National Pirogov Memorial Medical University, Vinnytsya (link <https://www.vnmu.edu.ua/General> information) at the time of work out schedule (published on the website of the department <https://www.vnmu.edu.ua/> Department of Forensic medicine and law #58) to the teacher on duty. To work out missed lesson student must provide a completed workbook protocol on the relevant topic, take a test and answer questions in writing or orally to the topic of the lesson. The reworking of missed lectures is carried out after providing a thesis of lecture material, or writing an abstract, or preparing own presentation on the topic of missed lecture.

The procedure for admission to the discipline final control is given in the Regulation of the Academic process in National Pirogov Memorial Medical University, Vinnytsya (link <https://www.vnmu.edu.ua/General> information). Students who do not have missed practical classes and lectures and received an average traditional grade of at least "3" are allowed to final control.

Additional points. Individual points in the discipline that student can receive for individual work, is determined by the results of his individual work according to Regulation of the Academic process in National Pirogov Memorial Medical University, Vinnytsya (link <https://www.vnmu.edu.ua/General> information) and policy of the course.

Conflict resolution. In case of misunderstandings and complaints to the teacher because of the quality of educational services, knowledge assessment and other conflict situations, student should submit his / her claims to the teacher. If the issue is not resolved, the student has a right to apply to the head of the department according to Complaints Consideration Procedure (<https://www.vnmu.edu.ua/> General information / Basic documents).

Politics in terms of remote learning. Distance learning regulated by the Regulations of the elements of remote learning in National Pirogov Memorial Medical University, Vinnytsya (<https://www.vnmu.edu.ua/> General information). The main training platforms for studying are Microsoft Team and Google Meets. Practical classes and lectures, exercises and consultations during distance learning is published on the website of the department (<https://www.vnmu.edu.ua/> Department of Forensic medicine and law / Student or <https://www.vnmu.edu.ua/> Department of Forensic medicine and law / News).

Feedback from teachers is via messengers (Microsoft Teams) or e-mail (at the teacher's choice) during working hours.

Educational resources.

Educational and methodological support of the discipline is published on the website of the department (<https://www.vnmue.edu.ua/> Department of Forensic medicine and law/ To students). Consultations are hold twice a week according to the schedule.

Recommended reading:

1. Dettmeyer, R. B., Verhoff, M. A., & Schütz, H. F. (2013). Forensic medicine: fundamentals and perspectives. Springer Science & Business Media.
2. Madea, B. (Ed.). (2015). Estimation of the time since death. CRC Press.
3. Saukko, P., & Knight, B. (2015). Knight's forensic pathology fourth edition. CRC press.
4. Narayan, K. S., & Reddy, M. (2017). Essentials of Forensic Medicine and Toxicology. Jaypee brothers medical p.

Electronic resources:

<https://www.uniprot.org/>

<https://www.forens-med.ru/>

<https://www.aic.gov.au/>

<https://scholar.google.com> PubMed : <https://pubmed.ncbi.nlm.nih.gov/>

The timetable and distribution of groups with assigned teachers are published on the web page of the department (<https://www.vnmue.edu.ua/> / Department of Forensic medicine and law / To students).

Questions to the intermediate and final semester control (credit) of the discipline are published on the web page of the department (<https://www.vnmue.edu.ua/> Department of Forensic medicine and law / To students).

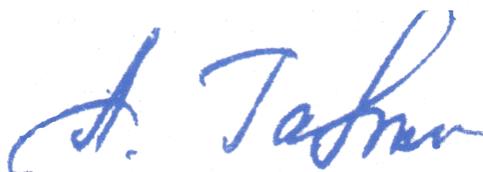
The syllabus of the discipline "Forensic medicine" was discussed and approved at the meeting of the department (record № 1, dated "31" 08 2020)

Responsible for the academic discipline "Forensic medicine"



Bondarchuk H.O.

Head of the department



Gavriluk A.O.