# INTERNATIONAL HIGHER SCHOOL OF MEDICINE Department of Pathology

#### **SYLLABUS**

# FORENSIC MEDICINE

2025-2026 academic year

for students of medical faculty 5<sup>rd</sup> course 9 1-48 groups (CC); 1-10 (I-KC) 4 credit (120 h, including auditoria – 72 h, self-working – 48 h)

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The Syllabus is considered at the meeting of the department of Pathology Protocol № 2 dated 9.09 2025

Head of the department \_

**Course objective:** The main objective of teaching the subject is educating students on issues of practical and theoretical aspects of forensic medicine, necessary for performing duties of specialist, conducting preliminary investigation. Familiarize students with morphological particulars Pathological processes during mechanical trauma and other extreme conditions (fatal conditions, death and corporal changes, poisoning, asphyxia); legal regulations and organizing forensic medical examination, basic foundations of medical ethics, issues of doctors' responsibility for inflicting damage to health and professional and professional-official misconduct.

# After studying the subject student should know: Knowledge:

- Rights and responsibilities of the patient, medical worker; measures of legal liability of subjects of medical law for offenses in the field of health protection.
- Ethical foundations of modern medical legislation, responsibilities, rights, the place of a doctor in society, basic ethical documents of international organizations, professional medical associations.
- Procedural foundations, order of organization, conduct and types of forensic medical examinations, as well as techniques and methods for their implementation.
- Types and purpose of regulatory documentation adopted in the country's healthcare system.

#### Skill:

- Skills in analyzing various legal phenomena, legal facts, legal norms and legal relations that are the objects of professional activity.
- Communication skills with patients and colleagues in the medical team, observing moral and ethical standards, rules and principles of professional medical behavior.
- Technical skills in working with tools, equipment and devices for conducting forensic medical research of various types. Skills in working with regulations documentation adopted in the country's healthcare system.

#### Attitude:

- Analyze and correctly apply legal norms in your professional activities; apply acquired legal knowledge to analyze a specific legal situation; analyze legal facts and legal relations arising in connection with them in the field of professional activity.
- Reveal the meaning of the basic moral and ethical norms, rules and principles of professional medical behavior.
   Determine the choice of conditions, equipment and techniques necessary to conduct various types of forensic medical examinations in specific situations.
- To navigate the main current regulatory documents of the healthcare system in certain cases.

**Pre-requisites:** To successful study this course, student shall know:

Anatomy (macro and microanatomy), Medical biology, Normal physiology, General pathology, Internal medicine, Surgical diseases, Obstetrics and gynecology, Traumatology, orthopedics, and extreme surgery, Psychiatry and addiction medicine

**Post-requisites:** To successful study this course, student shall know:

state exam, postgraduate studies, narrow specialization (GP, internal medicine, surgery, anesthesiology and intensive care).

#### THEMATIC PLAN OF LECTURES

No	Theme of lecture	Hours	Date
1.	Forensic service.	2	Acc. to timetable
2.	The basic normative acts regulating the activities of forensic agencies and forensic experts.	2	Acc. to timetable
3.	Early and late cadaveric phenomena. Principles of definition of time of occurrence of death.	2	Acc. to timetable
4.	Forensic examination (research) of a corpse.	2	Acc. to timetable
5.	Preparation of reports on forensic medical issues, interpretation of results, and formulation of conclusions/opinions; collection, preservation, and dispatch of biological or trace evidence.	2	Acc. to timetable

6.	The general questions of judicial medical traumatology.	2	Acc. to timetable
7.	Particulars of examining dismembered, skeletal corpses and bone remains.		Acc. to timetable
8.	Forensic examination of corpses of newborns.	2	Acc. to timetable
9.	The general questions of toxicology in judicial. medical aspect.	2	Acc. to timetable
10.	Injuries and death from the effects of mechanical factors (forensic traumatology).	s 2 Acc. to timetable	
11.	Mechanical damage, their classification. Causes of death in mechanical damage.	2	Acc. to timetable
12.	Forensic medical examination of explosive injuries.	2	Acc. to timetable
13.	Forensic medical examination in cases of poisoning.	2	Acc. to timetable
14.	The composition and structure of the used bullets and cartridges, and their forensic-medical interpretation.	2	Acc. to timetable
15.	Forensic examination of material evidences of a biological origin.	2	Acc. to timetable
16.	Forensic medical examination in criminal cases on professional law violations of medical workers.	2	Acc. to timetable
17.	Laboratory and special methods in forensic medicine.	2	Acc. to timetable
18.	The bone properties as the object examination of mechanisms of damage.	2	Acc. to timetable
	TOTAL:	36	

# THEMATIC PLAN OF PRACTICAL CLASSES

№	Theme of practical class		Date
1.	Organizational and procedure fundamentals of forensic medical examination.	2	Acc. to timetable
2.	Examination of a corpse on a scene of accident and a location of its discovery.	2	Acc. to timetable
3.	Demonstration research of dead body. Medico-legal documentation of examination of dead body.	2	Acc. to timetable
4.	Preparation of reports on forensic medical issues, interpretation of results, and formulation of conclusions/opinions; collection, preservation, and dispatch of biological or trace evidence.	2	Acc. to timetable
5.	Unit Control-1	2	Acc. to timetable
6.	Forensic medical examination of a corpse. Forensic examination of corpses of newborns.	2	Acc. to timetable
7.	Medico-legal differential diagnostics of different types of a trauma.	2	Acc. to timetable
8.	Medico-legal research at identification of the personality.	2	Acc. to timetable

9.	Unit Control-2	2	Acc. to timetable
10.	Forensic medical examination of injuries caused by blunt objects.	2	Acc. to timetable
11.	Forensic medical examination of injuries caused by sharp objects.	2	Acc. to timetable
12.	Independent research of corpses. Forensic examination of transport injury.	2	Acc. to timetable
13.	The composition and structure of the used bullets and cartridges, and their forensic-medical interpretation.	2	Acc. to timetable
14.	Unit Control-3	2	Acc. to timetable
15.	Forensic medical examination of gunshot injuries.	2	Acc. to timetable
16.	Physical asphyxia.	2	Acc. to timetable
17.	Illness and death from the effects of high and low temperatures, electricity and other external influences. Forensic medical examination of victims, suspects, and other individuals. Forensic medical examination for age determination.	2	Acc. to timetable
18.	Unit Control-4	2	Acc. to timetable
	TOTAL:	36	

# THEMATIC PLAN OF INDEPENDENT WORK OF STUDENTS

Unit №	Theme of independent work	Hours	Date
1.	Work with lecture material, including the study of lecture notes and educational literature	10	Acc. to timetable
2.	Experimental studies	14	Acc. to timetable
3.	Description of the forensic medical examination report	10	Acc. to timetable
4.	Working with literature	14	Acc. to timetable
	TOTAL:	48	

# Recommended reading for the discipline Basic literature:

- 1. Dr.K.S.Narayan Reddy, The Essentials of Forensic Medicine and Toxicology 2017 Jaypee Brothers Medical Publishers (P) Ltd
- 2. Rajesh Bardale, Principles of forensic Medicine and Toxicology 2021 Jaypee Brothers Medical Publishers (P)
- 3. Jason Payne-Lames, Simpson's Forensic Medicine 2020 CRC Press
- 4. Scott A. Wagner, Color Atlas Autopsy 2017 Taylor&Francis

# **Additional literature:**

1. Babanin A. A., Forensic Medicine 2007 Textbook, Simferopol

2. Belovitsky O. V., Forensic Medicine 2005 Textbook, M.

# Grading policy and procedures for all types of work

For the period of studying the discipline, the student gains points for the relevant parameters (per unit):

- current score 40 points,
- independent work 20 points,
- control score (final assessment of knowledge per unit) 40 points,

Maximum score - 100 (40+20+40)

Grading system for student's achievements

Grading system for student's achievements  Grading criteria per discipline				
Maximum score	Intervals			
	«unsatisfactory»	«satisfactory»	«good»	«excellent»
Current control – 40	0-23	24-30	31-35	36-40
Interval description	Does not know most of the relevant section of the material being studied, presents the material erratically and uncertainly	Presents the material incompletely and allows for inaccuracies in defining concepts	Gives an answer that meets the same requirements as for an "excellent" rating, but makes 2-3 errors	Completely presents the studied material, gives correct definitions of concepts;
Independent work – 20	0-11	12-15	16-17	18-20
Interval description	The topic is not covered, does not correspond to the plan, indicates superficial knowledge	The material is presented quite logically, but there are some irregularities in the sequence of expression of thoughts;	2-3 inaccuracies in the content, minor deviations from the topic are allowed	Excellent knowledge of the topic, targeted analysis of the material, correct conclusions and generalizations;
Control work (module) – 40	0-23	24-30	31-35	36-40
Interval description	Number of correct answers < 60%	Number of correct answers 60-75%	Number of correct answers 76-89%	Number of correct answers 90-100%
TOTAL – 100	0-59	60-75	76-89	90-100

# Conduct Policy (lateness, absence, behavior in the auditorium, late submission of work):

- Punctuality and completion of tasks.
- Mandatory attendance of classes.
- Attending class in a clean medical uniform.
- Eliminating conversations on a cell phone in the classroom.
- Active participation in the learning process.
- Doing homework on time.
- Academic detention at the time specified by the teacher.

For violations of the Conduct Policy, the total points for discipline might be reduced to 1-10 points.

# **Academic Ethics Policy:**

- Be tolerant, respect the opinions of others.
- Formulate objections in the correct form.
- Constructively support feedback in all classes.

- Plagiarism and other forms of dishonest work are unacceptable. Plagiarism includes the following: the absence of references when using printed and electronic materials, quotes, thoughts and works of other authors or students.
- Prompting and cheating during tests, exams, classes is unacceptable as well as passing an exam for another student, unauthorized copying of materials.

For violations of the Academic Ethics Policy, the total points for the discipline may be reduced to 1-10 points.

#### Guidelines for the practical classes of the discipline

# Theme 1: Organizational and procedure fundamentals of forensic medical examination.

Key questions covered in lesson 1.

- 1. Cases of mandatory forensic examinations on UK KR.
- 2. Types of Examination.
- 3. Procedures of conducting examination and ordering examination.
- 4. Forensic examination during preliminary investigation and in Court during criminal and civil cases. Objects of a forensic medical examination.
- 5. Forensic expert as a procedural figure and as an expert. Forensic expert and doctor. Duties, the rights and ¬ obligations of the expert. Limits of the competence of the forensic expert.
- 6. Organization and structure of forensic medical examination the Kyrgyz Republic. The State Centre of forensic medical examination of Public Health Ministry of the Kyrgyz Republic.

# **Recommended reading for the lesson:**

L.M. Bedrin The selected lectures on forensic medicine. - Yaroslavl, 1989.

Vermel I.G., Solokhin A.A. Formal logic in forensic medicine. - M, 1995.

#### Theme 2: Examination of a corpse on a scene of accident and a location of its discovery.

Key questions covered in lesson 2.

- 1. A regulation and the inspection routine of a corpse on a place of its discovery in accordance with criminal legislation. Organizing examination on a scene. Participants of examination, their duties. Tasks of the forensic doctor during corpse examination in location discovered. Rules, a technique, and stages of corpse examination. Search, discovery, removal, and packing of material evidences of biological origin.
- 2.Particulars of corpse examination in some cases of death: a transport trauma, fire damages, physical asphyxia, impact of extreme temperatures, an electrical shock, poisoning.
- 3. The documentation of corpse examination in a place of its discovery.

# **Recommended reading for the lesson:**

V.N.Krjukov Basics of physical and morphological genesis of fractures. - M, 1995.

Molchanov V. I, Popov V.L, Kalmykov L.N Firearm injuries and forensic medical examination. - Л, 1990.

#### Theme 3: Demonstration research of dead body. Medico-legal documentation of examination of dead body.

Key questions covered in lesson 3.

#### **Recommended reading for the lesson:**

Examination of a corpse on a place of its discovery / Under the editorship of A.A.Matyshev. - Л, 1989.

Practical workshop on judicial medicine / Under the editorship of V.M.Krjukov, I.V.Guromskiy, B.S.Nikolaev. - M, 1998 (planned to the print).

# Theme 4: Preparation of reports on forensic medical issues, interpretation of results, and formulation of conclusions/opinions; collection, preservation, and dispatch of biological or trace evidence.

Key questions covered in lesson 4.

- 1. Preparation of reports on forensic medical issues.
- 2. Interpretation of analytical results and formulation of conclusions/opinions.
- 3. Principles of collection of biological and trace evidence.
- 4. Protocols for preservation and dispatch of physical evidence.

# **Recommended reading for the lesson:**

Manual on a forensic medical examination of poisoning/under the editorship of of J.S.Smusin, etc. TH., 1980.

Solohin A.A., Bedrin L.M. Tables and schemes on forensic medicine (Releases 14). – Moskva-Jaroslavl, 19851989.

# Theme 5: Unit control № 1

Key questions covered in lesson 5.

Unit control includes oral interview and decision of cases.

- 1. The subject of forensic medicine: goals, objectives.
- 2. What are the main types of forensic medical examinations on the self-work of students?
- 3. What is the structure of the Center for Forensic Medicine?
- 4. What is the basis for forensic examinations?
- 5. Form of documentation of forensic medical examination and forensic medical examinations
- 6. The structure of the findings and conclusions of forensic examinations.

- 7. Who organizes and conducts inspection of the scene?
- 8. The basic principle, the purpose of inspection of the scene.
- 9. Methods and stages of inspection of the scene.
- 10. Objects of forensic examinations.
- 11. Mandatory types of forensic examinations.
- 12. Responsibilities of an expert / specialist in the field of medicine / when examining a corpse at the place of its detection
- 13. Forensic death classification.
- 14. Stages of dying.
- 15. Early and late corpse phenomena and their forensic value.
- 16. Features of the forensic study of the corpses of unknown persons, dismembered corpses.
- 17. Definitions of the term "sudden death".
- 18. What is "injury"?
- 19. What is injury? Classification of injury.
- 20. Medical classification of injuries.

# Theme 6: Forensic medical examination of a corpse.

Key questions covered in lesson 6.

- 1. Reasons for a forensic medical examination (survey of a corpse).
- 2. Tasks for forensic examination of a corpse in case of a violent death and suspicion for such. The basic requirements of "Regulation on forensic examination of a corpse."
- 3. Technique of examining of corpses. Particulars of examining of corpses in case of a transport ¬ trauma, physical asphyxia, poisoning, the sudden death, death¬ in medical institutions, corpses of unidentified persons.

#### Recommended reading for the lesson:

Solohin A.A., Solohin J.A., .Manual on a forensic medical examination of a corpse. - M, 1997.

Forensic examination of physical asphyxia/under the editorship of A.A.Matyshev and V.I.Vitera. – Saint-Petersburg Izhevsk, 1993.

#### Theme 7: Medico-legal differential diagnostics of different types of a trauma.

Key questions covered in lesson 7.

- 1. General principles of studying of damages of soft fabrics.
- 2. Classification of mechanical damages.
- 3. Mainly anatomic damages.
- 4. Mainly functional damages.
- 5. Medico-legal value of damages of soft fabrics.

# Recommended reading for the lesson:

Vermel I.G., Solokhin A.A. Formal logic in forensic medicine. - M, 1995.

V.N.Krjukov Basics of physical and morphological genesis of fractures. - M, 1995.

# Theme 8: Medico-legal research at identification of the personality.

Key questions covered in lesson 8.

- 1. Methods of identification of the personality.
- 2. Medico-criminalistics researches of objects.
- 3. Research of bones for an identification of the personality.

#### **Recommended reading for the lesson:**

Solohin A.A., Bedrin L.M. Tables and schemes on forensic medicine (Releases 14). – Moskva-Jaroslavl, 19851989.

Solohin A.A., Solohin J.A., .Manual on a forensic medical examination of a corpse. - M, 1997.

# Theme 9: Unit control № 2

Key questions covered in lesson 9.

Unit control includes oral interview and decision of cases.

- 1. What is a bruise, bruise, injury, fracture, etc. and their forensic value.
- 2. Indicate the main morphological signs of bruised, cut, stabbed, etc. wounds.
- 3. Classification of instruments / weapons / causing bodily harm.
- 4. Classification of blunt hard and sharp objects.
- 5. Classification of bone fractures. Biomechanism of bone fractures and soft tissue damage.
- 6. Primary and secondary causes of death.
- 7. Signs of direct and indirect rib fractures.
- 8. What legal issues are resolved in case of mechanical damages.
- 9. How is the sequence of wounds / injuries / damage caused by soft tissues, bones and internal organs determined?
- 10. Classification of closed head injuries, the mechanism of their formation / inertial, impression and compression injury.
- 11. Types of bone deformation.
- 12. Differential diagnosis of damage in the fall from a height and traffic injury.

- 13. Forensic classification of fractures of the cranial vault.
- 14. Differential diagnosis of damage caused by his own and another hand.
- 15. Differential diagnosis of damage from hitting and moving vehicles.
- 16. The mechanism of damage during transport injuries. Classification of damage.
- 17. Classification of autotrauma, the phase of autotrauma.
- 18. Classification of firearms and gunshot damage.
- 19. The definition of the distance of the direction of the shot.
- 20. Types of damage depending on the kinetic force of the projectile / bullet /

# Theme 10: Forensic medical examination of injuries caused by blunt objects.

Key questions covered in lesson 10.

- 1. Classification of blunt firm objects.
- 2. Mechanisms of inflicting injuries from blunt firm objects. The morphological characteristics of grazes, bruises, wounds from impact of blunt firm objects, forensic meaning.
- 3. Fractures: concept definition, the kinds of deformation leading to formation of Fractures, mechanisms and the conditions influencing formation of Fractures. Local and constructional Fractures. Mechanisms and morphological features of Fractures depending on kinds of deformation and features of blunt firm objects. Damages of membranes and substance of a brain and internal organs from impact of blunt firm objects. Possibilities of an establishment of the tool of a trauma using morphology of damages. The general representations about researches on identification of tools and their diagnostics using features and properties of a trauma.

#### Recommended reading for the lesson:

Forensic examination of physical asphyxia/under the editorship of A.A.Matyshev and V.I.Vitera. – Saint-Petersburg Izhevsk, 1993.

Forensic medicine. Atlas /under the editorship of. A.A.Solohin - M, 1998

# Theme 11: Forensic medical examination of injuries caused by sharp objects.

Key questions covered in lesson 11.

Definition and classification of sharp objects. Mechanisms of damaging impact of cutting, pricking, thrust-cutting, cutting, thrust-cutting, sawing and other objects. The morphological characteristics of damages inflicted by such.

- 1. Particulars of injuries by the sharp objects caused by own and stranger's hand.
- 2. Possibilities of a forensic establishment of the tool of a trauma.

# **Recommended reading for the lesson:**

V.N.Krjukov Basics of physical and morphological genesis of fractures. - M, 1995.

Molchanov V. I, Popov V.L, Kalmykov L.N Firearm injuries and forensic medical examination. - Л, 1990.

#### Theme 12: Independent research of corpses. Forensic examination of transport injury.

Key questions covered in lesson 12.

- 1. General characteristics of a modern transport trauma, its place in violent death structure. Types of a transport trauma.
- 2. Automobile trauma. Concept definition. Types of an automobile trauma. Mechanisms and phases of occurring injuries during each of them. The morphological characteristics of injuries during them. Specific and characteristic damages. Particulars of examining the scene and a corpse during road accidents and techniques of forensic research of a corpse.
- 3. Railway trauma: concept definition, trauma types, the morphological characteristics of injuries, Particulars of examining of a corpse on a place of its discovery and examination of dismembered body.

#### **Recommended reading for the lesson:**

Examination of a corpse on a place of its discovery / Under the editorship of A.A.Matyshev. - JI, 1989.

 $Practical\ workshop\ on\ judicial\ medicine\ /\ Under\ the\ editorship\ of\ V.M. Krjukov,\ I.V. Guromskiy,\ B.S. Nikolaev.\ -\ M,\ 1998\ (planned\ to\ the\ print).$ 

Vermel I.G., Solokhin A.A. Formal logic in forensic medicine. - M, 1995.

V.N.Krjukov Basics of physical and morphological genesis of fractures. - M, 1995.

# Theme 13: The composition and structure of the used bullets and cartridges, and their forensic-medical interpretation.

Key questions covered in lesson 13.

- 1. The composition and structure of modern bullets and cartridges.
- 2. The mechanics of interaction between a bullet and biological tissues.
- 3. Principles of forensic-medical interpretation of gunshot wounds.
- 4. Establishing the type of firearm and ammunition based on wound characteristics.

# **Recommended reading for the lesson:**

Vermel I.G., Solokhin A.A. Formal logic in forensic medicine. - M, 1995.

V.N.Krjukov Basics of physical and morphological genesis of fractures. - M, 1995.

#### Theme 14: Unit control № 3

Key questions covered in lesson 14.

Unit control includes oral interview and decision of cases.

- 1. Differential diagnosis of entry and exit gunshot wounds.
- 2. Features of damage to their gas firearms.
- 3. Additional research methods for gunshot injuries.
- 4. Legal classification of bodily harm.
- 5. Signs of HEAVY, LESS THAN HEAVY and LIGHT bodily harm.
- 6. Who resolves the issue of disfigurement of the face.
- 7. The concept of simulation, aggravation and artificial diseases.
- 8. What is the "torture", "torture", "Beating" and who sets the method of causing bodily harm.
- 9. What is poison and poisoning?
- 10. Classification of poison and poisoning.
- 11. Conditions on which the poisoning depends.
- 12. Features of the inspection of the scene in case of poisoning, transport injuries, asphyxia, etc.
- 13. Poisoning with blood poisons.
- 14. Poisoning by poisonous plants, mushrooms.
- 15. Food poisoning. Classification. Diagnostic methods.
- 16. Poisoning with acids, alkalis. The mechanism of action.
- 17. Poisoning with technical liquids / methyl alcohol, dichloroethane, etc. /. Mechanism of action.
- 18. Alcohol poisoning.
- 19. Poisoning with destructive poisons / mercury, arsenic, phosphorus, etc. /
- 20. Poisoning with organophosphate poisons

#### Theme 15: Forensic medical examination of gunshot injuries.

Key questions covered in lesson 15.

- 1. Fire-arms and ammunition to it, classification, device principles. The shot mechanism. Damaging factors of a shot. Signs of a close shot.
- 2. Bullet fire damages from very close distance shot, from a close and remote distance. Explosive, penetrative, shell-shock impact of bullet. Entrance and exit bullet holes, their morphological signs. Blind, through, tangential wounds. Wound channel. Injuries from a blank cartridge shot, from the home-made weapon, from a shot through a barrier.
- 3. Injuries from shot guns, particulars of wounds from drop shot, depending on short distance. Overview of laboratory examination of firearm injuries.

#### Recommended reading for the lesson:

Molchanov V. I, Popov V.L, Kalmykov L.N Firearm injuries and forensic medical examination. - Л, 1990. Examination of a corpse on a place of its discovery / Under the editorship of A.A.Matyshev. - Л, 1989.

# Theme 16: Physical asphyxia.

Key questions covered in lesson 16.

- 1. Concepts on hypoxia and mechanical asphyxia, their types. Pathophysiology of asphyxia.
- 2. Strangulated asphyxia from strangling neck: hanging, strangling with noose, strangling with hands.
- 3. Asphyxia from strangling a breast and a stomach.
- 4. Obturative asphyxia: from covering nose and mouth with soft objects, granular material, vomitive substances.
- 5. Drowning, its types. Pathogenesis and morphological changes during mechanical asphyxia, its forensic evaluation. Value of laboratory methods in diagnosing asphyxia. Signs of stay of corpses in water. Damages on the corpses removed from water.

# Recommended reading for the lesson:

Solohin A.A., Bedrin L.M. Tables and schemes on forensic medicine (Releases 14). – Moskva-Jaroslavl, 19851989. Solohin A.A., Solohin J.A., .Manual on a forensic medical examination of a corpse. - M, 1997.

# Theme 17: Illness and death from the effects of high and low temperatures, electricity and other external influences. Forensic medical examination of victims, suspects, and other individuals. Forensic medical examination for age determination.

Key questions covered in lesson 17.

- 1. The general and local impact of a heat, burns and burn illness. Reasons of death and time it occurred. Examination of the corpses found in a seat of fire. An establishment of flame impact when alive. Thermal and solar burns.
- 2. The general and local impact of low temperature. Death from overcooling of a body, the conditions leading to death, diagnostics of this kind of death during examination of a corpse. Freezing of corpses.
- 3. The general information on deterioration of health and death from the lowered atmospheric pressure. Mountain or high-rise illness, pathophysiology, morphological signs. Compression of a body of the diver. Decompression illness, pathogenesis, morphological signs. Hyperbarium: trauma of lungs, pathogenesis and morphological signs.
- 4. Electrical trauma. Mechanisms of action of an electric current on an organism and the conditions leading to shock by

electrical current. Pathophysiology, thanatogenesis and morphology of electrical trauma. Lightning strike. Particulars of surveying location and a corpse during an electrical trauma.

5. The general information on deterioration of health and death from impact of radiation.

#### **Recommended reading for the lesson:**

Manual on a forensic medical examination of poisoning/under the editorship of of J.S.Smusin, etc. TH., 1980. Solohin A.A., Bedrin L.M. Tables and schemes on forensic medicine (Releases 14). – Moskva-Jaroslavl, 19851989.

#### Theme 18: Unit control № 4

Key questions covered in lesson 16.

Unit control includes oral interview and decision of cases.

- 1. Classification of mechanical asphyxia.
- 2. Common asphyxia and species signs of asphyxiation
- 3. Pato and Tanatogenesis in Asphyxia
- 4. Hanging, strangling loop, hands
- 5. Compression asphyxia. Signs of
- 6. Drowning. Pato- and thanatogenesis, signs
- 7. Electric shock. Pathoantogenesis. Cause of death. Signs of electrical injury
- 8. Death from hypothermia of the body and the effects of high temperature.
- 9. The definition of "material evidence". The purpose and objectives of the study. Issues resolved in the examination of physical evidence.
- 10. Forensic medical examination of professional offenses of health workers. Penalties for doctor's actions
- 11. Medical errors, accidents in medical practice and iatrogenic
- 12. Forensic examination of sexual crimes (rape, sodomy, etc.)
- 13. Forensic examination of sexual conditions (examination of pregnancy, former childbirth, abortion, etc.)
- 14. Additional research methods in the examination of the corpse.
- 15. Features of forensic examination in cases of non-violent death.
- 16. Damage and destruction of corpses by animals, insects, forensic significance of these phenomena.
- 17. Principles (scheme) of the description of mechanical damage.
- 18. Forensic wound assessment.
- 19. Forensic assessment of fractures.
- 20. Features inspection of corpses at the place of their detection in various types of death.

# Methodological instructions for the implementation of independent work on the discipline

Working with lecture material,

involving the study of lecture notes and educational literature. Description of the conclusion of the court. honey. examination. Presentation. Working with literature. Experimental studies. Description of the court's conclusion. honey. examination. Working with literature. Work with lecture material, including the study of lecture notes and educational literature.