



SIXTH YEAR OF STUDIES

year 2023/2024

FORENSIC MEDICINE

Course:

FORENSIC MEDICINE

The course is evaluated with 5 ECTS. There are 5 classes of active teaching per week (3 classes of lectures and 2 classes of work in a small group).

TEACHERS AND ASSOCIATES:

No	Name and surname	E-mail address	Occupation
1.	Živana Slović	zivanaminic@yahoo.com	assistant professor
2.	Katarina Vitošević	vitosevickatarina@gmail.com	assistant professor
3.	Ivana Andrić	iradakovic992@gmail.com	teaching assistant

EVALUATION:

The grade is equivalent to the number of points earned (see tables). Points are earned in four ways:

ACTIVITY DURING LESSONS: Attendance at lectures is mandatory, because in this way students fulfill the requirement for the weekly examination. The student can gain up to 30 points after completing the practical classes, as the student answers 1 exam question from that week of classes and, in accordance with the demonstrated knowledge, gains 0 - 2 points.

SEMINAR ESSAYS: In this way, the student can earn up to 20 points. Each student receives a topic for a seminar essays that they submit in written form and presents with an oral presentation. The preparation, content and form of the seminar paper, manner of presentation and inclusion of others in the discussion will be evaluated.

FINAL EXAM:

A student can earn up to 50 points by passing a practical exam (up to 20 points) and final test (up to 30 points). In order for the student to pass the exam, they must achieve more than 50% of points on each of the defined elements of the pre-exam activities, that is, the final exam.

Module	MAXIMUM NUMBER OF POINTS				
	Activity during the lesson	Seminar essays	Practical exam	Final test	Σ
Forensic medicine	30	20	20	30	
Σ	30	20	20	30	100

The final grade is formed as follows:

In order to pass the course, the student must obtain a minimum of 51 points.

The student must:

1. earn more than 50% of points activity during the lessons
2. earn more than 50% of points from seminar essay
3. pass the practical exam, with minimum 50% of points
4. pass the final test, with minimum 50% of correct answer

the number of earned points	grade
0-50	5
51-60	6
61-70	7
71-80	8
81-90	9
91-100	10

FINAL GRADE

**ACTIVITY DURING THE
LESSON
0-30 points**

**SEMINAR ESSAYS
0-20 points**

**PRACTICAL EXAM
0-20 points**

**FINAL TEST
0-30 points**

EVALUATION OF THE TEST

**The test has 30 questions
Each question is worth 1 point**

LITERATURE:

TITLE OF THE TEXTBOOK	AUTHORS	PUBLISHER	LIBRARY
FORENSIC MEDICINE Textbook for medical students	Savic S, Veljkovic S, Djokic V, Alempijevic Đ, Nikolić S.	School of medicine, University of Belgrade, 2002	

PROGRAM:

TEACHING UNIT 1 (FIRST WEEK)

Introduction to Forensic Medicine

Lectures: 3 classes	Practice: 2 classes
<ul style="list-style-type: none">Introduction to Forensic Medicine. Medical Aspects of Death. Unexpected and Sudden Death from Natural Causes.	<ul style="list-style-type: none">Practice in the autopsy room.

TEACHING UNIT 2 (SECOND WEEK)

Thanatology

Lectures: 3 classes	Practice: 2 classes
<ul style="list-style-type: none">Changes after Death. The early changes after death, rigor mortis, postmortem hypostasis, cooling of the body after death, the estimation of the time of death, post-mortem decomposition, putrefaction, mummification, adipocere, skeletisation.	<ul style="list-style-type: none">Practice in the autopsy room.

TEACHING UNIT 3 (THIRD WEEK)

Physical diseases, the relation of diseases and injuries

Lectures: 3 classes	Practice: 2 classes
<ul style="list-style-type: none">Establishing a causal link between injury and diseases. Complications of injuries. Vital reaction.	<ul style="list-style-type: none">Practice in the autopsy room.

TEACHING UNIT 4 (FOURTH WEEK)

Mechanical injuries

Lectures: 3 classes	Practice: 2 classes
<ul style="list-style-type: none">Mechanical injuries. Classification of mechanical injuries.	<ul style="list-style-type: none">Practice in the autopsy room.

TEACHING UNIT 5 (FIFTH WEEK)

Mechanical injuries

Lectures: 3 classes	Practice: 2 classes
<ul style="list-style-type: none">Types of firearms. Wounds from rifled weapons. Distant wound. Close range wounds. Contact wounds. Common elements of firearm wounds. Blast injuries.	<ul style="list-style-type: none">Practice in the autopsy room.

TEACHING UNIT 6 (SIXTH WEEK)

Effects of injurys

Lectures: 3 classes	Practice: 2 classes
<ul style="list-style-type: none"> Effects of injurys. Haemorrhage. Infection. Embolism. Pulmonary thromboembolism. Fat embolism. Air embolism. Amniotic fluid embolism. Adult respiratory distress syndrome. Renal failure. Suprarenal haemorrhage. Stress ulcers. Problems in medicolegal expertise regarding effects of injuries. 	<ul style="list-style-type: none"> Practice in the autopsy room.

TEACHING UNIT 7 (SEVENTH WEEK)

Poisoning

Lectures: 3 classes	Practice: 2 classes
<ul style="list-style-type: none"> General aspects of poisoning. Conditions of poisoning. Manner of poisoning. Diagnostic methods. Collecting of material for toxicological analysis. Corrosive poisons; acids and alkalis. Heavy metal poisoning; arsenic, antimony, mercury, thallium. Agrochemical; pesticides, insecticides, herbicides. Gaseous and miscellaneous poisons; carbon monoxide, carbon dioxide, cyanogen gas and cyanides, strychnine, halogenated hydrocarbons. 	<ul style="list-style-type: none"> Practice in the autopsy room.

TEACHING UNIT 8 (EIGHTH WEEK)

Injuries of specific areas

Lectures: 3 classes	Practice: 2 classes
<ul style="list-style-type: none"> Head injuries. Scalp injuries. Facial injuries. Skull fractures. Intracranial haemorrhage. Extradural haemorrhage (haematoma epidurale). Subdural haemorrhage (haematoma subdurale). Subarachnoid haemorrhage (haemorrhagia subarachnoidalis). Cerebral injuries. Chest injuries. Abdominal injuries. 	<ul style="list-style-type: none"> Practice in the autopsy room.

TEACHING UNIT 9 (NINTH WEEK)

Forensic aspects of alcohol. Drugs of dependence and abuse.

Lectures: 3 classes	Practice: 2 classes
<ul style="list-style-type: none"> Forensic aspects of alcohol absorption of alcohol. Elimination of alcohol. The measurement of alcohol. The effects of alcohol. Death from acute alcohol intoxication. Alcoholism. Drug dependence and abuse. Tolerance, 	<ul style="list-style-type: none"> Practice in the autopsy room.

dependence and withdrawal symptoms.
Narcotics: morphine, heroin and other opioids. Non-narcotic drug abuse. Stimulants or uppers. Tranquillizers (diazepam and others). Hallucinogens (marijuana, LSD, peyote, PCP). Marijuana, cannabis.

TEACHING UNIT 10 (TENTH WEEK)

Asphyxia

Lectures: 3 classes	Practice: 2 classes
<ul style="list-style-type: none"> Mechanical asphyxia. Suffocation. Smothering. Choking. Throttling. Strangulation. Mugging. classification of mechanical asphyxia. Suffocation: Occlusio nasi et oris, Obturatio laryngopharyngis, Obturatio tracheobronchiorum. Drowning. Strangulation: Hanging. Thoracoabdominal compression. Classical signs of asphyxia. 	<ul style="list-style-type: none"> Practice in the autopsy room.

TEACHING UNIT 11 (ELEVENTH WEEK)

Homicide, suicide and accident

Lectures: 3 classes	Practice: 2 classes
<ul style="list-style-type: none"> Homicide, suicide and accident. Blunt injuries. Firearms. Knifewounds. Asphyxial deaths. Poisoning. Burns and scalds. Hypothermia. Electrocutation. Nutritional injuries (starvation). 	<ul style="list-style-type: none"> Practice in the autopsy room.

TEACHING UNIT 12 (TWELFTH WEEK)

Identification

Lectures: 3 classes	Practice: 2 classes
<ul style="list-style-type: none"> Identification of the living persons. Identification of the dead persons. Morphological characteristics. Identification from teeth. Photography. X-rays. Fingerprints. Identification of the parts of the body and human remains. Blood stains, groups, DNA and identification. Identification by DNA profiling. 	<ul style="list-style-type: none"> Practice in the autopsy room.

TEACHING UNIT 13 (THIRTEENTH WEEK)

Transportation injuries

Lectures: 3 classes	Practice: 2 classes
<ul style="list-style-type: none">Road traffic injuries. Pedestrians. Car occupants. Motorcycle and cycle injuries. Railway injuries. Aircraft fatalities. The medical examination of road traffic accidents.	<ul style="list-style-type: none">Practice in the autopsy room.

TEACHING UNIT 14 (FOURTEENTH WEEK)

Injury due to heat, cold and electricity, dysbarism and barotrauma

Lectures: 3 classes	Practice: 2 classes
Heat injuries - burns and scalds. The classification of the severity of burns. Moist thermal damage – scalds. Causes of death in burns. The autopsy findings of bodies recovered from fires. Fumes and fires - inhalation of smoke and soot. Ante-mortem versus post-mortem burns. Hypothermia. Autopsy findings in hypothermia. Local injury due to cold- frostbite. Electrocutation. Death from lightning. Dysbarism and barotrauma.	<ul style="list-style-type: none">Practice in the autopsy room.

TEACHING UNIT 15 (FIFTEENTH WEEK)

Ethics of medical practice

Lectures: 3 classes	Practice: 2 classes
<ul style="list-style-type: none">Duties of doctors in general. Medical ethics in practice. Medical confidentiality. Consent to medical treatment. Medical malpractice. Medical negligence. Types of medical negligence. Professional misconduct.	<ul style="list-style-type: none">Practice in the autopsy room.

WEEKLY COURSE SCHEDULE

COURSE	THURSDAY
<p>FORENSIC MEDICINE (3+2)</p>	<p>LECTURES 08:00-10:15 (Hall at the Pediatric Clinic)</p> <p>PRACTICE 11:00-14:00 (Center for Forensic Medicine and Toxicology)</p>

LESSON SCHEDULE FOR THE CURSE FORENSIC MEDICINE

module	week	type	method unit name	teacher
1	1	L	Introduction to Forensic Medicine	Asst. Prof. Živana Slović Asst. Prof. Katarina Vitošević
		P	Introduction to Forensic Medicine	MD Ivana Andrić
	2	L	Thanatology	Asst. Prof. Živana Slović Asst. Prof. Katarina Vitošević
		P	Thanatology	MD Ivana Andrić
	3	L	Physical diseases, the relation of diseases and injuries.	Asst. Prof. Katarina Vitošević Asst. Prof. Živana Slović
		P	Physical diseases, the relation of diseases and injuries	MD Ivana Andrić
	4	L	Mechanical injuries.	Asst. Prof. Katarina Vitošević Asst. Prof. Živana Slović
		P	Mechanical injuries.	MD Ivana Andrić
	5	L	Mechanical injuries.	Asst. Prof. Katarina Vitošević Asst. Prof. Živana Slović
		P	Mechanical injuries.	MD Ivana Andrić
	6	L	Effects of injurys	Asst. Prof. Katarina Vitošević Asst. Prof. Živana Slović
		P	Effects of injurys	MD Ivana Andrić
	7	L	Poisoning	Asst. Prof. Katarina Vitošević Asst. Prof. Živana Slović
		P	Poisoning	MD Ivana Andrić

LESSON SCHEDULE FOR THE CURSE FORENSIC MEDICINE

8	L	Injuries of specific areas	Asst. Prof. Živana Slović Asst. Prof. Katarina Vitošević
	P	Injuries of specific areas	MD Ivana Andrić
9	L	Forensic aspects of alcohol. Drugs of dependence and abuse.	Asst. Prof. Katarina Vitošević Asst. Prof. Živana Slović
	P	Forensic aspects of alcohol. Drugs of dependence and abuse.	MD Ivana Andrić
10	L	Asphyxia	Asst. Prof. Katarina Vitošević Asst. Prof. Živana Slović
	P	Asphyxia	MD Ivana Andrić
11	L	Homicide, suicide and accident	Asst. Prof. Živana Slović Asst. Prof. Katarina Vitošević
	P	Homicide, suicide and accident	MD Ivana Andrić
12	L	Identification	Asst. Prof. Katarina Vitošević Asst. Prof. Živana Slović
	P	Identification	MD Ivana Andrić
13	L	Transportation injuries	Asst. Prof. Živana Slović Asst. Prof. Katarina Vitošević
	P	Transportation injuries	MD Ivana Andrić
14	L	Injury due to heat, cold and electricity, dysbarism and barotrauma	Asst. Prof. Živana Slović Asst. Prof. Katarina Vitošević
	P	Injury due to heat, cold and electricity, dysbarism and barotrauma	MD Ivana Andrić
15	L	Ethics of medical practice	Asst. Prof. Živana Slović Asst. Prof. Katarina Vitošević

LESSON SCHEDULE FOR THE CURSE FORENSIC MEDICINE

		P	Ethics of medical practice	MD Ivana Andrić
		E		