

## **Degree Course in Medicine and Surgery**

Teaching: Forensic Medicine

Professor responsible: Matteo Bolcato

SSD: MEDS-25/A

Total number of CFU:4

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#### **PREREQUISITES**

Previous knowledge and skills in the following subjects:

Human anatomy, histology and embryology, physiology and pathophysiology, general pathology, biology and genetics, biochemistry and molecular biology.

#### LEARNING OBJECTIVES

The aim of the course in Forensic Medicine is to provide the basic knowledge of forensic pathology and the regulations of the civil, criminal and deontological codes, which are indispensable for the practice of the medical profession. It will be essential to acquire knowledge of the legal obligations under current legislation and to develop the ability to recognise which acts and events have or may have legal significance.

#### LEARNING OUTCOMES

## **Knowledge and understanding**

At the end of this course, the student should be able to:

- Know the various areas of interest of forensic medicine and the Italian judicial system;
- Describe the main aspects of forensic pathology and explain the physiopathological mechanisms underlying the different types of injuries;
- -Present each subject in detail with emphasis on macroscopic examination, microscopic aspects, classification, presentation and differential diagnosis;
- To know the criminal and deontological obligations to which the surgeon is subject by virtue of his qualification and profession;
- To know the basics of the regulations in force regarding the professional liability of health professionals.





## Applying knowledge and understanding

At the end of the course, the student will be able to:

- Recognise and distinguish the main kinds of injury in the medico-legal field and propose a correct differential diagnosis regarding the means that produced them;
- Establish a correct approach to the diagnosis of death in forensic medicine;
- Use laboratory tests in the different fields of forensic science;
- -Identify and contextualise the different aspects of the medical profession in the light of the regulations in force and the different areas of law within which the medical profession is inscribed.

#### Communication skills

At the end of the course, the student should know:

- To use specific scientific and legal terminology appropriately.
- To present arguments orally in an organised and coherent manner.

## Making judgements

At the end of the course, the student will be able to identify the possible use of the recognised skills in a future career and to assess the importance of the acquired knowledge within the entire medical training process.

#### **COURSE SYLLABUS**

## Definition, purpose, method and system of forensic medicine.

General notions of law: public and private law; constitutional law; substantive civil and criminal law; civil and criminal liability; the criminal offence, the offender, the offence, the criminal sanction; the tort, the damage, compensation for damage; civil and criminal procedural law. The Italian judicial system. The relationship of material causality: notion of cause; legal causality, human causality; criteria of judgement for the admission or exclusion of the aetiological link in forensic medicine.

**Bioethics and professional deontology:** Concept of bioethics - The code of medical deontology - Ethical standards and legal standards - Ethical, deontological, disciplinary responsibility - The doctor-patient relationship: doctor's rights and duties; the doctor's position of guarantee; the medical act and the faculty to treat; the consent of the person entitled and L.219 /2017; the obligation to provide assistance: failure to provide assistance; the doctor's professional liability; clinical documentation; the doctor's duties of confidentiality: professional secrecy, the patient's right to confidentiality - The doctor's duties of disclosure: report and complaint, mandatory notifications.

**Criminal forensic medicine:** The clinical-biological relevance of crimes against the person (murder - infanticide - criminal abortion - battery - personal injury) and against personal freedom (sexual violence).

**Civil forensic medicine**: The assessment of biological damage in civil liability - L. 24/2017.

**Social medicine:** The social security system, INPS, INAIL, civil invalidity, disability - Private insurance - Law 194 on the voluntary interruption of pregnancy - The protection of maternity - Organ transplants - The doctor's competences in emergencies; the concept of catastrophe: disasters and natural



UNICAMILLUS calamities; the organisation of interventions in catastrophes.



**Forensic psychopathology**: Imputability and criminal responsibility - Legal capacity, capacity to act, interdiction, incapacitation, natural incapacity, the support administrator - Psychopathological aspects of crimes against property through violence against persons: the crime of circumvention of an incapable.

**Thanatology and forensic pathology:** ascertaining the reality of death - Medico-legal necropsy investigations: external inspection and autopsy - The chronology of death: consecutive and transformative phenomena - The mortuary police regulations - The general assessment of the The differential diagnosis between homicide, suicide and accident - The lesivity by mechanical physical energy: blunt force injuries; gunshot injuries; violent mechanical asphyxia - The lesivity by electrical, baric, thermal physical energy - Sudden death. Forensic anthropology: Personal identification - Fingerprints - Radiological identification - Immunohaematological investigations - DNA - Techniques and methods of forensic medical examination - Bloodstains at the crime scene.

**Forensic Toxicology**: Notion of poison and diagnosis of poisoning and intoxication - Main poisons and major poisonings - Alcohol and narcotics - Regulation of narcotics - Alcohol and vehicle driving.

#### COURSE STRUCTURE

The course is structured in 40 hours of lectures. Frontal teaching includes theoretical lectures and supplementary seminars on the topics discussed.

#### **COURSE GRADE DETERMINATION**

The examination for the LEGAL MEDICINE course will be conducted through a written test. The test will consist of multiple-choice questions with a single correct answer.

The examination will be assessed overall according to the following criteria:

- -Unsuitable: major deficiencies and/or inaccuracies in knowledge and understanding of the topics; limited ability to analyse and summarise, frequent generalisations.
- -18-20: barely sufficient knowledge and understanding of the topics with possible imperfections; sufficient ability to analyse, synthesise and make independent judgements.
- 21-23: routine knowledge and understanding of the topics; correct analysis and synthesis skills with coherent logical argumentation.
- -24-26: fair knowledge and understanding of the topics; good analytical and synthetic skills with rigorously expressed arguments.
- -27-29: comprehensive knowledge and understanding of the topics; considerable ability to analyse, synthesise. Good autonomy of judgement.
- -30-30L: very good knowledge and understanding of topics. Remarkable analytical and synthetic skills and independent judgement. Argumentation expressed in an original way.

## **OPTIONAL ACTIVITIES**

In addition to teaching activities, the student will be given the opportunity to participate in seminars,



research internships, departmental internships and monographic courses. The topics of the activities do not constitute examination subjects.

# **READING MATERIALS**

Di Luca N.M.; Feola T.; Marinelli E. Nuovo Compendio di Medicina Legale, II edizione. Editore: Minerva Medica -2021.

Feola T.; Arcangeli M.; Marsella L.T. Fondamenti medico-legali della responsabilità professionale.

Editore: Minerva Medica-2017

