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# Course Regime

Course: Forensic Medicine and Stomatology
Study Programme: Medicine Dental Medicine
Year of the Course: 1 2 3 4 5 6
Semester: Winter Summer
Course type: Compulsory Elective
Number of ECTS credits: 3
Lecturer(s): Dr Tomaž Zupanc, Assistant Professor
Participating Organisational Units (Departments and Institutes): /
Parts (Modules) of the Course: /

# A. General part (applies to compulsory and elective courses)

#### 1. Course objectives

The student will learn the basics of forensic medicine: signs of death and postmortem changes; causes of natural death and types of violent death; the mechanisms governing the occurrence of injuries, with an emphasis on injuries to the facial skeleton or teeth and the characteristics of such injuries with relevance for forensic medicine practice; iatrogenic injuries in dentistry. They will also learn about basic procedures for identifying living and dead persons (basics of forensic anthropology and haematogenetics), with an emphasis on the role of dental medicine graduates in mass disasters situations, and the basics of forensic alcoholometry and toxicology. Students shall be presented with the tasks and role of postmortem examiners and doctors in emergency situations, and the tasks of doctors when dealing with cases of infanticide. They will become familiar with basic legislation in the criminal and health fields, along with the bases of expert witness work, with an emphasis on assessing physical injuries involving the facial skeleton and teeth, and on rights, duties and professional responsibility or medical error.

#### 2. Comprehensive outline of the course organisation

- 30 hours of lectures
- 15 hours of courses
- Where a student is able to provide a justifiable reason for absence, they may substitute a missing course for a course in the next series of courses within the final cycle of the general subject, or take a seminar in the field covered by the missing course at any time (subject to approval).

#### 2.1. Lectures

Summer semester:

in the Faculty of Medicine lecture hall or the practical course room at the Institute of Forensic Medicine.

The dates and titles of the lectures shall be posted on the website of the Department of Forensic Medicine and Deontology and the noticeboard of the Institute of Forensic Medicine, Korytkova 2 (3<sup>rd</sup> floor).

#### 2.2. Courses

## Summer semester:

At the start of the lecture series, students are assigned to course groups and the composition of the groups published. The number of groups shall depend on the number of students enrolled in the 5<sup>th</sup> year of dental medicine study. Courses shall take place in the practical course rooms of the Institute of Forensic Medicine, the DNA laboratory, the toxicology laboratory, the alcoholometry

laboratory and the basement premises of the Institute of Forensic Medicine (upper floor of the Faculty of Medicine basement).

Students shall wait for their course to start in the Institute hall or in the clinic located in the upper floor of the basement. When undertaking autopsy courses, students shall be given all the required protective equipment: laboratory coats, caps, protective face masks and slippers. Protective wear is for one-time use only.

Participation in courses is compulsory. Courses may be replaced or substituted for course to be undertaken by the next group of students in Dental Medicine programme. A course may also be substituted, subject to approval, for a course offered to students in the Medicine programme, or a seminar taken in the field covered by the missing course at a time of the student's choosing (subject to approval) prior to enrolment in the exam. Advance notice must be given of the replacement or substitution of a course, and consent to the replacement or substitution obtained. A student must have good reason for any absence from a course or courses and provide the appropriate certificate, e.g. a doctor's note.

## 3. Description of on-going assessment of knowledge and skills: /

#### 4. Required conditions for the final examination (Course Exam)

Only those students who can demonstrate the following may enrol for the exam:

• 100% attendance at courses

#### 5. Final assessment and examination of knowledge and skills (Course Exam)

The subject exam shall be written or oral and constitute a final examination of knowledge and skills.

- A written or oral exam shall comprise three questions from various fields covered by the subject.
- Exam questions shall have equal weight in the final grade for the subject exam.
- The subject exam is deemed to have been passed if the answers to all questions have been given a pass grade (knowledge meets the minimum criteria).
- The subject exam shall be up to 35 minutes in length.
- If the subject exam is being retaken, the student must retake it in its entirety until they meet the criteria for acquiring a pass grade (knowledge meets the minimum criteria).

A list of candidates who meet the conditions for enrolment in the exam and who have registered for the exam on time shall be published on the noticeboard and on the Institute's website. The

year representative shall distribute the timetable for the oral exam to the students after being given notice of it.

Assessment of the oral part of the exam shall also constitute the student's final grade for the exam. Performance of the oral part of the exam accords with the Regulations.

Enrolment for and withdrawal from an exam shall be effected via the VIS information system (enrolment no later than five days and withdrawal no later than until 12 am the day before the exam).

Viva voce exams are oral and shall take place in accordance with the Regulations.

#### 6. Other provisions

Article 34 of the Regulations on the Examination and Assessment of Knowledge and Skills for the Single Master's Programmes in Medicine and Dental Medicine.

Students with special needs may be permitted up to 50% more time to complete any form of continuous assessment or final exam.

## 7. Fundamental study material and Supplement reading /

#### Primary study literature:

Core:

FORENSIC PATHOLOGY (CRC Press; Taylor & Francis Group, 2001), V. J. M. DiMaio, D. DiMaio

GUNSHOT WOUNDS (CRC Press, 2016), V. J. M. DiMaio

KURZLEHRBUCH RECHTSMEDIZIN (Verlag Hans Huber, 2012), B. Madea, R. Muβhoff, B. Tag

SUDSKA MEDICINA (Medicinska naklada, Zagreb, 2004), D. Zečević

#### Secondary study literature:

HANDBOOK OF FORENSIC PATHOLOGY (CRC Press, 2007), V. J. M. DiMaio, S.E. Dana V. J. M. DiMaio

HANDBOOK OF FORENSIC MEDICINE (Wiley Blackwell, 2014), B. Madea

KNIGHT'S FORENSIC PATHOLOGY (4th edition) (CRC Press, 2015), P. Saukko, B. Knight P. Saukko, B. Knight

#### 8. Exam topics, clinical presentations and skills /

Death (apparent, clinical, biological and brain death)
Vital and supravital reactions
Postmortem changes
Determination of time of death
Mueller-Simonin chronological thanatological table
Measuring the concentration of potassium in the aqueous humour of the eye
Types of autopsy, legal regulation
Sudden death of children and adults
Corpse identification
Identification of rotting corpses
Identification of skeletonised corpse remains
Dental status, special signs
Identification in mass disasters: role of dental physicians
Injuries caused by sharp and pointed objects
Bites, bite wounds and bite identification
Blunt force injuries
Types of embolism
Acceleration and deceleration injuries
Breakages of the cranial cavity and the base of the skull
Bleeding in the head and brain
Brain injuries
Traffic trauma
Myocardial and aortic rupture (cardiac tampanade)
Physical injuries
Injuries sustained at high or low temperatures
Hypothermia
Injuries caused by electrical current and atmospheric electricity
Burned corpses
Basic knowledge of weapons and ballistic wounds
Ballistic injuries

Explosion injuries (mechanical and blast injuries)
Iatrogenic injuries in dentistry
Legal and criminal definition of professional error
Doctors' criminal, material and moral liability
Suffocation
Reflex death
Bolus death
Drowning and corpses in water
Apparent suicide, suicide, accidental autoerotic death and murder
Infanticide and evidence of live birth
Abortion: types, regulation, rights
Conscientious objection in healthcare
Personal Data Protection Act
Patient Rights Act
Criminal offences against the person
Health Services Act
Medical error
Code of medical ethics
Injuries to facial bones and teeth
Expert medical testimony and assessment of the gravity of injuries to facial bones and teeth
Forensic anthropology
Forensic genetics
Basics of alcoholometry
Forensic toxicology
Results of toxicological analyses, interpretation and postmortem toxicological ambiguities
Signs of acute and/or chronic poisoning, the operation of poisons, metabolic pathways, excretion
Gases, corrosive substances, solvents, inorganic metallic and non-metallic poisons, medicines, illicit drugs
Alcohol and illicit drugs in traffic