
	Educational institution Roel Metropolitan University
	Abstract of the course Department of Dental Disciplines

Abstract of the course "Surgical Dentistry"

Name of the discipline	Surgical dentistry
The complexity of the discipline	24 credits (720 hours)
Course, semester	3rd year 5, 6 semester, 4th year 7, 8 semester, 5th year 9, 10 semester.
The place of the discipline in the curriculum (prerequisites, postrequisites)	<p>The discipline "Surgical Dentistry" belongs to the cycle of dental disciplines of the curriculum and is a compulsory discipline.</p> <p>Prerequisites: Latin, medical biology, human anatomy, physics and mathematics, normal physiology, microbiology, biological chemistry, pharmacology.</p> <p>Postrequisites: therapy, general surgery, oncology, resuscitation, radiology, pharmacology.</p>
Goals and objectives of the discipline	<p>Target: To develop students' fundamental knowledge and professional competencies in the field of surgical dentistry, necessary for the diagnosis, comprehensive treatment, and prevention of diseases of the maxillofacial region, as well as preparation for independent professional activity in their specialty.</p> <p>Objectives of the course:</p> <ol style="list-style-type: none"> 1. Study of the anatomical and physiological characteristics of the maxillofacial region (MFR). 2. Mastering practical skills in examining surgical dental patients. 3. Training in the basics of etiology, pathogenesis and differential diagnosis of the main diseases of the maxillofacial region and their complications. 4. Training in providing assistance in emergency situations in dentistry. 5. To identify the connection between maxillofacial diseases and environmental factors and bad habits. 6. Recognition of chronic foci of infection for the prevention of systemic diseases. 7. Mastering the classifications of dental diseases and the international system of dental notation.

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	<p>8. Study of the relationship between maxillofacial pathology and pathological processes in other organs and systems.</p>
<p>Competencies:</p>	<p>Discipline helps to form :</p> <p>IK-1 - capable and ready to work with computer hardware and software for system and application purposes to solve professional problems;</p> <p>OK-1 – able and ready to analyze socially significant problems and processes, to use methods of natural sciences, mathematics and humanities in various types of professional and social activities;</p> <p>SLK-1 - capable and willing to implement ethical, deontological, and bioethical principles in professional activities;</p> <p>SLK-2 - capable and willing to use professional communication techniques; build interpersonal relationships, work in a group, constructively resolve conflict situations, and tolerate social, ethnic, religious, and cultural differences;</p> <p>PC-2 - capable and prepared to conduct and interpret interviews, physical examinations, clinical examinations, results of modern laboratory and instrumental studies, morphological analysis of biopsy, surgical, and autopsy specimens, and prepare medical records for outpatients and inpatients for children and adults;</p> <p>PC-3 - capable and prepared to conduct a pathophysiological analysis of clinical syndromes, and use evidence-based methods of diagnosis, treatment, rehabilitation, and prevention in children and adults, taking into account their age;</p> <p>PC-4 - is able and ready to apply aseptic and antiseptic methods, use medical instruments, carry out sanitization of treatment and diagnostic rooms, children's healthcare organizations, and possess the techniques for caring for sick children and adults;</p> <p>PC-6 - is capable and ready to work with medical and technical equipment used in work with patients, computer equipment, receive information from various sources, apply the capabilities of modern</p>



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	<p>information technologies to solve professional problems;</p> <p>PC-15 - capable and prepared to collect and record a complete patient medical history, including oral health data;</p> <p>PC-16 - capable and prepared to make a diagnosis based on the results of clinical and laboratory studies of biological materials and taking into account the patterns of pathological progression across organs, systems, and the body as a whole;</p> <p>PC-18 - capable and prepared to identify the main pathological symptoms and disease syndromes in patients, and perform basic diagnostic procedures to identify urgent and life-threatening conditions;</p> <p>PC-19 - capable and prepared to diagnose typical dental diseases of the hard and soft tissues of the oral cavity, as well as dentofacial anomalies in patients of all ages;</p> <p>PC-20 - capable and prepared to analyze and interpret the results of modern diagnostic technologies in children, adolescents, and adults for successful treatment and preventive care.</p> <p>PC-22 - is capable and ready to perform basic treatment procedures for the most common dental diseases and conditions in adults and children;</p> <p>PC-24 - is capable and ready to provide first aid to adults and children in the event of emergency and life-threatening conditions, and to hospitalize somatic patients on a planned and emergency basis;</p> <p>DPK-1 - the ability to use modern digital technologies in the diagnosis and treatment of dental diseases.</p>
Results of mastering the discipline	<p>After mastering this discipline, the student:</p> <p>Will know:</p> <ul style="list-style-type: none">• anatomical and topographic features of the maxillofacial region, innervation zones, blood supply and routes of spread of odontogenic infection;• mechanisms of action, indications and contraindications for the use of drugs for local anesthesia and antibacterial therapy;



- classification, etiology, pathogenesis and clinical picture of inflammatory diseases, injuries, tumors and congenital anomalies of the face and jaws;
- standards for equipping a surgical room, the design of instruments for tooth extraction, and rules for working with surgical equipment;
- legal requirements for maintaining medical records, principles of medical ethics and deontology in surgical practice.

Will understand:


- the relationship between dental diseases and pathology of internal organs and body systems;
- the importance of strict adherence to the rules of asepsis and antisepsis for the prevention of nosocomial infections and complications;
- limits of one's responsibility when performing invasive interventions and making decisions in non-standard situations;
- Psychological characteristics of patients' behavior during surgical procedures and methods of managing their emotional state.

Will be able to use:

- methods of clinical thinking for differential diagnosis of dental diseases;
- results of laboratory, instrumental and morphological studies to establish and substantiate the final diagnosis;
- algorithms for providing first aid in case of emergency conditions during a dental appointment;
- principles of evidence-based medicine in choosing tactics and methods of surgical treatment;
- skills in working in an interdisciplinary team in the treatment of combined injuries and complex inflammatory processes.

Will be able to:

- conduct initial and repeat surgical examination of the patient with filling out an outpatient card or medical history;
- perform the main types of local anesthesia (8 infiltration and 5 conduction methods) on anatomical specimens and phantoms;

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	<ul style="list-style-type: none"> • perform typical and atypical tooth extractions using an appropriate set of forceps and elevators; • perform primary surgical treatment of soft tissue wounds in the maxillofacial region and apply sutures; • identify hidden foci of chronic infection in the oral cavity and develop plans for their treatment; • diagnose and eliminate local complications that arise during or after tooth extraction surgery (bleeding, perforation of the maxillary sinus floor, alveolitis).
Basic literature	<ol style="list-style-type: none"> 1. Fragiskos D. Fragiskos. Oral Surgery. Springer. (Basic guide to surgical techniques). 2. James R. Hupp. Contemporary Oral and Maxillofacial Surgery. Elsevier. (The global standard for training oral surgeons). 3. Stanley F. Malamed. Handbook of Local Anesthesia. Elsevier. (The essential reference for pain relief techniques). 4. Mamytova A.B., Aidarbekova A.A. Surgical Dentistry. Textbook, 2016. (Main literature of Kyrgyzstan). 5. Mamytova A.B., Boronchiev A.A. Local anesthesia. Study guide, 2015. (Local anesthesia protocols). 6. Oral Medicine. Exam Preparatory Manual for Undergraduates.