FACULTY OF STOMATOLOGY

STUDY PROGRAM 0911.1 STOMATOLOGY

DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY AND ORAL IMPLANTOLOGY "ARSENIE GUȚAN"

APPROVED
at the meeting of the Quality Assurance and Curriculum Evaluation Commission in Dentistry
Minutes no. 5 dated 23.05.2024
Chairman, Dr. Med. Sci., Prof.
Valeriu Burlacu

APPROVED
At the Faculty of Stomatology Council meeting
Minutes no. 1 dated 01.09.2024
Dean of the Faculty, Dr. Med. Sci., Assoc. Prof.
Oleg Solomon

APPROVED
at the meeting of the Department of Oral and Maxillofacial Surgery and Oral Implantology "Arsenie Guțan"
Minutes no. 7 dated 02.05.2024
Department Head, Dr. Hab. Med. Sci., Prof.
Nicolae Chele

CURRICULUM

Discipline: **SEDATION AND ANESTHSIA IN DENTISTRY**

Integrated Studies

COURSE TYPE: **Mandatory**

Curriculum developed by the authoring team:
Nicolae Chele, Dr. Hab. Med. Sci., Prof.
Gabriela Motelica, Dr. Med. Sci., Assistant Prof., Head of Studies

Chisinau, 2024

I. PRELIMINARIES

• General Presentation of the Discipline: The Place and Role of the Discipline in Developing Specific Competencies for the Professional Training Program / Specialty

In dentistry, anesthesia is indispensable for any procedure that involves painful sensations. Modern anesthesia offers a diversified arsenal of techniques and methods, with loco-regional anesthesia being the preferred choice; however, indications for general anesthesia are also retained. Modern requirements for patient comfort during dental care necessitate the application of various combined anesthesia techniques, aiming to enhance the effect of local anesthesia, i.e., patient sedation. These facts require a very good understanding by students of this integrated compartment of modern dentistry, which involves studying the action of anesthetics on the body, methods and techniques for administering anesthetic preparations, as well as the prevention and treatment of complications arising from applied procedures.

Ethics and medical deontology play a crucial role in the field of anesthesia in dentistry, encompassing multiple aspects that affect both patients and professionals involved in the medical process.

Respect for the Patient: Medical ethics impose absolute respect for the autonomy and dignity of the patient. In the context of dental anesthesia, it is essential that all decisions are made considering the patient's will and well-being. It is important to provide the patient with all necessary information to make informed decisions regarding the available anesthesia options, their risks, and benefits.

Confidentiality: Medical ethics demand the protection of patient confidentiality. Medical data and information regarding dental anesthesia must be treated with the utmost care and respect, and the disclosure of this information should be limited to cases where it is absolutely necessary or with the explicit consent of the patient.

Professional Competence: Dental anesthetists must demonstrate competence and expertise in administering anesthesia. This involves appropriate training, continuous education, and adherence to current professional standards. Any anesthetic intervention should only be performed by qualified and authorized personnel.

Avoidance of Unnecessary Pain and Suffering: Medical ethics require the avoidance of any form of unnecessary suffering or improper treatment. In the context of dental anesthesia, it is essential that patients receive adequate anesthesia to prevent or minimize the discomfort and pain associated with dental procedures.

Informed Consent: Another important aspect of medical ethics in dental anesthesia is obtaining the patient's informed consent before administering anesthesia. The patient must be fully informed about the anesthesia procedure, the risks involved, and the available alternatives, and their consent must be obtained voluntarily and freely.

• Mission of the Curriculum in Professional Formation

Following the study of the Sedation and Anesthesia in Dentistry discipline, the student will acquire basic knowledge regarding the approach to patients with oro-maxillo-facial surgical conditions (data collection from medical history, conducting a general objective examination on apparatuses and systems, and loco-regional examination) with the formulation of clinical interpretation of the presented pathology; correlations between medical history, objective examination, and paraclinical examinations for confirmation/differential diagnosis of surgical diseases; and the technique of local and loco-regional anesthesia, as well as the treatment (operative times and working technique) of accidents and complications of local anesthesia. Additionally, the course covers the specifics of sedation in combination with loco-regional anesthesia techniques and the indications/contraindications for general anesthesia in dentistry. Similarly, adhering to ethical and deontological principles in the anesthesia used in dentistry is essential for ensuring quality medical care that respects the rights and dignity of the patient and promotes their safety and well-being.

• Languages of Instruction for the Discipline: Romanian, Russian, and English.

• Beneficiaries: 2nd-year students, Faculty of Dentistry.

II. ADMINISTRATION OF THE DISCIPLINE

Discipline code		**S.04.O.038**	
Discipline name		**Sedation and anesthesia in dentistry**	
Discipline responsible		**Nicolae Chele**, Dr. Hab. Med. Sci., Prof. **Gabriela Motelica**, Dr. Med. Sci., Assistant Prof., Head of Studies	
Year	**II**	Semester	**IV**
Total Number of Hours, including:			**90**
Lectures	**15**	Laboratory work	**15**
Seminars	**15**	Individual work	**45**
Assessment Method	**Examination**	Total credits	**3**

III. LEARNING OBJECTIVES WITHIN THE DISCIPLINE

By the end of the study of this discipline, the student will be able to:

• At the level of knowledge and understanding:

- ✓ Understanding the role of oro-maxillo-facial surgery in social life and the importance of educating both the dentist and the patient.
- ✓ Defining the concept of oro-maxillo-facial surgery, along with its objectives and tasks.
- ✓ Familiarity with the anatomo-topographical characteristics of the oro-maxillo-facial region.
- ✓ Understanding effective communication with patients and establishing their medical history.
- ✓ Knowledge of the proper method for recording patient data in the medical chart.
- ✓ Awareness of the characteristics and stages of the clinical examination of the patient.
- ✓ Knowledge of the specifics and options for paraclinical examination of the patient.
- ✓ Understanding the types of radiological paraclinical investigations and their indications.
- ✓ Understanding non-radiological paraclinical investigations and their indications.
- ✓ Mastering the specifics of general anesthesia in dentistry.
- ✓ Mastering the specifics of sedation in dentistry.
- ✓ Understanding the indications for various methods of anesthesia in dentistry.
- ✓ Mastering various methods of applying local and loco-regional anesthesia.
- ✓ Recognition of signs of general and local post-anesthetic complications and provision of first aid.

- ***At the application level***

- ✓ Collect patient data and medical history (subjective examination).
- ✓ Complete the patient's medical chart and informed consent.
- ✓ Highlight data crucial for establishing the diagnosis.
- ✓ Distinguish and resolve communication problems during the process.
- ✓ Perform the clinical examination of the patient (objective examination).
- ✓ Determine the necessary paraclinical examination methods based on the case.
- ✓ Justify the chosen paraclinical examination based on the case.
- ✓ Prepare the patient, physician, and surgical field for the surgical intervention.
- ✓ Describe the conduct of the physician and assistant during the surgical intervention.
- ✓ Understand the territory innervated by various branches of the trigeminal nerve and perform trunk anesthesia as needed.
- ✓ Be aware of the indications for using general anesthesia in dentistry.
- ✓ Possess knowledge and skill in the correct practice of local and loco-regional anesthesia techniques.

- ✓ Know the indications and contraindications of anesthetic substances based on the patient's condition.
- ✓ Apply tests to assess the tolerance of anesthetic substances (endo-nasal, conjunctival, contact cutaneous tests).
- ✓ Perform loco-regional anesthesia techniques through injection (endoral techniques): infiltration anesthesia, plexus anesthesia, intrapapillary and intraligamentary anesthesia, infraorbital nerve anesthesia, anesthesia of the posterior superior alveolar nerves, nasopalatine nerve anesthesia, greater palatine nerve anesthesia, inferior alveolar nerve anesthesia, lingual nerve anesthesia, buccal nerve anesthesia, and mental nerve anesthesia.
- ✓ Provide emergency assistance in case of immediate general and local complications (fainting, syncope, shock, hemorrhage, paresthesia, asphyxia, etc.).
- ✓ Determine the particularities of anesthesia and dental interventions based on the patients' individual conditions.

- ***At the integration level:***

- ✓ To appreciate the importance of oro-maxillo-facial surgery in the context of Medicine.
- ✓ To understand the correlations between oro-maxillo-facial surgery and other clinical disciplines.
- ✓ To be able to determine the indications for loco-regional anesthesia methods in dentistry.

IV. CONDITIONS AND PREREQUISITES

Understanding the clinical aspects of general anesthesia (GA) in oral and maxillofacial surgery, including its advantages, disadvantages, and specificities in the OMF (oral and maxillofacial) region. Familiarity with the methods of general anesthesia, the routes, and techniques of administration. Understanding the nuances of anesthesia and surgical interventions in the OMF region based on patients' conditions (physiological and pathological states). Knowledge of the specificities in preparing patients for anesthesia, including pre-anesthesia (premedication). Understanding the particulars of sedation and dental interventions that may involve sedation. Knowledge of methods and techniques of loco-regional anesthesia in OMF surgery, including advantages, indications, and contraindications. Awareness of the anesthetic solutions used in dentistry. Knowledge of incidents, accidents, and local and general

complications of loco-regional anesthesia and provision of first aid. Familiarity with the sources of information necessary in the field of oral and maxillofacial surgery.

V. SYLLABUS AND APPROXIMATE DISTRIBUTION OF HOURS

Lectures, Practical/Laboratory Work, Seminars, and Individual Work

Nr.	Topic	Number of hours		
		Lectures	Laboratory work/ Seminars	Individual work
1.	Anatomy of the oral-maxillofacial region.		2	3
2.	Clinical examination of patients in the oral-maxillofacial surgery and dentistry department (clinic).	1.5	2	3
3.	Paraclinical examination of patients in the oral-maxillofacial surgery and dentistry department (clinic).	1.5	2	3
4.	Specificities of anesthesia and surgical interventions in the OMF region based on patients' conditions (physiological and pathological states).	1	2	3
5.	Patient preparation for anesthesia used in dentistry and oral-maxillofacial surgery (general and loco-regional).	1	2	3
6.	Anesthetic solutions used in dentistry for local and loco-regional anesthesia. Instruments and materials.	1	2	3
7.	Local anesthesia: methods and techniques.	1	2	3
8.	Loco-regional anesthesia in the upper jaw. Anesthesia of the posterior superior alveolar nerve. Infraorbital nerve anesthesia.	1	2	3
9.	Loco-regional anesthesia in the upper jaw. Anesthesia of the nasopalatine and greater palatine nerves.	1	2	3
10.	Loco-regional anesthesia in the lower jaw. Anesthesia of the inferior alveolar and mental nerves.	1	2	3
11.	Loco-regional anesthesia in the lower jaw. Anesthesia of the lingual and buccal nerves. Simultaneous anesthesia of all branches of the mandibular nerve.	1	2	3
12.	Conscious sedation and analgesia in dentistry.	1	2	3
13.	Inhalation sedation used in dentistry.	1	2	3
14.	General anesthesia in oral and maxillofacial surgery.	1	2	3

15.	Incidents, accidents, and local and general complications of loco-regional anesthesia and sedation	1	2	3
Total		**30**	**15**	**30**

VI. PRACTICAL SKILLS ACQUIRED AT THE END OF THE COURSE

The essential mandatory practical procedures are:

- Patient history taking and conducting general and local clinical examinations in oral-maxillofacial surgery and dentistry.
- Acquiring skills in local and loco-regional anesthesia techniques.

VII. REFERENCE OBJECTIVES AND CONTENT UNITS

Goals	Contents
Unit 1. Instruments Used in Dentoalveolar and Maxillofacial Surgery.	
• to be familiar with the basic and supplementary instruments used in dentoalveolar and maxillofacial surgery. • to understand the structure of forceps and elevators.	1. Classification of instruments used in oro-maxillofacial surgery. 2. Basic instruments used for dental extraction. 3. Structure of forceps. 4. Structure of elevators. 5. Supplementary instruments used for dental extraction.
Unit 2. Dental Extraction. Indications and Contraindications. Pre-extraction Preparations.	
• to define the term "dental extraction." • to know the indications and contraindications for performing dental extractions. • to understand the principles of preparing the dentist and the patient for dental extraction	1. Indications for Dental Extraction. 2. Contraindications for Dental Extraction. 3. Preparation of the Dentist for Dental Extraction. 4. Preparation of the Patient for Dental Extraction.
Unit 3. Technique and Steps of Dental Extraction with Forceps and Elevators. Minimally Invasive Extraction Techniques.	
• to be familiar with the general principles of dental extraction technique. • to understand the indications for using forceps and elevators. • to demonstrate the technique, basic and auxiliary steps of dental extraction using forceps and elevators. • to apply minimally invasive extraction techniques using	1. General Principles of Dental Extraction Technique. 2. Indications for the Use of Forceps and Elevators. 3. Basic Steps in Dental Extraction with the Use of Forceps. 4. Basic Steps in Dental Extraction with the Use of Elevators. 5. Auxiliary Steps in Dental Extraction with the Use of Forceps and Elevators. 6. Minimally Invasive Extraction Techniques using Periotomes, Piezotomes, and the "Benex Root Control" System.

Goals	Contents
periotomes, piezotomes, and the "Benex Root Control" system.	
Unit 4. Extraction of Upper Arch Teeth.	
• to have knowledge of the necessary instruments for the extraction of upper arch teeth. • to be acknowldeged withe the application of the anesthesia methods used in the upper jaw. • to have understanding of the particularities of the extraction of upper incisors, canines, premolars, and first two molars.	1. Necessary instruments for the extraction of upper arch teeth. 2. Anesthesia methods used in the upper jaw. 3. Particularities of the extraction of upper incisors. 4. Particularities of the extraction of upper canines. 5. Particularities of the extraction of upper premolars. 6. Particularities of the extraction of upper first molars.
Unit 5. Extraction of Lower Arch Teeth. Summary.	
• to know the necessary instruments for the extraction of lower arch teeth. • to apply the methods of anesthesia used in the lower jaw. • to understand the particularities of the extraction of lower incisors, canines, premolars, and first two molars.	1. Necessary instruments for the extraction of lower arch teeth. 2. Anesthesia methods used in the lower jaw. 3. Specifics of the extraction of lower incisors. 4. Specifics of the extraction of lower canines. 5. Specifics of the extraction of lower premolars. 6. Specifics of the extraction of lower first two molars.
Unit 6. Extraction of upper third molars.	
• to know the indications and contraindications for the extraction of upper third molars. • to understand the classification of upper third molars. • to apply the types, techniques of creating mucoperiosteal flaps, techniques of extracting upper third molars. • to understand the used instruments and types of sutures. • to be aware of intraoperative accidents during the extraction of upper third molars and their prophylaxis.	1. Indications and contraindications for the extraction of upper third molars. 2. Classification of upper third molars (based on sagittal and transversal position, relationship with second molars, proximity to the maxillary sinus, nature of covering tissues). 3. Types and techniques of creating mucoperiosteal flaps. 4. Techniques for extracting upper third molars. Used instruments. 5. Types of sutures. 6. Intraoperative accidents during the extraction of upper third molars. Prophylaxis.
Unit 7. Extraction of Lower Third Molars.	
• To know the indications and contraindications for the extraction of lower third molars. • To understand the classification of lower third molars.	1. Indications and contraindications for the extraction of lower third molars. 2. Classification of lower third molars (according to sagittal and transverse position, relation to the second molar, position

Goals	Contents
• To apply the types and techniques of creating mucoperiosteal flaps, extraction techniques for lower third molars. • To comprehend the utilized instrumentation and types of sutures. • To be aware of intraoperative accidents during the extraction of lower third molars and their prevention.	relative to the ascending ramus, relation to the mandibular canal, nature of covering tissues). 3. Types and techniques of creating mucoperiosteal flaps. 4. Techniques for the extraction of lower third molars. Utilized instrumentation. 5. Types of sutures. 6. Intraoperative accidents during the extraction of lower third molars. Prevention.
Unit 8. Extraction by Alveolectomy.	
• to define the term "alveolotomy." • to understand the indications and types of alveolotomy. • to apply the surgical techniques and the instrumentation used in alveolotomy.	1. Alveolotomy: the definition, indications. 2. Types of alveolotomy. 3. Types of incisions. 4. Partial alveolotomy: indications, surgical techniques. 5. Total alveolotomy: indications, surgical techniques. 6. The instrumentation used in alveolotomy.
Unit 9. Management of post-extraction dental wound and its healing. Summary.	
• to understand the approach towards a normal alveolar wound. • to understand the approach towards an infected alveolar wound. • to comprehend the approach in crushed alveolar wounds. • to be aware of post-extraction recommendations. • to understand the healing processes of a post-extraction dental wound.	1. Approach to a normal alveolar wound. 2. Approach to an infected alveolar wound. 3. Approach in crushed alveolar wounds. 4. Post-extraction recommendations. 5. Healing of the post-extraction dental wound.
Unit 10. Particularities of dental extractions in patients with concurrent illnesses.	
• to be aware of the specificities of dental extractions in patients with respiratory, cardiovascular, endocrine, digestive, and renal conditions. • to understand the indications for performing dental extractions in a hospital setting.	1. Characteristics of dental extractions in patients with respiratory conditions. 2. Distinctive features of dental extractions in patients with cardiovascular conditions. 3. Unique aspects of dental extractions in patients with endocrine conditions. 4. Special considerations for dental extractions in patients with digestive system conditions. 5. Notable aspects of dental extractions in patients with renal conditions.

Goals	Contents
	6. Indications for performing dental extractions in a hospital environment.
Unit 11. Distinctive aspects of dental extractions in patients under antithrombotic treatment.	
• to understand the definition, classification of antithrombotic medication. • to comprehend the specificities of dental extractions in patients under antithrombotic treatment.	1. Antithrombotic Medication: Definition, Purpose of Administration. 2. Classification of Antithrombotic Medication. 3. Characteristics of Platelet Antiaggregants (Acetylsalicylic Acid, Clopidogrel). Mechanism of Action. Assessment of Hemorrhagic Risk. Approach in the Dental Clinic. 4. Vitamin K Antagonists (Acenocoumarol, Warfarin). Mechanism of Action. Assessment of Hemorrhagic Risk. Approach in the Dental Clinic. 5. Novel Oral Anticoagulants (Dabigatran, Rivaroxaban, Apixaban, Edoxaban). Mechanism of Action. Assessment of Hemorrhagic Risk. Approach in the Dental Clinic.
Unit 12. Antibiotic Prophylaxis in Dentoalveolar and Maxillofacial Surgery. Summary.	
• To provide a precise definition of the term "antibiotic prophylaxis." • To be aware of the indications for implementing antibiotic prophylaxis. • To understand the protocols for antibacterial prophylaxis.	1. Antibiotic prophylaxis: Definition, epidemiological data. 2. Indications for implementing antibiotic prophylaxis. 3. Protocols for antibacterial prophylaxis.
Unit 13. Dental extraction accidents.	
• to be aware of the classification of dental extraction accidents. • to understand the diagnosis, treatment, and prevention of dental injuries, soft tissue injuries in the perimaxillary region, bone injuries, nerve injuries, sinus accidents, and in case of tooth displacement into perimaxillary spaces. • to know the diagnosis, treatment, and prevention of temporomandibular joint dislocation and other accidents (swallowing dental or bone fragments, instrument fractures).	1. Classification of dental extraction accidents. 2. Dental injuries: diagnosis, treatment, prevention. 3. Soft tissue injuries in the perimaxillary region: diagnosis, treatment, prevention. 4. Bone injuries: diagnosis, treatment, prevention. 5. Sinus accidents: diagnosis, treatment, prevention. 6. Tooth displacement into perimaxillary spaces: diagnosis, treatment, prevention. 7. Nerve injuries: diagnosis, treatment, prevention. 8. Temporomandibular joint dislocation: diagnosis, treatment, prevention. 9. Other accidents (swallowing dental or bone fragments, instrument fractures): diagnosis, treatment, prevention.
Unit 14. Post-extraction dental hemorrhage.	
• to define the term "post-	1. Post-extraction dental hemorrhage: definition, classification.

Goals	Contents
extraction dental hemorrhage." • to understand the classification, etiological factors, and clinical presentation of post-extraction dental hemorrhage. • to comprehend the prophylaxis, local treatment, and general management of patients with post-extraction dental hemorrhage	2. Etiological factors involved in the occurrence of hemorrhage. 3. Clinical presentation of post-extraction dental hemorrhage. 4. Local treatment methods. 5. Local hemostatic agents: definition, classification, active and passive hemostatic agents. 6. Method of achieving post-extraction dental hemostasis through local application of human thrombin and 5% aminocaproic acid. 7. Properties of the ideal hemostatic agent. 8. General treatment of patients with bleeding disorders. 9. Prophylaxis of post-extraction dental hemorrhage.
Unit 15. Post-extraction Alveolitis. Summary.	
• To define the term of post-extraction alveolitis. • To know the etiopathogenesis, anatomopathological forms, symptomatology, progression, treatment, and prevention of post-extraction alveolitis.	1. Post-extraction alveolitis: definition, etiopathogenesis. 2. Anatomopathological forms of post-extraction alveolitis. 3. Symptomatology and progression of alveolitis. 4. Treatment methods for alveolitis. 5. Prevention of alveolitis.

VIII. PROFESSIONAL (SPECIFIC (SS) AND TRANSVERSAL (TS) SKILLS AND LEARNING OUTCOMES

Professional (specific) skills (SS)

SS1: Acquiring the knowledge, understanding, and usage of specialized language in dentoalveolar and maxillofacial surgery; Understanding and familiarizing oneself with the instruments used in dentoalveolar and maxillofacial surgery; Explaining the indications and contraindications for dental extractions; Understanding the principles of preparing the dentist and the patient for tooth extraction; Understanding the techniques and stages of tooth extraction using forceps and elevators.

SS2: Understanding and applying minimally invasive techniques for dental extractions; Understanding and simulating various types of incisions and sutures; Understanding the correct approach towards post-extraction dental wound care.

SS3: Understanding accidents that may occur during wisdom tooth extraction; Understanding the principles of alveolotomy.

SS4: Understanding the specifics of dental extractions for patients with concurrent diseases and those under antithrombotic treatment.

SS5: Describing the concept, risk groups, and protocols for antibiotic prophylaxis in dentoalveolar and maxillofacial surgery.

SS6: Understanding accidents and complications related to dental extractions.

Transversal Skills (TS)

TS1: Applying professional assessment standards, acting in accordance with professional ethics and current legislation. Promoting logical reasoning, practical applicability, evaluation, and self-assessment in decision-making.

TS2: Performing tasks and fulfilling specific roles within the team environment of the dental/maxillofacial clinic/department. Promoting initiative, dialogue, cooperation, a positive attitude, respect for others, empathy, altruism, and continuous improvement of one's own performance.

TS3: Systematically evaluating competences, roles, and personal expectations. Applying self-assessment to learned processes, acquired skills, professional development needs, efficient use of linguistic abilities, knowledge in information technologies, research and communication competences. These efforts aim to provide quality services, adapt to the dynamic requirements of health policies, and foster personal and professional growth.

Learning outcomes

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

• To be familiar with the instruments used in oral and maxillofacial surgery;

• To know the indications and contraindications for performing dental extractions;

• To understand the principles of preparing the dentist and the patient for dental extraction;

• To be knowledgeable about the technique and stages of dental extraction using forceps and elevators;

• To comprehend minimally invasive techniques for performing dental extractions;

• To understand the principles of performing extractions through alveolotomy;

• To be capable of evaluating the specificities of dental extractions in patients with concurrent illnesses and those on antithrombotic treatment;

• To be competent in applying knowledge related to antibiotic prophylaxis in dentoalveolar and maxillofacial surgery;

• To be able to deduce the causes of dental extraction accidents and complications and their treatment;

• To have the ability to implement acquired knowledge in research activities;

• To be competent in critically and confidently utilizing scientific information obtained through new information and communication technologies.

IX. INDIVIDUAL STUDENT WORK

Nr.	Expected product	Implementation Strategies	Evaluation Criteria	Accomplishment Deadline
1.	Working with informational sources.	Engaging in the lecture or studying the content provided in the manual relevant to the specific topic. Reflecting upon the topic by addressing the questions presented within it. Acquiring knowledge and selecting supplementary sources of information pertaining to the subject. Thoroughly reading the text and summarizing its core content. Formulating overarching insights and conclusions concerning the significance of the topic/subject.	The ability to extract the essentials. Interpretive skills. Capacity for independent analysis and effective communication of accumulated material.	During the semester
2.	Case problem solving	Analyzing case problems, providing reasoned conclusions at the end of each practical assignment. Assessing the attainment of objectives and evaluating their accomplishment. Utilizing supplementary sources of information through online references and additional bibliographic materials.	The quality of solving situational problems and clinical cases, the ability to formulate and interpret clinical and paraclinical data. Analytical skills in analyzing information selected from national and international professional websites.	During the semester
3.	Assessment of perception (basic knowledge) in understanding the instrumentation for odontectomy. Evaluation of methods and complications that may arise in connection with odontectomy in the oral and maxillofacial surgery department.			

Nr.	Expected product	Implementation Strategies	Evaluation Criteria	Accomplishment Deadline
	Each student will complete the patient's medical record, systematize the stages of clinical examination and history collection. Determining the indications and contraindications for odontectomy. Assessing the approach in managing complications.			
3.1.	Schematic recording of the instrumentation	Working with bibliographic sources in the organization of instrumentation for odontectomy.	Assessment of the accuracy of task completion.	During the semester
3.2.	Assessment of the indications for odontectomy.	The student needs to study the particularities of odontectomy and justify the need for tooth extraction.	Assessment of the accuracy of information described by the student.	During the semester
3.3.	Project preparation	The students will prepare information regarding the selected topic from the thematic plan, presenting it in a schematic and graphical format using PowerPoint.	Assessment of the quality of the selected material, project design, and the ability to present information.	During the semester

X. METHODICAL SUGGESTIONS FOR TEACHING-LEARNING-EVALUATION

• Teaching and Learning Methods Used

In teaching the discipline of odontectomy in OMF surgery, various methods and teaching approaches are employed, aimed at efficient assimilation and achievement of the didactic process objectives. The discipline includes lecture hours, seminars, practical work, and individual study. The courses are conducted in the 5th semester by the course instructor. Within the scope of practical work, the following forms of instruction are used: frontal activity, individual tasks, brainstorming sessions, group discussions, and case studies. As educational support, specialized textbooks available in the university library, methodological recommendations from department collaborators, tables, diagrams, electronic informational sources, national and international professional websites, etc., are utilized.

Students are assigned individual tasks that are presented for group discussions. Based on these assignments, the quality of individual work and practical skills is subsequently assessed. To master the study material and group work skills (teambuilding), students conduct a mini-research project in the field over the course of the semester. The results of this research are presented during seminars and practical lessons, organized in the

last month of the semester, facilitating comprehensive understanding of the subject matter and practical skills through active engagement and discussions.

• **Applied Teaching Strategies/Technologies (specific to the discipline)**

Frontal activity, individual tasks, brainstorming sessions, group discussions, clinical case analysis, teambuilding, simulated clinical examinations, mini-research projects, comparative analysis.

• **Evaluation Methods** (including specifying the calculation method for the final grade)

Current: Continuous assessments during seminars and practical sessions, 3 written or test-control summaries. The individual work completed throughout the semester is evaluated, and the grade is included in the summaries. At the end of the semester, the average annual grade is calculated based on the grades from the conducted summaries.

Final: The course concludes with an exam. The exam grade is determined based on the average annual grade. The average annual grade will be expressed as a numerical value according to the grading scale provided in the table.

Scaling of marks for assessments

Method of mark rounding

Grid of intermediary marks (anual average mark, final examination mark)	Grading system	ECTS Equivalent
1,00-3,00	**2**	**F**
3,01-4,99	**4**	**FX**
5,00	**5**	**E**
5,01-5,50	**5,5**	
5,51-6,00	**6**	
6,01-6,50	**6,5**	**D**
6,51-7,00	**7**	
7,01-7,50	**7,5**	**C**
7,51-8,00	**8**	
8,01-8,50	**8,5**	**B**
8,51-8,00	**9**	
9,01-9,50	**9,5**	**A**
9,51-10,0	**10**	

The annual average mark and final examination marks (computer test, written test, oral test) will be expressed in numbers according to the grid of marks (see table above), while the final mark will be

expressed in a number with two decimal digits, which will be recorded in the student's report card (gradebook).

Note: *Students` unexcused absence at the final examination is qualified with „absent" and is equivalent to „0" (zero). The students have the right to retake the failed examination twice.*

XI. RECOMMENDED BIBLIOGRAPHY: