



ACADEMIC STANDARD FOR THE DISCIPLINE „ORAL AND MAXILLOFACIAL SURGERY“

1. Purpose of the education

The education in the discipline aims to give fundamental knowledge and to develop practical skills in the ones who graduate with the specialty dental medicine. Through the education course in oral and maxillofacial surgery students acquire the theoretical knowledge and practical skills necessary for working in a non-hospital dental practice – examination of a patient, providing anesthesia and extraction of teeth, diagnostics of oral-surgical and maxillofacial diseases. It aims also to theoretically and practically prepare the students in dental medicine for individual work in diagnostics and treatment of the diseases, concerning the oral and maxillofacial surgery.

2. Educational form

In accordance with the rules of the structure, operation, and education organization of Medical University – Plovdiv the education of students in Dental medicine includes in auditorial and extra-auditorial work: lectures, seminars and practical classes, master classes, taking part in circle activity, other modern and interactive forms of education and self-preparation.

In national or regional state of emergency and corresponding order by the Rector of MU-Plovdiv the education can continue in online form, which is equal to the regular form in regards of the educational content and required credits for the respective specialty and academic discipline.

Online form of education is organized and conducted according to specific ruleset, which is accepted by the Academic council after receiving positive accreditation resolution for such form.

3. Educational content

Oral surgery is a part of dental medicine concerned with correcting problems or damage to the mouth, teeth, and jaws. Oral surgery deals with the diagnosis of, and the surgery required by, diseases,

injuries, and defects of the human jaws and associated structures. Both dentists and physicians refer a wide variety of special dental problems to the oral surgeon. Oral surgery is dental specialty.

Maxillofacial surgery treats many diseases, injuries and defects in the head, neck, face, jaws and the hard and soft tissues of the oral and maxillofacial region. It is an internationally recognized surgical specialty. In most countries around the world, including the United States, Canada, and Australia it is a recognized specialty of dentistry; in others (UK, Italy), including Bulgaria, it is recognized as a medical specialty.

Oral surgery is performed usually in ambulatory offices – individual practices or group practices. Maxillofacial surgery is hospital-based specialty.

The most common procedure in oral surgery is tooth extraction (so called exodontia). The complications after tooth extraction are in domain of oral surgeon too. Oral and maxillo-facial surgeon also treats:

- ✓ inflammations
 - from dental origin in oral cavity,
 - inflammation from different origin in maxillo-facial area,
 - inflammation of the neck.
- ✓ Osteomyelitis of the jaws
- ✓ Lymphadenitis
- ✓ Sinuitis from dental origin
- ✓ Cysts of the jaws
- ✓ Cysts of soft tissues
- ✓ Diseases of salivary glands
- ✓ Temporo-mandibular joint diseases
- ✓ Diseases of gums and periodontium
- ✓ Trauma of teeth and soft tissues in oral cavity and maxillo-facial area
- ✓ Fractures of jaws, zygoma and nose
- ✓ Defects of tissues
- ✓ Benign tumors
- ✓ Cancers

Discipline	Exam	Academic Hours			Academic Hours in Years and Semesters															
		Total	Lectures	Practicals	I year		II year		III year		IV year		V year							
					I	II	I	II	I	II	I	II	I	II						
Oral and maxillofacial surgery	Semester	330	60	270	I	p	I	p	I	p	I	p	I	p	I	p	I	p		
					1	4	1	4	1	4	1	4	1	4	1	6				
	X																			

Type of discipline: compulsory

Degree: Master's degree

Forma of training: Lectures, seminar exercises, self-study

Course length: Four semesters

Academic Hours: 60 lecture hours, 270 exercise hours

Training methods: Multimedia presentation, discussion, monitoring tests, figures, interpretation of case reports, practical tasks solving, and working on patients.

Forms of assessment: Ongoing monitoring, participation of seminars and colloquia, monitoring tests, semester examination

Formation of ongoing monitoring: Average assessment grade per semester

Semester examination: Test, written and oral examination.

State examination: Written and oral examination in special surgery, including local anesthesia and analgesics in dental medicine; oral and maxillo-facial surgery.

Tutor: Habilitated Professor of Oral surgery

Department: Oral surgery, Maxillofacial surgery

4. Prerequisites

In order for the training in oral surgery to begin, the student should have successfully completed the 3rd year special course of Special Surgery including anesthetics in the dental medicine and oral surgery. Considering the main objectives and tasks of the oral and maxillofacial surgery during the course of the training it should prepare the students with optimal knowledge and practical skills in the main sections of the discipline. The students should learn the methods of anesthesia, teeth extraction, treatment of inflammatory diseases of odontogenic origin, diagnostics and emergency aid in traumas in the oral cavity and maxillofacial area, diagnosis of precancerous and tumor diseases, knowledge of congenital abnormalities - diagnostics and terms of treatment. They should master and gain lasting knowledge about paraclinical tests applied in oral and maxillofacial surgery as well as the ways and means of pharmacologically influencing pathological processes. After completing the training, students should have the following knowledge and skills:

To be able to single handedly perform:

- Patient's evaluation, history and physical examination;
- Diagnosis of surgical diseases in the oral cavity;
- Preparation of the patient, the surgeon and the operating theatre;
- Hand disinfection methods;
- Application of local intraoral anesthesia:
 - ✓ topical anesthesia;

- ✓ infiltration anesthesia;
- ✓ intraligamentary anesthesia;
- ✓ maxillary and mandibular nerve blocks;
- Typical (closed) extraction of permanent and primary teeth;
- Incisions in case of complicated tooth eruption;
- Incisions of intraoral abscesses;
- Replacement and wire stabilization of luxated teeth;
- Issuing prescriptions to patients
- Diagnosis and treatment of urgent diseases in dentistry;
- Management of medical emergencies in the dental office and providing consultation with a specialist;

To be familiar with and send for consultation patients with:

- Patients with odontogenic and nonodontogenic bone cysts;
- Patient with fractures of the jawbones;
- Patients with pre-neoplastic and neoplastic intraoral pathology;
- Patients with congenital abnormalities in the oral cavity (clefts);
- Patients with dentoalveolar malformations;
- Abscesses and cellulitis in maxillofacial region;
- Pathology of the periodontium and oral mucosa;

5. Academic resources

The Departments should have the necessary number of lecturers, according to the accepted norms for teaching workload of a lecturer from the Medical University, Faculty of Dental Medicine - Plovdiv. The lecturer must have excellent theoretical and practical training and specialization in the disciplines "Oral Surgery" and "Maxillofacial Surgery" respectively. To participate actively in the plan of the Department of Scientific Research, guided by the latest achievements in the field.

6. Material resources

The Departments must have the necessary number of clinical halls equipped with dental units, special tools and computers. The operating theatres must be equipped with a modern dental unit, an operating table, as well as with piezosurgery, laser therapy and implantology equipment.

7. Lectures

The textbook of the Department can be found on the Faculty's website and contains information about the lecturing and the practical training of the students.

Oral and Maxillofacial surgery

Lecture schedule

IV year, VII semester

№	TOPIC
1.	Inflammatory processes (abscesses and phlegmons) of the face – anatomy, clinical signs, differential diagnosis. Treatment.
2.	Maxillary abscesses and phlegmons - anatomy, clinical signs, differential diagnosis. Treatment.
3.	Abscesses and phlegmons around the mandible - anatomy, clinical signs, differential diagnosis. Treatment.
4.	Abscesses and phlegmons of the tongue, floor of the mouth, parapharyngeal space - anatomy, clinical signs, differential diagnosis. Treatment.
5.	Acute osteomyelitis of the jaws - clinical signs, differential diagnosis. Treatment.
6.	Chronic osteomyelitis of the jaws - clinical signs, differential diagnosis. Treatment.
7.	Lymphadenitis in the maxillofacial area. Clinical signs, differential diagnosis. Treatment.
8.	Odontogenic sinusitis. Clinical signs, differential diagnosis. Treatment.
9.	Specific inflammatory processes in the maxillofacial area – tuberculosis, syphilis. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
10.	Specific inflammatory processes in the maxillofacial area – actinomycosis. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
11.	HIV/AIDS - clinical signs, methods of diagnosis, treatment, prophylaxis.
12.	Treatment of acute inflammation from dental origin – basic principles of medication. Antibacterial drugs. Prescription.
13.	Life threatening complications associated with abscesses and phlegmons.
14.	Treatment of acute inflammation from dental origin - basic surgical principles. Types of incisions and drainage systems.
15.	Treatment of acute inflammation from dental origin – basic principles of medication. Nonsteroidal anti-inflammatory drugs (NSAIDs), antihistamines, immunotherapy. Prescription.

Oral and Maxillofacial surgery

Lecture schedule

IV year, VIII semester

№	TOPIC
16.	Cysts of the jaws. Classification. Etiology and pathogenesis. Clinical signs. Methods of diagnosis.
17.	Cysts of the jaws. Differential diagnosis. Treatment.
18.	Soft tissue cysts in oral cavity and maxillofacial area. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
19.	Salivary gland diseases – sialadenitis. Classification. Etiology and pathogenesis. Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment.
20.	Reactive-dystrophic processes in salivary glands (sialoadenoses). Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment. Sialolithiasis.
21.	Temporomandibular joint disorders - arthritis and arthrosis. Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment.
22.	Temporomandibular joint disorders – subluxation, luxation, myofascial pain dysfunction (MPD) syndrome, contracture, ankylosis. Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment.
23.	Trigeminal neuralgia. Glossopharyngeal neuralgia. Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment.
24.	Surgical approaches for the treatment of periodontal diseases – resective and regenerative surgical techniques.
25.	Surgical approaches for the treatment of periodontal diseases – periodontal plastic surgery (mucogingival surgery).
26.	Maxillofacial trauma. General data. Features of maxillofacial trauma disease. Classification. General principles of good trauma management.
27.	Soft tissue trauma in oral cavity and maxillofacial area. Classification. Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment.
28.	Mandible fractures. Classification. Clinical signs. Methods of diagnosis. Differential diagnosis. Orthopedic treatment – basic principles.
29.	Mandible fractures. Surgical and orthopedic-surgical treatment.
30.	Facial paresis and paralysis. Paralysis of the hypoglossal nerve. Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment.

Oral and Maxillofacial surgery

Lecture schedule

V year, IX semester

№	TOPIC
31.	Maxillary fractures. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
32.	Zygoma complex and nasal fractures. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
33.	Life threatening complications associated with maxillofacial trauma (asphyxiation, hemorrhage, shock). Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
34.	Life threatening complications associated with maxillofacial trauma (commotio cerebri, cerebral compression, cerebral contusion). Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
35.	Teeth trauma. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
36.	Tumors in oral cavity and maxillofacial area. Etiology and pathogenesis. Characteristics. Basic principles of diagnosis Clinical signs, methods of diagnosis. Classification based on localization. Clinical classification – TNM-system.
37.	Oral and maxillofacial preneoplastic disorders. Classification. Etiology and pathogenesis. Erythroplakia and leukoplakia - clinical signs. Methods of diagnosis, differential diagnosis. Treatment.
38.	Oral and maxillofacial preneoplastic disorders. Lichen ruber planus (Lichen planus), cheilitis, melanoplakia, cornu cutaneum, keratoacanthoma. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
39.	Prophylaxis and early diagnosis of oral cancer.
40.	Benign soft tissue tumors of the skin and oral cavity. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
41.	Benign odontogenic tumors of the jaws. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
42.	Benign nonodontogenic tumors of the jaws. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
43.	Malignant soft tissue tumors of oral cavity (lips, cheeks, gingiva). Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
44.	Malignant soft tissue tumors of oral cavity (tongue, floor of the mouth, hard palate). Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
45.	Maxillary carcinoma. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.

Oral and Maxillofacial surgery

Lecture schedule

V year, X semester

№	TOPIC
46.	Maxillary sarcoma. Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment.
47.	Mandible carcinoma. Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment.
48.	Mandible sarcoma. Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment.
49.	Benign tumors of salivary glands. Classification. Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment.
50.	Malignant tumors of salivary glands. Classification. Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment.
51.	Lymphoreticular tumors. Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment.
52.	Treatment of malignant oral and maxillofacial tumors – basic principles.
53.	Complications associated with treatment of malignant oral and maxillofacial tumors. Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment.
54.	Pre-prosthetic preparation of the jaws – soft tissue surgery. Indications and methods.
55.	Pre-prosthetic preparation of the jaws – bone surgery. Indications and methods.
56.	Plastic and reconstructive surgery – basic principles. Free skin grafts. Bone grafts.
57.	Plastic and reconstructive surgery. Flap surgery. Filatov – Gillies tube pedicle.
58.	Clefts in maxillofacial area. Classification. Etiology and pathogenesis. Clinical signs. Treatment.
59.	Jaw deformities and acquired defects in maxillofacial area. Treatment.
60.	Acquired defects in maxillofacial area. Treatment.

8. Clinical exercises

Clinical exercises are held in clinical halls by groups of 5-7 students. Tests are provided for exercises. They help evaluate:

- ✓ the degree of student's preparation
- ✓ students' knowledge and skills gained from the specific exercise.

Under the guidance and control of the assistant the students assess the medical history and status of the patient, place a preliminary clinical diagnosis, appoint laboratory tests and consultations with other specialists if necessary. After a final diagnosis, local anesthesia is placed, and teeth extraction is performed.

Students fulfill the norms adopted at the Departmental Council:

Oral Surgery for the 4th and 5th year

- 1) Hygienic disinfection of hands -21 (21 points)
- 2) Surgical disinfection of hands -21 (21 points)
- 3) Operational field preparation -21 (21 points)
- 4) Terminal local anesthesia - as indicated
 - a) topical
 - b) infiltration anesthesia
- 5) Nerve block anestheti -21 (21 points)
 - a) of the branches of n. Maxillaris
 - b) of the branches of n. Mandibularis
- 6) Intraligamentary anesthesia - as indicated
- 7) Extraction of teeth - 21 (105 points)
 - a) extraction of maxillary teeth
 - b) extraction of mandibular teeth
- 8) Local anesthesia in children - as indicated
- 9) Extraction wound management - 21 (21 points)
- 10) Treatment of localized alveolar osteitis - as indicated
- 11) Bleeding post extraction – management - as indicated
- 12) Incision in case of complicated tooth eruption - as indicated
- 13) Incisions in submucosal and subperiosteal abscesses - as indicated
- 14) Prescription of drugs in a surgical patient – 10 (20 points)
- 15) Management of urgent situations in oral surgery (as indicated):
 - Acute and chronic exacerbated periodontitis
 - Complicated tooth eruption
 - Abscesses and cellulitises
 - Lymphadenitis
 - Sialoadenites

- Acute sinusitis
- Acute osteomyelitis
- Perforation of the maxillary sinus
- Acute arthritis of TMJ
- Luxation of TMJ
- Tooth trauma
- Soft tissue trauma
- Trigeminal neuralgia

16) Management of emergency situation (as indicated):

- Asthma attack
- Hypertensive crisis
- Angina pectoris
- Paroxysmal tachycardia
- Myocardial infarction
- Syncope
- Fall in resistance
- Shock
- Stroke
- Hyperglycaemic coma
- Hypoglycaemic coma
- Hysterical fainting
- Epileptic seizure
- Mechanical airway obstruction
- Allergic reactions
 - Idiosyncrasy
 - Urticaria
 - Angioedema
 - Anaphylactic shock

Note: operation observations are performed according to the adopted training program.

Oral surgery
Practical training schedule
IV year, VII semester

№	TOPIC
1.	Acute periodontitis – clinical signs, differential diagnosis, diagnosis clarity, complications. Students’ practice - anesthesia and tooth extraction.
2.	Acute periodontitis – principles of management. Students’ practice - anesthesia and tooth extraction.
3.	Chronic periodontitis - clinical signs, differential diagnosis, diagnosis clarity, complications. Students’ practice - anesthesia and tooth extraction.
4.	Chronic periodontitis – surgical treatment. Apical osteotomy of the teeth in the lower jaw – features, types of incisions and their performance. Students’ practice - anesthesia and tooth extraction.
5.	Chronic periodontitis – surgical treatment. Apical osteotomy of the teeth in the upper jaw – features, types of incisions and their performance. Students’ practice - anesthesia and tooth extraction.
6.	Chronic periodontitis – surgical treatment. Hemisection and root amputation. Students’ practice - anesthesia and tooth extraction.
7.	Chronic periodontitis – surgical treatment. Tooth replantation and tooth extraction. Students’ practice - anesthesia and tooth extraction.
8.	Colloquium: Periodontitis – classification, clinical signs, differential diagnosis, diagnosis, clarity, and management.
9.	Local complications by local anesthesia – clinical signs, diagnosis clarity and management. Students’ practice - anesthesia and tooth extraction.
10.	General complications by local anesthesia (intoxication, syncope, collapse, shock) - clinical signs, diagnosis clarity and management. Students’ practice - anesthesia and tooth extraction.
11.	Allergic reactions (idiosyncrasy, urticaria, angioneurotic edema /Quincke’s disease, anaphylactic shock). Students’ practice - anesthesia and tooth extraction.
12.	Anesthesia techniques and tooth extraction in the upper jaw. Students’ practice - anesthesia and tooth extraction.
13.	Anesthesia techniques and tooth extraction in the lower jaw. Students’ practice - anesthesia and tooth extraction.
14.	Local anesthesia in children. Students’ practice - anesthesia and tooth extraction.
15.	Local anesthesia in inflammatory processes of the oral cavity and maxillofacial region. Students’ practice - anesthesia and tooth extraction.

Oral surgery
Practical training schedule
IV year, VIII semester

№	T E M A
16.	Clinical death - clinical signs, methods of diagnosis. Management. Students' single-handed anesthesia appliance and tooth extraction.
17.	Local complications during dental extraction - clinical signs, methods of diagnosis. Management. Students' single-handed anesthesia appliance and tooth extraction.
18.	Hemorrhagia during and after dental extraction - methods of diagnosis. Management. Students' single-handed anesthesia appliance and tooth extraction.
19.	Postextraction alveolitis - clinical signs. Methods of diagnosis. Differential diagnosis. Treatment. Students' single-handed anesthesia appliance and tooth extraction.
20.	General complications during dental extraction - clinical signs, methods of diagnosis. Management. Students' single-handed anesthesia appliance and tooth extraction.
21.	Colloquium: Complications during and after anesthesia and dental extraction.
22.	Odontogenic jaw cysts - clinical signs, methods of diagnosis, differential diagnosis. Students' single-handed anesthesia appliance and tooth extraction.
23.	Odontogenic jaw cysts. Surgical treatment - methods of cystectomy and cystotomy. Students' single-handed anesthesia appliance and tooth extraction.
24.	Non-odontogenic jaw cysts - clinical signs, methods of diagnosis, differential diagnosis, treatment. Students' single-handed anesthesia appliance and tooth extraction.
25.	Periodontitis complications – odontogenic lymphadenitis. Clinical signs, methods of diagnosis, differential diagnosis, treatment. Students' single-handed anesthesia appliance and tooth extraction.
26.	Periodontitis complications – odontogenic sinusitis. Clinical signs, methods of diagnosis, differential diagnosis, treatment. Students' single-handed anesthesia appliance and tooth extraction.
27.	Periodontitis complications – odontogenic osteomyelitis. Clinical signs, methods of diagnosis, differential diagnosis, treatment. Students' single-handed anesthesia appliance and tooth extraction
28.	Periodontitis complications – maxillary abscesses and phlegmons. Clinical signs, methods of diagnosis, differential diagnosis, treatment. Students' single-handed anesthesia appliance and tooth extraction.
29.	Periodontitis complications – abscesses and phlegmons around the mandible. Clinical signs, methods of diagnosis, differential diagnosis, treatment. Students' single-handed anesthesia appliance and tooth extraction.
30.	Focal infection of odontogenic origin. Clinical signs, methods of diagnosis, treatment. Students' single-handed anesthesia appliance and tooth extraction.

Oral surgery
Practical training schedule
V year, IX semester

№	T E M A
31.	Soft tissue trauma. Classification. Wound's treatment. Students' single-handed anesthesia appliance and tooth extraction.
32.	Teeth trauma. Classification. Traumatic tooth luxation. Clinical signs, methods of diagnosis, treatment. Students' single-handed anesthesia appliance and tooth extraction.
33.	Tooth expulsion – treatment. Students' single-handed anesthesia appliance and tooth extraction.
34.	Partial fracture of alveolar process of the jaws. Clinical signs, methods of diagnosis, examination. Students' single-handed anesthesia appliance and tooth extraction.
35.	Splinting in tooth luxation, tooth expulsion, fracture of alveolar process. Students' single-handed anesthesia appliance and tooth extraction.
36.	Colloquium: Dental trauma and alveolar process trauma.
37.	Impacted teeth. Clinical signs, methods of diagnosis, treatment. Students' single-handed anesthesia appliance and tooth extraction.
38.	Tooth eruption disorders. Clinical signs, methods of diagnosis, differential diagnosis, treatment. Students' single-handed anesthesia appliance and tooth extraction.
39.	Dental extraction in medically compromised patients (endocrine disorders). Students' single-handed anesthesia appliance and tooth extraction.
40.	Dental extraction in medically compromised patients (hematopoietic system disorders). Students' single-handed anesthesia appliance and tooth extraction.
41.	Dental extraction in medically compromised patients (mental and neurological diseases). Students' single-handed anesthesia appliance and tooth extraction.
42.	Dental extraction in medically compromised patients (cardiovascular diseases). Students' single-handed anesthesia appliance and tooth extraction.
43.	Dental extraction in medically compromised patients (pregnant woman). Students' single-handed anesthesia appliance and tooth extraction.
44.	Paraclinical tests in the oral surgery. Students' single-handed anesthesia appliance and tooth extraction.
45.	Medication in oral surgery - antibacterial, nonsteroidal anti-inflammatory drugs (NSAIDs), hemostatics, tranquilizers. Students' single-handed anesthesia appliance and tooth extraction.

Oral surgery
Practical training schedule
V year, X semester

№	T E M A
46.	Hypertrophy of the oral mucosa – diagnosis clarity, surgical management. Students’ single-handed anesthesia appliance and tooth extraction.
47.	Exostoses of the jaws - diagnosis clarity, surgical management. Students’ single-handed anesthesia appliance and tooth extraction.
48.	Splinting in periodontal diseases – indications and techniques. Students’ single-handed anesthesia appliance and tooth extraction.
49.	Periodontal diseases – surgical management. Techniques. Students’ single-handed anesthesia appliance and tooth extraction.
50.	Surgical treatment of periodontal diseases – regeneration methods. Students’ single-handed anesthesia appliance and tooth extraction.
51.	Surgical treatment of periodontal diseases – mucogingival surgery. Students’ single-handed anesthesia appliance and tooth extraction.
52.	Preprosthetic surgery – deepening of the vestibular sulcus of the upper and lower jaw - techniques. Students’ single-handed anesthesia appliance and tooth extraction.
53.	Closure of oroantral perforations – vestibular techniques. Students’ single-handed anesthesia appliance and tooth extraction.
54.	Closure of oroantral perforations – palatine techniques. Students’ single-handed anesthesia appliance and tooth extraction.
55.	Orthodontic surgery – tooth extraction and corticotomy. Students’ single-handed anesthesia appliance and tooth extraction.
56.	Benign tumors of the soft tissue in the oral cavity (papiloma, fibroma). Epulides. Diagnosis clarity and management. Students’ single-handed anesthesia appliance and tooth extraction.
57.	Prophylaxis and early oral cancer detection. Behavior of the dentist. Students’ single-handed anesthesia appliance and tooth extraction.
58.	Retention cysts of the small salivary glands- diagnosis clarity and surgical treatment. Students’ single-handed anesthesia appliance and tooth extraction.
59.	Final assessment of the students’ practical skills: Patient’s evaluation. Diagnosis, differential diagnosis, anesthesia, and tooth extraction. Complications. Management.
60.	Final assessment of the students’ practical skills: Patient’s evaluation. Diagnosis, differential diagnosis, anesthesia, and tooth extraction. Complications. Management.

Maxillofacial surgery

Clinicals schedule

V year, IX semester

№	TOPIC
1.	Plan of examination, differential diagnosis and treatment of patients with infections of the face (zygomatic region, buccal space, orbit and temporal space).
2.	Plan of examination, differential diagnosis and treatment of patients with infections around the maxilla (canine fossa, infraorbital region, infratemporal space and hard palate).
3.	Plan of examination, differential diagnosis and treatment of patients with infections around the mandible (sublingual space, submental space, submandibular space, floor of mouth, pterygomandibular and parapharyngeal space).
4.	Plan of examination, diagnosis and treatment of patients with lymphadenitis of the head and neck. Plan of examination, differential diagnosis and treatment of patients with specific infections of the oral cavity and maxillofacial region /tuberculosis, actinomycosis/.
5.	Plan of examination, differential diagnosis and treatment of patients with osteomyelitis of the jaws and facial bones.
6.	Plan of examination, differential diagnosis and treatment of patients with odontogenic sinusitis.
7.	Drug therapy in patients with acute odontogenic infections – principles, routes of administration. Prescriptions.
8.	Surgical treatment of patients with acute odontogenic infections - principles. Types of incisions and drainage systems.
9.	Salivary gland diseases - sialadenitis, sialolithiasis, sialadenosis, traumatic injury.
10.	Life-threatening conditions in patients with oral and maxillofacial infections (asphyxia, sepsis, mediastinitis, facial vein and cavernous sinus thrombosis). Plan of examination, differential diagnosis and management. Management of patients with oral and maxillofacial infections and comorbidities (diabetes, hypertension, anticoagulation therapy)
11.	Seminar: Oral and maxillofacial infections.
12.	Trigeminal neuralgia, glossopharyngeal neuralgia. Assessment, differential diagnosis, and management. Paresis and paralysis of the facial nerve and the hypoglossal nerve. Assessment, differential diagnosis and management.
13.	Initial management of injuries to the maxillofacial area. Life-threatening conditions. Soft tissue injuries of the oral cavity and maxillofacial area. Surgical treatment of wounds - principles. Venipuncture, placement of intravenous cannula. Intramuscular injection - technique.
14.	Fractures of the maxilla. Plan of examination and differential diagnosis.
15.	Fractures of the mandible. Plan of examination and differential diagnosis.

Maxillofacial surgery

Clinicals schedule

V year, X semester

№	TOPIC
1.	Open reduction and internal fixation of mid-face and mandibular fractures. Patient demonstration.
2.	Fractures of the zygomatic complex. Examination and differential diagnosis. Methods of treatment. Fractures of the nasal bones – examination, diagnosis, treatment. Anterior and posterior nasal packing.
3.	Closed reduction and indirect fixation of jaw fractures (orthopedic treatment) – splinting on phantom model and patient.
4.	Seminar: Maxillofacial trauma.
5.	Potentially malignant disorders of the oral cavity and maxillofacial area. Examination and differential diagnosis. Treatment. Biopsy of oral and maxillofacial neoplasms – types and techniques.
6.	Benign tumours of the oral cavity and maxillofacial area. Plan of examination and diagnosis, differential diagnosis.
7.	Malignant tumours of the face and oral cavity – skin, lips, cheeks, gingiva, tongue, palate, floor of mouth. Plan of examination and diagnosis.
8.	Malignant tumours of the maxilla. Plan of examination and diagnosis, differential diagnosis.
9.	Malignant tumours of the mandible. Plan of examination and diagnosis, differential diagnosis.
10.	Odontogenic tumours. Plan of examination and diagnosis, differential diagnosis.
11.	Salivary gland tumours. Plan of examination and diagnosis, differential diagnosis.
12.	Treatment modalities for tumours of the oral cavity and maxillofacial area – surgery, chemotherapy and radiotherapy. Types. Osteoradionecrosis. Clinical presentation, diagnosis, treatment.
13.	Seminar: Clinical presentation, diagnosis, differential diagnosis and treatment modalities for tumours of the oral cavity and the maxillofacial area.
14.	Plastic and reconstructive surgery in the maxillofacial area. Free skin grafts and flap reconstruction. Indications and techniques.
15.	Congenital cleft defects in the maxillofacial area. Treatment and care for the child with congenital oral and maxillofacial defects. Maxillofacial deformities.

Examination syllabus
„Oral and Maxillofacial surgery“
5th year students of Dental medicine

1. Abscesses and cellulitis of the face – anatomy, clinical signs, differential diagnosis. Treatment.
2. Maxillary abscesses and cellulitis – anatomy, clinical signs, differential diagnosis. Treatment.
3. Abscesses and cellulitis around the mandible – anatomy, clinical signs, differential diagnosis. Treatment.
4. Abscesses and cellulitis of the tongue, floor of the mouth, parapharyngeal space – anatomy, clinical signs, differential diagnosis. Treatment.
5. Acute osteomyelitis of the jaws – clinical signs, differential diagnosis. Treatment.
6. Chronic osteomyelitis of the jaws – clinical signs, differential diagnosis. Treatment.
7. Acute nonspecific lymphadenitis in the maxillofacial area. Clinical signs, differential diagnosis. Treatment.
8. Chronic nonspecific lymphadenitis in the maxillofacial area. Clinical signs, differential diagnosis. Treatment.
9. Acute odontogenic sinusitis. Clinical signs, differential diagnosis. Treatment.
10. Chronic odontogenic sinusitis. Clinical signs, differential diagnosis. Treatment.
11. Syphilis. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment. Prophylaxis.
12. Tuberculosis. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment. Prophylaxis.
13. Actinomycosis. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment. Prophylaxis.
14. HIV/AIDS - clinical signs in oral cavity, methods of diagnosis, treatment, prophylaxis.
15. Life threatening complications associated with abscesses and cellulitis (mediastinitis, facial vein thrombosis, cavernous sinus thrombosis, brain abscesses, others). Clinical signs, methods of diagnosis, differential diagnosis, treatment.
16. Odontogenic sepsis. Clinical signs, methods of diagnosis, differential diagnosis, treatment.
17. Treatment of acute inflammation from dental origin – basic surgical principles. Types of incisions and drainage systems.
18. Treatment of acute inflammation from dental origin – basic principles of medication. Antibacterial drugs. Prescription.
19. Treatment of acute inflammation from dental origin – basic principles of medication. Nonsteroidal anti-inflammatory drugs (NSAIDs), antihistamines, immunotherapy. Prescription.
20. Soft tissue cysts in oral cavity and maxillofacial area. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
21. Cysts of the jaws. Classification. Etiology and pathogenesis. Clinical signs, methods of diagnosis.
22. Cysts of the jaws. Differential diagnosis. Treatment.
23. Salivary gland diseases. Methods of diagnosis.
24. Acute sialadenitis. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
25. Chronic sialadenitis. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
26. Reactive-dystrophic processes in salivary glands (sialoadenoses). Clinical signs, methods of diagnosis, differential diagnosis. Treatment.

27. Sialolithiasis. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
28. Temporomandibular joint disorders – inflammatory and reactive-dystrophic. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
29. Temporomandibular joint disorders – subluxation, luxation, contracture, ankylosis. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
30. Trigeminal neuralgia. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
31. Facial paresis and paralysis. Paralysis of the hypoglossal nerve. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
32. Soft tissue trauma in oral cavity and maxillofacial area. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
33. Teeth trauma. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
34. Maxillary fractures. Classification. Clinical signs, methods of diagnosis, differential diagnosis.
35. Maxillary fractures. Treatment.
36. Mandible fractures. Classification. Clinical signs, methods of diagnosis, differential diagnosis.
37. Mandible fractures. Orthopedic treatment.
38. Mandible fractures. Surgical and orthopedic-surgical treatment.
39. Zygomatic complex fractures. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
40. Life threatening complications associated with maxillofacial trauma (asphyxiation, hemorrhage, shock). Clinical signs, methods of diagnosis. Treatment.
41. Life threatening complications associated with maxillofacial trauma (commotio cerebri, cerebral compression, cerebral contusion). Clinical signs, differential diagnosis, methods of diagnosis. Treatment.
42. Tumors in oral cavity and maxillofacial area. Etiology and pathogenesis. Characteristics. Basic principles of diagnosis Clinical signs, methods of diagnosis. Classification based on localization. Clinical classification – TNM-system.
43. Oral and maxillofacial preneoplastic disorders. Classification. Etiology and pathogenesis. Erythroplakia and leukoplakia – clinical signs. Methods of diagnosis, differential diagnosis. Treatment.
44. Oral and maxillofacial preneoplastic disorders. Lichen ruber planus (lichen planus), cheilitis, melanoplakia, cornu cutaneum, keratoacanthoma. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
45. Benign soft tissue tumors of the skin and oral cavity. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
46. Benign odontogenic tumors of the jaws. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
47. Benign nonodontogenic tumors of the jaws. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
48. Malignant soft tissue tumors of oral cavity (lips, cheeks, gingiva, tongue, floor of the mouth, hard palate). Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
49. Maxillary carcinoma. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
50. Maxillary sarcoma. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
51. Mandible carcinoma. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.

52. Mandible sarcoma. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
53. Benign tumors of salivary glands. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
54. Malignant tumors of salivary glands. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
55. Lymphoreticular tumors. Non-Hodgkin lymphoma. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
56. Lymphoreticular tumors. Hodgkin lymphoma. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
57. Treatment of malignant oral and maxillofacial tumors – basic principles.
58. Prophylaxis and early diagnosis of oral cancer.
59. Surgical approaches for the treatment of periodontal diseases – resective surgical techniques.
60. Surgical approaches for the treatment of periodontal diseases – regenerative surgical techniques.
61. Surgical approaches for the treatment of periodontal diseases – periodontal plastic surgery (mucogingival surgery). Deepening of the vestibular sulcus of the upper and lower jaw – techniques.
62. Mucogingival surgery - gingival recession. Classification. Indications. Methods. Technique.
63. Pre-prosthetic preparation of the jaws. Indications and methods.
64. Plastic and reconstructive surgery – basic principles. Free skin grafts.
65. Plastic and reconstructive surgery. Flap surgery.
66. Clefts in maxillofacial area. Classification. Etiology and pathogenesis. Cleft lips. Clinical signs. Surgery deadlines. Treatment.
67. Clefts in maxillofacial area. Classification. Etiology and pathogenesis. Cleft palate. Clinical signs. Surgery deadlines. Treatment.
68. Jaw deformities and acquired defects in maxillofacial area. Treatment.

Sources:

- ✚ *Atanasov D., Pechalova P., Tsvetanov TS. A Textbook of Oral and Maxillofacial Surgery. Plovdiv, 2018 Publisher: Medical University – Plovdiv, Bulgaria ISBN 978-619-237-002-2.*
- ✚ *Hupp JR, Ellis E III, Tucker MR. Contemporary oral and maxillofacial surgery, fifth edition (2008) Mosby, Inc affiliate of Elsevier Inc. ISBN 9780323049030*
- ✚ *Andersson L, Kahnberg KE, Pogrel A. Oral and Maxillofacial Surgery (2010) Blackwell Publishing Ltd. ISBN 978-1-4051-7119-9*

TRAINING PROGRAM FOR THE STATE PRACTICE
IN ORAL SURGERY

Duration: 30 workdays / 120 hours

First week – 20 hours

1. Anesthesia techniques in the oral surgery:

- a. Preparation of the patient.
- b. Premedication in the oral surgery.
- c. Nerve block anesthesia in the upper jaw.
- d. Nerve block anesthesia in the lower jaw.
- e. Anesthesia in children.
- f. Anesthesia by inflammatory process in the oral cavity and jaw-bones.
- g. Local complications by anesthesia.
- h. General complications by anesthesia.

Second week – 20 hours

2. Tooth extraction:

- a. Indications and contraindications.
- b. Features by extraction of the different tooth groups.
- c. Surgical extraction of impacted teeth.
- d. Complications by and after tooth extraction.

Seminar: anesthesia end tooth extraction – 2 hours

Third week – 20 hours

3. Acute odontogenic infection (AOI):

- a. Difficult tooth eruption – clinical features, differential diagnosis, diagnosis clarity, treatment.
- b. Periodontitis - clinical features, differential diagnosis, diagnosis clarity, treatment.
- c. Osteomyelitis - clinical features, differential diagnosis, diagnosis clarity, treatment.
- d. Lymphadenitis - clinical features, differential diagnosis, diagnosis clarity, treatment.
- e. Sinusitis - clinical features, differential diagnosis, diagnosis clarity, treatment.
- f. Abscesses and cellulites - clinical features, differential diagnosis, diagnosis clarity, treatment.
- g. Main principles of the surgical treatment of the AOI.
- h. Main principles of the medical treatment of the AOI. Drug prescription.

Seminar: acute odontogenic infection – 2 hours

Fourth week – 20 hours

- 4. Inflammatory diseases of the salivary glands.**
- 5. Temporomandibular diseases.**
- 6. Traumatic injuries in the oral cavity and maxillofacial region:**

- a. First aid.
- b. Traumatic injuries of the soft tissue - clinical features, differential diagnosis, diagnosis clarity, treatment.
- c. Tooth trauma - clinical features, differential diagnosis, diagnosis clarity, treatment.
- d. Fractures of the lower jaw - clinical features, differential diagnosis, diagnosis clarity, treatment.
- e. Fractures of the upper jaw - clinical features, differential diagnosis, diagnosis clarity, treatment.

Seminar: traumatic injuries in the oral cavity and maxillofacial region – 2 hours

Fifth week – 20 hours

7. Tumors in the oral cavity and jaw-bones:

- a. Precancers - clinical features, differential diagnosis, diagnosis clarity, treatment.
- b. Benign tumors of the soft tissues in the oral cavity - clinical features, differential diagnosis, diagnosis clarity, treatment.
- c. Benign tumors of the jaw-bones - clinical features, differential diagnosis, diagnosis clarity, treatment.
- d. Oral carcinoma - clinical features, differential diagnosis, diagnosis clarity, treatment.
- e. The use of the TNM system for the tumors in the oral cavity.
- f. Biopsy – types, techniques.
- g. Principles of treatment of the malignant tumors in the oral cavity and jaw-bone.

Seminar: tumors in the oral cavity and jaw-bones – 2 hours

Sixth week – 20 hours

8. Preprosthetic and periodontal surgery:

- a. Preprosthetic surgery – soft tissue surgery.
- b. Preprosthetic surgery – bone surgery.
- c. Periodontal surgery – resection techniques.
- d. Periodontal surgery – regenerating techniques.
- e. Periodontal surgery – mucogingival surgery/plastic periodontal surgery.

Obligatory manipulation minimum to be performed by each student during the state pregraduation practice:

1. Anesthesia and tooth extraction – 2.
2. Taking a history and present status, differential diagnosis and diagnosis clarity, treatment plan in out-patients – 10.
3. Taking a history and present status, differential diagnosis and diagnosis clarity, treatment plan and medical discussion in patients with inflammatory diseases – 3.
4. Taking a history and present status, differential diagnosis and diagnosis clarity, treatment plan and medical discussion in patients with fractures of the facial and jaw - bones – 3.
5. Taking a history and present status, differential diagnosis and diagnosis clarity, treatment plan and medical discussion in patients with neoplasm – 3.

Examination syllabus for State Examination

„Oral and Maxillofacial surgery“

1. Historical development of the oral and maxillofacial surgery. Scope and aims. Oral surgery in Bulgaria.
2. Asepsis and antisepsis in oral surgery. Preparation of the patient and surgical team.
3. Patient evaluation in oral surgery. Patient's history and physical examination.
4. Paraclinical tests in oral surgery. Laboratory, microbiology, histology, cytology and imaging studies in oral surgery.
5. Pain – definition, etiology, classification. Pathways for superficial and deep somatic pain.
6. Basic surgical principles: wounds, hemostasis, wounds healing, impairment of the healing process, tissues, and teeth replacement.
7. Anesthesia in oral surgery. General information. Types of anesthesia. Preparation of the patient for anesthesia (premedication).
8. Local anesthetics. Pharmacology.
9. Vasoconstrictors. Pharmacology, indications, and contraindications for their use in oral surgery.
10. Anatomical and physiological characteristics of the maxillofacial area. Terminal local anesthesia - topical anesthesia, infiltrative anesthesia, intrafilamentary anesthesia. Techniques.
11. Regional block anesthesia of the maxilla (intra- and extraoral). Anatomic and topographic features. Techniques.
12. Regional block anesthesia of the mandible (intra- and extraoral). Anatomic and topographic features. Techniques.
13. Anesthesia in children - characteristics. Features of regional anesthesia in oral and maxillofacial areas in inflammatory processes.
14. Local complications of local anesthesia. Clinical signs, diagnosis, management.
15. General complications of local anesthesia. Clinical signs, diagnosis, management.
16. General anesthesia in oral surgery. Types of anesthetic agents. Management and guidance of anesthesia. Complications, prevention.
17. Pharmacological management of pain – non-opioid, opioid and adjuvant analgesics. Types, mechanism of action.
18. Common surgical instruments – types, design, and principles of use.
19. High-frequency electrosurgery, piezo surgery and lasers in oral surgery.
20. Surgical sutures and suturing – instruments and materials. Types of sutures and knots. Techniques.
21. Tooth extraction (exodontia). Indications and contraindications. Preparation of the patient.
22. Instruments for tooth extraction – types, design, and principles of use.
23. Anatomical and mechanical considerations for tooth extraction - steps and methods. Dentist's and patient's care for the extraction wound. Extraction wound healing – characteristics of the process.
24. Surgical (open, atypical) extraction. Indications, techniques.
25. Removal of partially erupted and impacted teeth. Indications, contraindications, techniques, complications. Gernectomy.

26. Tooth extractions in medically compromised patients (disorders of cardiovascular and respiratory systems). Management.
27. Tooth extractions in medically compromised patients (disorders of blood and hematopoietic system). Management.
28. Tooth extractions in medically compromised patients (endocrine and renal disorders). Management.
29. Tooth extractions in medically compromised patients (hepatic disorders, patients on corticosteroid therapy, received radiotherapy; pregnant woman). Management.
30. Complications during tooth extraction. Local complications. Clinical signs, diagnosis, management.
31. Complications during tooth extraction. General complications. Clinical signs, diagnosis, management.
32. Complications after tooth extraction. Clinical signs, diagnosis, management.
33. Inflammatory processes in the oral cavity and maxillofacial area. Incidence, etiology and pathogenesis. Pathways of infection dissemination. General characteristics of the inflammation in the oral cavity and maxillofacial area. Patient assessment.
34. Tooth eruption disorders. Classification. Retained tooth eruption. Etiology and pathogenesis. Clinical signs. Methods of diagnosis and treatment.
35. Tooth eruption disorders. Classification. Complicated tooth eruption. Etiology and pathogenesis. Clinical signs. Methods of diagnosis and treatment.
36. Periodontitis. Etiology and pathogenesis. Classification. Acute apical periodontitis. Clinical signs. Methods of diagnosis and treatment.
37. Chronic apical periodontitis. Clinical signs. Methods of diagnosis and treatment. (hemisection, replantation, root amputation).
38. Apical osteotomy. Indications, contraindications. Preoperative preparation of the tooth. Techniques, complications, prevention.
39. Inflammatory processes (abscesses and phlegmons) of the face – anatomy, clinical signs, differential diagnosis. Treatment.
40. Maxillary abscesses and phlegmons - anatomy, clinical signs, differential diagnosis. Treatment.
41. Abscesses and phlegmons around the mandible - anatomy, clinical signs, differential diagnosis. Treatment.
42. Abscesses and phlegmons of the tongue, floor of the mouth, parapharyngeal space - anatomy, clinical signs, differential diagnosis. Treatment.
43. Acute osteomyelitis of the jaws - clinical signs, differential diagnosis. Treatment.
44. Chronic osteomyelitis of the jaws - clinical signs, differential diagnosis. Treatment.
45. Acute nonspecific lymphadenitis in the maxillofacial area. Clinical signs, differential diagnosis. Treatment.
46. Chronic nonspecific lymphadenitis in the maxillofacial area. Clinical signs, differential diagnosis. Treatment.
47. Acute odontogenic sinusitis. Clinical signs, differential diagnosis. Treatment.
48. Chronic odontogenic sinusitis. Clinical signs, differential diagnosis. Treatment.

49. Syphilis. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment. Prophylaxis.
50. Tuberculosis. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment. Prophylaxis
51. Actinomycosis. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
52. HIV/AIDS. Presentation in oral cavity and maxillofacial area. Clinical signs, methods of diagnosis, treatment, prophylaxis.
53. Life threatening complications associated with abscesses and phlegmons (thrombosis of the cavernous sinus, mediastinitis, brain abscess, etc.). Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
54. Sepsis from odontogenic origin. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
55. Treatment of acute inflammation from dental origin - basic surgical principles. Types of incisions and drainage systems.
56. Treatment of acute inflammation from dental origin – basic principles of medication. Antibacterial drugs. Prescription.
57. Treatment of acute inflammation from dental origin – basic principles of medication. Nonsteroidal anti-inflammatory drugs (NSAIDs), antihistamines, immunotherapy. Prescription.
58. Soft tissue cysts in oral cavity and maxillofacial area. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
59. Cysts of the jaws. Classification. Etiology and pathogenesis. Clinical signs, methods of diagnosis.
60. Cysts of the jaws. Differential diagnosis. Treatment.
61. Salivary gland diseases. Main methods of diagnosis.
62. Acute sialadenitis. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
63. Chronic sialadenitis. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
64. Reactive-dystrophic processes in salivary glands (sialoadenoses). Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment.
65. Sialolithiasis. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
66. Temporomandibular joint disorders: inflammatory and reactive-dystrophic (arthritis and arthrosis). Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
67. Temporomandibular joint disorders: subluxation, luxation, contracture, ankylosis. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
68. Trigeminal neuralgia. Clinical signs. Methods of diagnosis. Differential diagnosis. Treatment.
69. Facial paresis and paralysis. Paralysis of the hypoglossal nerve. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
70. Soft tissue trauma in oral cavity and maxillofacial area. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
71. Teeth trauma. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
72. Maxillary fractures. Classification. Clinical signs, methods of diagnosis, differential diagnosis.
73. Maxillary fractures. Methods of treatment.
74. Mandible fractures. Classification. Clinical signs, methods of diagnosis, differential diagnosis.

75. Mandible fractures. Orthopedic principles and methods of management. Indication and contraindications.
76. Mandible fractures. Surgical and orthopedic-surgical methods of management. Indications and techniques.
77. Zygomatic complex fractures. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
78. Life threatening complications associated with maxillofacial trauma (asphyxiation, hemorrhage, shock). Clinical signs, methods of diagnosis. Treatment.
79. Life threatening complications associated with maxillofacial trauma (commotio cerebri, cerebral compression, cerebral contusion). Clinical signs, differential diagnosis, methods of diagnosis. Treatment.
80. Tumors in oral cavity and maxillofacial area. Etiology and pathogenesis. Characteristics. Basic principles of diagnosis Clinical signs, methods of diagnosis. Classification based on localization. Clinical classification – TNM-system.
81. Oral and maxillofacial preneoplastic disorders. Classification. Etiology and pathogenesis. Erythroplakia and leukoplakia - clinical signs. Methods of diagnosis, differential diagnosis. Treatment.
82. Oral and maxillofacial preneoplastic disorders. Lichen ruber planus (Lichen planus), cheilitis, melanoplakia, cornu cutaneum, keratoacanthoma. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
83. Benign soft tissue tumors of the skin and oral cavity. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
84. Benign odontogenic tumors of the jaws. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
85. Benign nonodontogenic tumors of the jaws. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
86. Malignant soft tissue tumors of oral cavity (lips, cheeks, gingiva, (tongue, floor of the mouth, hard palate). Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
87. Maxillary carcinoma. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
88. Maxillary sarcoma. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
89. Mandible carcinoma. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
90. Mandible sarcoma. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
91. Benign tumors of salivary glands. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
92. Malignant tumors of salivary glands. Classification. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
93. Lymphoreticular tumors. Classification. Non-Hodgkin's lymphomas. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
94. Lymphoreticular tumors. Classification. Hodgkin's lymphomas. Clinical signs, methods of diagnosis, differential diagnosis. Treatment.
95. Treatment of malignant oral and maxillofacial tumors – basic principles.
96. Prophylaxis and early diagnosis of the oral carcinomas.
97. Surgical approaches for the treatment of periodontal diseases – resective surgical techniques.
98. Surgical approaches for the treatment of periodontal diseases – regenerative surgical techniques.

99. Periodontal plastic surgery (mucogingival surgery). Methods of vestibuloplasty operations. Indications. Techniques.
100. Periodontal plastic surgery (mucogingival surgery). Gingival recessions. Classification, indications, techniques.
101. Pre-prosthetic preparation of the jaws. Indications and methods. Surgical techniques.
102. Plastic and reconstructive surgery – basic principles. Free skin grafts. Indications and surgical techniques.
103. Plastic and reconstructive surgery – basic principles. Flap surgery. Indications and surgical techniques.
104. Clefts in maxillofacial area. Classification. Etiology and pathogenesis. Cleft lip - clinical signs, deadlines for surgery, basic principles.
105. Clefts in maxillofacial area. Classification. Etiology and pathogenesis. Cleft palate - clinical signs, deadlines for surgery, basic principles.
106. Jaw deformities and acquired defects in maxillofacial area. Surgical management – techniques.

Sources:

- ✚ *Pechalova P. Introduction to oral surgery: a textbook for the third year students of dental medicine. Medical university, Plovdiv, Bulgaria 2016, 400pp, ISBN 978-619-7085-77-8*
- ✚ *Atanasov D., Pechalova P., Tsvetanov TS. A Textbook of Oral and Maxillofacial Surgery. Plovdiv, 2018 Publisher: Medical University – Plovdiv, Bulgaria ISBN 978-619-237-002-2.*
- ✚ *Miloro M, Ghali GE, Larsen P, Waite P. Peterson's Principles of Oral and Maxillofacial Surgery, third edition (2012) PMPH – USA, Ltd. ISBN-13: 978-1607951117*
- ✚ *Hupp JR, Ellis E III, Tucker MR. Contemporary oral and maxillofacial surgery, fifth edition (2008) Mosby, Inc affiliate of Elsevier Inc. ISBN 9780323049030*
- ✚ *Andersson L, Kahnberg KE, Pogrel A. Oral and Maxillofacial Surgery (2010) Blackwell Publishing Ltd. ISBN 978-1-4051-7119-9*

8. Midterm controls and assessment

The students should be dynamically and intensively engaged during the midterms. Midterm control is implemented through MCQs and oral questions in every practical class and a colloquium twice a year. Students are provided in a timely manner with information and explanation on the results, which should aid their continuing training. These control results are included in the verification of the midterm.

9. Personal engagement of the student

Assistant professors direct the personal work of the students in their classes. The MCQs for personal training are issued in a book and are accessible on MU-Plovdiv's website.

10. Student-educator cooperation

The engagement of the student to the teacher and his/her education resides in active participation during the practical classes as well as:

- Taking advantage of the teacher's consultation hours.
- Participation in science courses at the Department of Oral surgery

11. Formative assessment and grade

In accord with the educational plan for the specialty, interval assessment is based on:

- Results from the midterm colloquium
- Assessment on the overall performance of the student during the midterm
- Assessment of the practical performance of the student at the end of the tenth semester

12. Grading standards:

The standards for students' grading and assessment should be defined and formed in such a way, so that the students are graded objectively and free of the teacher's subjectivity. Exam grade therefore is the combination of three components:

First component is the interval assessment of the student's theoretical and practical performance during the midterms (no more than 20% of the overall exam grade). This also includes midterm controls and formative assessment – colloquiums and individual work of the student as defined in the education plan.

Second component includes assessment of the written exam (no more than 30% of the overall exam grade). The regulation for conducting the exam is of essential importance, thus reducing the possibility for manipulation of the exam results.

Third component is the assessment of the oral exam (no more than 50%).

- **Excellent (6)** – for excellent mastering of the material and good knowledge of information sources. Thoroughly mastered basic and advanced knowledge and skills. Accurate exposition and rich language culture. Skillful handling of the study material and ability for independent thinking, judgments and conclusions.
- **Very good (5)** – for very good mastering of the material and good knowledge of information sources. Mastered basic and advanced knowledge and skills. Rich language culture. Some difficulties in making reasoned independent judgements and conclusions.
- **Good (4)** – for sufficient mastering of the material, mastered basic and advanced knowledge and skills. Lackluster interpretation of the material and making reasoned independent judgements and conclusions.
- **Fair (3)** – for basic mastering of the material. Exposition is done in plain language. Acquired basic knowledge and skills for solving simple tasks.
- **Poor (2)** – for scarce knowledge of the material. Poor language. Lacking individual clinical thinking, problem solving and interpretation skills.

At the beginning of the course, students should be informed about the grading standards, midterm and interval assessment procedures and the opportunities to receive feedback on their progress during the semester.

13. Final grade

The final grade determines the extent to which the student has achieved the goal of education set at the beginning. It is multicomponent and includes assessments from:

- Formative assessments in the midterms
- Final written examination
- Final oral examination

For each component of the final grade, a coefficient of significance (from 0 to 1) is determined, and the total sum of the coefficients must always be 1. The final grade is obtained as the sum of the six-point system scores from the various components multiplied by the respective sign coefficients.

$$Q_{\text{final grade}} = \kappa_1 Q_{\text{formative assessment}} + \kappa_2 Q_{\text{written exam}} + \kappa_3 Q_{\text{oral exam}}$$

$$\kappa_1 = 0.20; \quad \kappa_2 = 0.30; \quad \kappa_3 = 0.50$$

If one of the components 2 and 3 of the final grade is Poor 2, then the final grade is necessarily Poor 2.

In case of poor grade of the written work, the student is not admitted to the oral exam.

The examination results are announced no later than five working days after the end of the examination. The examination materials are stored in the office of the department. Within five working days after the announcement of the results, the student has the right to become acquainted with his written exam. During the examination of the exam paper, it is not allowed to export, copy, record or copy it, as well as to provide a copy of it. After the expiration of the specified term, the written exam papers are archived, and the students do not have access to them.

The present discipline has a characteristic to which in this form the student is given access at the beginning of the course.

This requirement is set in accordance with the Higher Education Act Art. 56. para. 1, "teachers are obliged to develop and publish in an appropriate manner and description of the lecture course conducted by them, including titles and sequence of topics from the curriculum, recommended reading, method of forming the assessment and form of testing knowledge and skills".

The academic standard for the discipline "Oral and maxillofacial surgery" was approved by a Decision of the Department council (Protocol № 208 / 22.04.2021) and is published on the website of Medical University - Plovdiv.