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 Committee for Quality Assurance and Curriculum Evaluation, Faculty of Stomatology
Minutes no. 3 from 16.02.2018

Chairwoman of the Committee, PhD MD, associate professor
Stepco Elena

APPROVED
at the meeting of the Faculty Council, Faculty of Stomatology
Minutes no. 6 from 20.02.2018

Dean of the Faculty, PhD MD, associate professor
Ciobanu Sergiu

APPROVED
at the Meeting of the Department of Oral and Maxillofacial Surgery and Oral Implantology *Asenie Guțan*
Minutes no. 3 of 22.11.2017

Head of the Department PhD MD, associate professor
Chele Nicolae

CURRICULUM

DISCIPLINE: **TRAUMA IN ORAL AND MAXILLOFACIAL TERITORY**

Integrated studies

Course type: **Mandatory discipline**

Chișinău, 2017

I. PRELIMINARY

- ***Overview of discipline: place and role discipline in training specific comptencies program / speciality.***

„OMF Surgery Trauma" it's essential compartment indispensabil both oro maxillo facial surgery and for another branches of modern dentistry.

The passing of the students' training to the clinical stage of dentistry is done by familiarizing them with the specifics of the traumatisms in the oro-maxilo-facial region, granting the medical aid on stages in ambulatory and stationary conditions. Familiarize students with the clinical and paraclinical stages of patients' examination, aiming to establish the diagnosis and the treatment plan.

The knowledge of traumatology helps to train specialists in the provision of medical aid. The doctor's conduct in the oral and maxillo-facial surgery cabinet, based on the principles of traumatology, is one of the foundations for the development of future dental specialists, aiming at proper work and decreasing morbidity and mortality.

Mission of the curriculum (scope) in vocational training

Traumatology as a discipline of OMF surgery, aiming at the accumulation of knowledge, their application by future dentists to the provision of qualitative dental care. Using principles and classifications, and contemporary treatment methods. Obtaining professional skills, developing clinical thinking, acting promptly and correctly in emergency situations. Provide emergency medical help to patients with traumatic complications, such as bleeding and asphyxia, to save lives, and complex rehabilitation of patients.

- ***Languages of instruction of discipline***: romanian and english.
- ***Beneficiaries:*** fourth year students, Faculty Dentistry.

I MANAGEMENT OF THE DISCIPLINE

Discipline code		**S.07.O.079**	
Discipline title		**Traumas in OMF region**	
Responsabil de disciplină		**Chele Nicolae**, M.D.-PH.D., Associate professor, head of department Hîțu Dumitru, M.D.-PH.D., Associate professor, Suharschi Ilie, M.D.-PH.D., Associate professor	
Year	**IV**	Semester	**VII**
Total number of hours, inclusive:			**90**
Courses	**24**	Practical lessons	**42**
Seminaries	**18**	Individual work	***6***
Form of assessment	**C**	Achieved credits	**3**

III OBJECTIVES OF TRAINING IN THE DISCIPLINE

• ***At the level of knowledge and understanding:***

- ✓ To know the role of oro-maxilo-facial surgery in social life and the importance of future physician education
- ✓ Understand the notion of trauma in the OMF region, its objectives and tasks;
- ✓ to know the anatomo-topographic features of the oro-maxilo-facial territory;
- ✓ Understand the importance of interacting with traumatized patients and establishing their anamnesis;
- ✓ Be aware of the way of notification of the data in the medical record of the traumatized patient;
- ✓ To know the specifics and stages of the clinical examination of the traumatized patient;
- ✓ to know the methods of paraclinical examination of the traumatized patient;
- ✓ be familiar with the directions for paraclinical, radiological and laboratory examinations;
- ✓ Be familiar with the tools and devices needed to rehabilitate traumatized patients;
- ✓ Be familiar with the notions of traumatology;
- ✓ to know the methods of treatment and their application in a clinical situation;
- ✓ To know the stages of doctor's and patient's preparation for surgery;
- ✓ Know the basic stages in surgical conduct in terms of traumatology.

• ***At application level:***

- ✓ be able to collect patient and anamnesis data (subjective examination);
- ✓ be able to complete the patient's medical record and informed consent;
- ✓ be able to highlight data of major importance for establishing the diagnosis;
- ✓ to distinguish the problems that arise in the communication process and to solve them;
- ✓ be able to perform the clinical examination of the patient (objective exam);
- ✓ Be able to determine the necessary paraclinical examination methods, depending on the case;
- ✓ be able to argue the necessity of the chosen paraclinical examination depending on the case;
- ✓ Be able to perform surgical maneuvers on the simulator;
- ✓ be able to demonstrate doctor's training for surgery;
- ✓ Be able to demonstrate the doctor's behavior during surgery.

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

- ✓ Assess the volume of surgery;
- ✓ Assess the way data is collected depending on the clinical case;
- ✓ Assess the satisfaction of the patient according to various criteria;
- ✓ to select the necessary tools depending on the surgery;
- ✓ To respect medical ethics and deontology;
- ✓ determine the patient's problem and indicate the paraclinical investigations necessary to confirm the diagnosis;

III CONDITIONS AND PRELIMINARY REMARKS

Knowledge and observance of ethical-moral and professional norms in patient relations. Knowledge of purpose and tasks in the conduct of trauma patients in the oro-maxilo-facial region. Knowledge of anatomo-topographic and etio-pathogenic particularities of the oro-maxilo-facial territory. Knowledge of methods and stages of clinical and paraclinical examination used in traumatic OMF regions. Knowledge of the principles and phases of

nursing patient with facial trauma. Knowing the stages of surgeon's preparation for surgery. Knowledge of Fracture Treatment Techniques in OMF Territory. Knowing the recording of the operator protocol in the medical record. Knowledge of how to assess the postoperative outcome. Knowledge of the information sources necessary in the oro-maxilo-facial surgery.

THEMES AND INDICATIVE DISTRIBUTION OF HOURS

Nr.	THEMES	Number of hours			
		Courses	Semi-naries	Prac-tice	In di vi du l
1	**Familiarize students with general data on oro-maxillofacial trauma.** Characterization of oro-maxillo-facial traumas by types: industrial trauma, agricultural trauma, common trauma (all day), trauma in transport, street trauma, sports traumatism etc .; Frequency (statistical) oro-maxillo-facial trauma; Classification of oro-maxillo-facial lesions; Examination of injured persons with oro-maxillo-facial trauma**;** Forms and basic principles of organizing care for accidents.	1	1	2	0
2	**Soft tissue lesions.** Anatomic particularities of OMF soft parts; Etiology, classification; Anatomo-clinical aspects (contusions, excoriations, cut wounds, penetrating wounds, transfixing wounds, contusive wounds, wounds by animal bites, wounds from firearms); signs and common symptoms; Complications (immediate, primary, secondary, late); Emergency treatment (treatment of immediate serious complications, serious concomitant lesions, immediate wound healing); Final treatment of lesions of facial soft parts; Dressing, drainage, oral hygiene, diet; Late repair treatment.	2	2	4	1
3	**Tooth and periodontal trauma.** General data on dento-periodontal traumas; Etiopathogenesis and pathological anatomy of tooth and periodontal trauma; Classification of dento-periodontal traumas: contusions, dislocations, fractures; Dental lesions: enamel or enamel cracks and dentin coronary fractures (simple, complicated), root fractures, coronadicular fractures; Periodontal lesions: periodontal contusions, partial dental dislocations, total dental dislocations, dental intrusions; Clinical and radiological study: anamnesis, objective examination, radiographic examination; The evolution of dento-periodontal traumas, prognosis; Treatment of dento-periodontal traumas: conservative and prosthetic treatment, reduction of dental dislocations, replantation tehnique, immobilization technique.	2	1	3	1

4	**Nasal pyramid trauma.** General data on nasal pyramid trauma; etiology; Anatomo-clinical forms: traumas of the skeleton, the cartilaginous skeleton, of the entire nasal pyramid; Diagnostic; Evolution: Treatment.	1	1	3	1
5	**Fractures of the zigomatic-orbital complex.** General data on the fractures of the zigomatic-maxillary complex. Etiology. Anatomo-clinical forms: anterior fractures, posterior fractures. Diagnostic. Evolution; Treatment: fragments reduction pathways (suborbital, temporal, endobuccal, sinusal), surgical treatment, treatment of sequelae.	1	1	3	1
6	**Upper jaw fractures.** Facial Floor Fractures: General Data, Classification, Statistics; General data on jaw fractures, horizontal, oblique, pyramidal, cominutive horizontal fractures; Etiology. Production mechanisms; Anatomo-clinical forms: alveolar crest fractures, tuberosity, palatine arteries; inferior horizontal fractures (Guerin, Le Fort I), horizontal middle fractures (Le Fort II), superior horizontal fractures (Le Fort III); Diagnostic. Evolution. Complications; Treatment: Emergency treatment, treatment of alveolar crest fractures, Le Fort I, II, III, vertical or oblique, at the edentulous: surgical treatment.	2	2	3	0
7	**Cranio maxilla facial fractures.** General data, clasication, statistics. General data about maxilla fractures, horizontal vertical, oblique, pyramidal, cominitive fractures. Etiology. Production mechanism, statistics. Anatomo-clinical forms. Classification of OMF fractures. Clinical picture of fractures OMF. Diagnostic. Evolution. Complications. Tratament: emergency, final treatment of fratctures,vertical or oblique, edentuluous.	2	1	3	1

8	**The mandibular fractures.** General data on mandible anatomy: constructive features, low resistance areas. Statistical data. Classification of mandibular fractures: median, paramedian, mental, lateral, angular, ramus of condyle processus, coronoid aprocessus, double, multiple, cominutive. Etiology: traffic accidents, accidents at work, sports accidents, etc. Mechanisms of fractures and movement displacement: direct and indirect fractures, ways of production (flexion of trauma and muscle contraction on the mandible, importance of teeth implanted on fragments or antagonist arch) Symptomatology: pain (at rest, on movements, at the jaw pressure), impairment of functions, abnormal mobility, oclusion disorders, deformations, swelling and bruising, crepitation, absence of movement, sensitivity disturbances. Anatomical clinical forms: pstial and total, complete and incomplete, linear and cominutive, with or without loosing of substance, opened and closed type. Evolution: terms of bone recovering (4-6 weeks for adults, 3-4 weeks for children, 6-8 weeks for elderly) , phases of callus formation (fibrin-protein-fibrosus, bone-primitive, bone-definitive), age dependence, physiological state, constitutional type, food factors, mechanical factors. Caring, feeding and repairing patients with mandible fractures. .	2	2	3	0
9	**Treatment of mandible fractures.** Treatment: Reduction (bleeding, non-angling), Emergency immobilisation (mental fixation, monomaxillary and intermaxillar interdental links, preconfigured devices, other types), Immobilization (monomaxillary devices, intermaxillary traction, cranio-mandibular devices) (osteosynthesis plate, chemical osteosynthesis, osteosynthesis with metallic brooches), external fixators, perimandibular sericula, distant suspensions, suspensions at the inferior orbital ribbon, pyriform hole, nasal spine, zigomatic arcade, frontal mandibular processus, cranian device(Federapiell). General treatment. Individualization of treatment according to the anatomical-clinical forms by localization of fracture, in children, in edentulous, in old age.	2	1	3	1
10	**Injuries through the firearm of the soft parts of the maxillofacial region.** General data and statistical data on firearms injuries of the maxillofacial region; Organization and volume of surgical dental care in dental surgeries. Classification and frequency of maxillofacial soft tissue damage by firearm: by type of vulnerable factor, by region, by severity. The peculiarities of the clinical development of the fire damage of maxillofacial soft parts by regions, by periods, by disturbance zones, by multiplicity. The characteristics of tongue wounds.	2	1	3	0
	Combined injuries. Burns. Frequency of face burns during wartime. Classification of thermal injuries. Burns disease. Particularities of Clinical Evolution of Thermal Lesions of the OMF Region. Treatment of burn disease. Particularities of associated lesions of the OMF region. Combined injuries: clinical development,	1	1	1	0

	treatment.				
11	**Complications of facial trauma.** Immediate complications (shock, asphyxia, cerebral concussion, tongue lesions, haemorrhage, subcutaneous emphysema, nerve damage, salivary gland disorders); Secondary complications (secondary haemorrhage, osteomyelitis, phlegmons); Late complications or sequelae (chronic infection, osteomyelitis, incorrect bone healing, temporo-mandibular ankylosis); Remote complications (bronchopulmonary infections, meningo-encephalic complications).	3	1	3	0
12	**Diseases and injuries of the temporomandibular joint.** General data on temporomandibular joint disorders and injuries. Inflammatory processes of the temporomandibular joint (temporomandibular arthritis). Acute nonspecific arthritis: general data, classification, etiopathogenesis, pathological anatomy, symptomatology, evolution, complications, diagnosis, treatment. Chronic arthritis: etiopathogenesis, pathological anatomy, symptomatology, evolution, complications, diagnosis, treatment and prognosis. Specific arthritis: gonococcal, syphilitic, tuberculous, actinomic, rheumatic, simple arthralgia. Temporal-mandibular osteoarthritis: general data, etiopathogenesis, pathological anatomy, symptomatology, diagnosis, treatment, prognosis. Mandibular pain dysfunction syndrome: etiopathogenesis, clinical data, treatment. Traumatic injuries of the temporomandibular joint. General data. Contusion of temporomandibular joint: etiology, pathological anatomy, symptomatology, diagnosis, treatment. TMJ wounds; general data, treatment. Tempo-mandibular luxations. General data. Anterior luxations: general data, etiopathogenesis, pathological anatomy, symptomatology, evolution, complications, diagnosis, treatment. Posterior luxations: general data, symptomatology, evolution, complications, diagnosis, treatment. Lateral luxations: general data, treatment. Recurrent luxations: general data, symptomatology, evolution, complications, diagnosis, treatment. Constriction of the mandible: general data, etiopathogenesis, symptomatology, diagnosis, treatment. TMJ ankylosis: general data, etiopathogenesis, pathological anatomy, symptomatology, treatment. TMJ tumors: general data, symptomatology, diagnosis, treatment.	2	2	3	0

13	**Nervous Facial Affections and Lesions.** Trigeminal nerve neuritis: etiology (traumas, infection, toxins and allergic conditions), symptomatology, treatment. Facial nerve neuritis; etiology, symptomatology, evolution, diagnosis, treatment, prognosis. Traumatic facial injuries without or with interruption of nerve continuity: etiology, symptomatology, diagnosis, conservative and surgical treatment. Surgical treatment of mimic muscles paralysis. Facial nerve neuralgia: frequency, etiology, symptomatology. Neuralgia of the glossopharyngeal nerve (neuritis): frequency, etiology, symptomatology, diagnosis, treatment, prognosis. Sphynopalatin Neuralgia (Sluder Syndrome): general data, etiology, pathogenesis, symptomatology, diagnosis, treatment. Neuralgia of the superior laryngeal nerve. Glossodynia. Nevrity and traumatic injuries without or with interruption of nerve continuity**.**	1	1	3	0
	Total	**24**	**18**	**42**	**6**

IV REFERENCE OBJECTIVES AND CONTENT UNITS

Objectives	Content unit
Traumatic lesions OMF. Classification by types (etiology), frequency. Forms and basic principles of healthcare organization to injured persons .	
✓ To know the types of traumatic injuries OMF, ✓ Know their classification; ✓ Be familiar with the principles of organizing accident medical assistance; ✓ Know the stages of examination of the patients with trauma; ✓ Know how to complete the medical record; ✓ Participate in receiving patients; ✓ Be familiar with the process of recording the work done; ✓ Be aware of the diagnosis of facial trauma; ✓ Be aware of the first medical assistance in case of trauma;	In the practical work the students acquire the types of traumatic injuries OMF, their classification, the principles of organization of healthcare injuries, examine patients with traumas, notes in the dental record. Participates in receiving patients and records the work done in the records. The appearance of the surgeon in the medical institution. Dental medical documentation in the OMF surgery department.
Soft tissues wounds of the face and oral cavity. Anatomo-clinical aspects. Treatment	

✓ Know the types of traumatic lesions of the soft parts; ✓ To know the clinical particularities of the traumas; ✓ To know the principles of treatment, ✓ examine patients with soft tissue injuries from the OMF region; ✓ record the data in the medical record; ✓ Participate in the examination of patients; ✓ write the work done in the register; ✓ Provide medical aid to the patient with hemorrhage; ✓ Perform on the simulator methods of hemostasis; ✓ prescribe medication.	The anatomic features of the OMF soft tissues. Etiology, classification. Anatomo-clinical aspects (contusions, excoriations, cut wounds, penetrating wounds, transfixing wounds, contusive wounds, wounds by animal bites, wounds from firearms). Common Signs and Symptoms. Complications (immediate, primary, secondary, late complications). Emergency treatment. Final treatment of facial soft lesions. Dressing, drainage, oral cavity hygiene, nutrition. Late repair.
Traumatic lesions of teeth and periodontitis. Etiopathogenesis, classification, clinical picture, treatment.	
✓ To acquire the types of traumatic injuries of teeth and periodontitis; ✓ appreciate anatomical-clinical aspects; ✓ Know the principles of treatment; ✓ examine patients with dental-periodontal lesions; ✓ record the data in the medical record; ✓ Participate in the examination of patients; ✓ Write in the registers the work done. ✓ Reduce dental dislocation; ✓ Perform teeth immobilisation on the simulator.	Functional morphology of teeth and periodontitis. General data on dento-periodontal trauma. Etiopathogenesis and pathological anatomy of dento-periodontal traumas. Classification of dental-periodontal traumas: dislocations, fractures. Dental injuries: (cracks, coronary and non-coronary fractures in the pulp chamber, root fractures, corona-root fractures): clinical trial: anamnesis, objective examination, radiological examination, evolution, treatment. Periodontal lesions (contusions, partial dental dislocations, total dislocations). Clinical aspects in relation to the variety of lesion, evolution, treatment. Technique of replanting a total sprained tooth. Immobilization technique.
Fractures of the nazo-ethemidal complex. Etiopathogenesis, anatomical-clinical forms, diagnosis, evolution, treatment.	

✓ Acquire ethio-pathogenesis; ✓ To determine the clinical forms of fractures of the nasal pyramid, ✓ Participate in establishing the diagnosis; ✓ Participate in treatment, ✓ examine the patient with nasal pyramid fractures, ✓ Fill in the medical records ✓ Participate in the examination of patients; ✓ Write the work done in the register. ✓ Demonstration of anterior and posterior haemostasis of the nose on the simulator;	General data on nasal pyramid trauma. Production mechanism, statistics. Anatomo-clinical forms: traumas of the skeletal bone, cartilaginous skeleton of the entire nasal pyramid. Classification of nasal pyramid trauma. Clinical picture (fractures of the cartilaginous bone skeleton and the nasal pyramid in all). Diagnostic. Treatment: Reduction and immobilization of fragments.
Maxilla fractures (facial mass fractures). Etiopathogenesis, production mechanism, anatomoclinic forms, treatment.	
✓ Acquire the causes of facial mass fractures, ✓ Know the mechanism of production, ✓ Know the fracture classification of the maxilla; ✓ Know the clinical picture of the maxillary fractures and their evolution; ✓ Be able to indicate conservative and surgical treatment. ✓ Examine patients with jaw fractures. ✓ Record the data in the medical record, ✓ Participate in patient examination and registration. ✓ Demonstrate interdentral immobilization by means of simulations.	Elements of functional facial mass anatomy. Ethiopathy, classification, statistics. General data on jaw fractures (horizontal, vertical, oblique, pyramidal, cominutive fractures). Production mechanism. Anatomical clinical forms: alveolar crest fractures, tuberosities, palatal arches, inferior horizontal fractures (Le Fort I), middle horizontal (Le Fort II), superior horizontal (Le Fort III), Diagnosis, evolution. Emergency treatment (temporary fixation with mentocephalic bandages, menton frond, bridge deck connections). Final treatment by orthopedic, surgical methods: metallic osteosynthesis, microplates, screws, Federspie process.
Fractures of the zygomatic-maxillary complex. Etiopathogenesis, anatomical-clinical forms, diagnosis, evolution, treatment.	
✓ Acquire the etio-pathogenesis of the fractures of the zigomatic-maxillary complex ✓ Acquire the clinical forms of fractures of the zigomatic-maxillary complex; ✓ Participate in establishing diagnosis and treatment; ✓ examine patients with malaria fractures; ✓ complete medical records; ✓ Participate in the examination of patients; ✓ Write the work done in the register.	General information on zygomatic bone anatomy. Fractures of the zygomatic-maxillary complex. Ethiopathy, statistics. Anatomo-clinical forms: anterior fractures, posterior fractures. Classification. Diagnostic. Evolution. Treatment: suborbital, temporal, endobuccal, sinusoidal fracture reduction pathways, surgical treatment - metallic suture, miniplates and screws. General treatment, prognosis.
Cranio - maxilo - facial and pan - facial fractures. Etiopathogenesis, anatomical-clinical forms, diagnosis, evolution, treatment.	

✓ to acquire the types of cranio - maxilo - facial and pan - facial fractures; ✓ appreciate anatomical-clinical aspects, ✓ Know the principles of treatment; ✓ Examine patients with cranio - maxilo - facial and pan - facial fractures; ✓ record the data in the medical card; ✓ Participate in the examination of patients; ✓ Write in the register the work done.	General data on cranio - maxilo - facial and pan - facial fractures; Production mechanism, statistics. Anatomo-clinical forms. Classification of OMF fractures. Clinical picture of fractures OMF. Diagnostic.Tratament.
Mandibular fractures: frequency, etiopathogenesis, classification mechanism, symptomatology, anatomical-clinical forms, evolution.	
✓ to assume the types of mandibular fractures; ✓ appreciate anatomical-clinical aspects, ✓ Know the principles of treatment; ✓ examine patients with mandible fractures; ✓ record the data in the medical card; ✓ Participate in the examination of patients; ✓ record the work done in the register; Perform LeBlank, Ivy, Ernst ligation immobilisation on the simulator.	General data on mandible anatomy: constructive features, low resistance areas. Statistical data (relative to other facial bones, gender, location, traumatic agent). Classification of mandibular fractures (after the mechanisms of production, by the degree of interest of the thickness of the bones, by the number of fracture lines, by the degree of interest of the periosteum, by the relationship of the fracture focal point with the external environment, by the degree of movement of bone fragments). Etiology (traumatic causes, pathological causes, surgical causes). The mechanism of fracture and fragment movement (direct and indirect fracture, fractures by flexion, compression, pulling, shearing, forcing), the importance of the force of the blow and its direction and the constriction of the muscle groups. Clinic of mandibular fractures (general symptomatology present in all fractures and specific localities. Evolution (healing, factors that influence evolution and healing).
Treatment of mandible fractures. Emergency immobilisation. Methods of orthopedic and surgical treatment. Indications of treatment according to the anatomical-clinical form.	

✓ Acquire emergency immobilization methods, ✓ to acquire the methods of orthopedic and surgical treatment; ✓ Make different mono and bimaxilations on different castings; ✓ to carry out emergency assets; ✓ Know the principles of treatment; ✓ examine patients with dental-periodontal lesions; ✓ record the data in the medical record; ✓ Participate in the examination of patients; ✓ record the work done in the register; ✓ Perform emergency immobilisation (mentoring linden, compressive mentocephalic dressing, Pomeranţev-Urbanschi devices, mono- and intermaxing interdental connections, monomaxillary gaps, prefabricated devices).	The main goals of the treatment of mandible fractures. Steps of treatment (emergency or provisional treatment, primary or definitive treatment, secondary or maintenance treatment, late treatment or late complications). Reduction (repositioning) of manual fragments (bleeding, nonbleeding) With surgical, combined devices. Immobilization: Emergency (menton frond, compresive mentocephalic bandage, Pomerantev-Urbantev devices, monomaxillar or intermaxillar interdental conections, preconfigured devices). Final immobilisation (monomaxillar devices, bimaxillar with intermaxillar traction, craniomandibular devices). The method of making castings on molds. Surgical treatment - osteosynthesis (metallic wire, with miniplates and screws, with intramedullary rods, external fasteners, remote suspension) Therapeutic recommendations according to the anatomical-clinical forms of the mandibular fractures. Tratamentul general.
The soft tissue damage of the oro-maxillofacial region by fire arm, general characteristic, classification, symptomatology, complications.	
✓ To assimilate the types of traumatic injuries by a firearm; ✓ appreciate anatomical-clinical aspects; ✓ Know the principles of treatment; ✓ examine the patients with the given pathology; ✓ record the data in the medical record; ✓ Participate in the examination of patients; ✓ Write in the register the work done.	Statistics and classification of oro-maxilo-facial wounds. Organization and volume of surgical dental care in dental offices Particularities of facial fire injuries. Symptomatology of fire injuries: penetrating, tangential and blind wounds. Diagnosis. Particularities and methods of toilet and surgical treatment of wounds of soft maxillofacial tissue. Classification and statistical data of the firearm lesions of the facial skeleton. Clinical diagnosis of facial skeletal bone lesions. Diagnosis. General and local treatment of injured persons with facial skeletal bone.
Combined injuries. Burns of the maxillofacial region: etiology, frequency, classification, clinical development, first aid to the injured, treatment. Particularities of associated lesions.	

✓ Acquire types of pathologies; ✓ appreciate anatomical-clinical aspects; ✓ Know the principles of treatment; ✓ examine patients with the given lesion; ✓ record the data in the medical record; ✓ Participate in the examination of patients; ✓ Write in the register the work done.	Frequency of face burns. Classification of thermal injuries. Burns disease. Particularities of Clinical Evolution of Thermal Lesions of the OMF Region. Treatment of arthritis disease. Particularities of associated lesions of the OMF region. Combined injuries (actinic disease): the particularities of clinical development, treatment.
Complications of facial trauma.	
✓ learn the types of complications; ✓ appreciate the anatomical-clinical aspects; ✓ Know the principles of treatment; ✓ examine patients with complications; ✓ record the data in the medical record; ✓ Participate in the examination of patients; ✓ Write in the register the work done.	Immediate complications: asphyxia, haemorrhage, traumatic and haemorrhagic shock, cerebral coma, cerebral edema. Asphyxia: Etiopathogenesis, Symptoms, Diagnosis, Treatment, Prophylaxis. Hemorrhage: etiopathogenesis, symptoms, diagnosis, methods of control, prophylaxis. Cerebral coma: Symptoms, diagnosis, treatment. Traumatic and hypovolemic shock: etiology, symptoms, treatment. Secondary complications of facial trauma. Late complications of facial trauma.
Traumatic and inflammatory lesions of the temopore-mandibular joint. Osteoarthritis and ATM painful dysfunction syndrome. Ankylosis and constriction of the mandible	
✓ Acquire the types of traumatic lesions of the given pathology; ✓ To grasp etiology and classification; ✓ appreciate the anatomical-clinical aspects; ✓ Know the principles of treatment; ✓ examine patients with ATM injuries; ✓ record the data in the dental sheet; ✓ Participate in the examination of patients; ✓ Write in the register the work done.	Topographic anatomy and TMJ functions. Classification of TMJ disorders and injuries. Contusions of the temporomandibular joint: etiology, symptoms, diagnosis, treatment. Acute anterior, posterior, and lateral luxations of TMJ: etiology, symptoms, diagnosis, treatment. Recurrent luxations (etiology, symptoms, conservative and surgical treatment). Inflammatory processes of the TMJ (temporomandibular arthritis). General data, classification of acute nonspecific arthritis: general data, classification, cytopathogenesis, pathological anatomy, symptomatology, evolution, complications, diagnosis, treatment. Chronic arthritis: general data, classification, cytopathogenesis, pathological anatomy, symptomatology, treatment. Specific arthritis (gonococcal, rheumatic, simple arthralgia, syphilis, tuberculosis, actinomycosis, temporomandibular osteoarthrosis: general data, etiopathogenesis, pathological anatomy, symptomatology, diagnosis, treatment. Mandibular constriction: general data, classification, cytopathogenesis, pathological anatomy, symptomatology, treatment Mandibular pain dysfunction syndrome: general data, classification, cytopathogenesis, pathological anatomy, symptomatology, treatment.

Facial nerve diseases and injuries: etiopathogenesis, symptomatology, evolution, diagnosis, treatment, prognosis.	
✓ to assimilate facial nerve affections; ✓ appreciate the anatomical-clinical aspects; ✓ Know the principles of treatment; ✓ Examine patients with affections of facial nerves; ✓ record the data in the medical record; ✓ Participate in the examination of patients; ✓ Write in the register the work done.	The topographic anatomy of the trigeminal nerve. Anatomy of the facial nerve. Topographic anatomy of the glossopharyngeal nerve. General data on facial nerve damage and injuries: frequency, classification. Trigeminal nerve neuralgia (essential and symptomatic, central and peripheral); etiology, pathogenesis, evolution, positive and differential diagnosis. methods of treatment of trigeminal nerve neuralgia: conservative methods, physiotherapeutic methods, chemical blockage, surgical methods, method after Munteanu I. Trigeminal neuralgia: etiology (traumas, infections, toxics, allergic states), symptomatology and treatment. Facial neuralgia: etiology, simptomatology, evolution, diagnosis, treatment, prognosis. Traumatic disorders of facial nerve, with or without interruption of nerve continuity: simptomatology, evolution, diagnosis, conservative and surgical treatment. Surgical treatment of mimic muscles paralisia. Facial nerve neuralgia: frequency, etiology, simptomatology, diagnosis, treatment. Neuralgia (neuritis) of the glossopharyngeal nerve: frequency, etiology, symptomatology, diagnosis, prognosis treatment. Sphynoplatin ganglion neuralgia (Sluder syndrome), general data, etiology, pathogenesis, symptomatology, treatment. Laryngeal neuralgia. Glossodinia: etiology, symptomatology, diagnosis, treatment. Nevrity and traumatic injuries without or with breakdown of nerve content.

V PROFESSIONAL (SPECIFIC (PC) AND TRANSVERSAL (TC) COMPETENCES AND STUDY FINDINGS

Professional competencies (specific) (SC)

PC1: Knowledge of theoretical bases of anatomy in oro-maxilo-facial territory, trauma in the OMF region, general principles in examination of patients with facial trauma, analysis and interpretation of clinical and paraclinical data; knowledge of the legal and normative framework in the field, the means of diagnosis with facial trauma within the oro-maxillo-facial surgery / surgery section, knowledge of the rights and obligations of the medical doctor.

PC2: Knowledge and treatment of trauma simulations in the OMF region; evaluating the quality of the work performed and describing the methods of treatment of the patient with facial trauma; demonstrating doctor's training for surgery.

PC3: Completing patient records, conducting clinical examinations, and developing guidelines for the type of paraclinical exam, as appropriate, with their arguments. Determining the options for establishing the diagnosis and treatment plan of the patient with facial trauma. Elaboration of data collection algorithm and work with patients with facial trauma.
PC4: Analysis of laboratory paraclinical investigation data and their description of the patient with facial trauma. Analysis of radiological clusters, evaluation and description of anatomical formations based on conical fascicular tomography of facial trauma patients.
PC5: Description of the concept and types of prophylaxis of the patient with facial trauma, as well as their application levels (individual, group, society).
PC6: Demonstration and application of acquired knowledge in the clinical and paraclinical assessment of the patient with facial trauma. Selection and argumentation of communication techniques, data collection and patient preparation for surgery with facial trauma. Promoting the principles of tolerance and compassion towards patients.

Transversal compentences (TC)

- **TC1:** Application of professional assessment standards, professional ethics, and applicable legislation. Promoting logical reasoning, practical applicability, assessment and self-assessment in decision-making.
- **TC2:** Performing activities and exercising the roles specific to teamwork within the OMF cabinet / section. Promoting the spirit of initiative, dialogue, cooperation, positive attitude and respect for others, empathy, altruism and continuous improvement of their own activities;
- **TC3:** Systematically assessing personal skills, roles and expectations, applying self-assessments to learned processes, acquired skills and professionalism needs, effective use of language skills, knowledge in information technologies, research and communication skills to deliver quality services and adapting to the dynamics of policy requirements in health and for personal and professional development.

Study finalizations

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

- • to know the basic principles of examination, diagnosis and treatment of patients with trauma in the OMF region;
- • be familiar with the directions for the paraclinical examination necessary for establishing the diagnosis and interpretation thereof;
- • perform differential diagnosis with other pathologies in the OMF region;
- • provide emergency medical help to patients with OMF trauma.

VI STUDENT'S INDIVIDUAL WORK

Nr.	The expected product	Implementation Strategies	Evaluation criterias	Deadline
1.	Working with information sources	Read lecture or material in the OMF surgery manual. Reflection on the theme of facial trauma. Identification of additional information sources. Read the text carefully and describe the essential content. Wording of generalizations and conclusions.	The ability to extract the essentials. Interpretative skills. The ability to analyze and communicate the material accumulated individually.	During the semester
2.	Solving the problems of the situation	Solving case problems, arguing the conclusions at the end of each practical work. Verification of the finalities and appreciation of their achievement. Selection of additional information, using electronic addresses and additional bibliography.	The quality of problem solving and clinical case, the ability to formulate and interpret clinical and paraclinical data. Ability to analyze selected information from national and international professional websites.	During the semester
3.	**Evaluation of perception (basic knowledge) in the clinical and paraclinical examination of patients with facial trauma**. Completing the medical record of the patient with facial trauma will be performed by each student individually, the clinical and paraclinical examination algorithm will be followed. Establish indications for paraclinical investigations, arguing their need.			
3.1.	Data recording and patient history	Analyzing the medical record and structuring the steps of collecting the anamnesis and clinical examination of the patient with facial trauma.	Assess the correctness and succession of the analysis.	During the semester
3.2.	Appreciation of radiographic examination guidelines.	The student should know the particularities of the radiological examination and argue the need to indicate each investigation.	Assessing the accuracy of the information described by the student.	During the semester
3.5.	Preparing the project.	Students will systematize and render schematically and graphically in Power Point, the information provided in the thematic plan.	Evaluating the quality of the selected material, the design of the project and the ability to reproduce the information.	During the semester

VII METHODOLOGICAL SUGGESTIONS FOR TEACHING-LEARNING-EVALUATION

✓ **Teaching and learning methods used**

When teaching Traumas in the OMF region, different teaching methods and methods are used, oriented towards efficient learning and achieving the objectives of the teaching process. The course provides lectures (lectures), seminars, practical works and individual work. Courses are held in semester VII by the course owner. The following forms of training are used in the practical work: frontal, individual activity, brainstorming sessions, group discussions, case studies in community pharmacies, case study. As a teaching aid, the specialized manuals available in the university library, the methodological recommendations of the department's staff, tables, schemes, information sources in electronic format, national and international professional websites, etc. are available. Students receive individual assignments that are presented for group discussions, which subsequently assess the quality of individual work and practical skills. In order to acquire the didactic material and teambuilding skills during the semester the students perform a mini-research in the field of facial trauma, the results of which are presented in the seminars and practical lessons organized in the last month of the semester.

Learning methods are recommended: *learning theoretical material* after lecture and manually; *observation* - identifying the characteristic features of doctor-patient communication; analysis - when using the clinical and paraclinical examination methods of patients with facial trauma; *comparison* - analysis by comparison of the methods of collecting the anamnesis, of the paraclinical examination methods according to their advantages and disadvantages; *elaboration of the algorithm* - selection of the mandatory elements and elaboration of the patient consultation algorithm; *modeling* - identifying and selecting the necessary elements for modeling the situation when consulting patients with facial trauma, formulating the conclusions, argumentation and final decision.

Applied didactic strategies / technologies *(discipline specific)*

Face-to-face, individual, brainstorming, group discussion, clinical case analysis with facial trauma, teambuilding, clinical exam simulation, mini-research, comparative analysis.

✓ **Methods of evaluation** *(including an indication of how the final grade is calculated)*

Current: Current checks during seminars and practical papers, 3 totals in writing and / or test-control. For the individual work done during the semester, the student is evaluated, the grade being included in totals. At the end of the semester, based on the deductions from the totals, the average annual score is calculated.

Final: The course will consist of 2 stages: test-control and oral interview according to the tickets. The final weighted score is calculated on the basis of positive grades (≥5) of the annual average, calculated at the end of the discipline study - 50%; from test-control - 20% and oral interview - 30%. The average annual mark and the marks of all final stages of testing (test and oral answer) - are expressed in numbers according to the scoring scale (according to the table) and the final mark obtained is expressed in two decimal digits, to be entered in the report card.

Manner of rounding grade point to the rating steps

Intermediate grid notes (annual average, notes from examination stages)	National rating 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**	

Note: The failure to present the exam without good reason is recorded as "absent" and is equivalent to 0 (zero). The student is entitled to 2 repeated claims of the unsuccessful exam.

VIII RECOMMENDED BIBLIOGRPHY :

A. Mandatory :

1 Courses material .
2 C. Burlibașa Chirurgie orală și maxilofacială. București 1999 page. 51-162
3 G. Timoșca C. Burlibașa Chirurgie buco-maxilo-facială Chișinău 1992 page. 51-136.
4 **Chele N.** Optimizarea tratamentului complex al fracturilor de mandibulă. Teza de doctor în medicină Chişinău 2006.
5 **Hîţu D.** Traumatismul etajului mijlociu al feţei. Chişinău, 2008.
6 **Hîţu D.** Plăgile faciale (curs teoretic). Buletinul Academiei de Ştiinţe a Moldovei. Ştiinţe medicale. Chişinău. 1(10) 2007.
7 **Hîţu D**. Diagnosticul fracturilor de mandibulă. Medicina Stomatologică. Nr. 1(18), Chişinău, 2011.
8 **Hîţu D**. Tratamentul ortopedic al fracturilor de mandibulă (curs teoretic). Buletinul Academiei de Ştiinţe a Moldovei. Ştiinţe medicale. Nr. 2, (30) Chişinău, 2011.
9 **Hîţu D**. Tratamentul chirurgical al fracturilor de mandibulă (curs teoretic). Medicina Stomatologică. Nr. 2(27), Chişinău, 2013.
10 **Procopenco Olga**. „Fracturile complexului zigomatic și tratamentul lor” Autoreferatul tezei de doctor în medicină. Chişinău, 2015.
11 **Popovici T. V.** Traumatismul asociat al regiunii maxilo-facială. Elaborare metodică. Chişinău, 1999.
12 **Rusu N.** Căile contemporane de reglare a regenerării tegumentare tegumentare în tratamentul plăgilor regiunii maxilo-faciale. Autoreferatul tezei de doctor în medicină. Chişinău, 2008.
13 **Radzichevici Mihail**. „Sporirea eficacităţii tratamentului chirurgical a osteomielitelor posttraumatice a mandibulei”. Autoreferatul tezei de doctor în medicină. Chişinău, 2011.

14 **Sîrbu D.** Osteosinteza mandibulei prin acces endooral. Autoreferat al tezei de doctor în medicină. Chişinău, 2005, Page. 16-19.
15 Ю. И. Бернадский Основы челюстно-лицевой хирургии и хирургической стоматологии. Витебск 1998 стр. 13-70
16 А. А. Тимофев руководство по челюстно лицевой и хирургической стоматологии Том 1 Киев 1997 стр. 63-150.
17 Larry J. Peterson „Contemporary Oral and Maxillofacial Surgery", fourth edition, 2003, USA.
18 Fragiskos D. Fragiskos „Oral surgery", Springer-Verlag Berlin Heidelberg, 2007.
19 Karl R. Koerner "Manual of Minor Oral Surgery for the General Dentist", 2006, US.