KHARKIV NATIONAL MEDICAL UNIVERSITY

EDUCATIONAL DISCIPLINE SYLLABUS

SURGICAL DENTISTRY

Specialty: **221 «Dentistry»**
Educational and Professional Program: **Dentistry**
Component Code in the Educational Program: **OK 29**
Higher education level: **Second (Master's)**
Form of the Educational Component: **full-time (daytime)**
Year of study: **4**
Semester(s): **VII (autumn), VIII (spring)**
Type of Educational Component: **compulsory**
Academic Year: **2027–2028**

Volume: **4 ECTS credits (120 hours)**
Training sessions: **lectures, practical classes, consultations**
Final control: **Exam**
Prerequisites: **anatomy and morphology, pathological anatomy, radiological diagnostics, surgical dentistry and maxillofacial surgery**

Department / Unit: **the Department of Surgical Dentistry and Maxillofacial Surgery,**
Peremohy Ave., 51, 6 Floor
Head of the Educational Component:
doctor of medicine, professor Grigorov Serhiy Mykolayovych,
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Educational Component Page in the Distance Learning System KhNMU (Moodle):
https://distance.knmu.edu.ua/course/index.php?categoryid=309

DESCRIPTION OF THE EDUCATIONAL COMPONENT

Operative Dentistry studies methods of patient examination, diagnosis of surgical dental diseases, their treatment, and prevention in the surgical dentistry clinic.

PURPOSE OF THE COURSE: Students will learn to conduct examinations, diagnose, and treat patients with surgical pathology of the maxillofacial region (MFR) tissues.

LEARNING OUTCOMES:

- ability to identify and determine the leading clinical symptoms and syndromes, and to establish a probable nosological or syndromic clinical diagnosis of surgical dental diseases;
- ability to demonstrate the basic methods of examining a patient in the clinic of surgical dentistry;
- planning the examination of a patient with diseases of the maxillofacial region;
- ability to determine the final clinical diagnosis through analysis of the obtained subjective and objective data from clinical and additional examinations;
- aability to perform differential diagnosis of diseases of the organs of the maxillofacial region;
- acquisition and improvement of practical skills in the treatment of patients with surgical pathology of the tissues of the maxillofacial region according to existing algorithms and standard treatment protocols;
- development of professional abilities and skills for making independent decisions in selecting treatment methods based on a preliminary and/or final clinical diagnosis in the surgical dentistry clinic;
- ability to identify different clinical variants and complications of the most common diseases encountered in surgical dentistry practice;
- ability to complete the main medical documentation related to dental appointments;

- ability to carry out prevention of dental diseases among the population in order to prevent the spread of dental diseases;
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CONTENT OF THE EDUCATIONAL COMPONENT

List of Lecture Topics (10 hours):

1. Subject and task of emergency maxillofacial surgery. General military medical doctrine. Wound ballistics, clinical course of a modern gunshot wound, general diagnostic signs of facial gunshot wounds. Damage to soft tissues of the face, primary surgical treatment of wounds, types of sutures. Features of the course and treatment of wounds of soft tissues of the face, assistance at the stages of evacuation in wartime and in extreme conditions. Thermal and radiation damage to the face.
2. Damage to the bones of the facial skull in peacetime and wartime: clinic, diagnosis, treatment, modern principles of bone wound treatment. Non-fire and combat injuries of the lower jaw. Fracture classification, clinic, diagnosis, temporary (transport) and permanent (medical) immobilization of jaw fragments. Treatment of the wounded and injured at the stages of medical evacuation.
3. Early and late complications of traumatic injuries and combat wounds of facial tissues, oral cavity organs, jaws and bones of the facial skeleton: classification, clinic, diagnosis, prevention, treatment.
4. Cysts of soft tissues of the face and neck: dermoid, epidermoid, median, lateral cysts (fistula) of the neck, parotid cysts and fistulas. Jaw cysts of various etiologies: radicular, follicular, paradental and others. Classification, pathogenesis, pathanatomy, clinic, differential diagnosis, methods of surgical treatment.
5. Tumor-like diseases of maxillofacial region: classifications, clinical picture, differential diagnosis, principles and methods of treatment.
   Odontogenic tumors: ameloblastoma, odontoma. Benign neodontogenic neoplasms of the jaws: clinic, differential diagnosis, principles and methods of treatment. Odontogenic tumor-like formations. Epulids: classification, pathanatomy, clinic, diagnosis, treatment methods.

List of Practical Session Topics (70 hours):

1. The subject and tasks of military maxillofacial surgery. Organization of surgical dental care for the wounded and injured in war and peacetime, as well as in extreme conditions. General characteristics, clinic, course, diagnosis, treatment of gunshot wounds of the face and neck.
2. Non-flammable and combat damage to the soft tissues of the face and organs of the oral cavity. Classification, features of the course of the wound process. Types of surgical treatment of wounds (primary, secondary, etc.) Types of sutures. Providing first aid to the wounded and injured and their treatment at the stages of medical evacuation and in extreme conditions.
3. Combined injuries: trauma to the maxillofacial area and various damaging factors (radiation, chemical, biological weapons). Combined injuries of the maxillofacial area and injuries of other parts of the body. Classification, clinic, diagnosis, treatment at the stages of medical evacuation. Combined injuries of the jaws, facial bones and brain. Blind wounds of the maxillofacial area. Peculiarities of the course and surgical treatment of blind wounds. Indications and contraindications for foreign body removal, surgical approaches.
4. Mandibular fractures: identification of type, mechanisms of fracture, symptoms and signs, and ways of diagnosing. Ways of temporary securing of the fractured jaw. Applying temporary one-jaw and intra-jaw splints of wire on head and jaw models. Surgical methods of treatment of fractures of the lower jaw and indications to each particular method.

5. Fractures of the upper jaw (maxilla): pathogenesis, identification of type, symptoms and signs, ways of diagnosing and treatment. Fractures of zygomatic bones and nasal bones: pathogenesis, identification of type, symptoms and signs, ways of diagnosing and treatment.
6. Burns on the face: clinical manifestation, outcomes, treatment, and preventive measures for complications. Burn disease. Frostbites of electrodamage of the person. Radiation lesions of facial tissues, clinic, diagnostics, first aid. Early and follow-up complications of injuries in the maxillofacial area. Classification, etiology, pathogenesis, symptoms and signs, ways of diagnosing and treatment. Preventive.
7. Classification of neoplasm of maxillofacial area. Benign tumors of soft tissues of maxillofacial area: etiology, pathogenesis, classification, symptoms and signs, diagnostics, treatment, and preventive measures (papilloma, fibroma, lipoma, neurofibroma, neurofibromatohosis). Vascular tumors of soft tissues of face and organs of oral cavity, classification, symptoms and signs, diagnostics, treatment
8. Cystic formations of the jaws: odontogenic, nonodontogenic, epithelial and nonepithelial, and others like that. Odontogenic cysts of jaws (radicular, follicular, paradental, keratocysts, incisive canal's cysts): etiology, pathogenesis, classification, morphological constitution, symptoms and signs, diagnostics, medical treatment, complications, and preventive measures.
9. Benign odontogenic tumors of jaws (ameloblastoma, odontoma, odontogenous fibroma): classification, morphological constitution, symptoms and signs, diagnostics, medical treatment, and preventive measures.
10. Benign nonodontogenic tumors of jaws (osteoclastoma, osteoma, chondroma, fibroma, epulis): classification, morphological constitution, symptoms and signs, diagnostics, medical treatment, and preventive measures.
11. Osteogenic tumor-like diseases of jaws (fibrose osteodislasia, paratyroid dystrophy, Pedjets disease, eosinophilic granuloma): etiology, pathogenesis, classification, gistological structure, clinical signs, diagnostics, treatment.
12. Benign tumors and cysts of salivary glands: etiology, classification morphological constitution, symptoms and signs, diagnostics, and medical treatment.

    Branchyogenic and dermoid cysts of face and neck, atheroma: etiology, classification morphological constitution, symptoms and signs, diagnostics, and medical treatment.

List of Student Independent Work Topics (40 hours):

1. Providing emergency medical care in traumatic and pain shock during treatment stages.
2. Providing emergency medical care in facial and neck vessel injuries during treatment stages. Providing emergency medical care in various types of asphyxiation.
3. Modern treatment methods for the prolonged compression syndrome of facial tissues (extracorporeal hemoperfusion, plasmapheresis, etc.), neurological changes after trauma.
4. Surgical methods for treating soft tissue wounds in the maxillofacial region (MFR), types of sutures.
5. Modern diagnostic methods for facial tissue injuries. Achievements of domestic scientists and department staff in the treatment of lower and upper jaw injuries.
6. Oncogenesis. Modern views on the biological foundations of oncogenesis. The immune system in tumors and tumor-like processes in the maxillofacial region (MFR).
7. Biological principles of treating benign and malignant tumors in the maxillofacial region (MFR).
8. Methods of examining patients with tumor and tumor-like processes in the maxillofacial region (MFR). Biopsy.

9. Differential diagnosis of benign and malignant tumors in the maxillofacial region (MFR). Differential diagnosis of soft tissue cysts in the maxillofacial region (MFR).

Independent Study Work (ISR) is aimed at deepening and consolidating the theoretical knowledge acquired during classroom learning and contributes to the development of professional competencies. The results of ISR are subject to control and are included in the final assessment of knowledge.

Consultations: Online, by prior registration on the course page in the Distance Learning System.

Teaching Methods: Lecture, performing exercises and practical tasks, solving situational problems and case studies, and the standardized patient method.

EVALUATION

Current Learning Activities (CLA). Student performance is assessed in accordance with the Instructions for Evaluating the Academic Activities of Higher Education Students at KhNMU (https://knmu.edu.ua/documents/normatyvni-dokumenty-navchalnogo-proczesu/). The grade for a practical or final session ranges from 2 to 5 points. Submitting assignments late without a valid reason results in a grade reduction proportional to the delay time relative to the assignment deadline. Assignments are checked within 24 hours. Grades are recorded in the electronic gradebook. Unsatisfactory grades must be remedied in accordance with the Regulations on the Procedure for Students to Make Up Unsatisfactory Work KhNMU Classes / Educational Sessions (https://knmu.edu.ua/wp-content/uploads/2021/05/polog_vidprac_zaniat.pdf).

At the end of the semester, the average grade for the semester is converted into a multi-point grade (70–120 points) according to Table 1 of the Evaluation Instructions (see above). The arithmetic mean of the Current Learning activity (CLA) for both semesters constitutes the overall academic activity (OAA).

Individual tasks (IT) are graded up to 10 points.

Final control: To be allowed to take the exam, a student must score at least 70 points in the OAA. The exam grade ranges from 50 to 80 points.

Grade in subject (GS): GS = OAA + IT + exam.

Appealing the results of the final control Is conducted in accordance with the procedure established by the KhNMU (https://knmu.edu.ua/wp-content/uploads/2021/05/polog_apel_kontrol.pdf).

POLICIES OF THE EDUCATIONAL COMPONENT

Recommendations for working on the course: Actively participate in all forms of class activities, dedicate 1–2 hours daily to independent work and preparation for classes, ask questions during sessions, attend consultations, submit assignments on time, and complete all forms of assessment.

Attending classes. Attendance at lectures and practical classes is mandatory. The required attire for in-person sessions is a white medical coat. If you are more than 5 minutes late, you may be denied entry to the class. Missed sessions must be made up in accordance with the Regulations on the Procedure for Students to Make Up Missed Educational Sessions at the educational institution KhNMU (https://knmu.edu.ua/wp-content/uploads/2021/05/polog_vidprac_zaniat.pdf).

Academic Integrity. The KhNMU maintains a zero-tolerance policy toward any forms of academic dishonesty. Any violations of the principles of academic integrity entail responsibility in accordance with the procedure established by the KhNMU (https://knmu.edu.ua/wp-content/uploads/2021/05/polog_ad-1.pdf).

Use of Electronic Devices and Artificial Intelligence Tools Allowed only with the Teacher's permission.

Policy on Students with Special Educational Needs. Students with special educational needs should contact the instructor to develop an individual educational plan.

Teacher Response Time: 24 hours.

Technical Requirements for the Course:

- Access to a computer, laptop, tablet, or smartphone
- Corporate Google account with a personal photo

- Skills in using Google Workspace (Google Meet, Docs, Sheets, Slides, Forms) та Moodle

Technical Support: **LMS (Learning Management System)** (ev.shevtsov@knmu.edu.ua), Google (tehotdelknmu@gmail.com), Moodle (al.korol@knmu.edu.ua)

RECOMMENDED RESOURCES

1. Oral and Maxillofacial Surgery. Pt. 1 / ed. V. Malanchuk. - 2nd ed., updated. - Vinnytsya : Nova Knyha Publ. - 440 p.- 2018.
2. Oral and Maxillofacial Surgery. Pt. 2 / ed. V. Malanchuk. - 2nd ed., updated. - Vinnytsya : Nova Knyha Publ. - 296 p. – 2018.
3. Oral and Maxillofacial Surgery. Edited by Lars Andersson DDS, PhD, Karl-Erik Kahnberg DDS, M. Anthony (Tony) Pogrel DDS. / © 2010 Blackwell Publishing Ltd
4. Oral and maxillofacial surgery diseases. Edited by Crispian Scully, Stephen R Flint, Jose V Bagan, Stephen R Porter and Khursheed F Moos. / © 2010 Informa UK Ltd, except as otherwise indicated.
5. PETERSON'S PRINCIPLES OF ORAL AND MAXILLOFACIAL SURGERY Second Edition. Michael Miloro - Editor G. E. Ghali • Peter E. Larsen • Peter D. Waite - Associate Editors. / 2004 BC Decker Inc Hamilton • London.

Head of the Department
of Surgical Dentistry and
Maxillofacial Surgery

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