

Ministry of Healthcare of Ukraine
Poltava State Medical University
Department of Propaedeutic of Surgical Stomatology

«AGREED»

Guarantor of the academic and
professional program
«Dentistry»

_____ O.V. Sheshukova

« ____ » _____ 2023 y.

«APPROVED»

Chairman of the Academic Council of the
International Faculty

_____ L.V. Buria

Minutes as of 30 august 2023 y. № 1

SYLLABUS

SURGICAL PREPARATION OF THE ORAL CAVITY FOR PROSTHETICS selective discipline

level of higher education

the second (master's) level of higher
education

field of knowledge

22 «Healthcare»

specialty

221 «Dentistry»

academic qualification

Master of Dentistry

professional qualification

Dentist

academic and professional program

«Dentistry», full-time

mode of study

course and semester of study of the

V course 9 semesters

academic discipline

Module 1. Surgical preparation of the oral cavity for prosthetics

«RESOLVED»

at the meeting of the Department of propaedeutic of surgical
stomatology

Head of the Department _____ V.M. Novikov

Minutes as of 29 august 2023 No. 1

Poltava – 2023

INFORMATION ABOUT TEACHERS DELIVERING DISCIPLINE

Surname, name, patronymic of the lecturer (lecturers), scientific degree, academic title	Novikov Vadim Pankevych Artur Hohol Andrii Kolisnyk Inna	Ph. D., D.M.Si. professor Ph. D. associate professor Ph. D. associate professor Ph. D. associate professor
Profile of the lecturer (lecturers)	TEACHERS	
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Page of the department on the site of the academy	Page of the department	

MAIN CHARACTERISTICS OF THE EDUCATIONAL DISCIPLINE

The scope of the academic discipline (module), in particular module 2

Number of credits / hours – 3 ECTS credits / 90, of which:

Lectures (hours.) – not provided.

Practical classes (hours) – 20.

Self-directed work (hours) – 70.

Type of control – credit.

Policy of the discipline

Teachers and applicant for higher education, during studying the discipline «Surgical preparation of the oral cavity for prosthetics» at the Poltava State Medical University act in accordance with: Regulations on the organization of the educational process ([1](#)), The work program of the discipline «Surgical preparation of the oral cavity for prosthetics», Regulations on the academic integrity of applicants for higher education and employees of Poltava State Medical University ([2](#)), Regulations on the organization of independent work of students at Poltava State Medical University ([3](#)) rules of internal regulations for applicant for higher education of the Poltava State Medical University ([4](#)), Regulations on the organization and methods of assessment of educational activities of higher education students at the Poltava State Medical University ([5](#)), Regulations on the completion of missed classes and unsatisfactory grades by applicants for higher education of the Poltava State Medical University ([6](#)) etc.

Independent work of higher education students during the study of the discipline "Surgical preparation of the oral cavity for prosthetics" is provided by a system of educational and methodological basis provided by the working program of the discipline: textbooks, guidelines for independent work, electronic and other educational materials, remote courses, etc. The control of mastering the educational material in the discipline "Surgical preparation of the oral cavity for prosthetics", submitted for self-study, is mandatory. The form of control is determined by the working program of the discipline in the form of an abstract. Written work is performed in compliance with the principles of academic integrity and is designed in accordance with the requirements developed by the department. Regulations on the organization of independent work of students at Poltava State Medical University.

Attendance at all practical classes in the discipline "Surgical preparation of the oral cavity for prosthetics" is mandatory. Classes in which the student was not personally present are considered missed. Missed classes in the discipline are subject to mandatory completion. Unsatisfactory grades by

applicants for higher education retake at the department two weeks before the end of the semester and are held if the average score in the discipline is less than 3.0 (free). The number of attempts is not limited. The student must work out such a number of unsatisfactory grades that the average score is 3.0. Testing of unsatisfactory grades is carried out by a scientific and pedagogical employee appointed by the head of the department and recorded in the "Journal of accounting for unsatisfactory grades". Applicants who have not completed the missed classes are not allowed to take the test in the discipline. Regulations on working off missed classes and unsatisfactory grades by applicants for higher education of Poltava State Medical University.

Description of the educational discipline (annotation)

The discipline provides the study of an integral part of the complex rehabilitation of patients with defects of the dental system, namely: surgical preparation of the oral cavity for prosthetics.

During studying the discipline, the attention of applicants is focused on improving the skills of collecting medical history, examination and differential diagnosis to justify and choose the tactics of pre-prosthetic surgery in patients on the basis of evidence-based medicine. To implement the tasks, students take part in the diagnostic and treatment process, get acquainted with treatment and prevention activities under the guidance of teachers of the department.

Mastering the discipline contributes to the deepening of the level of theoretical and practical training, expands the range of professional practical skills necessary for independent medical practice. The discipline "Surgical preparation of the oral cavity for prosthetics" is selective.

Prerequisites and post-requisites of the educational discipline (interdisciplinary communication)

Prerequisites

Assimilation of the discipline "Surgical preparation of the oral cavity for prosthetics" is based on knowledge gained in the study of basic disciplines: human anatomy, histology, cytology and embryology, physiology, pathophysiology, pathomorphology, pharmacology, microbiology, virology and immunology, clinical analogy, clinical analogy, surgery, propaedeutics of internal medicine, radiology, internal medicine, Latin and medical terminology and integrates with these disciplines.

Post-requisites

Knowledge is necessary for further study of surgical and orthopedic dentistry, maxillofacial surgery (internship, clinical residency). Applicants must know the basic diagnostic and therapeutic manipulations used in the practice of a dental surgeon in creating appropriate conditions for prosthetics.

Purpose and tasks of the educational discipline

The purpose of teaching the discipline "Surgical preparation of the oral cavity for prosthetics" is the professional training of a dentist, which involves mastering theoretical issues and acquiring basic practical skills that are necessary in preparing the patient for prosthetics.

The main tasks of studying the discipline are:

- ability to perform examination of a surgical dental patient;
- diagnosis of the main symptoms and syndromes manifested in the maxillofacial area;
- ability to formulate a preliminary diagnosis;
- analysis of the results of additional methods of examination and differential diagnosis;
- correct formulation of preliminary and clinical diagnosis of major diseases;
- detection and identification of manifestations of somatic diseases in the oral cavity;
- understanding and correct application of methods of surgical preparation of the oral cavity for prosthetics;
- determination of optimal terms and methods of treatment of patients.

Competences and studying outcomes, fostered by the discipline (integral, general, special):

- The discipline ensures the acquisition of **competencies** by applicants for higher education:
Integral: the ability to solve complex problems and problems in the field of health care in the

specialty "Dentistry" in a professional activity or in the learning process, which involves research and / or innovation and is characterized by uncertainty of conditions and requirements.

– **General:**

1. Ability to abstractly think, analyze and synthesize.
2. Knowledge and understanding of the subject area and understanding of professional activity.
3. Ability to use knowledge in practical cases.
5. Ability to communicate in English.
6. Skills of using information and communication technologies.
7. Ability to search, process and analyze information from various sources.
8. Ability to adapt and act in a new situation.
9. Ability to identify, pose and solve problems.
10. Ability to be critical and self-critical.
11. Ability to work in a team.
12. Ability to act socially responsibly and consciously.
13. The ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.
14. Ability to preserve and multiply moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, techniques and technologies. active recreation and leading a healthy lifestyle.

- **Special (professional, subject):**

1. Ability to collect medical information about the patient and analyze clinical data.
2. Ability to interpret the results of laboratory and instrumental research.
3. Ability to diagnose: determine the preliminary, clinical, final, concomitant diagnosis, emergencies.
4. Ability to plan and implement measures for the prevention of diseases of organs and tissues of the oral cavity and maxillofacial area.
5. Ability to design the process of medical care: to determine the approaches, plan, types and principles of treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.
6. Ability to determine the rational mode of work, rest, diet in patients in the treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.
7. Ability to determine the tactics of management of patients with diseases of organs and tissues of the oral cavity and maxillofacial area with concomitant somatic diseases.
8. Ability to perform medical and dental manipulations.
9. Ability to perform medical and dental manipulations.
10. Ability to organize and conduct medical and evacuation measures.
11. Ability to determine tactics, methods and provide emergency medical care.
12. Ability to organize and conduct screening examinations in dentistry.
13. Ability to assess the impact of the environment on the health of the population (individual, family, population).
14. Ability to maintain regulatory medical records.
15. Processing of state, social and medical information.
16. Ability to organize and conduct rehabilitation measures and care for patients with diseases of the oral cavity and maxillofacial area.
17. Ability to provide legal support for one's own professional activity.
18. Ability to provide pre-medical care according to the protocols of tactical medicine.

Program learning outcomes, the formation of which is facilitated by the discipline:

1. Select and identify the leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary data of the patient's anamnesis, data of the patient's examination, knowledge about the person, his organs and systems, to establish a probable nosological or syndromic preliminary clinical diagnosis of a dental disease (according to list 2).

2. Collect information about the general condition of the patient, assess the psychomotor and physical development of the patient, the condition of the organs of the maxillofacial area, based on the results of laboratory and instrumental studies to evaluate information about the diagnosis (according to list 5).
3. Assign and analyze additional (mandatory and optional) examination methods (laboratory, radiological, functional and / or instrumental) according to list 5, patients with diseases of organs and tissues of the oral cavity and maxillofacial area for differential diagnosis of diseases (according to the list) 2).
4. Determine the final clinical diagnosis in accordance with the relevant ethical and legal norms, by making an informed decision and logical analysis of subjective and objective data of clinical, additional examination, differential diagnosis under the supervision of a physician-manager in a medical institution (list 2.1).
5. To diagnose emergencies under any circumstances (at home, on the street, in a medical institution), in an emergency, martial law, lack of information and limited time (according to list 4).
6. Plan and implement measures to prevent dental diseases among the population to prevent the spread of dental diseases.
7. Analyze the epidemiological situation and carry out measures of mass and individual, general and local drug and non-drug prevention of dental diseases.
8. Determine the approach, plan, type and principle of treatment of dental disease (according to list 2) by making an informed decision according to existing algorithms and standard schemes.
9. Determine the nature of work, rest and the necessary diet in the treatment of dental diseases (according to list 2) on the basis of preliminary or final clinical diagnosis by making an informed decision according to existing algorithms and standard schemes.
10. Determine the tactics of the dental patient with somatic pathology (according to list 3) by making an informed decision according to existing algorithms and standard schemes.
11. Carry out treatment of major dental diseases according to existing algorithms and standard schemes under the supervision of a doctor-manager in a medical institution (according to list 2.1).
12. Organize medical and evacuation measures among the population, servicemen, in emergency situations, including martial law, during the detailed stages of medical evacuation, taking into account the existing system of medical and evacuation support.
13. Determine the tactics of emergency medical care, using the recommended algorithms, under any circumstances on the basis of a diagnosis of emergency in a limited time (according to list 4).
14. Analyze and evaluate government, social and medical information using standard approaches and computer information technology.
15. Assess the impact of the environment on the health of the population in a medical institution by standard methods.
16. Form goals and determine the structure of personal activity based on the result of the analysis of certain social and personal needs.
17. Adhere to a healthy lifestyle, use the techniques of self-regulation and self-control.
18. To be aware and guided in their activities by civil rights, freedoms and responsibilities, to raise the general cultural level.
19. Adhere to the requirements of ethics, bioethics and deontology in their professional activities.
20. Organize the necessary level of individual safety (own and persons cared for) in case of typical dangerous situations in the individual field of activity.
21. Perform medical manipulations on the basis of preliminary and / or final clinical diagnosis (according to lists 2, 2.1) for different segments of the population and in different conditions (according to list 6).
22. Perform medical dental manipulations on the basis of preliminary and / or final clinical diagnosis (according to lists 2, 2.1) for different segments of the population and in different conditions (according to list 7).

23. Perform emergency medical care manipulations, using standard schemes, under any circumstances on the basis of an emergency diagnosis (according to list 4) for a limited time (according to lists 6, 7).

Learning outcomes of the discipline:

upon completion of the study of educational discipline applicants for higher education should **to know:**

1. Principles of organization and provision of dental care in Ukraine.
2. Rules of deontology and medical ethics when working with patients with surgical pathology of the maxillofacial area organs.
3. Features of examination of patients with maxillofacial area pathology.
4. Indications, contraindications to general and local anesthesia, features of sedation in the practice of a dentist.
5. Techniques of operation of simple and surgical tooth removal. Modern methods of tooth extraction.
6. Teething diseases, their diagnosis and treatment.
7. Inflammatory processes of the periodontium and jaw bones (periodontitis, periostitis, alveolitis, osteomyelitis).
8. Dystrophic diseases of periodontal tissues. Dysplastic diseases of maxillofacial localization.
9. Acquired defects and deformations of the bones of the facial skeleton and soft tissues of the maxillofacial localization.
10. Age-related changes in the alveolar processes of the jaw bones, gums, soft tissues of the face and neck.
11. Changes in the alveolar processes of the jaws during adentia.
12. Principles of diagnosis and surgical treatment of periodontal diseases.
13. Principles of preparation of the oral cavity for prosthetics.
14. General and local complications during and after surgery in surgical dentistry and maxillofacial surgery. Principles of cardiopulmonary resuscitation.

To be able:

1. Collect a medical history and examine a patient with maxillofacial area pathology.
2. Make a plan and perform an examination of a patient with maxillofacial area pathology.
3. Make a plan of additional research methods and be able to interpret their results.
4. Fill in the necessary medical documentation.
5. Make a plan for comprehensive treatment of patients.
6. Prescribe a scheme of preventive premedication, taking into account the psycho-somatic condition of the patient, the nature and extent of surgery.
7. Demonstrate modern techniques for preparing the surgeon's hands for surgery.
8. Carry out antiseptic treatment of the operating field on the phantom with the imposition of sterile linen.
9. Perform application anesthesia on the phantom.
10. Perform terminal injection (infiltration anesthesia) on the phantom.
11. Perform posterior superior nerve block anesthesia on the phantom.
12. Perform anterior and medium superior nerve block on the phantom.
13. Perform anterior palatine nerve anesthesia on the phantom.
14. Perform nasopalatine nerve anesthesia on the phantom.
15. Perform inferior alveolar nerve anesthesia on the phantom using various techniques.
16. Perform torus anesthesia on the phantom.
17. Perform mental anesthesia on the phantom.
18. Perform lingual anesthesia on the phantom.
19. Perform buccal anesthesia on the phantom.
20. Perform central conduction anesthesia for the upper and lower jaws on the phantom.
21. Perform operation of typical removal of individual groups of teeth on the upper and lower jaws

- on the phantom.
22. Perform atypical tooth extraction on the phantom.
 23. Carry out tooth-preserving surgical interventions for chronic periodontitis.
 24. Stop the bleeding after tooth extraction.
 25. Carry out curettage and tamponade of the cavity of the removed tooth.
 26. Carry out curettage of periodontal pockets.
 27. Apply a knot seam.
 28. Perform tooth replantation.
 29. Perform the operation of closing the oroantral junction on the phantom.
 30. Diagnose local and general complications of local anesthesia and surgical interventions in the practice of a dental surgeon.
 31. Carry out cardiopulmonary resuscitation on the phantom (indirect heart massage and artificial respiration).
 32. Provide assistance in emergencies in the practice of surgical dentistry and maxillofacial area according to appropriate algorithms.

Thematic plan of lectures (in modules) with the main issues discussed at the lecture

It is not provided by a working educational program

Thematic plan of seminars for modules and content modules, indicating the main issues addressed at the seminar

It is not provided by a working educational program

Thematic plan of practical classes by modules and content modules, indicating the main issues addressed at the practical classes

No	Theme	Hours
Module 1. Surgical preparation of the oral cavity for prosthetics		
<i>1.</i>	<p>Examination of patients at the stage of pre-prosthetic surgical preparation of the oral cavity. Topographic and anatomical features of the jaws and tissues of the oral cavity with partial and complete adentia, age changes. Evaluation of quantitative and qualitative characteristics of jaw bone tissue. Selection of orthopedic design and drawing of the corresponding plan of operative interventions. Preparation of patients for surgery. Choice of anesthesia. Radiation methods of examination of patients when planning surgical preparation of the oral cavity: orthopantomography, spiral and conical computed tomography. Three-dimensional visualization of the facial skeleton and soft tissues of the face, the use of navigation computer technology at the stage of diagnosis and planning of surgical interventions. Safety measures for patients and medical staff.</p> <ul style="list-style-type: none"> – Subjective examination of a surgical dental patient (complaints, medical history, life history). – Assessment of the general condition of the surgical dental patient. – Local examination (extraoral and intraoral). – Additional methods of examination (electroodontometry, radiography, MRI, morphological, microbiological, functional studies). – Features of the structure of the jaws with partial and complete adentia. – Anatomical and functional features of the mucous membrane in different parts of the oral cavity. – Structure and functions of the TMJ. – Topography of the trigeminal and facial nerves. – Topography of the main blood vessels of the maxillofacial area. – Clinical picture of the edentulous oral cavity. – Classification of jaw atrophy. 	6

	<ul style="list-style-type: none"> – Medical preparation of the patient for surgery in the maxillofacial area in the clinic and hospital. Types of premedication. – Basic drugs that are part of premedication regimens, their disadvantages and advantages. – Choice of anesthesia method. – Indications and contraindications to local and general anesthesia. – Preparing the patient for planned surgery in an outpatient and inpatient setting. – The choice of analgesia in patients with severe allergic status. – The purpose and objectives of general anesthesia. – The purpose and objectives of local anesthesia. – Complications during and after local anesthesia. – Pharmacological agents for local anesthesia, mechanism of action. Prescriptions. – Drugs used to prolong the action of local anesthetics. – Side effects from the use of adrenaline. – Pharmacological drugs for anesthesia, the mechanism of their action. – Features of anesthesia in the maxillofacial area. – Indications and contraindications to endotracheal anesthesia, types of intubation. – Asepsis and antisepsis. Aspects of AIDS and viral hepatitis prevention in outpatient and inpatient practice of a dental surgeon. Surgeon's hand preparation. Preparation of the operating field. – Radiation examination methods. – Indications and contraindications to X-ray examination. – Principles of image acquisition by radiological methods of examination. – Intraoral radiography. – Orthopantomography. – Teleradiography. – Computed tomography: cone-beam and spiral. – X-ray examination of the TMJ. – Protective measures against the side effects of ionizing radiation. – Ways to reduce radiation exposure. – Indicators of the effective equivalent dose for X-ray examination of the facial cranium. 	
2.	<p>Rehabilitation and prosthetic indications for tooth and root removal. Dental-preserving surgical interventions. Operations for periodontal diseases. Directed bone regeneration. Ways to stimulate osteogenesis. Methods of obtaining platelet concentrates. Growth factors, their origin and regulation of hard and soft tissue regeneration of the oral cavity.</p> <p>Surgical preparation of the soft tissues of the oral cavity: frenulum plastic of the lips and tongue, mucous membranes, correction of scar deformities and muscle strands. Vestibuloplasty: the essence of the intervention, indications, techniques of surgery using local tissues and free and skin grafts.</p> <ul style="list-style-type: none"> – Absolute and relative indications for tooth extraction. – Stages of tooth extraction surgery. – The concept of prosthetic, aesthetic, rehabilitation indications for tooth extraction. – Tools for removing tooth and roots, structure and principles of use. – Indications and contraindications to dental surgery. – Choosing a set of tools for dental surgery. – Technique of apical and interradicular granulomectomy. – The sequence of the operation of resection of the apex of the tooth root. – Tooth root amputation. – Coronary-radicular separation. – Hemisection of the tooth. Tooth replantation. – The purpose and objectives of periodontal surgery. – Indications and contraindications to surgical treatment of periodontal disease. Surgical intervention planning. – Surgical intervention within the periodontal, gingival pocket; flap operations; formation of the vestibulum of the oral cavity. – Bone replacement materials. Indications and contraindications to use. 	6

	<ul style="list-style-type: none"> – Varieties of osteogenesis. Osteogenic, osteoconductive and osteoinductive potential of bone materials. – Mechanisms of bone regeneration of jaws. – Directed bone regeneration. – Medical support before and after surgery. – Endogenous technologies to improve regeneration. – Autologous platelet concentrates. – Tissue growth factors, classification, cell regulation; regenerative potential of concentrates. – Methods of obtaining platelet concentrates, their properties. – Indications and features of application in dentistry. – The purpose and objectives of surgery on the soft tissues of the oral cavity. – Indications and contraindications to the correction of oral soft tissues. – Surgical intervention planning. – Surgical interventions on the soft tissues of the oral cavity: excision of pathological bands and scars, frenuloplasty, vestibuloplasty. – Use of surgical lasers when working with soft tissues of the oral cavity. – Early and late postoperative complications, their prevention, ways to eliminate. – Medical support before and after surgery. 	
3.	<p>Surgical preparation of bone tissue of the oral cavity for prosthetics: alveolotomy, removal of exostoses, augmentation of the alveolar process, reposition of the lower alveolar nerve. Closed and open sinus lifting: indications, contraindications, methods of implementation.</p> <p>Complications that occur during and after surgery. Suture eruption, bleeding. Violation of the integrity of the Schneider membrane: treatment tactics. Inflammatory complications at the stage of surgical preparation of the oral cavity for prosthetics. Incomplete osteogenesis: treatment tactics.</p> <ul style="list-style-type: none"> – The purpose of surgical preparation of alveolar processes of jaws for prosthetics. – Indications and contraindications to surgery on the jaw bones. – Drawing up a plan of surgical intervention. – Correction of excess bone tissue: removal of exostoses and toruses. – Methods of augmentation of alveolar processes on the upper and lower jaws. – Postoperative complications. Prevention of early and late postoperative complications. Treatment tactics. – Medical support before and after surgery. – Topography of the mandibular canal in the thickness of the mandible. Anatomy of the lower alveolar nerve. – Indications and contraindications to mandibular nerve reposition. Techniques of surgical intervention. Possible complications, their prevention. – The structure of the maxillary sinus. Anatomical and topographic features are caused by tooth loss. – The purpose and objectives of sinus lifting surgery. – Indications and contraindications to open and closed sinus lifting. – Technique of sinus lifting operation. – Wound management after reconstructive interventions on the alveolar processes of the jaws. – Prevention of postoperative complications. – Complications of a general nature that may occur during surgical preparation of the oral cavity for prosthetics. – Early local complications: suture eruption, postoperative bleeding, perforation, and Schneider's membrane rupture. Diagnosis, prevention and treatment. – Inflammatory complications at different times after surgery. Postoperative osteomyelitis, features of the course and treatment. – Prevention of postoperative osteomyelitis. – Disorders of reparative osteogenesis prevention and treatment measures. 	6
4.	Final class.	2
Total		20

Elaboration of topics that are not included in the classroom plan

N	Theme	Hours
1.	Dental implantation as a component of surgical preparation of the oral cavity for prosthetics. Types of dental implantation. Stages of formation and development of the method.	6
2.	The use of bone grafts in the surgical preparation of the oral cavity for prosthetics. Methods of fixing grafts in the recipient site.	6
3.	Features and techniques of soft tissue suturing during surgical preparation of the oral cavity for prosthetics. Modern suture material.	6

Individual tasks

1. Annotation of additional literature on the topics submitted for independent mastering.
2. Production of visual teaching aids (training stands, tables, drugs, etc.).
3. Creation of educational videos of methods of surgical interventions on the maxillofacial area in patients with defects of the dentition.
4. Participation in specialized student competitions in the discipline.
5. Work in a research circle with the presentation of abstracts for the conference and reports at student scientific conferences.

List of the theoretical questions for control module 1

1. Subjective and objective examination of a surgical dental patient.
2. Additional methods of examination of the patient (radiography, MRI, morphological, microbiological, functional studies).
3. Features of the structure of the jaws with partial and complete adentia.
4. Anatomical and functional features of the mucous membrane in different parts of the oral cavity.
5. Structure and functions of the TMJ.
6. Topography of the trigeminal and facial nerves.
7. Clinical picture of the edentulous oral cavity. Classification of jaw atrophy.
8. Medical preparation of the patient for surgery in the maxillofacial area in the clinic and hospital. Types of premedication.
9. Indications and contraindications to local and general anesthesia.
10. Preparing the patient for planned surgery in an outpatient and inpatient setting.
11. The choice of analgesia in patients with severe allergic status.
12. Complications during and after local anesthesia.
13. Pharmacological agents for local anesthesia, mechanism of action. Prescriptions.
14. Drugs used to prolong the action of local anesthetics.
15. Side effects from the use of adrenaline.
16. Pharmacological drugs for anesthesia, the mechanism of their action.
17. Features of anesthesia in the maxillofacial area.
18. Indications and contraindications to endotracheal anesthesia, types of intubation.
19. Asepsis and antisepsis. Aspects of AIDS and viral hepatitis prevention in outpatient and inpatient practice of a dental surgeon. Surgeon's hand preparation. Preparation of the operating field.
20. Indications and contraindications to X-ray examination.
21. Principles of image acquisition by radiological methods of examination.
22. Intraoral radiography.
23. Orthopantomography.
24. Teleradiography.
25. Computed tomography: cone-beam and spiral.
26. X-ray examination of the TMJ.

27. Stages of tooth extraction surgery.
28. The concept of prosthetic, aesthetic, rehabilitation indications for tooth extraction.
29. Tools for removing teeth and roots, structure and principles of use.
30. Indications and contraindications to dental surgery.
31. Choosing a set of tools for dental surgery.
32. Technique of apical and interradicular granulomectomy.
33. The sequence of the operation of resection of the apex of the tooth root.
34. Tooth root amputation.
35. Coronary-radicular separation.
36. Hemisection of the tooth. Tooth replantation.
37. The purpose and objectives of periodontal surgery.
38. Indications and contraindications to surgical treatment of periodontal disease. Surgical intervention planning.
39. Surgical intervention within the periodontal, gingival pocket; flap operations; formation of the vestibulum of the oral cavity.
40. Bone replacement materials. Indications and contraindications to use.
41. Varieties of osteogenesis. Osteogenic, osteoconductive and osteoinductive potential of bone materials.
42. Mechanisms of bone regeneration of jaws.
43. Directed bone regeneration.
44. Medical support before and after surgery.
45. Endogenous technologies to improve regeneration.
46. Autologous platelet concentrates.
47. Tissue growth factors, classification, cell regulation; regenerative potential of concentrates.
48. The purpose and objectives of surgery on the soft tissues of the oral cavity.
49. Indications and contraindications to the correction of oral soft tissues.
50. Surgical intervention planning.
51. Surgical interventions on the soft tissues of the oral cavity: excision of pathological bands and scars, frenuloplasty, vestibuloplasty.
52. Early and late postoperative complications, their prevention, ways to eliminate.
53. Medical support before and after surgery. The purpose of surgical preparation of alveolar processes of jaws for prosthetics. Indications and contraindications to surgery on the jaw bones.
54. Correction of excess bone tissue: removal of exostoses and toruses.
55. Methods of augmentation of alveolar processes on the upper and lower jaws.
56. Postoperative complications. Prevention of early and late postoperative complications. Treatment tactics.
57. Medical support before and after surgery.
58. The structure of the maxillary sinus. Anatomical and topographic features are caused by tooth loss.
59. The purpose and objectives of sinus lifting surgery. Indications and contraindications to open and closed sinus lifting.
60. Technique of sinus lifting operation.
61. Wound management after reconstructive interventions on the alveolar processes of the jaws.
62. Prevention of postoperative complications.
63. Disorders of reparative osteogenesis prevention and treatment measures.

The list of practical skills to control the discipline "Surgical preparation of the oral cavity for prosthetics":

1. Make a medical history and, if necessary, make an extract from it.
2. To make the rational scheme of inspection of the patient with defects of dentitions and to analyze the received results.
3. Carry out differential diagnosis with justification and formulation of the previous diagnosis.

4. Be able to decipher and interpret the results of CT examination of the bones of the facial skull.
5. To determine the optimal surgical methods of treatment of patients with defects of the dentition in their preparation for prosthetics with the involvement, if necessary, of related specialists.
6. Develop a scheme of individual surgical measures for patients in preparation for prosthetics.
7. Perform local anesthesia during surgery.
8. Perform tooth extraction surgery to prepare the patient for prosthetics.
9. Apply a suture to the gums after surgery.
10. Apply the principles of deontology in patients with tooth loss.

Form of final control of academic success – Final Test

The current control, which is carried out at each practical lesson and is evaluated on the traditional 4-point scale, including the marks "excellent", "good", "satisfactory", "unsatisfactory".

Standardized generalized criteria for the knowledge of students: "excellent" - the student has knowledge on the topic at least 90%, "good" - the student has knowledge on the topic at least 75-89%, "satisfactory" - the student has knowledge on the topic not less than 60-74%, "unsatisfactory" - the student has not mastered the required minimum knowledge on the topic within 59%.

Assessment of success is integrated (all types of work of the student are evaluated both during independent work and during classes) according to the criteria that are communicated to students at the beginning of the discipline.

The applicant for higher education receives a test in the discipline "Surgical preparation of the oral cavity for prosthetics" at the last lesson based on the results of the current assessment. This type of final control does not involve any additional written work, surveys, or testing in the last lesson.

Applicants for higher education, who scored the required minimum number of points during the current control (average grade point average of 3.0 and above), do not have missed working hours and met all the requirements of the discipline, which are provided by the working curriculum (defense of abstracts on topics independent work) receive the credit.

Discipline assessment:

The number of points that the student scores from the discipline is defined as the arithmetic mean of current performance.

The maximum number that can be obtained by the applicant of higher education in the study of the discipline is equal to 200 points. The minimum number of points that a higher education applicant must score is 122.

Scheme of accrual and distribution of points received by students

Learning outcomes are assessed on a two-point scale (passed / not passed) and a multipoint scale. The average score for current activity is converted into points on a 200-point scale, according to Table 1.

Table 1. Unified table of correspondence of points for current performance, points for final test, and traditional four-point assessment.

Average score for current performance (A)	Points for the module and / or exam ($A \cdot 24 + A \cdot 16$)
2	80
2,1	84
2,15	86
2,2	88
2,25	90
2,3	92
2,35	94
2,4	96

2,45	98
2,5	100
2,55	102
2,6	104
2,65	106
2,7	108
2,75	110
2,8	112
2,85	114
2,9	116
2,95	118
3	122
3,05	123
3,1	124
3,15	126
3,2	128
3,25	130
3,3	132
3,35	134
3,4	136
3,45	138
3,5	140
3,55	142
3,6	144
3,65	146
3,7	148
3,75	150
3,8	152
3,85	154
3,9	156
3,95	158
4	160
4,05	162
4,1	164
4,15	166
4,2	168
4,25	170
4,3	172
4,35	174
4,4	176
4,45	178
4,5	180
4,55	182
4,6	184
4,65	186
4,7	188

4,75	190
4,8	192
4,85	194
4,9	196
4,95	198
5	200

If the student fulfills the conditions for obtaining credit, the research and teaching staff puts in the statement of the final semester control and individual curriculum of the student. "Credited" and the number of points scored by the applicant for higher education for the discipline. Information about students who did not receive a test, with the exact reason, is also included in the "Statement of final semester control" and in the individual curriculum.

The reasons for not receiving the test may be the following: a) the applicant for higher education has unworked absences. Marked "n / v" (failed) in the column "points for the final control"; b) the applicant of higher education has attended all practical classes, but has not scored the minimum number of points for the current educational activity and is not allowed to take part. Marked "n / d" (not allowed) in the column "points for final control"; c) the applicant of higher education attended all practical classes, but did not complete the task of independent work. Marked "n / a" (not allowed) in the column "points for the final control".

After the test, the first copy of the "Information of the final semester control" is transferred to the responsible employee of the dean's office, within one day after the test, the second copy is stored at the department ([12](#)).

Teaching methods

The organization of the educational process is carried out in accordance with the requirements of the European credit transfer system of the organization of the educational process.

Teaching of discipline is provided by the following methods:

- **verbal**, providing the applicants for higher education with **perception and assimilation** of knowledge (lecture, explanation, story, conversation, instruction);
- **visual** (observation, illustration, demonstration);
- **practical for the application of knowledge and acquisition and consolidation of skills** (different types of dental manipulations on phantoms, performing manual works);
- brainstorm, role-playing games, clinical cases, debates;
- **checking and evaluation of knowledge, skills and competences**;
- implementation of applicants for higher education' self-independent work (SIW), which is provided in the thematic plans in the form of topics for independent study and is monitored on the final module control;
- **motivations** for scientific publications or prizes for participation in the Olympiad in disciplines among universities of Ukraine, applicant for higher education conferences, etc.

The maximum efficiency of training is reached on condition of system combination of these methods.

Control methods

Standardized methods of control that evaluate the applicants for higher education theoretical and practical preparation according to the requirements of the curriculum: oral, written, test, computer, using of tests of the format of the integrated license exam "Krok", self-control and self-assessment - in the volume of program material in the discipline.

Types of control: preliminary, current, final.

Methodological support

1. Working curriculum.
2. Working program of the discipline "Surgical preparation of the oral cavity for prosthetics"
3. Syllabus in the discipline "Surgical preparation of the oral cavity for prosthetics"
4. Basic and additional literature.

5. Methodical guidelines for independent work of applicants for higher education in preparation for practical classes.
6. Sets of results of additional research methods, photo-video materials on the topics of Module
7. Test and control tasks for practical classes.
8. List of questions for the final module control.
9. Visual materials.

Recommended literature

Main literature

1. Atlas of Human Anatomy / F. Netter – 2nd ed. – New Jersey: ICON Learning Systems. – 592 p.
2. Peterson's Principles Of Oral And Maxillofacial Surgery Third Edition, Vol. 1, 2012. - 2000 p.
3. Peterson's Principles Of Oral And Maxillofacial Surgery Third Edition, Vol. 2, 2012. - 1772 p.
4. Oral and Maxillofacial Surgery / J. Pedlar, J. Frame. – Edinburg, London, New York, Philadelphia, Sydney, Toronto: Churchill Livingstone, 2003. – 325 p.
5. Principle of oral and maxillofacial surgery / Ed. by U.J. Moore. – Blackwell Science, 2001. – 276 p.
6. Contemporary Oral and Maxillofacial Surgery (4th Edition) Larry J. Peterson (Editor), Edward Ellis (Editor) & James R Hupp ISBN 0323018874 Publisher: Mosby-Year Book, Dec. 2002 875 pages, 1650 illus, Hardcover.
7. Oral and Maxillofacial Infections (4th Edition) by Richard G Topazian, DDS, Morton H Goldberg, DMD, MD and James R Hupp, DMD, MD, JD, FACS ISBN: 0721692710 Publisher: W.B. Saunders, Feb. 2002 540 pages, 522 illus, Hardcover.
8. Mitchell D. An Introduction to Oral and Maxillofacial Surgery / D. Mitchell. – Oxford University Press, Jan, 2006. – 356 p.
9. Coulthard P. Master dentistry / P. Coulthard, K. Horner PH. Sloan, E. Theaker. – Edinburg, London, New York, Philadelphia, St Louis, Toronto, Churchill Livingstone, 2003. – 267 p.

Additional

1. Oral and maxillofacial surgery Хірургічна стоматологія та щелепно-лицева хірургія. Part 1 : textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.] ; ed. V. Malanchuk. – Вінниця: Нова книга, 2011
2. Oral and maxillofacial surgery Хірургічна стоматологія та щелепно-лицева хірургія. Part 2 : textbook for the students of stomatological faculties of higher medical education establishments of the IV level of accreditation / V. O. Malanchuk [et al.] ; ed. V. Malanchuk. – Вінниця: Нова книга, 2011.

Information resources

<https://www.pdfdrive.com/contemporary-oral-and-maxillofacial-surgery-5e-e164191042.html>
<https://www.pdfdrive.com/contemporary-oral-and-maxillofacial-surgery-e187520208.html>
<https://www.pdfdrive.com/textbook-of-oral-and-maxillofacial-surgery-e168318935.html>
https://www.academia.edu/37335369/Textbook_of_Oral_and_Maxillofacial_Surgery_-_3rd_ed._2012_.pdf

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