Odessa National Medical University

Faculty of Dentistry

Department of Surgical Dentistry

SYLLABUS OF THE COURSE

Social aspects in preventing and predicting complications of dental implantation

| Amount | 60 hours \ 2 credits |
|-------------------------|---|
| Semester, year of study | 8 semester, 4 years of study |
| Days, time, place | 8th semester - classes (2 hours) according to the schedule twice on week, 8.30-16.00; Department of Surgical Dentistry (11 Richelievska Street) |
| Teachers | Ivanchenko SV, Dmitrieva NB, Parasochkina VV |
| Contact phone | 0949964216 |
| E-mail | Hirstom_onmu@ukr.net |
| Workplace | Department of Surgical Dentistry (11 Richelievska Street) |
| Consultations | Eye consultations: Thursday from 14.30 to 18.00, Saturday 9.00-15.00 every week |

Communication with students - face-to-face meetings, on line (zoom, google meet, Microsoft teems)

Description of the discipline (abstract).

The discipline "Social aspects in the prevention and prediction of complications of dental implantation" is studied in the fifth year of study, belongs to the selective educational program in the specialty "Dentistry".

The discipline involves the study of diagnosis, planning and forecasting the results of implant treatment; study of modern surgical methods of implant treatment with the subsequent replacement of dentition defects by orthopedic methods; study of ways to prevent complications of implant treatment.

Considerable attention is paid to the formation of students' skills of examination and differential diagnosis of pathological conditions and diseases of the thyroid gland, which require dental implantation, methods of its implementation.

The study of the topic "Social aspects in the prevention and prediction of complications of dental implantation" contributes to the formation of a holistic view of the structure and functioning of the

thyroid gland; acquaintance with modern views on diagnosis, principles of treatment and prevention of dental diseases on the basis of evidence-based medicine; acquisition of professional practical skills for independent medical activity.

The subject of study of the discipline is the possibility of rehabilitation of patients with partial and complete loss of teeth, the main diagnostic and therapeutic manipulations used in the practice of a dental surgeon during dental implantation.

The purpose of teaching the discipline "Social aspects in the prevention and prediction of complications of dental implantation" is the professional training of a dentist, which involves mastering the theoretical and practical issues of dental implantology, the possibility of reconstructive oral surgery with partial and complete adentia.

The main objectives of the discipline "Social aspects in the prevention and prediction of complications of dental implantation" is to study the current stage of development of dental implantology; mastering algorithms for diagnosis, planning and forecasting the results of implant treatment; study of surgical methods of implant treatment; study of ways to prevent complications of implant treatment.

Competences and learning outcomes

In accordance with the requirements of the Standard of Higher Education, the discipline "Social aspects in the prevention and prediction of complications of dental implantation" provides students with the acquisition of competencies:

- *Integral* (ability to apply the acquired general and professional competencies to solve complex problems of the dentist and practical problems in the field of health care in the relevant position, the scope of which is provided by certain lists of syndromes and symptoms of diseases, dental diseases, physiological conditions and somatic diseases that require special tactics of patient management, emergencies, laboratory and instrumental studies,

medical and dental manipulations and / or innovation).

- *General* (ability to abstract thinking, analysis and synthesis; ability to learn and be modernly trained; ability to apply knowledge in practical situations; skills of using information and communication technologies; ability to search, process and analyze information from different sources; ability to detect, put and solve the problem; the ability to choose a communication strategy; the ability to work in a team; skills of interpersonal interaction; skills of safe activities; the ability to assess and ensure the quality of work performed).

- *Special* (professional, subject) (collection of medical information about the patient; evaluation of laboratory and instrumental studies; clinical diagnosis of dental disease; diagnosis of emergencies; determining the nature and principles of treatment of dental disease; determining the tactics of

dental patients with somatic pathology; and dental manipulations, treatment of major dental diseases, medical records).

General competencies (GQ):

- 1. Ability to abstract thinking, analysis and synthesis.
- 2. Knowledge and understanding of the subject area and understanding of professional activity.
- 3. Ability to apply knowledge in practice.
- 4. Ability to communicate in the state language both orally and in writing.
- 5. Ability to communicate in English.
- 6. Skills in the use of 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. The desire to preserve the environment.

13. The ability to act socially responsibly and consciously.

14. 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.

15. Ability to preserve and increase 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, technology and technology, use different types and forms of motor activities for active recreation and a healthy lifestyle.

Professional competencies (FC)

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 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 treat major diseases of organs and tissues of the oral cavity and maxillofacial area.

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 thyroid gland.

17. Ability to legally support their own professional activities.

18. Ability to provide home care according to the protocols of tactical medicine.

As a result of studying the discipline the student must

know:

- History of dental implantation. Stages of formation of implantology in Ukraine.
- Features of examination of patients before planning dental implantation.
- Modern methods of radiological diagnostics when planning dental implantation. Rationale for choosing a method of radiological diagnostics.
- Basic methods of local and general anesthesia, sedation in the practice of a dentist (indications, contraindications, features).
- Indications and contraindications to implant intervention.
- Classification of implants and dental implants.
- Types of materials from which implants are made and requirements for them.
- Modern systems for dental implantation.
- Features of dental implantation on the upper and lower jaw.
- One- and two-stage implantation.
- Immediate and delayed loading of implants with prosthetic structure.
- Navigation technologies in dental implantation.
- Methods of planning and manufacturing navigation templates for installation Methods for assessing the stability of the implant in the dynamics of engraftment.
- Features of implantation in persons with somatic pathology and in the elderly.
- Principles and tasks of preimplantation preparation.
- Techniques of surgical interventions on the soft tissues of oral dental implants.
- Modern classifications of quantitative and qualitative parameters of jaw bone tissue.
- Growth factors, their influence on the regeneration of hard and soft tissues of the oral cavity.
- Classifications of adentia and bone quality.
- Classifications of atrophy of alveolar processes
- Peculiarities of the structure of edentulous jaws and jaws with partial loss of teeth of the cavity (vestibuloplasty operations; frenuloplasty; excision of pathological strands and scars, etc.).
- Techniques of surgical interventions on the hard tissues of the oral cavity (vertical and horizontal augmentation of the alveolar process, reposition of the lower alveolar nerve, sinus lifting, etc.).

- Tooth extraction for orthopedic indications. Modern methods of removing teeth and their roots.
- The use of auto-, allo-, xenotransplantation in pre-implantation preparation of the oral cavity.
- Pharmacotherapy of dental implantation.
- Complications of dental implantation.
- Principles of deontology and medical ethics in dentistry and SHLH.

be able:

- Collect a medical history and examine a patient with partial or complete adentia.
- Make a plan of additional research methods and be able to interpret their results.
- Fill in the relevant medical documentation.
- Perform an operation on the phantom to remove individual groups of teeth on the upper and lower
- Make a plan for dental implantation in the patient depending on the specific clinical situation.
- Explain and demonstrate on the phantom the surgical stage of the implantation operation, including pre-implantation preparation (if necessary).

• demonstrate:

- • ability to abstract thinking, analysis and synthesis.
- • ability to learn and be modernly trained.
- • knowledge and understanding of the subject area and understanding of professional activity.
- • ability to apply knowledge in practical situations.
- • skills in using information and communication technologies.
- • ability to search, process and analyze information from various sources.
- • ability to identify, pose and solve problems.
- • ability to choose a communication strategy.
- • ability to work in a team.
- interpersonal skills.
- • ability to act on the basis of ethical considerations (motives), security orientation.
- • possession of moral and deontological principles of a medical specialist and the principles of professional subordination.
- • ability to evaluate and ensure the quality of work performed.
- ability to act socially responsibly and civically consciously.
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Prerequisites.

The study of the discipline involves the preliminary mastering of academic disciplines with:

1. Normal anatomy

1.Normal physiology

- 2. Histology, embryology and cytology
- 3.Pathological anatomy
- 4.Pathological physiology
- 5. Operative surgery and topographic anatomy
- 6. Microbiology, virology and immunology
- 7.Medical biology
- 8.General and clinical pharmacology
- 9.Hospital surgery and dental surgery
 - 10.Propaedeutics of internal diseases
- 11.Sotsialna medicine, public health

- 12.Skin and venereal diseases
- 13.Therapeutic dentistry
- 14.Orthopedic dentistry
- 15. Orthodontics,

and have practical skills in caring for patients with a surgical profile. And their management in outpatient and inpatient settings.

Postrequisites.

The main provisions of the discipline should be applied in the study of related disciplines during 5 years of study, is the basis for preparation for the licensing exam EDKI, preparation for study in higher education institutions in the programs of the third educational and scientific level of higher education.

Expected results:

The student must know:

- anatomical features of the structure of the oral cavity,
- physiology and pathology of the development of the maxillofacial apparatus,
- basics of surgery,
- bone biochemistry,
- physiology and pathophysiology of bone tissue,

•principles of examination of patients: to know the importance of special and auxiliary methods of examination for differential diagnosis in surgical implantation to prevent and predict complications,

•etiology and pathogenesis of complications of dental implantation and their impact on organs and systems of the human body,

•clinical manifestations of various complications,

•indications for the use of various methods of treatment of complications of dental implantation, to develop a treatment plan and tactics, to establish a primary (preliminary) diagnosis based on the analysis of the results obtained,

- prevention of inflammatory processes of the maxillofacial area,
- •principles and methods of anesthesiology, general and local anesthesia,
- •issues of asepsis and antiseptics.

Description of the discipline

Forms and methods of teaching:

-the course will be presented in the form of lectures, practical classes, organization of independent work of students.

-during teaching the discipline the following teaching methods are used: lectures, explanations, multimedia presentations, photo tasks, situational training, simulation training, oral examination, testing, individual tasks, independent work with the textbook.

Course content:

COURSE " Modern diagnostics of diseases of the TMJ and salivary glands "

(60 years), 2 credits.

| Lecture topics | Number hours | of |
|--|---------------------|----|
| 1 History of dental implantation. Stages of formation of implantology in Ukraine. | 2 | |
| Features of examination of patients before planning dental implantation. 2 Modern methods of radiological diagnostics when planning of implantation. Rationale for choosing a method of radiological diagnostics. | lental ₂ | |
| Indications and contraindications to implant intervention.3 Classification of implants and dental implants.Types of materials from which implants are made and requirements for them. | 2 | |
| Modern systems for dental implantation. 4 Features of dental implantation on the upper and lower jaw. One- and two-stage implantation. | | |
| ⁵ Complications that occur during and after implantation. Delayed and complications, their prevention and treatment | direct ₂ | |
| Hours in general | 10 | |
| Topics of practical classes 1 Features of examination of patients before planning dental implantation. . Modern methods of radiological diagnostics when planning dental implantation. | 2 | |
| 2 Indications and contraindications to implant intervention. Classification of implants. | plants 2 | |
| 3 Classification, clinic, differential diagnosis and treatment of complications that . during and after dental implantation | occur ₂ | |
| ⁴ prevention and prediction of complications of dental implantation | | |
| ⁵ Final lesson. | | |
| Hours in general Themes of independent works | 10 | |
| Biological bases of dental implantation. Types of implants. Indications, contraindications, provision. Indications and examination of the patient before the surgical stage of or | 6 Jental | |
| ² implantation. Preparation of the alveolar process for implantation. Exec technique. | cution6 | |
| $\frac{3}{3}$ Results, complications of dental implantation and their treatment. | | |
| 4 Features of dental implantation on the upper and lower jaws | | |

⁵ Complications during dental implantation and in the postoperative period

Hours in general

The system of organization of practical classes

Duration of practical training 5 academic hours - 4 hours. including 3 breaks of 10 minutes.

1. Preparatory stage - 30 minutes. 1.1 Organizational activities - 5 minutes.

1.2 Setting educational goals and motivation - 5 min. Substantiation by the teacher of the importance of the topic of the lesson for further study of the discipline and professional activity of the doctor in order to form motivation and purposeful educational activities. Introducing students to specific goals and lesson plan.

1.3 Control of the initial level of knowledge (standardized methods of control) - 20 min. Carrying out of the standardized control of the initial level of preparation of students, discussion and answers to questions of students.

Educational technologies, materials of methodical maintenance: questions for individual oral and written interrogation, typical situational tasks and tests; tables, models, collapsible models of jaws, textbooks, manuals, reference books, atlas, methodical recommendations according to the subject of the lesson, videos.

2. The main stage - 205/225 minutes.

Formation of professional skills and abilities. Collection of students' anamnesis and examination of the thematic patient. Students make a plan of examination of the patient, a plan of additional research methods, fill in the relevant medical documentation, practice the technique of diagnostic manipulations, treatment measures, practice practical skills in accordance with the subject of the lesson.

Educational technologies, materials of methodical maintenance: patients of dental polyclinic, case histories, selection of results of additional methods of inspection of thematic patients, situational tasks, algorithms of performance of practical skills, models, tools, thematic video materials.

3. The final stage - **30** minutes. **3**.1 Control and correction of the level of professional skills and abilities with the use

Discipline policy and values.

In order to successfully complete the relevant course, it is necessary to regularly attend practical classes; to have theoretical preparation for practical classes according to the subject; not to be late and not to miss classes; perform all necessary tasks and work in each lesson; be able to work with a partner or in a group; contact the curators of the course on various issues on the subject of classes and receive it when you need it.

Students can discuss different tasks, but their performance is strictly individual. It is not allowed to write off, use various software, tips, use a mobile phone, tablet or other electronic gadgets during classes for purposes other than the educational process. Students are not allowed to be late for practical classes.

Curation of patients is possible provided that students have the appropriate form of clothing, a health book with a mark on vaccination against diphtheria, the results of the examination for the stress of immunity to measles (or a mark on vaccination).

Students with special needs can meet with the teacher or warn him before the start of classes, at the request of the student it can be done by the head of the group. If you have any questions, please contact the teacher.

Students' participation in research and conferences on this topic is encouraged.

All ONMedU students are protected by the Regulations on the Prevention, Prevention and Settlement of Cases Related to Sexual Harassment and Discrimination at ONMedU, designed to define an effective mechanism for resolving conflict situations related to discrimination and sexual harassment. This Regulation is developed on the basis of the following normative legal acts of Ukraine: the Constitution of Ukraine; Law of Ukraine "On Education"; Law of Ukraine "On Higher Education"; Law of Ukraine "On Principles of Preventing and Combating Discrimination in Ukraine"; Law of Ukraine "On Ensuring Equal Rights and Opportunities for Women and Men"; Convention for the Protection of Human Rights and Fundamental Freedoms; Convention for the Suppression of Discrimination in Education; Convention on the Elimination of All Forms of Discrimination against Women; General Recommendation No 25 to Article 4, paragraph 1, of the Convention on the Elimination of All Forms of Discrimination against Women; General Comment № 16 (2005) "Equal rights for men and women to enjoy economic, social and cultural rights" (Article 3 of the International Covenant on Economic, Social and Cultural Rights; UN Committee on Economic, Social and Cultural Rights). ONMedU provides training and employment that is free from discrimination, sexual harassment, intimidation or exploitation. The University recognizes the importance of confidentiality. All persons responsible for the implementation of this policy (staff of deans' offices, faculties, institutes and the Center for Gender Education, members of the student government and ethics committee, vice-rector for research and teaching) are confidential about those who report or accuse of discrimination. or sexual harassment (except where the law requires disclosure and / or when disclosure by the University is necessary to protect the safety of others).

ONMedU creates a space of equal opportunity free from discrimination of any national, racial or ethnic origin, sex, age, disability, religion, sexual orientation, gender, or marital status. All rights, privileges, programs and activities granted to students or staff of the University apply to all without exception, provided they are properly qualified.

Academic Integrity Policy

Adherence to academic integrity by students involves independent performance of educational tasks, tasks of current and final control of learning outcomes.

The use of prohibited auxiliary materials or technical means (cheat sheets, headphones, telephones, smartphones, etc.) during control activities is unacceptable in the educational activities of participants in the educational process; passing of procedures of control of results of training by fictitious persons.

For violation of academic integrity, the applicant may be held subject to the following academic liability:

- reduction of assessment results (exam, test, etc.),

- re-assessment (exam, test, etc.),
- appointment of additional control measures (additional individual tasks, tests, etc.),
- re-passing the relevant educational component of the educational program,
- deprivation of the right to participate in competitions for scholarships,
- deprivation of tuition benefits provided by the University,
- deductions from the university.

Attendance and lateness policy.

Absence of a student at lectures or practical classes is noted in the journal of visits in the form of a mark "nb", delay - "op". The student must work off the practical classes for 2 weeks.

Mobile devices

The student can use technical means (phones, smartphones, tablets) in preparation for the test computer control.

Behavior in the audience

It is important for students to follow the rules of good behavior at the university. These rules are common to all, they also apply to all faculty and staff, and are not fundamentally different from the generally accepted norms.

During classes

•allowed:

- leave the audience for a short time if necessary and with the permission of the teacher;

- drink soft drinks;
- take photos of presentation slides;
- take an active part in the lesson).

•forbidden:

- eat (except for persons whose special medical condition requires another - in this case, medical confirmation is required);

- smoking, drinking alcohol and even low-alcohol beverages or drugs;
- use obscene language or use words that offend the honor and dignity of colleagues and faculty;
- gambling;

- damage the material and technical base of the university (damage inventory, equipment; furniture, walls, floors, litter the premises and territories);

- shouting, shouting or listening to loud music in classrooms and even in corridors during classes.

Plagiarism and academic integrity

The Department of Surgical Dentistry of ONMedU maintains zero tolerance for plagiarism. Students are expected to constantly raise their awareness of academic writing. The first lessons will provide information on what to consider plagiarism and how to properly conduct research and scientific research.

Occupational Health

The first lesson of the course will explain the basic principles of labor protection by conducting appropriate training. It is expected that every higher education seeker should know where the evacuation exit closest to the audience is, where the fire extinguisher is, how to use it, and so on.

Evaluation

Methods of current control

Current control is carried out on the basis of daily control of theoretical knowledge, practical skills through oral interviews, computer testing. At the end of the discipline, the current performance is calculated as the average current score.

Forms and methods of final control

The form of final control is an oral exam. At the end of the 4th year students take an exam. The theoretical part includes answers to questions in the ticket, solving a practical problem or solving test problems (30), reading radiographs, selection and explanation of the purpose of surgical instruments for surgery.

Independent work of students

Types of independent work of students: preparation for practical classes and study of topics that are considered only in terms of independent work of students, search and study of additional literature, writing essays, reports for presentations with messages in practical classes.

Evaluation criteria

- "excellent" - receives a student who fully possesses the theoretical educational material on the topic, can use the acquired knowledge to answer questions, justify their answer; mastered the practical skills provided by the topic of the lesson; solves test problems on the topic and explains the course of their solution;

- "good" - gets a student who fully possesses theoretical teaching material on the topic, can use the knowledge to answer questions, but with some difficulty justifies his answer; mastered the practical skills provided by the relevant lesson; can solve test problems on the topic and explain the course of their solution;

- "satisfactory" - gets a student who does not have enough theoretical teaching material on the topic, has difficulty using the knowledge gained, can not justify their answer; not sufficiently mastered the practical skills provided by the relevant lesson; with difficulty solves test problems on the topic;

- "unsatisfactory" - receives a student who does not have theoretical educational material on the topic, can not use the acquired knowledge to answer questions and justify their answer; has not mastered all the practical skills required by the relevant lesson; cannot solve and explain the solution of test problems on the topic.

Equipment, logistics and software of the discipline / course

In order to introduce new educational technologies, a phantom class of the Department of Surgical Dentistry of ONMedU was created, which is equipped with modern computer and video equipment for demonstration of operations and thematic films. To demonstrate and practically master the skills of local anesthesia in the maxillofacial area and dental implant surgery, the phantom class is equipped with phantoms of the head with replaceable jaw modules, collapsible models of the skull and jaws, sets of tools for tooth extraction, surgical interventions such as dental implantation. and elimination of complications of dental implantation.

List of recommended reading

Required

1. Маланчук В.О. Хірургічна стоматологія та щелепно-лицева хірургія: підручник; У 2 т. –Т.1/ Маланчук В.О., Воловар О.С., Гарляускайте І.Ю. –К.: Логос, 2011 –627 с.

2. МаланчукВ.О.. Хірургічна стоматологія та щелепно-лицева хірургія: підручник; У 2 т. –Т. 2/ Маланчук В.О., Логвіненко І.П., Маланчук Т.О. та ін. –К.: ЛОГОС, 2011–606 с.

3. Тимофсев О.О. Щелепно-лицева хірургія: Підручник для мед. ун-тів, інст., акад. —2-ге вид, випр. Затверджено МОН / О.О. Тимофсев —К., 2017. —752с.

4. Хірургічні етапи дентальної імплантації (Базовий курс) [Текст]:навчальний посібник для студентів стоматологічних факультетів вищих медичних закладів IV рівня акредитації / Аветіков Д.С., Криничко Л.Р., Ставицький С.О.. ВДНЗУ «УМСА». –Полтава: 2016. –108 с

5. Параскевич В.Л. Дентальна імплантологія. Основи теорії і практики. -2-е вид. -М.: Медичне інформаційне агентство, 2006.

6. Дентальная імплантологія. Вступний курс : Учб. посібник /В.І. Куцевляк, Н.Б Гречко, С.В. Алтунина, С.Л Старікова. -Харків: ХДМУ, 2005.

7. Заблоцький Я.В. Імплантація в незнімному протезуванні /Я.В. Заблоцький. –Львів :

ГалДент, 2006. –156 с.

8. В. П. Неспрядько, П. В. Куц. Дентальна імплантологія. Основи теорії та практики. Навчальний посібник. Київ, «Самміт-книга», 2015. – 348 с.

9. Невідкладна допомога в практичній хірургічній стоматології (методичнівказівки) / уклад. Я.Е. Варес та ін. –Львів, 2014 – 34с

10. Хирургическая стоматология в схемах и таблицах: Учеб. пособие для студентов и врачейинтернов / Г.П. Рузин, А.А. Дмитриева - Харьков: ХГМУ, 2001. - 108 с.

11. Тимофеев А. А. Руководство по челюстно-лицевой хирургии и хирургической стоматологии / А.А.Тимофеев. - 5-е изд., перераб. и доп. - Киев : Червона Рута-Турс, 2012. - 1048 с.

12. Тимофєєв А.А. Челюстно-лицевая хирургия: Учебник для мед. ВУЗ IV ур. аккр. — 2 е изд., перераб. и доп. Утверждено МОН / Тимофеев А.А. — К., 2015. — 800 с.

13. Тимофєєв О.О. Щелепно-лицева хірургія: Підручник для мед. ун-тів, інст., акад. — 2-ге вид, випр. Затверджено МОН / О.О. Тимофєєв — К., 2017. — 752 с.

14. Маланчук В. А. Непосредственная дентальная имплантация: научноучебное издание для студентов и врачей / В. А. Маланчук. -Киев, 2008. -154 с

15. PETERSON'S PRINCIPLES OF ORAL AND MAXILLOFACIAL SURGERYThird Edition, Vol. 1, 2012. -2000 p.

16. PETERSON'S PRINCIPLES OF ORAL AND MAXILLOFACIAL SURGERYThird Edition, Vol. 2, 2012. -1772 p.

17. Fundamentals of Implant Dentistry. Gerard Byrne. John Wiley & Sons, 2014. -264 c.

18. .Choi B. H. Flapless implantology / Choi B. H., Jeong S. M., Kim J., Engelke W. -Korea Seoul: Daehan Narae Publishing Inc., 2008. –120 p.

19. Atlas of Human Anatomy / F. Netter –2nded. –New Jersey: ICON Learning Systems. –592 p.

Additional:

1. Бернадський Ю.Й. Основи щелепно-лицевої хірургії і хірургічної стоматології: навч. посібник. -3-е вид., перероб. і доп. -Київ: Спалах, 2003

2. Мигович М. Місцеве знечулення тканин щелепно-лицевої ділянки: посіб. / М. Мигович, І. Мигович. – Львів, 2004

3. Рузін Г. П. Хірургічна стоматологія в схемах і таблицях: навч. посіб. для студ. стомат. ф-тів вищих мед. навч. закл. IV рівня акредитації / Г. П. Рузін, А. А. Дмитрієва, О. Ю. Стоян ; заред. Г. П. Рузіна. –Вінниця: Нова книга, 2007

4. Рузін Г. П. Основи технології операцій у хірургічній стоматології та щелепно-лицевій хірургії: навч. посіб. для студ. стоматол. ф-тів вищих мед. навч. закл. IV рівня акредитації / Г. П. Рузін, М. П. Бурих. –Вінниця: Нова книга, 2008.

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