

**Thematic plan of seminar-type classes
in discipline «Implantology and reconstructive oral surgery»
for students of 2022 year of admission
under the educational programme
cipher 31.05.03 Dentistry,
specialisation (profile) Dentistry
(Specialist's),
form of study full-time
for the 2025-2026 academic year**

№	Thematic blocks	Practical training within the framework of ТБЗ	Hours (academic) 4
8 семестр			
1.	<p>The history of development, current state, and prospects for the development of dental (implant) implantology.1 Prospects and trends in the development of implantology as a science. The problem of choosing between an implant and a bridge prosthesis, arguments for and against. The possibilities of modern implantology.2</p> <p>Theoretical justification of the method of dental implantation.1 Legal aspects of dental implantation. Patient information. Documentation.2</p> <p>Causes of bone tissue loss in the area of missing teeth and their consequences.1 Opportunities for patient rehabilitation using dental implants.2</p>	ПІІ	6
2.	<p>Indications and contraindications for the use of dental implants.1 Indications for dental implantation. General contraindications for dental implantation. Local contraindications for dental implantation. Risk factors for dental implantation.2</p> <p>Anatomical prerequisites for dental implantation. Causes of bone loss in the area of missing teeth and their consequences.1 Biology of bone tissue. Physiological basis of bone tissue response to trauma. Regeneration of the jawbone. Hormonal regulation of bone vital activity. Reaction of bone tissue to functional load. Architecture of bone tissue. Types of structure of jawbone bone tissue.2</p> <p>The phenomenon of osteointegration.1 Research by P.I. Branemark. The theory of clot retraction in implantology. Mechanisms of osteogenesis during implantation. The concept of contact and distant osteogenesis. Factors affecting the optimization of the osteointegration process. Morphological features of the bone-implant contact zone.2</p>	ПІІ	6
3.	Diagnosis and treatment planning for patients using dental implants. Key factors for planning implantation.1	СМ	6

	<p>Scheme of pre-implant diagnostic examination. Basic and additional methods of examination of patients in treatment using dental implants. Use of CT in planning of implantological treatment. Planning of treatment in the most common clinical situations. Type of adentia, methods of prosthetics, volume of bone tissue, type of bone architectonics.2</p> <p>Types of implants and features of different implant systems.1 The size range of implants. Features of the macro- and microrelief of the implant surface. Comparative anatomy of the dental-alveolar and implant-alveolar segment.2</p> <p>Surgical instruments and medical support for dental implantation.1 Preoperative preparation of the patient for surgery (premedication, pain relief, and sedation). Postoperative management of the patient. Dynamics of the acute period. Dispensary supervision</p>		
4.	<p>Basic methods of implantation.1 One-stage and two-stage approaches in the use of dental implants. Terms of implantation, type of load. Types of surgical templates and methods of their production.2</p> <p>Surgical stage in dental implantation.1 Features of anesthesia. Formation of the implant bed, installation of the implant, closure of the wound.2</p> <p>Immediate implantation.1 Indications, contraindications. Algorithm for making a decision on immediate implantation. Features of the surgical stage.2</p>	CM	6
5.	<p>Implantation in complex clinical cases.1 Implantation in adverse anatomical conditions (in the area of bone tissue defects). Types of defects.2</p> <p>Biological foundations of bone grafting.1 General principles of bone grafting. Types of reconstructive interventions on the jaw bones and their techniques.2</p> <p>Modern concepts of osteoplastic materials.1 Their application in dental implantology and in reconstructive interventions in the oral cavity, tooth-preserving surgeries.2</p> <p>Monitoring the performance of independent work</p>	PII	6
6.	<p>Anatomical prerequisites for subantral augmentation. Sinus lifting.1 Open sinus lifting. Closed sinus lifting. Indications. Contraindications. Methods of performance.</p> <p>Guided bone tissue regeneration in dental implantology.1 Basic techniques of directed tissue regeneration using membrane technique and titanium frames.2 Possible complications at the stage of dental implants installation and ways of their elimination.1</p> <p>Complications.2 Prevention and treatment of complications that occur in the early postoperative period and in the long-term period of dental implantation.2</p> <p>Control of knowledge, skills, and abilities</p>	CM	6
	Total		36

¹ – topic

2 – essential content

3 – RP – work with a patient; SM – simulation modules

4 – one thematic block includes several classes, the duration of one class is 45 minutes, with a break between classes of at least 5 minutes

Considered at the meeting of the Department of Surgical Dentistry and Maxillofacial Surgery,
Minutes dated May 17, 2025, No. 9.

Head of the Department



Е.Н.Ярыгина