

**Thematic plan of seminars
in the discipline "Gnathology"
for students in the year of admission 2021
according to the educational program 31.05.03 Dentistry,
Dentistry profile (specialty), full-time education
for the 2025-2026 academic year**

№	Thematic blocks	Practical training in the framework of the thematic block	Hours (academic)
	9 semester		
1	Fundamentals of clinical gnathology (biomechanics of the dentofacial system). The main links of the dentofacial system and their function. ¹ The main links of the dentofacial system and their function. The relationship of the main elements of the dentofacial system. Biomechanics of the dentofacial system. Movements of the lower jaw. ² Part 1	PT	2
	Fundamentals of clinical gnathology (biomechanics of the dentofacial system) ¹ Occlusal surface (morphological and functional features). ² Part 2	PT	2
	Fundamentals of clinical gnathology (biomechanics of the dentofacial system). ¹ Factors that determine the relief of the occlusal surface ("occlusion factors"). ² Part 3	PT	2
2	Functional analysis of the maxillofacial system. Clinical and laboratory research methods. ¹ Types of articulators. Device. The procedure for working with them. The facial arch. The overlay algorithm. The indicator of the position of the lower jaw. Assessment of occlusion, occlusion, identification and characterization of supercontacts. Analysis of occlusograms, diagnostic models in the articulator, marking of supercontacts. ² Part 1	SM	2
	Functional analysis of the maxillary-facial system. Clinical and laboratory research methods. ¹ Functional tests. Clinical index of dysfunction (Helkimo M, 1976). ² Part 2	SM	2
	Functional analysis of the maxillofacial system. Clinical and laboratory research methods. ¹ Electromyography. Graphical research methods. Intraoral registration of movements of the mandible (functionography). Out-of-mouth recording of mandibular movements (axiography). ² Part 3	SM	2
3	The functional state of the dentoalveolar system with defects in the hard tissues of the teeth and the partial absence of teeth. ¹ Definition of the term "deformation". Etiological factors of deformation of teeth and dentition. Pathogenesis of deformations of the dentition (theories of Godon, Kalvelis, Kurlyandsky, Abrikosov). Classification of deformations of teeth and dentition. ² Part 1	SM	2
	The functional state of the dentoalveolar system with defects in the hard tissues of the teeth and the partial absence of teeth. ¹	SM	2

	Treatment of tooth deformation and horizontal deformation of the dentition. Treatment of dental deformities of the dentition. Treatment of dentoalveolar deformities of the dentition. ² Part 2		
	The functional state of the dentoalveolar system with defects in the hard tissues of the teeth and the partial absence of teeth. ¹ Classification of bite deformities. Varieties of clinical manifestations. Treatment of bite deformity with the preservation of a straight bite or transition to an orthognathic bite with a decrease in height. The sequence and principle of treatment of bite deformities with a decrease in the height of the lower third of the face and the establishment of a deep bite. The sequence and principle of treatment of bite deformities with the establishment of a biprognathic ratio of the dentition. ² Part 3	SM	2
4	Gnathological aspects of orthodontic and orthopedic treatment of patients with anomalies of teeth, dentition, occlusion. ¹ Methods of examination of patients with anomalies of the dentoalveolar system. Features of the treatment of dentoalveolar anomalies in adult patients. ² Part 1	SM	2
	Gnathological aspects of orthodontic and orthopedic treatment of patients with anomalies of teeth, dentition, occlusion. ¹ Features of the treatment of anomalies of the dentition, complicated by periodontitis. ² Part 2	SM	2
	Gnathological aspects of orthodontic and orthopedic treatment of patients with anomalies of teeth, dentition, occlusion. ¹ Features of the treatment of anomalies of the dentition, complicated by deformations of the dentition. ² Part 3	SM	2
5	Causes of functional overload of periodontal tissues. Traumatic occlusion. ¹ Functional overload of periodontal tissues, etiology, pathogenesis. The concept of "traumatic occlusion". Purpose of selective grinding of teeth. Indications and contraindications for selective grinding of teeth. Methods for detecting supercontacts and materials used. ² Part 1	SM	2
	Causes of functional overload of periodontal tissues. Traumatic occlusion. ¹ Functional overload of periodontal tissues, etiology, pathogenesis. The concept of "traumatic occlusion". Purpose of selective grinding of teeth. Indications and contraindications for selective grinding of teeth. Methods for detecting supercontacts and materials used. Modern diagnostic systems for supercontacts (scanning densitometers, hardware and software complex "T-Scan III"). ² Part 2	SM	2
	Causes of functional overload of periodontal tissues. Traumatic occlusion. ¹ Methods and basic rules for selective grinding of teeth. Selective grinding of centric supercontacts. Selective grinding of eccentric supercontacts. Errors in the conduct of selective grinding of teeth. ² Part 3	SM	
	Total		30
№	Thematic blocks	Practical training in the framework of the thematic block	Hours (academic)
	10 semester		
1	Diseases of the temporomandibular joint and chewing muscles. Dysfunctional conditions of the temporomandibular joint. ¹	SM	2

	Etiology, pathogenesis of dysfunctional conditions of the temporomandibular joint. Classification of diseases of the temporomandibular joint. Diagnosis of dysfunctional conditions of the temporomandibular joint. ² Part 1		
	Diseases of the temporomandibular joint and chewing muscles. Dysfunctional conditions of the temporomandibular joint. ¹ Clinical manifestations of dysfunctional conditions of the temporomandibular joint and their differential diagnosis. ² Part 2	SM	2
	Diseases of the temporomandibular joint and chewing muscles. Dysfunctional conditions of the temporomandibular joint. ¹ Parafunctions of masticatory muscles. Etiology, pathogenesis. clinical picture. Diagnostics. Differential Diagnosis. ² Part 3	SM	2
2	Bruxism. ¹ Bruxism. Etiology, pathogenesis. Classification and stages of Bruxism development. ² Part 1	SM	2
	Bruxism. ¹ Clinical picture. Diagnostics. Differential Diagnosis. ² Part 2	SM	2
	Bruxism. ¹ Complex methods of treatment. Prevention. ² Part 3	SM	2
3	Dislocation of the TMJ disc. ¹ Etiology, pathogenesis. Clinical picture. ² Part 1	PT	2
	Dislocation of the TMJ disc. ¹ Diagnostics. Differential Diagnosis. ² Part 2	PT	2
	Dislocation of the TMJ disc. ¹ An integrated approach to the treatment of dislocation of the TMJ disc. ² Part 3	PT	2
4	Diseases of the temporomandibular joint and chewing muscles. Habitual dislocations in the joint. ¹ Etiology and pathogenesis of habitual dislocations in the joint. Diagnosis of condylar and disc disorders. clinical picture. Differential Diagnosis. ² Part 1	PT	2
	Diseases of the temporomandibular joint and chewing muscles. Habitual dislocations in the joint. ¹ Features of clinical manifestations. ² Part 2	SM	2
	Diseases of the temporomandibular joint and chewing muscles. Habitual dislocations in the joint. ¹ Treatment of habitual dislocation. Methods of complex therapy. ² Part 3	SM	2
5	Basic principles of complex treatment of diseases temporomandibular joint and masticatory muscles ¹ Algorithm for the complex treatment of diseases of the temporomandibular joint and masticatory muscles. Types of medical diagnostic devices. ² Part 1	SM	2
	Basic principles of complex treatment of diseases temporomandibular joint and masticatory muscles ¹ Methods of manufacturing of occlusal splints. ² Part 2	SM	2
	Basic principles of complex treatment of diseases temporomandibular joint and masticatory muscles ¹ Complications with the use of bite blocks and occlusal splints. ² Part 3	SM	2
6	Methods for determining the central ratio of the jaws. Central relation of jaws, central and "habitual" occlusion ¹ . The central ratio of the jaws and the hinge axis of the articular heads. Central relation of jaws, central and "habitual" occlusion. The central ratio of the jaws and temporomandibular joint. ² Part 1	SM	2
	Methods for determining the central ratio of the jaws.	SM	2

	Central relation of jaws, central and "habitual" occlusion ¹ . 1. Methods for determining the central ratio of the jaws. Materials for fixing the central ratio of the jaws. ² Part 2		
	Methods for determining the central ratio of the jaws. Central relation of jaws, central and "habitual" occlusion ¹ . Checking the correctness of determining the central ratio of the jaws. ² Part 3	SM	2
7	Restoration and preservation of occlusion in the restoration dentistry. Restoration of front teeth fixed prostheses, taking into account the registration of incisal paths. ¹ Restoration and preservation of occlusion in restorative dentistry. The use of articulators in the manufacture of laboratory work (inlays, veneers, removable and non-removable dentures). ² Part 1	SM	2
	Restoration and preservation of occlusion in the restoration dentistry. Restoration of front teeth fixed prostheses, taking into account the registration of incisal paths. ¹ Restoration of front teeth with fixed dentures with taking into account the registration of incisal paths. ² Part 2	SM	2
	Restoration and preservation of occlusion in the restoration dentistry. Restoration of front teeth fixed prostheses, taking into account the registration of incisal paths. ¹ Registration principles incisal path in the articulator. ² Part 3	SM	2
8	Gnathological basics of occlusal modeling surfaces. Modeling the occlusal surface with taking into account occlusal movements of the lower jaw. Tools and materials. ¹ Diagnostic wax modeling of restorations taking into account the "occlusal compass". Tools and materials. ² Part 1	PT	2
	Gnathological basics of occlusal modeling surfaces. Modeling the occlusal surface with taking into account occlusal movements of the lower jaw. Tools and materials. ¹ Marking up and preparing models. The sequence of modeling elements of the occlusal surface. ² Part 2	PT	2
	Gnathological basics of occlusal modeling surfaces. Modeling the occlusal surface with taking into account occlusal movements of the lower jaw. Tools and materials. ¹ Transfer of the prototype of the future restoration into the oral cavity (mock-up). Materials. The sequence of application. ² Part 3	PT	2
9	Occlusion of dentures on implants. ¹ Examination of patients before implantation. Planning designs on implants. Features of prosthetics on implants. ² Part 1	SM	2
	Occlusion of dentures on implants. ¹ The choice of types of occlusion in various clinical situations. ² Part 2	SM	2
	Occlusion of dentures on implants. ¹ The basic principles of the design of prostheses on implants. Risk factors for prosthetics on implants. Causes of complications. ² Part 3	SM	2
10	Medical errors in the clinic of orthopedic dentistry, their prevention, elimination of consequences. ¹ Mistakes and complications at the stages of orthopedic treatment fixed dentures: errors and complications at the manufacturing stages of veneers, inlays, crowns, and bridges. Causes and remedies. ² Part 1	PT	2

	Medical errors in the clinic of orthopedic dentistry, their prevention, elimination of consequences. ¹ Errors and complications at the stages of manufacturing removable denture structures. Causes and remedies. ² Part 2.	PT	2
	Medical errors in the clinic of orthopedic dentistry, their prevention, elimination of consequences. ¹ Errors and complications at the stages of orthopedic treatment with removable denture structures (plate and bar). Ways of prevention and elimination. ² Part 3.	PT	2
	Total		60

1 - topic

2 - essential content

3- PT - practical training, SM - simulation modules

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

Considered at the meeting of the Department for Prosthetic dentistry "17" May 2025, protocol No 11.

Head of the Department



V.I. Shemonaev