

Ministry of Health of the Kyrgyz Republic  
Ministry of Education and Science of the Kyrgyz Republic  
Educational and Methodical Unit on Higher Medical and Pharmaceutical  
Education under the ME&S

## **CATALOGUE OF COMPETENCIES**

of Higher Educational Institution Graduate in the Specialty 560001  
“Dentistry”  
UNDERGRADUATE LEVEL

Bishkek 2015

The Catalogue of Competencies is developed using materials of the State Educational Standard in the specialty 560004 “Dentistry” (undergraduate level).

The Working Group members: Kalbaev A.A., Cholokova G.S., Urgunaliyev B.K., Ergeshov S.M., Kuramaeva U.K., Abaskanova P.D., Davletov B.M., Baktybekov C.B., Kaliev M.R., Boronchiev T.T., Momusheva M.T.

The Catalogue is reviewed by: Chief physician of the SDP No. 2, Bishkek, PhD Bashirov M. B. Doctor of Medical Sciences, Professor I. M. Yuldashev.

It is reviewed and recommended for publishing by the Educational and methodical unit on higher medical and dentistry education under the KR MES (Protocol No. \_\_\_ as of \_\_\_ 2018).

**CONTENTS**

**EXPLANATORY NOTE**

**CHAPTER 1. GENERAL TASKS**

**CHAPTER 2. SYMPTOMS/PROBLEMS**

**CHAPTER 3. DISCIPLINARY TASKS**

**CHAPTER 4. MEDICAL SKILLS / MANIPULATIONS**

## EXPLANATORY NOTE

Pre-graduate training in the specialty "General Practice dentistry" provides professional training of a specialist who has deep theoretical and practical knowledge in the diagnosis, prevention and treatment of diseases and is ready for subsequent mandatory postgraduate education, which gives the legal right to provide primary medical, social and medical specialized care to dental patients.

The list of competencies is compiled taking into account the structure of dental diseases and medical problems that are most common in dental practice in Kyrgyzstan, and meets the requirements of the State Educational Standard of Higher Professional Education.

According to the State Educational Standard of Higher Professional Education, a graduate must master the following activities::

- Preventive maintenance
- Diagnostic information
- Medical treatment
- Rehabilitation
- Educational program
- Organizational and managerial support
- Research and development

This catalog defines the tasks corresponding to the listed types of activities. The following are determined •

- The purpose and content of the pre-graduate training of a general dentist
- The level of competence, knowledge and skills of a general dentist.

Developed by:

- Working training programs for general dental practitioners
- Criteria for assessing the quality of training of students and doctors at various stages of training
- Standard requirements for certification of general practice dentists
- Standards of examination, treatment, rehabilitation, and follow-up of patients.

Organized by:

- Learning process
- Professional orientation of applicants entering medical universities.

Held:

- Certification of graduates

	Level 1	Level 2
Clinical conditions	<p>The graduate should be guided in this clinical situation:</p> <ul style="list-style-type: none"> <li>* make a preliminary diagnosis,</li> <li>* give a definition in general terms, without going into details</li> <li>* refer to a specialist for consultation</li> </ul>	<p>The graduate must solve the clinical situation:</p> <ul style="list-style-type: none"> <li>* can collect anamnesis in a structured way,</li> <li>* perform a physical examination,</li> <li>* conduct an active search for typical complaints and symptoms,</li> <li>* can continue the appropriate diagnostic and therapeutic measures, taking into account the epidemiological data, the results of laboratory research methods,</li> <li>* can properly explain to the patient the essence of the necessary diagnostic, therapeutic and rehabilitation measures.</li> </ul>
theoretical bases	<p>The level of general knowledge of the graduate:</p> <ul style="list-style-type: none"> <li>* can describe the concept or procedure in general terms, including indications and contraindications,</li> <li>* knows the relevance and significance of this phenomenon/procedure in a specific clinical situation,</li> <li>* saw the correct execution of the procedure (in a clinical setting, on a simulator, on video, or through other technical means)</li> </ul>	<p>The level of practical application of the graduate:</p> <ul style="list-style-type: none"> <li>* * can use their knowledge in interpreting the results of examinations, advising patients on treatment, prevention and rehabilitation.</li> </ul>

To indicate the competence that a graduate should possess in the management of diseases/pathological conditions, the following letter designations are used:

A	The diagnosis of the disease is made directly by the doctor on the basis of data from physical examination methods, simple examination methods prescribed and interpreted by the doctor himself.
B	Treatment is carried out personally by a doctor, including the usual treatment regimens for uncomplicated cases.
C	The doctor is able to assess the patient's condition and begin to provide urgent measures. The doctor is not obliged to make a clinical diagnosis, his emergency measures can be based on a reasonable preliminary diagnosis.
D	The doctor knows and is able to carry out preventive measures.

Chapter 4, "Medical Manipulations," lists the manipulations that a graduate should be familiar with and/or have some degree of proficiency in.

To describe the degree of proficiency in a skill that a graduate should possess, the following gradation of levels is used:

	Level 1	Level 2
Medical manipulations	<p>The graduate should have some practical experience:</p> <ul style="list-style-type: none"> <li>* can explain the principle of manipulation</li> <li>* knows the indications and contraindications to manipulation,</li> <li>* knows the clinical significance of the procedure of a specific clinical situation</li> <li>* saw the manipulation performed (on the patient, on the dummy, on the video, etc.).</li> </ul>	<p>The graduate should apply the skill regularly (the manipulation should be practiced on phantoms and on patients of all age categories, except newborns):</p> <ul style="list-style-type: none"> <li>- can explain the principle of manipulation,</li> <li>- has the correct technique of performing manipulation,</li> <li>- has sufficient experience for independent execution ,</li> <li>- can interpret the data obtained as a result of manipulation.</li> </ul>

All medical manipulations are conditionally grouped into the following groups:

- interviewing or collecting the patient's medical history,
- information management,
- physical examination,
- general manipulations,
- manipulations for emergency care,

- manipulations on: - therapeutic dentistry,
  - surgical dentistry,
  - orthopedic dentistry,
  - pediatric dentistry.

At the end of the Explanatory Note, it should be emphasized that to date, no similar documents have been developed in the country. This publication is the first attempt to develop a Catalog of competencies for a graduate of the Faculty of Dentistry of the I. K. Akhunbayev KSMA

#### Chapter 1. GENERAL TASKS

General tasks can be formulated in the form of general and special (professional) competencies. Special competencies are distributed according to the types of professional activity of the doctor. A graduate in the specialty 560004 "Dentistry" with the assignment of the qualification of a specialist "Dentist" in accordance with the goals of the MEP and the tasks of professional activity specified in paragraphs 3.4 and 3.8 of this State Educational Standard must have the following competencies:

a) universal:

General scientific competence (GC):

GC-1-is able to analyze socially significant problems and processes, to use in practice the methods of the humanities, natural sciences, biomedical and clinical sciences in various types of professional and social activities;

GC-2-is capable of analyzing philosophical problems of worldview, social and personal significance, basic philosophical categories, and self-improvement;

GC-3-is able to analyze significant political events and trends, to master the basic concepts and laws of the world historical process, to respect and respect the historical heritage and traditions, to evaluate state policy; has knowledge of historical and medical terminology;

GC-4-is able to analyze economic problems and social processes, use the methodology for calculating economic efficiency indicators;

GC-5-capable of logical and reasoned analysis, public speaking, conducting discussions and polemics, editing texts of professional content, cooperation and conflict resolution, tolerance;

GC-6-is ready to carry out the activity taking into account the moral and legal norms accepted in society; to observe rules of medical ethics, laws and regulations on work with confidential information, to keep medical secrecy

Instrumental competencies (IC):

IC-1-Is able and ready to solve standard tasks of professional activity using information, bibliographic resources, biomedical and pharmaceutical terminology, information and communication technologies and taking into account the basic requirements of information security;

IC-2-ready for written and oral communication in the state language and official languages, able to master one of the foreign languages at the level of everyday communication;

IC-3-Is capable and ready to use specialized equipment and medical devices intended for use in the professional field;

IC-4-is able to use management methods; organize the work of performers; find and make responsible management decisions in the context of different opinions and within the framework of their professional competence;

IC-5-Is capable and ready to work with computer equipment and software for system and application purposes for solving professional tasks;

IC-6-Is able and ready to apply the main methods, methods and means of obtaining, storing, processing, and transmitting scientific and professional information using modern information and communication technologies.

Social and personal competencies (SPC):

SPC-1-is able to implement the ethical and deontological aspects of medical activity in communication with colleagues, nurses and junior staff, children, their parents and adults;

SPC -2-is able to identify the natural-scientific nature of problems that arise in the course of a doctor's professional activity;

SPC -3-capable of analyzing medical information based on the principles of evidence-based medicine;

SPC -4-is able to apply modern social and hygienic methods of collecting and medical and statistical analysis of information on the health indicators of children and adults;

SPC -5-is able to use methods for assessing natural (including geographic) and medico-social environmental factors in the development of diseases in children and adults, and to correct them.

b) professional (PC):

Professional competencies:

PC-1-is able to analyze the results of its own activities to prevent medical errors, while being aware of the responsibility of disciplinary, administrative, civil, criminal;

PC-2-is able to conduct and interpret a survey, physical examination, clinical examination, the results of modern laboratory and instrumental studies, morphological analysis of biopsy, surgical and sectional material of patients, to issue a medical record of an outpatient and inpatient patient of a child and an adult;

PC-3-is able to conduct pathophysiological analysis of clinical syndromes, use reasonable methods of diagnosis, treatment, rehabilitation and prevention among children, taking into account their age and the adult population;

PC-4-is able to apply methods of asepsis and antiseptics, use medical instruments, carry out sanitary treatment of medical and diagnostic rooms, children's health organizations, master the technique of caring for sick children and adults;

PC-5-is able to conduct a forensic medical examination of living persons; interpret the results of laboratory studies of objects of forensic medical examination as a specialist;

PC-6-is capable of working with medical and technical equipment used in working with patients, computer equipment, receiving information from various sources, using the capabilities of modern information technologies to solve professional problems

Preventive activities:

PC-7-is able to carry out preventive measures with the population to prevent the occurrence of the most common diseases; to carry out general health measures to promote a healthy lifestyle, taking into account risk factors, to make recommendations on healthy nutrition, to evaluate the effectiveness of dispensary monitoring of healthy and chronically ill children and adults.

Diagnostic activity:

PC-8-is capable of making a diagnosis based on the results of biochemical studies of biological fluids and taking into account the laws of the course of pathology in organs, systems and the body as a whole;

PC-9-is able to analyze the patterns of functioning of individual organs and systems, use the knowledge of anatomical and physiological bases, basic methods of clinical and immunological examination and assessment of the functional state of the body of an adult and children for timely diagnosis of diseases and pathological processes;

PC-10-is able to identify the main pathological symptoms and syndromes of diseases in patients, use the algorithm for making a diagnosis (main, concomitant, complications) taking into account the ICD-10, perform basic diagnostic measures to identify urgent and life-threatening conditions;

PC-11-is able to analyze and interpret the results of modern diagnostic technologies in children and adults for successful therapeutic and preventive activities.

Medical activities:

PC-12-is able to perform basic therapeutic measures for the most common dental diseases and conditions in adults and children; timely identify life-threatening disorders (acute blood loss, respiratory failure, cardiac arrest, coma, shock), use methods of their immediate elimination, carry out anti-shock measures;

PC-13-is able to prescribe adequate treatment to patients in accordance with the diagnosis, to implement an algorithm for choosing drug and non-drug therapy for patients with dental diseases;

PC-14-is able to provide the adult population and children with first aid in case of emergency and life-threatening conditions, to carry out the hospitalization of patients in a planned and emergency manner;

PC-15-is able to prescribe and use the basic principles in the organization of medical nutrition;

Rehabilitation activities:

PC-16-is able to apply various rehabilitation measures (medical, social and professional) among adults and children with the most common dental diseases, to determine the indications for the transfer of children and adolescents to specialized groups for physical education after diseases;

PC-17-is able to determine the indications and contraindications to the appointment of physical therapy, physiotherapy, non-drug therapy, use the main resort factors in the treatment of adults and children;

Educational activities

PC-18-is capable of teaching secondary and junior medical personnel the rules of the sanitary and hygienic regime of the stay of patients and their families in medical and preventive institutions;

PC-19-is capable of teaching the adult population, children and their relatives the rules of medical behavior; to conduct hygienic procedures, to form the skills of a healthy lifestyle.

Organizational and managerial activities:

PC-20-is able to use the regulatory documentation adopted in the health care of the Kyrgyz Republic;

PC-21-is able to use the knowledge of the organizational structure, management and economic activities of dental institutions of various types to provide medical care to adults and children, analyze the performance of their structural units, evaluate the effectiveness of modern medical-organizational and socio-economic technologies in the provision of medical services to patients;

PC-22-is able to provide a rational organization of the work of middle and junior medical personnel of medical and preventive institutions; their training in basic manipulations and procedures performed in dental institutions;

PC-23-is able to solve the issues of examination of working capacity (permanent and temporary) among the population, to draw up appropriate documentation, to determine the need to refer the patient for medical and social expertise, to carry out the prevention of disability among adults and children.

Research activities:

PC-24-ready to study scientific and medical information, domestic and foreign experience on the subject of research;

## CHAPTER 2: SYMPTOMS/PROBLEMS

Common symptoms

1. Blood Loss
2. Loss of appetite
3. Eating disorders

Metabolic disorders

1. Hyperglycemia
2. Changes in blood parameters

Symptoms from the skin

1. Pallor of the skin
2. Skin rashes

1. Symptoms of the oral cavity

Caries and non-carious dental lesions

2. Loss of natural gloss of enamel
3. Formation of pigmented dentin
4. Enamel demineralization
5. Formation of a carious cavity

6. Toothache
  7. Hyperesthesia of teeth
- Pulpitis
1. Spontaneous pain
  2. Paroxysmal pain
  3. Night pains
  4. Lymphadenitis of regional lymph nodes

Periodontitis

1. Bad breath
2. Pain when biting
3. Changing the color of your teeth
4. Vasoparesis symptom
5. Positive percussion
6. Fistula stroke
7. Enlargement of regional lymph nodes

Periodontitis

8. Gum hyperemia
9. Swelling of the gums
10. Bleeding
11. Gum atrophy
12. Gum hypertrophy
13. Dental deposits
14. Tooth mobility
15. Periodontal tissue lysis
16. Gum recession
17. Gum soreness

Diseases of the oral mucosa (SOPR):

1. Hyperemia of the SOPR
2. Cyanosis of the SOPR
3. Plaque formation
4. Puffiness of the SOPR
5. Paresthesia
6. Itching
7. Burning sensation
8. Ulceration on the SOPR
9. Pigmentation on the SOPR
10. Hyposalivation
11. Increased salivation (hypersalivation)
12. Xerostomia (dry mouth)
13. Atrophy of the papillae of the tongue
14. Violation of taste sensitivity
15. Desquamation of the epithelium of the SOPR
16. Rashes on the SOPR
17. Nikolsky's symptom

### Partial secondary adentia

1. Lack of teeth
2. Atrophy of the mucosa and alveolar process
3. Tilt of the teeth towards the defect
4. Lowering the height of the lower third of the face
5. Senile progeria with a decrease in the lower third of the face
6. Bites with an unfixated bite
7. Defects of dentition of different localization
8. Sinking of the lips, cheeks

### Secondary deformities of the dentition

1. Partial absence of teeth
2. The Popov-Godon phenomenon
3. Facial asymmetry
4. Blockage of movements of the lower jaw in the sagittal, transversal directions
5. Denudation of the cervical region of the teeth
6. TMJ dysfunction
7. Vertical dentoalveolar elongation of teeth
  - a) vacant hypertrophy of the alveolar process
  - b) increase in the clinical crown of the tooth
8. Fan-shaped divergence of the front teeth
9. Functional overload of the periodontal teeth
10. Impaired joint function with possible subsequent development of arthrosis

### Complete secondary adentia

1. Aesthetic dissatisfaction
2. Pronounced nasolabial and chin folds
3. Drooping corners of the mouth and outer edges of the eyelids
4. Reduction of the lower third of the face
5. Senile progeria
6. Inability to chew food
7. Speech formation disorders
8. TMJ pain
9. Kosten's syndrome
10. Formation of wrinkles in the oral area
11. Sinking of the lips, cheeks
12. Zayeds
13. Bone atrophy of the alveolar processes
14. The appearance of exostoses and bone protrusions
15. Flabbiness of the masticatory muscles
16. Atrophy of the masticatory muscles
17. Changes in the mucous membrane of toothless jaws

### Pathological erasability

1. Kosten's syndrome

2. Violation of the anatomical shape of the crown
3. Reducing the height of crowns
4. Vertical, horizontal and mixed tooth washing
5. Changing the color of teeth
6. Hyperesthesia of teeth
7. Erase facets
8. Crunch and crepitation of the TMJ
9. TMJ pain
10. Localized tooth erasure
11. Generalized tooth erasure

Influence of dental prosthesis materials on the soft tissues of the oral cavity

1 Galvanosis:

- 1) pain on the tongue
  - 2) perverse taste
  - 3) tingling of the tongue
  - 4) metallic taste
  - 5) beating by currents
  - 6) feeling sour

2 Toxic stomatitis:

- 1) Hyperemia
- 2) Burning sensation
- 3) Pasty mucosa
- 4) Hyposalivation
- 5) Saliva viscosity
- 6) General malaise, weakness, headache

Mandible joint diseases

1. Pain, stiffness when moving the lower jaw
2. Restriction of mouth opening
3. Habitual central occlusion
4. Zigzag mouth opening
5. Lack of smooth movement of the lower jaw
6. Clicks, crunches, gnashes when moving the jaw
7. Enlargement of the submandibular lymph nodes
8. Stuffiness and ringing in the ears

Congenital and acquired defects of the hard and soft palate in adults

1. Nasal speech
2. A defect in the hard and soft palate of different localization
3. Eating and breathing disorders
4. Facial asymmetry
5. Shortening and sinking of the upper lip
6. Shortening and squeezing the tip of the nose
7. Shortening of the dentition and deformation of the dental arch
8. Leaning on each other after teething

Fractures and defects of the maxillofacial region:

1. Incorrectly fused fractures

1. Open bite

2. Facial asymmetry

3. Deformity of the dentition

4. Aesthetic defect

5. Chewing disorder

2. False joint

1. Violation of the integrity of the dentition

2. Mobility of fragments

3. Difficulty chewing food

4. Microstomy

5. Narrowing of the oral fissure

6. Limited mouth opening

7. Violation of chewing, diction and aesthetic defect

3. Acquired defects of CHLO

1. Post-traumatic defects of CHLO

2. No nose

3. No auricle, eyeball

4. No upper and lower lip

5. The absence of various fragments of the jaw

Symptoms from the oral cavity

Dental adentia

1. Lack of teeth (milk, permanent)

2. Violation of aesthetics

3. Violation of biting and chewing food

Abnormality of the shape and size of the teeth

1. Changing the anatomical shape and size of the teeth

Anomalies in the position of the teeth

1. Incorrect position of the teeth in the dentition

2. Rotate the teeth on the axis

3. Changing the places of the teeth

Anomalies of the dentition

1. Violation of the shape and size of the upper and lower dentition

Anomalies of occlusion of the dentition

1. Incorrect closing of the dentition

Anomalies in the size of the jaws

1. Violation of the shape and size of the jaws in three directions

Teething diseases

1. Limited painful opening of the mouth.

2. Pain when swallowing (food, saliva).

3. Hyperemia of the mucosa around the 48 and 38 teeth.

4. Discharge of pus from under the hood

5. Increased body temperature

6. Enlarged and painful regional lymph node

## 7. Smell from behind the mouth

### Odontogenic periostitis of the jaws

1. Facial asymmetry
2. Smoothness of the transition fold
3. Hyperemia and edema of the transitional fold
4. Painful palpation
5. Periosteal jaw seal

### Odontogenic osteomyelitis

1. Vincent's Symptom
2. Muff-like thickening of the jaw bones
3. Formation of a fistula with purulent discharge
4. Fever
5. Formation of sequestrers
6. Putrid smell
7. Mobility of teeth of 2-3 degrees of "causal" and adjacent intact teeth
8. Weakness malaise, fever
9. Radiating pain
- 10 Tachycardia, hypertension

### Purulent-inflammatory diseases of mandible

#### Inflammatory infiltrate of cellular spaces mandible

#### Face configuration violation

#### The disappearance of the natural folds of the face

#### Narrowing of the eye slit

#### Restricting the opening of the mouth

#### The skin above the infiltrate is hyperemic, edematous in the fold is not collected

#### Chills, fever, malaise, weakness, loss of appetite

#### Symptom of fluctuation

#### The presence of a purulent-necrotic rod

#### Inflammatory and painful enlargement of regional lymph nodes

#### An hourglass symptom of

#### Maxillary sinusitis

#### Nasal breathing disorder

#### Nasal speech

#### Nasal discharge

#### Rhinoceros air plug

#### The presence of a fistula

#### Mandible injuries

#### Malocclusion

#### Soft tissue abrasions and bruises

#### Breaks are accompanied by:

#### The "steps" symptom»

#### The "load" symptom»

#### Mobility of bone fragments

#### Lacerated, open, burn wound

Infected wound  
Tooth mobility  
Hematoma  
The "glasses" symptom»  
The "double spot" symptom»  
Dental implantology  
Single defects of the dentition  
End defects of the dentition  
Included dentition defects  
Complete adentia  
Implantation under unfavorable anatomical and topographic conditions.  
Diseases of the salivary glands  
Xerostomia  
Hypersalivation  
Hyposalivation  
Xerodermatosis  
Xerophthalmia  
Enlargement of the salivary glands  
Changes in the color of saliva and the consistency of the salivary glands  
Thickening of the ducts  
Salivary " Colic»  
TMJ diseases  
Crunching and clicking in the TMJ area  
Joint excursion disorder  
Joint subluxation  
TMJ and facial pain  
Neuritis and trigeminal neuralgia  
The presence of pain and parasthesias  
The feeling of crawling goosebumps  
Reflex contraction of the facial and masticatory muscles  
Trigger zones  
No sensory defect  
Benign soft tissue tumors  
1. The presence of a tumor neoplasm  
2. Dense or soft-elastic consistency, painless on palpation.  
3. Clear border (in the capsule or in the shell), displaced tumor  
4. Cone-shaped horn of dense consistency, soldered to the base  
5. Dirty gray color  
6. Spots of dark brown, black, red and blue color  
7. A symptom of dystopia and loosening of teeth  
8. Bone or cement-like inclusions  
9. Paresthesia of the lips  
10. Multiple hypertrophy of the gingival papillae  
11. Knot, soft-elastic consistency, color purple, bluish. The surface is bumpy.  
12. Macrocheilia, macroglossia

13. Symptom of compression, swelling
14. The spot is bright red or bluish-purple in color
15. Soft consistency knot, ripple
16. The symptom of " noise or splashing of water»
17. Dilation of the lymphatic vessels and crevices
18. Randomly arranged cavities
19. Multi-chamber structure, milk-colored content +detritus+ cholesterol
20. Colorless birthmarks
21. Skin pigmentation (coffee with milk)
22. Elephantiasis (elephantiasis)
23. Destruction of the bones of the facial and cerebral skull
24. Malocclusion

### Macroglossia

#### Tumour-like formations

1. The "lion face" symptom»
2. Albright syndrome
3. Congenital bone formation disorder
4. Hypercalcemia, a decrease in inorganic phosphorus in the blood
5. Symptoms of periodontitis
6. On the X-ray image, the destruction of the alveolar processes of the jaws in the form of uneven zones of resorption
7. " Floating teeth»
8. Bone bonding line layering of new bone material
9. Damage to bones with mechanical stress
10. On the X-ray picture " lumps of cotton wool»
11. Face configuration violation
12. A symptom of instability and mobility of the teeth
13. On the radiograph, the symptom of " soap bubbles»
14. On the radiograph, the symptom of "honeycomb"
15. The symptom of " celluloid or plastic toys»

#### Odontogenic tumors of the jaw

1. Fusiform swelling of the body or angle of the lower jaw
2. The surface is smooth, bumpy
3. The consistency is dense
4. The "parchment crunch" symptom»
5. The "celluloid or plastic toy" symptom»
6. On the radiograph, the destruction site is oval or rounded, with a thin cortical plate
7. On the radiograph, the symptom of " bee honeycombs»
8. Petrified foci or rudiments of teeth
9. Uniform or lumpy swelling of the jaw
10. Elastic-elastic consistency
11. Cyanosis of the mucous membrane on the surface of the formation

12. On the radiograph, a non-uniform dense tissue equal to the density of the tooth, the edges are scalloped, spiny (raspberries, grapes or mulberries) - a symptom of "raspberries", "mulberries", "grapes".

Neodontogenic tumors of the jaw

On the X-ray of the tooth-a similar intense shadow

Foci of osteodystrophy

On the radiograph, the symptom+ tissue

Osteophytes, exostoses

Precancerous and malignant tumors

Erosion is a skin defect within the epidermis.

Papule-nodule-a limited asexual seal protruding above the surface of the mucosa.

Scales, increased keratinization of the epithelium, in the form of layered scales (horn plates)

Parakeratosis - a layer of dense white horn masses in a limited area, not removed by scraping

Limited focus of hyperkeratosis

Keratinization and epithelial hyperplasia

An ulcer is a deep lesion of the mucous membrane, involving the own layer of the mucous membrane and the deeper layers.

A sharply limited polygonal area of 0.2-1.8 cm on the red border of the lips, the surface is covered with tightly seated scales

The symptom of "cauliflower" is covered with a surface of tightly seated scales, a short, wide leg.

Jaw and soft tissue cysts mandible

1. The "plus" symptom»

2. The symptom of " parchment crunch»

3. "Rubber ball" symptom

4. Fluctuation symptom

5. On the radiograph, the rarefaction of the bone tissue is rounded or oval in shape (enlightenment)

6. Runge-Dupuytren symptom

7. Protrusion and thinning of the walls of the upper and lower jaw

8. Destruction of the "causal" tooth

9. Convergence or divergence of teeth

10. Fistulas in the area of the alveolar process of the jaw

11. Amber liquid + cholesterol crystals

12. Violation of the face configuration.

Congenital malformations of mandible in children

1. The presence of a cleft on the upper lip (one-sided, two-sided)

2. The presence of a cleft in the alveolar process of the upper jaw (unilateral, bilateral)

3. The presence of a cleft in the hard palate (complete, incomplete)

4. The presence of a cleft in the soft palate (complete, incomplete)

5. Violation of the act of sucking

6. Violation of the act of swallowing
7. Violation of speech formation (nasal voice)
8. Micrognathia of the upper jaw
9. Deformity of the septum and wings of the nose
10. Partial adentia (of the lateral incisors and canines of the upper jaw)

### CHAPTER 3: DISCIPLINARY TASKS

NAME OF THE NOSOLOGY	LEVEL
----------------------	-------

NAME OF THE NOSOLOGY	level	A	B	C	D
3.1 Diseases of therapeutic dentistry in children and adults					
Clinical conditions					
Dental diseases of non-carious origin:					
Hypoplasia	2	A	B		D
Fluorosis	2	A	B		D
Hyperplasia	2	A	B		D
Hereditary disorder	1				D
Traumatic injuries	2	A		C	D
Wedge-shaped defect	2	A	B		D
Erasing teeth	2	A		C	D
Necrosis, erosion of the hard tissues of the teeth	1			C	D
<b>Dental caries:</b>	2	A	B		D
Initial caries	2	A	B		D
Surface Level	2	A	B		D
Average	2	A	B		D
Deep	2	A	B		D
Compensated form of caries	2	A	B		D
Subcompensated form of caries	2	A	B		D
Decompensated form of caries	2	A	B		D
<b>Diseases of the tooth pulp:</b>					
Acute focal	2	A	B		D
Acute diffuse	2	A	B		D
Chronic fibrotic	2	A	B		D
Chronic gangrenous	2	A	B		D
Chronic hypertrophic pulpitis	2	A	B		D
Chronic acute pulpitis	2	A	B		D
<b>Periodontal diseases:</b>					
Acute serous apical periodontitis	2	A	B		D
Acute purulent apical	2	A	B		D

periodontitis					
Chronic fibrotic periodontitis	2	A	B		D
Chronic granulomatous periodontitis	2	A	B		D
Chronic granulating periodontitis	2	A	B		D
Chronic periodontitis in the acute stage	2	A	B		D
<b>Periodontal diseases</b>					
Gingivitis	2	A	B		D
Periodontitis	1			C	D
Periodontal disease	1			C	D
Periodontal disease	1			C	D
<b>Diseases of the oral mucosa</b>					
Traumatic injuries					
Leukoplakia					
<b>Infectious diseases</b>					
Acute herpetic stomatitis	1			C	D
Recurrent herpetic stomatitis	1			C	D
Herpangina	1			C	D
Measles stomatitis	1			C	D
Chickenpox stomatitis	1			C	D
Herpes zoster	1			C	D
Foot-and-mouth disease.	1			C	D
Ulcerative-necrotic stomatitis of Vincent	1			C	D
Impetigo	1			C	D
Chancriform pyoderma	1			C	D
Tuberculosis	1			C	D
SYPHILIS	1			C	D
Candidiasis SOPR	1			C	D
Actinomycosis	1			C	D
<b>Allergic diseases</b>					
Multiform exudative erythema	1			C	D
Chronic recurrent aphthous stomatitis	1			C	D
Behcet syndrome	1			C	D
<b>changes in the in exogenous intoxication</b>					
<b>DOMs</b>					
<b>Changes in some systemic diseases and metabolic diseases:</b>					
Hypo -, beriberi					
Diseases of the endocrine	1			C	D

systems					
Diseases of the gastrointestinal tract	1			C	D
Diseases of the cardiovascular system	1			C	D
Diseases of the blood system	1			C	D
Diseases of the nervous system	1			C	D
Collagenoses	1			C	D
Skin diseases	1			C	D
For systemic diseases	1			C	D
<b>Changes in dermatoses DOMs</b>					
Pemphigus	1			C	D
Red lichen planus	1			C	D
Lupus erythematosus					
<b>Anomalies and independent diseases of the tongue</b>					
Folded glossitis	1			C	D
Diamond-shaped glossitis	1			C	D
Black, hairy tongue	1			C	D
<b>Cheilitis (lip disease).</b>					
Exfoliative cheilitis	1			C	D
Simple glandular cheilitis	1			C	D
Contact allergic cheilitis	1			C	D
Actinic cheilitis	1			C	D
Meteorological hailit	1			C	D
Atopic cheilitis	1			C	D
Eczematous cheilitis	1			C	D
Macroheilitis	1			C	D
<b>Precancerous diseases</b>					
Bowen's disease	1			C	D
Warty precancer	1			C	D
Limited precancerous hyperkeratosis of the red border of the lips.	1			C	D
Abrasive precancerous cheilitis Manganotti	1			C	D
Skin horn	1			C	D
<b>Emergency conditions</b>					
Anaphylactic shock	2			C	D
Fainting	2			C	D
Collapse	2			C	D
Quincke's edema	2			C	D
Coma	1			C	D
External bleeding	2			C	D

<b>3.2. Diseases in orthopedic dentistry</b>					
<b>Complete defect of the crown part of the tooth</b>	2	A	B	C	
<b>Partial secondary adentia</b>	2	A	B	C	D
<b>Secondary deformities of the dentition and occlusion in partial secondary adentia</b>	2	A	B		
<b>Pathological erasability</b>	2	A			
<b>The effect of dental prosthesis materials on the soft tissues of the oral cavity (allergic and toxic reactions of the oral cavity):</b>					
Allergic stomatitis	1	A			
Toxic stomatitis	1	A			
Galvanosis	1	A			
<b>Diseases of the temporomandibular joint (TMJ):</b>					
TMJ dysfunction	1	A			
Arthritis	1	A			
Habitual TMJ dislocations	1	A			
Masticatory muscle contracture	1	A			
<b>Malformation of teeth and bite in adults:</b>	1	A			
Mesial bite	2	A	B		
Distal bite	2	A	B		
Open bite	2	A	B		
Deep bite	2	A	B		
Cross bite	2	A	B		
Anomaly of individual teeth	2	A	B		
<b>Complete secondary adentia</b>	2	A	B		
<b>Periodontal diseases:</b>					
Traumatic occlusion and its types	1	A	B		
Deformity of the dentition in periodontitis	2	A			
<b>Congenital and acquired defects of the hard and soft palate in adults</b>					
<b>Fractures and defects of the maxillofacial region:</b>					
Fractures of the upper jaw	1	A			
Fractures of the lower jaw	1	A			
<b>3.3 Diseases in pediatric</b>					

dentistry (orthodontics)					
<b>Clinical conditions</b>					
<b>Anomalies in the number of teeth:</b>					
Hypertension (in the presence of extra-complete teeth).	2	A		C	D
Hypodontia (full and partial dental adentia)	2	A		C	D
Anomalies in the shape and size of teeth:	2	A		C	D
Anomalies in the shape of teeth	2	A		C	D
Tooth color abnormality	2	A		C	D
Anomalies of the tooth size (height, width, thickness)	2	A		C	D
Anomalies of the structure of the hard tissues of the tooth	2	A			D
Hyperplasia of the hard tissues of the tooth	2	A			D
Macrodentia	2	A		C	D
<b>Anomalies of the position of the teeth (in one, two, three directions)</b>					
Crowding	2	A	B	C	D
Diastema	2	A	B	C	D
Offset	2	A			D
Tortioanomalialia	2	A		C	D
Tremis	2	A	B	C	D
Transposition	2	A			D
Retented or impacted teeth with an incorrect position of their or adjacent teeth	2	A			D
<b>Anomalies of the dentition:</b>					
Form violation	2	A			D
Violation of the size (in the transversal direction-narrowing, expansion; in the sagittal direction-elongation, shortening)	2	A		C	D
Violation of the sequence of teeth, violation of the symmetry of the position	2	A		C	D
Violation of contacts between adjacent teeth (crowding or rare position)	2	A		C	D

<b>Jaw abnormalities:</b>					
Violation of the size (in the sagittal direction-shortening, elongation, transversal direction-narrowing, expansion; in the vertical direction-increasing and decreasing height; combined in 2 and 3 directions)	1	A			D
Violation of the relative position of the parts of the jaw, violation of the position of the jaws	1	A			D
<b>Anomalies of occlusion of the dentition:</b>					
In the sagittal direction (distal, medial)	1	A			D
In the vertical direction (incisor disocclusion, direct occlusion, deep incisor occlusion, deep incisor disocclusion)	1	A			D
In the transversal direction (cross-occlusion, vestibulo-occlusion, lingvo-occlusion, palato-occlusion)	1	A			D
<b>3.4. SURGICAL DENTISTRY AND MAXILLOFACIAL SURGERY (MFS) SURGERY IN CHILDREN AND ADULTS</b>					
Teething diseases	2	A	B	C	D
Pericoronitis	2	A	B	C	D
Complications that occur during and after anesthesia	2	A	B	C	D
Complications that occur during and after tooth extraction surgery	2	A	B	C	D
Periodontitis	2	A	B	C	D
Odontogenic periostitis	2	A	B	C	D
Odontogenic osteomyelitis	1			C	D
Abscesses of MFS	2	A		C	D
Phlegmons of MFS	1			C	D
Thrombophlebitis of the facial veins	1			C	
Cavernous sinus thrombosis	1			C	
Sepsis, septic shock	1			C	
Odontogenic mediastinitis	1			C	
Actinomyces, tuberculosis, syphilis MFS	1			C	
Boils and carbuncles of MFS	2	A		C	

Erysipelas of MFS	1			C	
Lymphadenitis	1	A		C	D
Odontogenic maxillary sinusitis	1	A	B	C	D
Perforated maxillary sinusitis	1	A	B	C	D
Dislocations and fractures of teeth	1	A		C	D
Fracture of the alveolar process of the jaws	1	A		C	D
Neognestrel soft tissue injuries MFS	1	A		C	D
Fractures of the nasal bones	1	A		C	
Fractures of the zygomatic area and zygomatic arch	1			C	
Neognestrel fractures of the upper jaw	1	A	B	C	D
Neognestrel fractures of the lower jaw	1	A	B	C	D
Combined and combined MFS injuries	1	A		C	
Traumatic osteomyelitis of the jaw	1	A		C	D
Complications that develop in the treatment of patients with neognestrel trauma of the soft tissues and bones of the face	1	A		C	D
Inflammatory diseases of the salivary glands	1	A	B	C	D
Salivary stone disease	1	A		C	D
Reactive dystrophic diseases of the salivary glands	1	A		C	D
Retention cyst of the small salivary glands	2	A	B	C	D
Arthritis of the temporomandibular joint	1	A		C	D
Osteoarthritis of the temporomandibular joint	1			C	D
Ankylosis of the temporomandibular joint	1				D
Pain dysfunction of the temporomandibular joint	1	A	B	C	D
Mandibular contracture	1			C	D
Combat injuries to the soft tissues and bones of the face	1			C	D
Burns and frostbite of the face	1			C	D

Combined radiation damage	1			C	D
Early and late complications of CHLO injuries	1			C	D
Radicular cyst of the jawbones	2	A	B	C	D
Jawbone follicular cyst	1		B	C	D
Retromolar cyst	1			C	D
Keratocysta	1				D
Incisor and naso-palatine canal cyst	1			C	D
Adamantinoma of the jawbones	1			C	
Odontomas of the jawbones	1			C	
Cementoma of the jawbones	1			C	
Cementing fibroma of the jaw bones	1			C	
Fibrotic dysplasia	1			C	
Deforming osteodystrophy-Paget's disease	1			C	
Parathyroid osteodystrophy-Recklinghausen's disease	1			C	
Cherubism	1			C	
Exostosis-hyperostosis of the alveolar processes	2	A		C	D
Eosinophilic granuloma – Taratynov's disease	1			C	
Optional pre-cancers	1			C	D
Obligate precancers	1			C	D
Papilloma	2	A		C	D
Hemangioma MFS	1	A		C	
Cancer of the DOMs, skin, lip, tongue	1	A		C	
Osteoma of the jaw bones	1	A		C	
Chondroma	1	A		C	
Osteodysplasia	1	A		C	
Fibroma	1	A		C	
Myxoma	1	A		C	
Lipoma	1	A		C	
Atheroma	2	A		C	D
Epulis	2	A	B	C	D
Keratoacanthoma	1	A		C	
Melanoma	1	A		C	
Malignant tumors of the upper and lower jaw	1	A		C	
Birth defects and deformities of soft tissues and bones MFS	1	A		C	

Acquired defects and deformities of soft tissues and bones MFS	1	A		C	D
Neuritis and trigeminal neuralgia	1	A		C	D
Neuralgia and paralysis of the facial nerve	1	A		C	
Dental implantation	1	A		C	D
	1	A		C	

#### CHAPTER 4: MEDICAL SKILLS / MANIPULATIONS

COMPETENCIES	LEVEL
4.1. INTERVIEWING THE PATIENT COLLECTING ANAMNESIS	2
1. Collection of main and additional complaints	2
2. Collecting a life history	2
3. Collecting the allergic status	2
4. Collection of anamnesis of diseases	2
4.2. INFORMATION MANAGEMENT	
1. Setting a clinical question and searching for its solutions in the literature.	2
2. Informing the patient and his relatives and other health workers about the results of the examination.	2
3. Informing the patient to obtain informed consent.	2
4. Documentation of the results of the examination in the medical history / outpatient card.	2
5. Advising the patient on issues related to lifestyle (nutrition, physical activity, smoking, brushing teeth).	2
4.3. PHYSICAL EXAMINATION	
1. Assessment of the general condition of the patient (appearance, position, nutrition, consciousness, mental state)	2
2. Assessment of vital functions of the body (body temperature, frequency and type of breathing, pulse rate, arterial and venous pressure)	2
3. Assessment of patients with emergency conditions and injuries	1
4. Examination of the skin and mucous membranes (signs of anemia, cyanosis, jaundice, edema, dehydration)	2
5. Examination of the lymph nodes	2
6. Description of the visible mucous membranes	2
7. Examination of the lips, oral area of the oropharynx, as well as teeth, tongue root, pharyngeal arches, tonsils examination of the excretory ducts of the parotid glands and submandibular glands	2
8. Palpation of the bottom of the mouth, cheeks, tonsils and	2

tongue root	
9. Examination and palpation of the parotid and submandibular glands	2
10. Study of the sensitivity of the tooth to temperature stimuli.	2
11. Determination of the pulp state by electrodontometry.	1
12. Determination of the working length of the root canal.	2
13. Determination of the degree of mobility of teeth in periodontitis.	2
14. Determination of the type, color and consistency of plaque on the teeth.	2
15. Measurement of the depth of pathological dentoalveolar pockets with a graduated probe.	2
16. Determination of the degree of gum retraction.	2
17. Determination of the pH of saliva, the contents of the gingival pocket using an indicator paper strip.	1
18. Palpation of the oral mucosa.	2
19. Probing of deep ulcers, fistulas.	1
20. Determination of pain and tactile sensitivity with a probe, needle.	2
21. Determination of microcurrents of the oral cavity.	1
22. Carrying out the Nikolsky symptom in cystic dermatoses.	1
23. Conducting transillumination and luminescence diagnostics.	1
24. Conducting functional tests (blistering, histamine, Schiller-Pisarev, Yasinovsky, Kavetsky, Rotter, Kulazhenko)	1
25. Carrying out functional research methods (biomicroscopy, chewing test, polarography, reodontography, reoparodontography, photoplethysmography)	1
26. Conducting an EMG . Masticaciography. Galvanometry..	1
27. Biochemical analysis of blood, saliva	1
28. Determination of the degree of compliance of the mucous membrane.	1
29. Determination of periodontal endurance. Gnathodinamometry	1
30. Determination of the degree of periodontal atrophy;	1
31. Determination of the chewing efficiency of tooth rows according to Agapov	1
32. Analysis of the odontoparodontogram.	1
33. Analysis of jaw models in order to determine the path of insertion and removal of the prosthesis.	2
34. Studying models in a parallelometer	1
35. Study of diagnostic models	2
36. Registration of the primary patient's medical card;	2
37. Determination of the hygienic state of the oral cavity using the Fedorov-Volodkina, Green-Vermillion, RNR indices, etc.;	2
38 Conducting hygienic training;	

39. Conducting a controlled brushing of teeth;	
40. Training in the standard method of brushing your teeth;	
41. Carrying out sanitary and educational work;	
42. Determination of the intensity of caries using the CPI, CPI indices of teeth and surfaces;	2
43. Determination of the state of periodontal tissues using CPI, PMA indices, etc.;	2
44. Decoding of intraoral (sighting) radiographs and radiographs of the bones of the facial skeleton (in direct and lateral projections, panoramic, orthopantomograms);	1
45. Examination of patients with pathology of the temporomandibular joint (TMJ) according to a specific algorithm;	2
46. Selection of the most informative methods of additional examination of children with primary bone and functional diseases of the TMJ;	2
47. Provision of emergency pre-hospital care for various types of CHLO injuries, determine the combined injury, indications for hospitalization;	2
48. Examination of children with dental anomalies of different age groups;	2
49. Calculation of control and diagnostic models according to the methods of Pon, Korkhaus, Gerlach, Snagina, Tonnu, Nanse;	2
50. Description of the dental radiograph;	2
51. Carrying out the analysis of the orthopantomogram;	2
52. Conducting a study of the lateral telorentgenogram (craniometry, gnathometry, profilometry);	1
53. Analysis of the tomogram of the temporomandibular joint;	1
54. Determination of the face shape by Garson, by Izar;	1
55. Conducting a photometric examination of the head;	1
56. Determining the type of profile of an orthodontic patient;	1
57. Setting the correspondence of the passport, somatic and bone age of the patient;	1
58. Identification of children with pronounced dentoalveolar anomalies and deformities and refer them to an orthodontist to provide specialized care and take them to the dispensary register;	1
59. Two-handed (bimanual) examination of the maxillofacial region and neck	2
60. Technique of taking incisional and excisional biopsy	1
61. Technique of puncture biopsy for cytological and histological (TAB) examination	1
62. Examination of the maxillary sinus	1
63. - Perform instrumental methods of examination of soft and	1

bone tissues of the face and oral cavity when planning dental implantation surgery	
64. - To assess the functional state of the body (all organs and systems) according to the patient's completed health questionnaire.	1
65. - To examine diagnostic models of the jaws, determine the placement of implants, their angles of inclination, using marking balls and analogues of laboratory implants	1
66. Properly prepare the documentation that is compiled during the dental implantation operation	1
67. Conducting a clinical examination of an orthodontic patient (competently collect an anamnesis of the patient's life and disease, conduct a thorough objective examination of the orthodontic patient) from the data obtained, make an assumption about the etiology and pathogenesis of CRO deformities;	2
<b>4.4 GENERAL SKILLS</b>	2
1. All types of injections, including intravenous drip fluids	2
2. Drip and jet transfusion of medicines and blood substitutes	2
3. Interpretation of the results of the X-ray examination	2
4. Interpretation of the blood test for hemoglobin, leukocytosis, ESR (general blood test);	2
5. Applying proper hand-washing techniques in the workplace	2
6. Preoperative preparation of the surgical field for small surgical interventions, asepsis and antiseptics	2
7. Preparation for the operation (washing your hands before the operation, putting on a sterile operating uniform and sterile gloves)	2
8. Interpretation of the results of allergological tests	2
9. Obtaining smears, material for cytological, bacteriological research.	2
10. Measuring temperature in children	2
1. Counting the pulse and breathing in children	2
2. Surgical suture removal	2
3. Measurement of blood pressure.	2
4. Conducting infiltration anesthesia:	2
a) intraligmental	
b) intraceptal c	
c) subcostal	
d) intraosseous	
e) creeping infiltration according to Vishnevsky	
15. Conducting conducting anesthesia on the upper jaw	
a) infra-orbital	
b) tuberal c	
c) at the large palatal opening	
d) at the incisor hole	
<b>16. Conducting conducting anesthesia on the lower jaw</b>	

a) mandibular	
b) torus	
c) at the chin opening	
<b>4.5 MANIPULATIONS FOR EMERGENCY CARE</b>	
1. Cardiopulmonary resuscitation (the main algorithm of cardiac resuscitation, on a dummy)	2
2. Examination and first aid for external injuries (wounds, bleeding, burns, sprains, dislocations, fractures)	2
3. Transportation of a patient with an injury	2
4. Stop bleeding (compression, applying a tight bandage, applying a tourniquet)	2
5. Artificial respiration "mouth to mouth", "mouth to nose";	2
6. Methods of cleaning the upper respiratory tract, aspiration of mucus from the upper respiratory tract	2
7. Indirect heart massage	2
8. Tracheo- or conicotomy, tracheostomy	1
9. Heimlich's Reception	2
10. Tongue fixation and air duct insertion	2
<b>4.6 MANIPULATIONS OF THERAPEUTIC DENTISTRY IN CHILDREN AND ADULTS</b>	
1. Preparation of carious cavities of class 1-6, atypically located and non-carious cavities.	2
2. Carrying out antiseptic treatment and drying of carious cavities.	2
3. Mixing of materials for temporary, permanent fillings.	2
4. Application of insulating and therapeutic pads, temporary fillings and dressings.	2
5. Preparation and filling of cements, amalgam, composite materials. Grinding and polishing of the seal.	2
6. Removal of temporary and permanent fillings.	2
7. Carrying out instrumental and medical treatment of the root canal, its drying, determining the degree of its patency.	1
8. Perform expansion of root canals with the help of chemical agents.	2
9. Perform impregnation treatment of poorly traversed root canals.	1
10. Methods of root canal filling.	1
11. Removal of dental deposits: soft plaque, plaque, supragingival tartar.	2
12. Polishing the teeth after removing dental deposits.	2
13. The imposition and strengthening of the "Cofferdam" system.	1
14. Sealing of intact fissure teeth with sealants.	2
15. Applying and strengthening the matrix, the matrix holder when filling carious cavities.	2

16. Carrying out therapeutic measures for the remineralization of enamel for the prevention and treatment of caries (remtherapy, fluorolac).	2
17. Carrying out the method of complete preservation of the tooth pulp.	2
18. Carrying out the method of partial preservation of the tooth pulp.	1
19. Applying paste for pulp devitalization.	2
20. Opening of the tooth cavity in the incisors, canines, premolars and molars and excision of the arch above the crown completely.	2
21. Opening of the tooth cavity, trepanation of the crown of intact teeth.	1
22. Complete removal of pulp from the tooth cavity after anesthesia and devitalization.	1
23. Antiseptic treatment of the crown cavity and instrumental expansion of the root canal mouths.	2
24. Instrumental treatment of root canals in different groups of teeth.	2
25. Washing of the root canal, various medications.	2
26. Filling of passable root canals with non-hardening and hardening pastes.	2
27. Root canal electrophoresis using various medicines.	1
28. Removal of filling material and tool fragments from root canals	1
29. Performing therapeutic manipulations for perforation of the bottom of the crown cavity and the walls of the root canals of the tooth.	2
30. Washing of pathological dentoalveolar pockets with a syringe, spray gun.	2
31. Introduction of turundum with medicinal substances into the pathological dentoalveolar pocket.	2
32. Dissection of a pathological gingival abscess.	1
33. Conducting closed curettage of pathological dentoalveolar pockets.	1
34. Preparation and application of medical dressings.	2
35. Introduction of medicinal substances into the hypertrophied gingival papilla, for the purpose of sclerosis.	1
36. Elimination of local traumatic factors.	2
37. The introduction of drugs under the elements of the lesion and the transitional fold.	1
38. Perform therapeutic manipulations in the treatment of diseases of the periodontal tissues and the oral mucosa (applications, irrigation) washing, removal of plaque and necrotic tissues.	2
39. Physical therapy (vibration massage, hydro massage,	1

ionophoresis).	
40. Treatment of diseases of the mucous membrane using laser techniques.	1
42. Carrying out the necessary endodontic measures in the teeth of temporary, mixed and permanent bites (on phantoms, models, in patients, on removed teeth with formed and unformed roots);	2
43. Implementation of the technique of vital staining of enamel demineralization foci;	2
44. Coating of teeth with fluoride-containing gel and varnish;	2
45. Filling of all types of carious cavities with modern filling and restoration materials;	2
46. Performing a pulpotomy with medication in temporary teeth;	2
47. Performing vital amputation of pulp in permanent teeth;	2
48. Performing pulp devitalization with necrotizing and mummifying pastes in temporary teeth;	2
49. Determination of the " working " length of the root canal (by clinical, electronic and radiovisiographic methods) in temporary and permanent teeth;	1
50. Removal of the decay of the root and crown pulp in periodontitis in formed and unformed teeth;	2
<b>4.7. MANIPULATIONS IN ORTHOPEDIC DENTISTRY</b>	
1. Mastering the techniques of dental preparation.	2
2. Working out techniques for working with tools.	2
3. Preparation of cavities for tabs: inlay, onlay, overlay, pinlay.	2
4. Performing gum retraction.	2
5. Getting a double impression	2
6. Direct tab modeling.	1
7. Getting impressions for making tabs.	2
8. Storing tabs in the clinic.	1
9. Fixing tabs in the clinic.	1
10. Preparation of teeth for metal stamped crowns.	2
11. Obtaining impressions for the stamped crown.	2
12. Preparation of teeth for solid crowns with a ledge.	1
13. Preparation of teeth for solid crowns without a ledge.	2
14. Obtaining casts with alginate materials.	2
15. Obtaining casts with silicone materials	2
16. Preparation of teeth for plastic crowns	1
17. Obtaining casts for a plastic crown	2
18. Fixing all types of crowns	1
19. Preparation of teeth for veneers.	1
20. Obtaining impressions for the manufacture of veneers.	1
21. Preparation of the tooth for metal-ceramic crowns.	1
22. Preparation of the tooth for metalacrylic crowns.	1
23. Preparation of the tooth for all-ceramic crowns.	1

24. Preparation of the tooth for pin structures.	1
25. Modeling of the stump pin tab by the direct method.	1
26. Preparation of the supragingival part of the root and sealing of the root canals.	1
27. Fixing the pin tooth on the cement.	1
28. Obtaining casts for metal-ceramic crowns.	2
29. Obtaining casts for metalacrylic crowns	2
30. Obtaining casts for all-ceramic crowns.	2
31. Preparation of teeth for supporting artificial crowns of the bridge prosthesis.	1
32. Packing of supporting metal crowns.	2
33. Storing and fixing bridges on temporary and permanent cements.	1
34. The technique of removing fixed dentures with coronal scissors.	1
35. The technique of removing fixed prostheses with the Kopp device.	1
36. Determination and fixation of central occlusion in toothless patients.	1
37. Checking the design of the bridge prosthesis.	1
38. Fitting and applying bridges.	1
39. Preparation of the tooth for bridges made of zirconium oxide.	1
40. Obtaining a cast for the manufacture of a partial removable plate prosthesis	2
41. Obtaining a cast for a removable plate prosthesis made of thermoplastics.	2
42. Determination and fixation of central occlusion for removable plate prosthesis.	1
43. Application of clinical guidelines for the selection and placement of artificial teeth on the bite roller.	1
44. Checking the wax structure of partial removable dentures.	1
45. Packing and applying partial removable dentures.	1
46. Correction of partial removable dentures.	1
47. Removal of casts for the manufacture of clasp prostheses.	1
48. Packing and checking of solid-cast frames of clasp prostheses.	1
49. Checking the metal frame of the clasp prosthesis structure.	1
50. Applying and storing a clasp prosthesis.	1
51. Clinical examination in the absence of teeth.	2
52. Determination of the morphological features of the hard and soft tissues of the prosthetic bed.	1
53. Determination of the flexibility and mobility of the mucous membrane.	1
54. Fixation and stabilization of complete removable dentures	1
55. Packing an individual spoon according to Herbst on the upper	1

and lower jaws.	
56. Obtaining a functional impression on the Herbst from the upper and lower jaws.	1
57. Drawing anatomical landmarks when determining the central ratio of the jaws with complete loss of teeth.	1
58. Method of determining the central ratio of toothless jaws.	1
59. Analysis and correction of errors made in determining the central ratio of the alveolar processes.	1
60. Selective grinding of teeth.	1
61. Application of tires for frontal, sagittal, parasagittal, frontosagittal stabilization along the arc.	1
62. Removal of impressions for the manufacture of immediate prostheses.	2
63. Methods of obtaining impressions in prosthetics based on implants	1
64. Selection of impression transfers, impression masses for prosthetics based on implants	1
65. Selection of orthopedic structures based on dental implants	1
66. Methods of fixing orthopedic structures on dental implants.	1
<b>Dental prosthesis manufacturing technology</b>	
1. Laboratory technology for making tabs	1
1. Laboratory equipment for manufacturing stamped crowns	2
2. Laboratory equipment for the production of solid crowns	1
4. Laboratory equipment for making plastic crowns	2
5. Laboratory equipment for the manufacture of metal-ceramic crowns	1
6. Laboratory equipment for manufacturing metalacrylic crowns	1
7. Laboratory equipment for making veneers	1
8. Laboratory equipment for the manufacture of partially removable acrylic plate prostheses	1
9. Laboratory equipment for the manufacture of partially removable plate prostheses from thermoplastics	2
10. Laboratory equipment for the manufacture of clasp prostheses	1
11. Laboratory equipment for the manufacture of complete removable plate prostheses	1
12. Laboratory equipment for the manufacture of reponding, forming, resection, splinting (fixing) devices.	2
13. Manufacturing technology of metal-free ceramic fixed prostheses according to the CAD-CAM, Cerec and press-ceramics system.	1
14. Laboratory equipment for the manufacture of metal stamped-soldered bridges	2
15. Laboratory equipment for the manufacture of combined stamped-soldered bridges	2

16. Laboratory equipment for the manufacture of solid bridges	2
17. Laboratory equipment for the manufacture of metal-ceramic bridges	1
18. Laboratory equipment for the manufacture of metalacrylic bridges	1
19. Laboratory equipment for manufacturing pin teeth	1
20. Laboratory equipment for the manufacture of porcelain bridges	1
21. Laboratory equipment for the production of modern stump pin structures	1
22. Technology of casting of metal alloys	1
<b>CHAPTER 4.8 MANIPULATIONS IN PEDIATRIC DENTISTRY (ORTHODONTICS)</b>	level
1. Determination of the type of occlusion of the patient, according to the WHO classification.	
2. Determination of the retention period of this orthodontic pathology;	1
3. Applying ligature and rubber traction;	2
4. Impression removal in children with dentoalveolar anomalies, including cleft palates of the hard and soft palate;	2
5. Casting of working and diagnostic models of jaws with plaster in the plinth;	2
6. Provision of orthodontic devices and orthopedic crowns and rings in the oral cavity;	2
7. Activation of orthodontic devices;	2
8. Carrying out repairs of orthodontic devices;	2
9. Installation of the bracket system;	1
10. Installing the retainer in the oral cavity;	1
11. Making a mouthguard	2
<b>4.9 MANIPULATIONS OF SURGICAL DENTISTRY IN CHILDREN AND ADULTS</b>	
1. The technique of aerosol instillation of the oral cavity with the help of spencers	2
2. Anesthesia according to Bershe-Dubov	2
3. Anesthesia at the round and oval holes (stem anesthesia)	1
4. Applying sling bandages	2
5. Primary surgical treatment of wounds, suturing and removal of sutures	2
6. Treatment of the burn surface.	1
7. Care and dressings of postoperative patients	2
8. The operation of removing teeth on the upper jaw	2
9. Operation to remove teeth on the lower jaw	2
10. The operation of removing the roots of the teeth in the upper jaw	2
11. Operation to remove the roots of the teeth in the lower jaw	2

12. Operation of complex and atypical tooth extraction	1
13. Removal operation for difficult teething	1
14. Curettage of the tooth socket	2
15. Stop bleeding from the tooth socket	2
16. Alveolectomy	1
17. Corticotomy	1
18. Plastic closure of the perforation hole of the bottom of the maxillary sinus	1
19. Puncture of the maxillary sinus	1
20. Anterior rhinoscopy and nasal tamponades for bleeding	1
21. Tooth-preserving operations: root apical resection; hemisection; root amputation; tooth replantation	1
22. Excision of the hood in pericoronaritis	2
23. Periostotomy	2
24. Sequestrectomy	1
25. Drainage of purulent foci in inflammatory diseases of the MFS	1
26. Reduction of dislocation of the lower jaw	1
27. Applying vacuum drains after operations in the throat and neck	1
28. Temporary methods of stopping bleeding	2
29. Ligation of the facial and external carotid arteries.	1
30. Immobilization of teeth in case of dislocation of the tooth with a ligature bandage or mouthguards	2
31. Temporary immobilization of the jaws (Ivy bandage, Kurland bandage)	2
32. Permanent immobilization of the jaws (individual and standard tires);	2
33. Osteosynthesis of the jaw	1
34. Buzhirovanie ducts of the salivary glands. Introduction of drugs and contrast agents into the ducts of the salivary glands, for sialography;	1
35. Removal of salivary stone from the ducts of the salivary glands	1
36. Excision of retention cysts of the small salivary glands of the lips and oral mucosa	2
37. Maxillary sinusitis;	1
38. Flap operations for periodontal diseases	1
39. Lengthening of the frenulum of the lip and tongue	1
40. Vestibuloplasty	1
41. Excision of the lateral and median cysts of the neck	1
42. Removal of a benign tumor	1
43. Cystectomy	1
44. Cystotomy	1
45. Operations during dental implantation. Types and methods of implantation	1
46. Sinus-lifting transposition of the inferior lunate nerve, free facial	1

tissue transplantation	
47. Carrying out hygiene measures in the oral cavity in the presence of dental implants with supraconstruction	1
48. Reconstructive operations on the oral mucosa	1
49. Plastic with local fabrics, flaps on the stem, stalk flaps	1
50. Autotransplantation with free soft and bone tissues	1
51. Reconstructive operations in maxillofacial surgery with the use of vascularized tissues	1
52. Bone and plastic surgery for anomalies and deformities of the jaw (orthognathic surgery).	1
53. Feeding patients with CHLO injuries and after reconstructive operations	2
54. Hygienic treatment of the oral cavity b-x with CHLO injuries and after reconstructive operations	2
55. Aesthetic facial surgery	1
56. Cheiloplasty (one-sided, two-sided)	1
57. Uranoplasty	1
58. Staphyloplasty	1
60. Uranostaphyloplasty	1
61. Reheylorhinoplasty	1
62. Velopharyngoplasty	1
<b>4.10. Catalog of competencies of related disciplines</b>	
<b>Competencies</b>	<b>level</b>
<b>Philosophy</b>	
Methods and techniques of philosophical analysis	1
Analyze and evaluate the social situation	1
Possess the principles of medical deontology.	1
<b>Biology and Genetics</b>	
The laws of genetics its significance for medicine and dentistry including	1
Patterns of heredity and variability in individual development as the basis for understanding the pathogenesis and etiology of hereditary and multifactorial diseases	1
Biosphere and ecology, the phenomenon of parasitism and bioecological diseases	1
<b>Chemistry</b>	1
Chemical and biological entities of processes occurring in a living organism at the molecular and cellular levels.	1
Properties of dental materials and preparations used in dental practice.	1
<b>Physics</b>	
Basic laws of biomechanics and its significance for dentistry.	1
The main physical phenomena and patterns underlying the processes occurring in the human body.	1

Physical fundamentals of the functioning of medical equipment.	1
Design features and principles of operation of safety equipment for dental equipment and devices for dental purposes.	1
Rules for the use of ionizing radiation and the risks associated with their impact on biological tissues.	1
<b>Anatomy of the head and neck</b>	
Outline the topographic contours of the organs and the main vascular and nerve trunks.	2
Anatomical and physiological, age-sex and individual features of the structure and development of the body.	1
<b>Physiology</b>	
To analyze the physiological assessment of the state of various cellular, tissue and organ structures in patients	1
The role of cell membranes and their transport systems in the metabolism of adults and children.	1
<b>Biochemistry</b>	
The structure and biochemical properties of the main classes of biologically important compounds, the main metabolic pathways of their transformation.	1
The complex relationship between dental health, nutrition, general health, diseases, and the use of medicines.	1
Anatomy of the head and neck	1
<b>Histology</b>	
Analyze the histological state of various cellular and tissue structures of the human body.	1
<b>Pathophysiology</b>	
To substantiate the nature of the pathological process and its clinical manifestations, the principles of pathogenetic therapy of the most common diseases, in particular dental diseases.	2
Functional systems of the human body, their regulation and self-regulation in interaction with the external environment in normal and pathological processes.	2
<b>Pathanatomy</b>	
Concepts of etiology, pathogenesis, morphogenesis, pathomorphosis of the disease, principles of classification of diseases; basic concepts of general nosology.	2
<b>Immunology</b>	
Structure and functions of the immune system, its age-related features, mechanisms of development and functioning	1
The main methods of immunodiagnostics, methods of assessing the immune status and indications for the use of immunotropic therapy.	1
Immunology functional systems of the human body, their regulation and self-regulation when exposed to the external	1

environment in normal and pathological processes.	
<b>Bioethics</b>	
Teaching about the health of children and adults, methods of its preservation.	1
Concepts of medical ethics. The relationship "doctor-patient", "doctor-relatives".	1
Analyze and evaluate the social situation in Kyrgyzstan, as well as beyond its borders.	1
Skills of presenting an independent point of view, analysis and logical thinking, public speech, moral and ethical argumentation, conducting discussions and round tables.	1
Principles of medical deontology and medical ethics.	1
<b>Internal diseases</b>	
Collect a complete medical history of the patient, conduct a survey of the patient, his relatives (biological, medical, psychological and social information).	2
Know the etiology, pathogenesis, diagnosis, treatment and prevention of the most common diseases.	1
The clinical picture, features of the course and possible complications of the most common diseases that occur in a typical form.	1
Modern methods of clinical, laboratory and instrumental diagnostics of patients with therapeutic, surgical and infectious profile.	1
Interpret the results of the examination, give the patient a preliminary diagnosis, formulate indications for the chosen method of treatment, taking into account etiologic and pathogenetic agents.	1
Outline the scope of additional studies to clarify the diagnosis; formulate a clinical diagnosis.	1
To justify pharmacotherapy in a particular patient with the main pathological syndromes and emergency conditions, to determine the methods of administration, regimen and dose of drugs.	1
Evaluate the effectiveness and safety of the treatment.	2
The algorithm for making a preliminary diagnosis to patients and, if necessary, with subsequent referral to additional examinations and to specialist doctors.	2
An algorithm for making a detailed clinical diagnosis of patients.	2
<b>Resuscitation and anesthesiology</b>	
An algorithm for performing basic medical diagnostic and therapeutic measures to provide first aid to victims of urgent and life-threatening conditions.	2
Methods of emergency measures and indications for hospitalization;	2
Radiation diagnostics and medical radiology	

Analyze the results of X-ray examination of patients.	2
Have a technique for reading various types of radiographs.	2
Physical basis of X-ray radiation and types of radiation used	2
X-ray examinations (sighting radiography, orthopantomography, radiovisiography, 3d) The	2
principles underlying dental radiography.	1
Diagnostics and methods of treatment of tumors and tumor-like formations of tissues of the maxillofacial region.	1
Methods of diagnosis of diseases of the temporomandibular joint, salivary glands in patients in children and adults.	2
Determine the presence of a fracture and dislocation, free gas in the abdominal cavity, hydro - and pneumothorax, and so on.	1
<b>General Surgery</b>	
Interpret the results of the most common methods of laboratory and functional diagnostics, thermometry to identify pathological processes in the organs and systems of patients.	1
Information on the principles of sterilization, disinfection and antiseptic treatment of instruments and equipment to avoid infection of the doctor and patient.	2
<b>Pharmacotherapy</b>	
Individual variability and individualized treatment	
Basic pharmacological concepts: drug safety, drug efficacy, therapeutic index	1
Methods of administration of medicinal substances and forms of medicinal substances	2
Prescribing medications during pregnancy and lactation (safe medications for the treatment of common diseases, the risk associated with taking medications.)	1
Prescribing medications to infants	1
Principles of prescribing medicines to children, with the calculation of dosage, based on body weight, body surface area	1
Prescribing medicines to the elderly (pharmacokinetics, pharmacodynamics and dosage principles)	1
Drug interactions (fundamentals of pharmacodynamics and pharmacokinetics, basic drug interactions)	1
<b>Drug safety, prevention and diagnosis of adverse reactions</b>	
Side effects (frequency, detection and prevention, risk factors, drug allergy)	1
Pharmacological alertness - assessment of cases of reactions, reporting	1
The main antidotes for drug poisoning	1
Measures for drug poisoning and measures aimed at increasing the elimination of the drug substance	1
Common drug poisoning (sedatives, antidepressants, opiates,	1

opioid substances, paracetamol, aspirin).	
<b>Principles of pharmacotherapy</b>	
Principles of drug selection	1
Analyze the effect of drugs on the totality of their pharmacological properties and the possibility of their use for therapeutic and dental treatment of patients.	1
Placebo effect (mechanism, role in clinical trials)	1
Sources of information on drug therapy (clinical protocols)	1
<b>Public health</b>	
Basic terms and concepts in public health	
Basic terms and concepts in public health: health and disease, pathogenesis, etiology, individual and public health, public health, epidemiology, clinical epidemiology, preventive medicine, health service, health promotion, lifestyle	1
The concept of primary, secondary and tertiary prevention	2
The concept of disinfection, deratization and sterilization.	2
The concept of infection control.	2
Structure and equipment of medical departments of polyclinics and hospitals; sanitary and hygienic requirements for the organization of medical organizations of dental profile.	2
Assessments of the state of dental health of the population of different age and gender groups.	1
<b>Evidence-based medicine</b>	
Evidence-based medicine. Basic concepts of evidence-based medicine	1
Use methods of primary and secondary prevention based on evidence-based medicine.	2
Establish cause-and-effect relationships of changes in the state of health (including dental) from the impact of environmental factors.	1
Sources of information on evidence-based drug therapy. Levels of evidence	1
<b>Legal studies</b>	
Requirements and rules for obtaining informed consent of the patient for diagnostic and therapeutic procedures.	1
Protect the civil rights of doctors and patients of various ages.	1
The main patterns and trends in the development of the world historical process.	1
Moral and ethical norms, rules and principles of professional medical behavior, the rights of the patient and the doctor, the main ethical documents of international and domestic professional medical associations and organizations.	1
To be guided by the existing labor regulations, to apply the norms of Labor legislation in specific practical situations.	1
Skills of presenting an independent point of view, analysis and	1

logical thinking, public speech, moral and ethical argumentation, conducting discussions and round tables.	
The ability to inform patients of different age groups and their relatives and relatives in accordance with the requirements of the rules of "informed consent".	1