

MINISTRY OF HEALTH OF UKRAINE
IVANO-FRANKIVSK NATIONAL MEDICAL UNIVERSITY

PROFESSIONAL EDUCATION PROGRAM
«DENTISTRY»
second (master) level of higher education

Field of knowledge I Healthcare and social security
Specialty II Dentistry
Educational qualification: Master of Dentistry
Professional qualification: Dentist

APPROVED BY THE ACADEMIC COUNCIL

Chairman of the Academic Council  Mykola OSTROVSKYI
(Minutes no. 5 of April 29, 2025)



Education Program comes into force on September 1st, 2025.

Rector of IFNMU  Roman YATSYSHYN
(Order no. 595-д of April 30, 2025)



LETTER OF APPROVAL
of Professional Education Program

Proposed for consideration:

Education Program Guarantor: *Oleksandr Buherchuk*, PhD (Med), Associate Professor of the Department of Orthopedic Dentistry, Dean of Dentistry Faculty.

Workgroup members:

1. *Oleksandr Bulbuk*, Vice-Rector for Scientific and Pedagogical Work, Strategic Development and Innovations , PhD (Med), Associate Professor of the Department of Orthopedic Dentistry;
2. *Vasyl Piuryk*, Dr. habil. (Med), Professor, Head of the Department of Surgical Dentistry;
3. *Zinovii Ozhohan*, Dr. habil. (Med), Professor, Head of the Department of Orthopedic Dentistry;
4. *Halyna Melnychuk*, Dr. habil. (Med), Professor, Head of the Department of Pediatric Dentistry;
5. *Vitalii Hereliuk*, Dr. habil. (Med), Professor, Head of the Department of Therapeutic Dentistry.

Submitted by:

IFNMMU Periodic Methodical Board for dental disciplines
Minutes no. 5 of February 24, 2025

Chairman of PMB  Oleksandr BUHERCHUK

Approved by:

Central Methodical Council of IFNMMU
Minutes no. 5 of April 16, 2025

Chairwoman of CMC  Serhiy HERASHCHENKO

PREFACE

Professional Education Program has been elaborated in accordance with requirements of Article 1 Item 17, Article 10 Item 3 and Article 29 of the Law of Ukraine “On Higher Education”, National Classifier of Ukraine: “Classifier of Professions” SC 003: 2010, Resolution of the Cabinet of Ministers no. 266 of April 29th, 2015 “On approval of the list of subject areas and specialties in which the training of applicants for higher education is carried out”, State Educational Standard in specialty II “Dentistry” for the second (master) level of higher education approved by Order of the Ministry of Education and Science of Ukraine no. 879 of June 24th, 2019.

Professional Education Program has been developed by the workgroup in specialty II “Dentistry” of Ivano-Frankivsk National Medical University consisting of:

- *O.V. Buherchuk* – PhD (Med), Associate Professor of the Department of Orthopedic Dentistry, Dean of Dentistry Faculty;
 - *O.I. Bulbuk* – Vice-Rector for Scientific and Pedagogical Work, Strategic Development and Innovations , PhD (Med), Associate Professor of the Department of Orthopedic Dentistry;
 - *V.P. Piuryk* – Dr. habil. (Med), Professor, Head of the Department of Surgical Dentistry;
 - *Z.R. Ozhohan* – Dr. habil. (Med), Professor, Head of the Department of Orthopedic Dentistry;
 - *H.M. Melnychuk* – Dr. habil. (Med), Professor, Head of the Department of Pediatric Dentistry;
 - *V.I. Hereliuk* – Dr. habil. (Med), Professor, Head of the Department of Therapeutic Dentistry.
- R.M.Dmytryshyn* - Academic Department Methodologist

Academic community reviews:

1. *I.V. Yanishen* – Dr. habil. (Med), Professor, Head of the Department of Prosthetic Dentistry of Kharkiv National Medical University

Reviews of external stakeholders:

1. *I.V. Rudko* – Director of the municipal non-profit enterprise “Regional Clinical Dental Polylinic of Ivano-Frankivsk Region Council”;
2. *R.I. Savchuk* – Head Doctor of the Centre for Dental Implantation “Respect Dental”;
3. *T.B. Stefankiv* – Acting Director of the municipal non-profit enterprise “City Dental Clinic of Ivano-Frankivsk City Council”;
4. *M. Rudyk* – IFNMU graduate of 2008, Master of Public Administration, Resident and Fellow of Advanced Education in General Dentistry at Marquette University School of Dentistry, Milwaukee, WI USA, Doctor of Dental Surgery, Chicago, IL USA.

Outline of Education Program, specialty I1 “Dentistry”

1 – General Information	
Full name of higher educational institution and structural unit	Ivano-Frankivsk National Medical University (IFNMU) Dentistry Faculty Foreign citizens' training department
Degree of higher education and name of qualification in the original language	Education degree – Master. Educational qualification – Master of Dentistry. Professional qualification – Dentist. Qualification in the diploma – Master of Dentistry. Dentist.
Official name of Education Program	Professional Education Program “Dentistry” of the second (master) level of higher education.
Diploma type and Education Program volume	Master’s degree diploma, unitary. 300 ECTS credits, term of study – 4 years 10 months (full-time) on the basis of complete general secondary education, or 300 ECTS credits, term of study – 3 years 10 months (full-time) on the basis of bachelor’s degree diploma (junior specialist) in a related specialty.
Accreditation availability	The Program is accredited in 2021
Cycle/level	NFQ of Ukraine – level 8, FQ-EHEA – second cycle, EQF-LLL – level 7
Preconditions	Requirements for previous education – complete general secondary education (according to the results of National Multisubject Test or External Independent Evaluation certificates) or education and qualification level of a junior specialist (junior bachelor) in the relevant specialty of medical field (according to the results of entrance examinations).
Language(s) of instruction	Ukrainian, English
Education Program validity	Education program is valid until 2025, with an annual scheduled update

Internet address of permanent placement of Education Program description	https://www.ifnm.edu.ua/uk/publicna-informatsiya/osvitni-prohramy
2 – Education Program Purpose	
<p>Training of a specialist who is able to solve complex tasks and problems in the field of dentistry and health care or in training process, which involves research and/or innovation and is characterized by uncertainty in conditions and requirements.</p> <p>Development of the ability to apply acquired knowledge, skills, abilities and understanding in humanitarian, fundamental and professionally-oriented disciplines in solving standard dental tasks in the field of health care, the scope of which provides a list of syndromes and symptoms of dental diseases, physiological conditions and somatic diseases requiring special patient management tactics, emergencies, laboratory and instrumental studies, medical and dental manipulations.</p>	
3 – Characteristics of Education Program	
Official name of Education Program	Professional Education Program “Dentistry” of the second (master) level of higher education
Subject area (field of study, specialty, specialization)	Preservation of health (including dental health), prevention, diagnosis and treatment of human dental diseases at the individual, family and population levels Field of study II “Healthcare and social security“ Specialty II “Dentistry”
Education Program orientation	Professional Education Program is focused and based on scientific and evidence-based modern achievements of dental science, contemporary process and peculiarities of Master of Dentistry training considering current state of higher education, higher education standard and dental care system.
Main focus of Education Program and specialization	Education Program is focused on training modern specialists capable of solving complex specialized tasks and practical issues associated with organ and system dysfunctions, including oral and maxillofacial organs and tissues with application of principles, theories and methods of biomedical, social, psychological and pedagogical sciences, based on knowledge of structural and functional state of organs and systems, assessment of the environmental impact on health,

	<p>including dental health; capable for planning and conducting prevention and treatment of oral and maxillofacial organs and tissues diseases on the basis of professional training disciplines. Special higher education in the field of study I1“Healthcare and social security specialty I1 “Dentistry”</p> <p>Key words: health care, dentistry, higher education, Master</p>
Program features	<p>The Program combines students’ theoretical and practical training, based on modern scientific results and principles of evidence-based medicine in the field of dental care, it is implemented in a logical sequence of disciplines, it also involves practicing (clinical) professionals in clinical practice guidance and practical classes in disciplines of professional training cycle.</p> <p>Practical training sessions are obligatory for all the students, they are held on the basis of Dentistry Center of the University Clinic and healthcare facilities.</p> <p>The Program is also implemented in Ukrainian.</p>
4 – Graduates’ Suitability for Employment and Further Education	
Suitability for employment	<p>A specialist is prepared to work according to Classifier of Economic Activities SC 009:2010: Section Q. Health and social care Section 86. Healthcare Group 86.2 Medical and dental practice Class 86.23 Dental practice</p> <p>After completing Professional Education Program, specialty I1 “Dentistry”, a specialist is able to perform professional work:</p> <ul style="list-style-type: none"> • Internship doctor (CP code – 3229); • Junior doctor (CP code – 3221); • Resident doctor (CP code – XXX); • Junior research scientist (Dentistry) (CP code – 2222.1); • Scientific researcher (Dentistry) (CP code – 2222.1 (23667); • Higher education institution teacher (CP code – 2310.2)
Further education	<p>A graduate can enter postgraduate education programs (internship, residency), where training according to education programs of a dentist is carried out.</p> <p>After internship, residency training a specialist is awarded the qualification of a dentist being able to perform the professional work noted in SC 003:2010 and can hold a relevant medical position: 2222.2 Dentist.</p>

	<p>Such a specialist has the right:</p> <ul style="list-style-type: none"> - to undergo specialization and perform dentist’s relevant professional work of a certain specialty, noted in current National Classifier of Ukraine “Classifier of Professions”, to hold a relevant medical position; - to continue education at the third (educational and scientific) level of higher education to obtain PhD degree; - to acquire another specialty, which gives the opportunity to hold a relevant medical position and perform relevant professional work; - to improve qualification level in continuing postgraduate education system, specialty II “Dentistry”, as well as to acquire additional qualifications in postgraduate education system.
5 – Teaching and Assessment	
Teaching and studying	<p>Competence, student-centered learning, initiative self-directed learning, problem-oriented learning, learning through work and clinical placement.</p> <p>Lectures, seminars, practical classes in small groups, work placement, consultations with teachers and students’ independent work, forms of blended learning (e-learning).</p>
Assessment	<p>Assessment of learning outcomes is carried out according to the principles of objectivity, systematicity and systemacity, planning element, requirements unity, openness, transparency, accessibility and clarity of assessment methods, taking into account personal students’ capabilities.</p> <p>The assessment system of students' knowledge in each discipline includes current, midterm and final knowledge control, assessment of results of practical training sessions and graduates’ certification.</p> <p>Current control is testing of knowledge during practical and seminar classes in the form of tests, reports or projects presentation and practical skills demonstration.</p> <p>Final knowledge control is carried out in the form of pass-fail tests, summative module assessments and examinations.</p> <p>Certification of students for the second (master) level of higher education, specialty II “Dentistry” is carried out in the form of the Unified State Qualification Examination (USQE), which includes:</p> <ul style="list-style-type: none"> • Integrated Examination “STEP”, which assesses the conformity of theoretical training quality to higher education standards; • Professional English examination, which assesses student’s

	<p>competence in professional English;</p> <ul style="list-style-type: none"> • Objective Structured Practical (Clinical) Examination, which assesses graduate's readiness to introduction of professional activity in accordance with the requirements of higher education standard by demonstrating practical (clinical) components of professional competence on a real object or model.
6 – Program Competencies	
Integral Competency	Ability to solve complex tasks and issues in the field of healthcare in specialty II “Dentistry” in professional activity or in the process of education, which involves carrying out research and/or implementation of innovations and is characterized by uncertainty of conditions and requirements.
General Competencies (GC)	<p>GC 1. Ability to think abstractly, analyze and synthesize.</p> <p>GC 2. Knowledge and understanding of the subject essence as well as professional activity comprehension.</p> <p>GC 3. Ability to apply knowledge in practical activity.</p> <p>GC 4. Ability to communicate in the state language both orally and in written form.</p> <p>GC 5. Ability to communicate in English.</p> <p>GC 6. Skills in information and communication technologies application.</p> <p>GC 7. Ability to search, process and analyze information from a variety of sources.</p> <p>GC 8. Ability to adapt and take actions in a new situation.</p> <p>GC 9. Ability to identify, pose and solve problems.</p> <p>GC 10. Ability to be critical and self-critical.</p> <p>GC 11. Teamwork ability.</p> <p>GC 12. Pursuance of environmental protection.</p> <p>GC 13. Ability to act in a socially responsible and civic conscious manner.</p> <p>GC 14. Ability to exercise one's rights and duties as a member of society, to realize the values of civil (democratic) society and the need for its sustainable development, supremacy of the law, human and civil rights and liberties in Ukraine.</p> <p>GC 15. Ability to preserve and multiply moral, cultural and scientific values and achievements of society by the virtue of comprehension of the history and consistent patterns of development of the subject area, its place in the general system of knowledge about nature and society as well as in</p>

	<p>social, technical and technological advancement, to make use of various types and forms of physical activity for dynamic recreation and healthy lifestyle.</p> <p>GC 16. Ability to make decisions and act in accordance with the principle of zero tolerance for corruption and any other forms of dishonesty.</p>
<p>Professional Competencies (PC)</p>	<p>PC 1. Ability to collect medical information about a patient and analyze clinical data.</p> <p>PC 2. Ability to interpret laboratory data and results of instrumental examination.</p> <p>PC 3. Ability to diagnose: to make preliminary, clinical, final, concomitant and emergency diagnoses.</p> <p>PC 4. Ability to plan and take measures to prevent oral and maxillofacial pathologies.</p> <p>PC 5. Ability to design the process of medical care: to define approaches and determine plans, types and principles of the oral and maxillofacial disease treatment.</p> <p>PC 6. Ability to determine patients' rational work, rest and diet patterns in the treatment of oral and maxillofacial diseases.</p> <p>PC 7. Ability to determine tactics of management of patients with oral and maxillofacial diseases suffering from concomitant somatic diseases.</p> <p>PC 8. Ability to perform medical and dental manipulations.</p> <p>PC 9. Ability to treat major oral and maxillofacial diseases.</p> <p>PC 10. Ability to arrange and provide medical evacuation measures.</p> <p>PC 11. Ability to determine tactics and methods of emergency medical care provision.</p> <p>PC 12. Ability to arrange and perform screening examinations in dentistry.</p> <p>PC 13. Ability to assess the environmental impact on human health (individual, family, population).</p> <p>PC 14. Ability to maintain standard medical records.</p> <p>PC 15. Ability to process state, social and medical information.</p> <p>PC 16. Ability to arrange and provide rehabilitation and care for patients with oral and maxillofacial diseases.</p> <p>PC 17. Ability to provide personal legal support of the professional activity.</p> <p>PC 18. Ability to provide paramedic assistance according to the tactical medicine protocols.</p>

7 – Program Learning Outcomes

Program Learning Outcomes (PLO)

*(the lists are given in Appendix 1)

PLO 1. To highlight and identify major clinical symptoms and syndromes (according to list 1); using standard methods, preliminary data of patient's anamnesis and examination, knowledge of human organs and systems, to make a possible nosological or syndromic preliminary clinical diagnosis of a dental disease (according to list 2).

PLO 2. To collect information on patient's health status, to assess psychomotor and physical development of a patient and condition of maxillofacial organs; to evaluate information about the diagnosis based on laboratory and instrumental examination results (according to list 5).

PLO 3. To administer and analyze additional (mandatory and optional) examination methods (laboratory, radiological, functional and/or instrumental) according to list 5 of patients with oral and maxillofacial diseases for making a differential diagnosis (according to the list 2).

PLO 4. To establish final clinical diagnosis, while maintaining high ethical and legal standards, by making a reasonable decision and logic analysis of the obtained subjective and objective data of the clinical and additional health examination as well as differential diagnosis under the physician's supervision in the environment of a medical institution (according to list 2.1).

PLO 5. To diagnose emergencies under any conditions (at home, outdoors, in a medical institution), in emergency situation, under conditions of martial law, lack of information and time (according to list 4).

PLO 6. To plan and carry out prophylactic measures for dental diseases among the population to prevent dental disease incidence.

PLO 7. To analyze the epidemiological situation and carry out measures of mass and individual, general and local drug-based and drug-free prevention of dental diseases.

PLO 8. To determine the approach, plan, type and principle of treatment of dental disease (according to list 2) by making reasonable decisions based on available algorithms and standard schemes.

PLO 9. To determine the nature of work, rest and diet pattern in treatment of dental diseases (according to list 2) based on preliminary or final clinical diagnosis by making an informed decision by means of available algorithms and standard schemes.

PLO 10. To determine the tactics of dental management of a patient with somatic pathology (according to list 3) by making an informed decision by means of available algorithms and standard schemes.

PLO 11. To conduct treatment of major dental diseases by means of available algorithms and standard schemes under physician's supervision in a medical institution (according to list 2.1).

PLO 12. To arrange medical evacuation procedures among the population, servicemen, in emergency situations, including martial law, during large-scale stages of medical evacuation, taking into account the available system of medical and evacuation support.

PLO 13. To determine emergency medical care tactics by applying recommended algorithms under any circumstances based on emergency diagnosis in a limited time-frame (according to list 4).

PLO 14. To analyze and evaluate government, social and medical information using standard approaches and computer-based technology.

PLO 15. To evaluate the environmental impact on the public health in a medical institution according to standard methods.

PLO 16. To formulate goals and determine personal activity structure based on the results of analysis of certain social and personal needs.

PLO 17. To maintain a healthy lifestyle, to apply self-adjustment and self-control techniques.

PLO 18. To realize and apply civil rights, liberties and duties, to raise the general cultural and educational level.

PLO 19. To observe the requirements of ethics, bioethics and deontology in professional activity.

PLO 20. To arrange the necessary level of individual safety (personal and persons' under care) in case of typical dangerous situations in the individual field of activity.

PLO 21. To perform medical manipulations based on preliminary and/or final clinical diagnosis (according to lists 2, 2.1) for different segments of the population and under various conditions (according to list 6).

PLO 22. To perform medical dental manipulations based on preliminary and/or final clinical diagnosis (according to lists 2, 2.1) for different segments of the population and under various conditions (according to list 7).

PLO 23. To perform emergency medical care manipulations

	by applying standard schemes under any circumstances based on emergency diagnosis (according to list 4) in a limited time-frame (according to lists 6, 7).
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8 – Resource Allocation for Program Implementation

Staffing	<p>All academic staff involved in the Professional Education Program implementation have a qualification corresponding to the specialty, a confirmed level of scientific and professional activity. The vast majority of academic staff are full-time employees of Ivano-Frankivsk National Medical University, the employees of clinical departments are practitioners. Staffing of departments and project team meet the license conditions of educational activities.</p> <p>The group providing Professional Education Program “Dentistry” consists of 104 academic staff, 98 of them have a scientific degree (94.2%). In support group the share of those having a doctorate in medicine is 20.2% (21 people), candidates of medical science – 74.0% (77 people). The scientific and pedagogical specialty of teachers who provide the educational process corresponds to the disciplines they teach.</p> <p>32 members (30.8%) of the academic staff carry certificates of B₁-C₁ level of English in relation to the Common European Framework of Reference for Languages or have qualification documents (diploma of higher education, academic degree) related to the use of English, including 22 people (21.5%) having at least equal to B₂ level. The share of staff having a degree of doctor of science or candidate of science and rendering lectures in the specialty as well as being permanent employees is 100%.</p> <p>Rendering lectures and giving practical, seminar and laboratory classes as well as the level of the scientific and professional activity of each of the academic staff is evidenced by the fulfillment, over the last five years, of at least four criteria indicated in paragraph 5 of notes – subparagraphs 1-18 of the paragraph.</p> <p>Graduate departments of special (professional) training are headed by specialists of the relevant scientific and pedagogical specialty: – Doctors of Sciences.</p> <p>Professional development is carried out on a regular basis in accordance with the Procedure of Professional Development and Advanced Training of Educational and Academic Workers, which came into effect on January 1, 2020, the frequency of professional development is once a year over the course of five years.</p>
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	<p>Contracts of employment have been concluded with all members of the academic staff having passed the competition commission.</p>
<p>Material and technical support</p>	<p>IFNMU is provided with premises for training sessions as well as tests and examinations. Classrooms are equipped with multimedia training tools (provision of multimedia equipment is 40.4%). The disciplines required for education program implementation are provided with appropriate clinical bases, computerized workplaces (2 students per 1 computer), laboratories, equipment, and facilities. The educational process is carried out on the basis of the dentistry educational building of IFNMU, where the departments as well as clinical halls of the Center of Dentistry of the University Clinic of IFNMU are located. The University has a well-equipped training and practical center “Dentistry” combining fifteen phantom and clinical rooms for various functional purposes, where high-tech simulation equipment is used. The University facilities allow to arrange and give classes in all disciplines at the appropriate scientific and methodological level.</p> <p>The university has a developed social infrastructure: library, reading rooms, dining facilities, gyms and sports grounds, and a medical center. The students are provided with a dormitory.</p>
<p>Information and methodological support</p>	<p>The official website of IFNMU https://www.ifnmu.edu.ua/uk/ contains basic information about its activities (structure, licenses and certificates of accreditation, educational/educational and scientific/publishing activities, standard documents on education, research and academic structural units and their staff, list of disciplines, admission regulations, contact information).</p> <p>Information support is based on the use of “cloud technologies” based on Microsoft Office 365. All teachers and students of the University are 100% licensed by Microsoft OfficeProPlus, and all IFNMU computers are 100% licensed by Microsoft Windows7 Pro, Windows 10 Edu. The novel interactive learning technologies are extensively introduced into the educational process of IFNMU: blended learning (e-learning) based on the University “cloud”; “virtual patients”; interactive learning complex on the basis of EDX-IFNMU.</p> <p>E-learning content (virtual programs) can be used both for students’ individual work and for the use of multimedia equipment in lectures, practical and seminar classes, as well as for students’ distance learning.</p> <p>The University electronic resource contains educational</p>

	<p>learning materials on academic disciplines of the curriculum, including the system of distance learning.</p> <p>The library is provided with domestic and foreign professional periodicals of relevant or related profile, including e-forms. The IFNMU library collection is annually replenished and meets the students' needs for current domestic and foreign professional periodicals in specialty (including in electronic form).</p> <p>The library has access to field-oriented periodical databases in English.</p> <p>Teaching and learning support of the educational process in IFNMU consists of:</p> <ul style="list-style-type: none"> - curriculum and explanatory note to it; - work programs, syllabuses, teaching materials for each discipline of the curriculum; - practical training programs, work programs of practical training sessions; banks of test tasks, teaching materials for students for all forms of current and final classes and students' certification.
9 – Academic Mobility	
National Credit Mobility	<p>National Credit Mobility is carried out on the basis of the Law of Ukraine “On Higher Education”. Recognition of learning outcomes in other Ukraine’s educational institutions within the framework of academic mobility – in accordance with the agreements of IFNMU.</p> <p>Individual agreements on academic mobility for learning and research in universities and research institutions of Ukraine are allowed.</p> <p>ECTS credits received in other higher educational institutions of Ukraine are transferred in accordance with the Regulations on the Organization of the Educational Process in IFNMU https://ifnmu.edu.ua/uk/normatyvni-dokumenty</p>
International Credit Mobility	<p>International mobility, credit transfer within Erasmus + International Credit Mobility Program is realized on the basis of the Law of Ukraine “On Higher Education”, agreements between IFNMU and higher educational institutions of other countries, Regulations on the Organization of Educational Process in IFNMU, Credit Transfer Regulations (personal curriculum) and academic deficiency determination in IFNMU. https://ifnmu.edu.ua/uk/normatyvni-dokumenty</p>
Teaching of foreign students	<p>Training of foreign students is conducted in accordance with the requirements of legislation.</p> <ul style="list-style-type: none"> - Admission to the university is performed in accordance with “Admission Regulations” and taking relevant

	<p>professional examinations.</p> <ul style="list-style-type: none">- Ukrainian or English is the medium of instruction depending upon a student's choice.
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2. List of Professional Education Program components and their logical consistency

2.1. List of Professional Education Program components

Academic discipline code	Education Program Components (academic disciplines, practical training sessions)	Number of ECTS credits	Summative assessment form
EP Mandatory Components			
General Training			
MCG 1	Professional Ukrainian Language ¹	3	Summative module assessment
MCG 2	History of Ukraine and Ukrainian Culture	3	Summative module assessment
MCG 3	Philosophy	3	Summative module assessment
MCG 4	Physical Education	3	Summative module assessment
MCG 5	Latin Language and Medical Terminology	3	Summative module assessment
MCG 6	Medical Chemistry	3	Summative module assessment
MCG 7	Life Safety, Fundamentals of Bioethics and Biosafety	3	Pass-fail test
MCG 8	Training of reserve officers in the field of knowledge “Healthcare”, specialty “Dentistry” ²	3	Summative module assessment
Total		23	
Professional Training			
MCP 1	Medical Biology	5	Summative module assessment

MCP 2	Biological and Bioorganic Chemistry	7.5	Summative module assessment
MCP 3	Human Anatomy	8	Summative module assessment
MCP 4	Histology, Cytology and Embryology	7	Summative module assessment
MCP 5	Medical and Biological Physics	4	Summative module assessment
MCP 6	Professional Foreign (English) Language	4	Summative module assessment
MCP 7	Physiology	5.5	Summative module assessment
MCP 8	Microbiology, Virology and Immunology	4.5	Summative module assessment
MCP 9	Medical Informatics	3	Summative module assessment
MCP 10	Pathomorphology	5.5	Summative module assessment
MCP 11	Pathophysiology	5.5	Summative module assessment
MCP 12	Pharmacology	5.5	Summative module assessment
MCP 13	Propaedeutics of Therapeutic Dentistry	4	Summative module assessment
MCP 14	Propaedeutics of Orthopedic Dentistry	4	Summative module assessment
MCP 15	Propaedeutics of Pediatric Therapeutic Dentistry	3	Summative module assessment
MCP 16	Hygiene and Ecology	3	Summative module

			assessment
MCP 17	Propaedeutics of Internal Medicine	3	Summative module assessment
MCP 18	Clinical Anatomy and Operative Surgery	3	Summative module assessment
MCP 19	Internal Medicine, including:	7	
	Internal Diseases	3.75	Summative module assessment
	Infectious Diseases and Epidemiology	2.25	Summative module assessment
	Clinical Pharmacology	1	Summative module assessment
MCP 20	Surgery, including:	8	
	Surgical Diseases	6	Summative module assessment
	Oncology	1	Summative module assessment
	Neurosurgery	1	Summative module assessment
MCP 21	Dental Disease Prevention	4	Summative module assessment
MCP 22	Dental Surgery	13.5	Summative module assessment
MCP 23	Orthopedic Dentistry, including Implantology	14.5	Summative module assessment
MCP 24	Therapeutic Dentistry	16	Summative module assessment
MCP 25	Orthodontics	8,5	Summative module

			assessment
MCP 26	Forensic Medicine (Dentistry) and Medical Jurisprudence	3	Summative module assessment
MCP 27	Radiology	3	Summative module assessment
MCP 28	Social Medicine, Public Health and Fundamentals of Evidence Based Medicine	3	Summative module assessment
MCP 29	General Medical Training, including:	8	
	Ophthalmology	1.5	Summative module assessment
	Neurology, including Neurodentistry	1.5	Summative module assessment
	Dermatology, Venereology	1	Summative module assessment
	Psychiatry, Narcology	1	Summative module assessment
	Medical Psychology	1	Summative module assessment
	Physical Rehabilitation, Sports Medicine	1	Summative module assessment
	Endocrinology	1	Summative module assessment
MCP 30	Pediatric Therapeutic Dentistry	7	Summative module assessment
MCP 31	Pediatric Dental Surgery	4,5	Summative module assessment
MCP 32	Phthisiology	3	Summative module assessment
MCP 33	Pediatric Diseases including Childhood	3	Summative

	Infections		module assessment
MCP 34	Obstetrics and Gynecology	3	Summative module assessment
MCP 35	Otorhinolaryngology	3	Summative module assessment
MCP 36	Emergency and Urgent Medical Care	3	Summative module assessment
MCP 37	Public Health, Economics and Health Care Organization	3	Summative module assessment
	Certification	1	USQE
Total		204	
Practical Training Sessions			
MCPT 1	Work Placement	3	Summative module assessment
MCPT 2	Nursing Clinical Placement	3	Summative module assessment
MCPT 3	Clinical Placement	15	Summative module assessment
MCPT 4	Cycle of practical training in dental surgery and oncology	5,5	Summative module assessment
MCPT 5	Cycle of practical training in therapeutic dentistry	4,5	Summative module assessment
MCPT 6	Cycle of practical training in orthopedic dentistry	5	Summative module assessment
MCPT 7	Cycle of practical training in pediatric dentistry, including		
	in pediatric therapeutic dentistry	3	Summative module assessment
	in pediatric surgical dentistry	1,5	Summative module assessment

	in orthodontics	1,5	Summative module assessment
Total		42	
Overall total of EP mandatory components		269	
List of Elective Components			
<i>Block 1</i>			
EC 1.1.	History of Medicine	3	Summative module assessment
EC 1.2.	History of Medical Knowledge Development		Summative module assessment
<i>Block 2³</i>			
EC 2.1.	Human Anatomy: Vascular Neurology	3	Summative module assessment
EC 2.2.	Human Anatomy: Head and Neck Angioneurology		Summative module assessment
<i>Block 3</i>			
EC 3.1.	Country Studies	3	Summative module assessment
EC 3.2.	European Computer Competence Standard		Summative module assessment
EC 3.3.	Communication Psychology		Summative module assessment
EC 3.4.	Current Molecular Biology Issues		Summative module assessment
EC 3.5.	Sociology and Medical Sociology		Summative module assessment
EC 3.6	Logic as the Basis of Evidence-Based Medicine		Summative module assessment
EC 3.7	Religious Studies		Summative module

			assessment
EC 3.8	Academic integrity in the student environment		Summative module assessment
EC 3.9	Anti-corruption and integrity		Summative module assessment
EC 3.10	Foreign language (English/Ukrainian)		Summative module assessment
	Block 4		
EC 4.1.	Professional Foreign Communication: English	3	Summative module assessment
EC 4.2.	World Civilization		Summative module assessment
EC 4.3.	Basic Techniques of Denture Fabrication		Summative module assessment
EC 4.4.	Cosmetology		Summative module assessment
EC 4.5	Information Hygiene and Critical Thinking		Summative module assessment
EC 4.6	Ethics and Aesthetics in Medicine		Summative module assessment
EC 4.7	Surgical Technique		Summative module assessment
EC 4.8	Philosophy of Medicine		Summative module assessment
EC 4.9	Forensic dentistry: European standards for identification		Summative module assessment
EC 4.10	Professional Ukrainian language		Summative module assessment
EC 4.11	Medical neutrality and international humanitarian law		Summative module

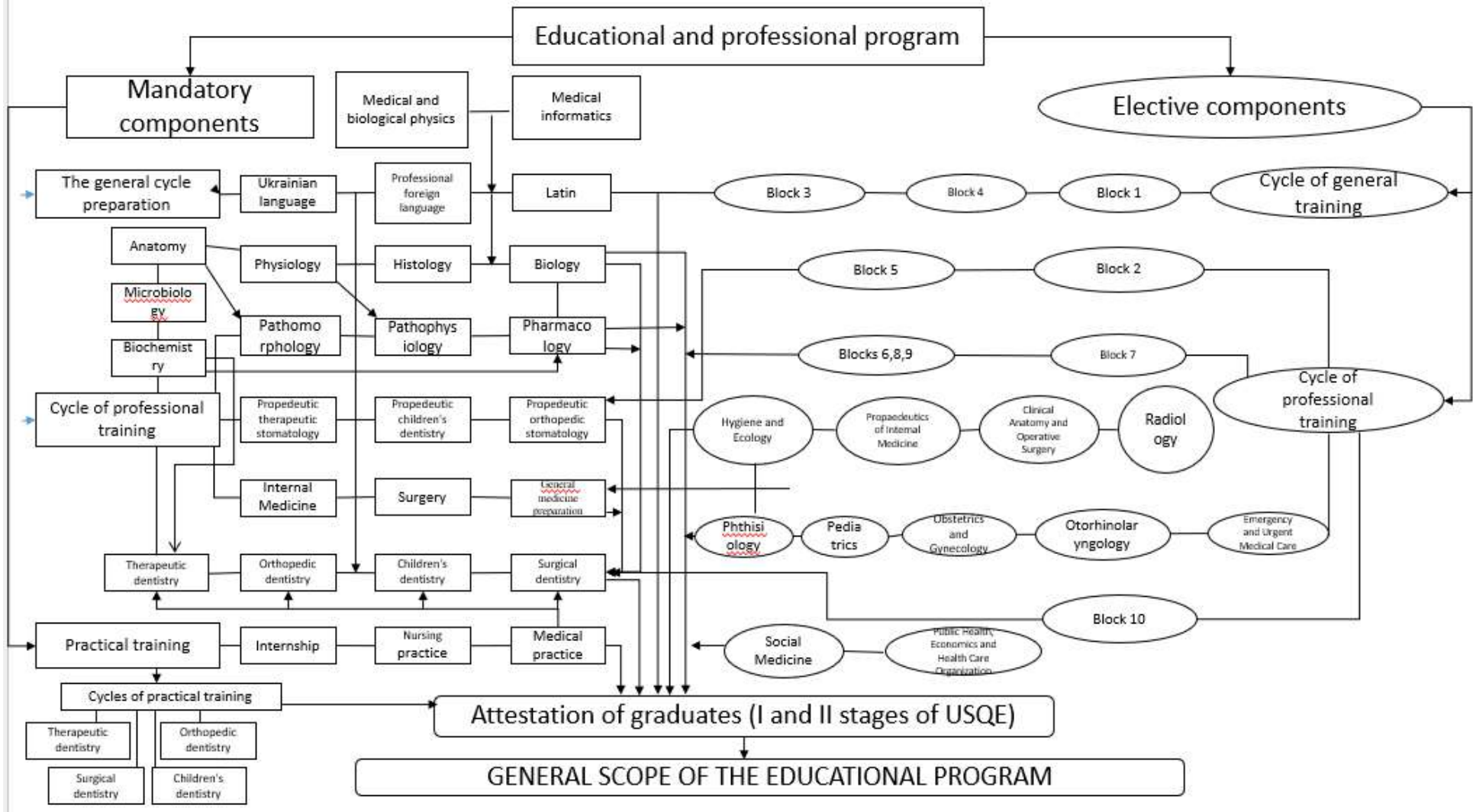
			assessment
EC 4.12	Interactive language practices in communication		Summative module assessment
EC 4.13	Theoretical training in basic military training		Summative module assessment
	Block 5		
EC 5.1.	Integrated Course of Biomedical Sciences	3	Examination
EC 5.2.	Integrated Course of Fundamental Sciences		Examination
	Block 6		
EC 6.1.	Modern Methods of Genetic Diagnosis	3	Summative module assessment
EC 6.2.	Fundamentals of Social Psychology		Summative module assessment
EC 6.3.	Professional English		Summative module assessment
EC 6.4.	Medicine and Art Culture		Summative module assessment
EC 6.5.	Novel Approaches and Methods of Dental Crowns Preparation for Different Types of Orthopedic Structures		Summative module assessment
EC 6.6.	Advanced Features of Restoration of Damaged Dental Crowns		Summative module assessment
EC 6.7.	Latin and Greek in Clinical Terminology		Summative module assessment
EC 6.8.	Surgical Technique		Summative module assessment
EC 6.9	Forensic dentistry: European standards for identification		Summative module assessment
EC 6.10	Leadership and ethics in professional decision-making		Summative module

			assessment
EC 6.11	Endodontics with digital microscopy		Summative module assessment
EC 6.12	Myths and reality in medicine: a critical analysis from the perspective of clinical pathophysiology		Summative module assessment
	Block 7		
EC 7.1.	Occupational Safety in the Professional Field	3	Summative module assessment
EC 7.2.	Occupational Health and Safety in Dentistry		Summative module assessment
	Block 8		
EC 8.1.	Fundamentals of Alcohol and Drug Abuse Prevention	3	Summative module assessment
EC 8.2.	Fundamentals of Psychoanalysis		Summative module assessment
EC 8.3.	Business English		Summative module assessment
EC 8.4.	Fundamentals of Sexology and Sexopathology		Summative module assessment
EC 8.5.	Modern Techniques in Diagnosis of Temporomandibular Joint and Salivary Glands Disorders		Summative module assessment
EC 8.6.	Plastic and Reconstructive Surgery		Summative module assessment
EC 8.7.	Novel Approaches and Methods of Dental Crowns Preparation for Different Types of Orthopedic Structures		Summative module assessment
EC 8.8.	Advanced Features of Restoration of Damaged Dental Crowns		Summative module assessment
EC 8.9.	Professional Communication Skills in Dentistry		Summative module assessment

EC 8.10	Tumors of Maxillofacial Area		Summative module assessment
EC 8.11	Treatment and Rehabilitation of Patients with Maxillofacial Wounds		Summative module assessment
EC 8.12	Modern methods of digital diagnostics, surgical navigation, virtual planning, and modeling of results		Summative module assessment
EC 8.13	Marketing in dentistry		Summative module assessment
	Block 9		
EC 9.1.	Plastic and Reconstructive Surgery	3	Summative module assessment
EC 9.2.	Modern Technologies of Solid-Cast Prosthetics		Summative module assessment
EC 9.3.	Fundamentals of Aesthetic Teeth Restoration		Summative module assessment
EC 9.4.	Surgical Preparation of the Oral Cavity for Prosthetic Treatment		Summative module assessment
EC 9.5.	Endodontic Treatment in Pediatric Dentistry		Summative module assessment
EC 9.6.	Modern Technologies of Fixed Orthodontic Appliances Application		Summative module assessment
EC 9.7.	Implantation as Modern Approach of Lost Teeth Replacement		Summative module assessment
EC 9.8	Tumors of Maxillofacial Area		Summative module assessment
EC 9.9	Treatment and Rehabilitation of Patients with Maxillofacial Wounds		Summative module assessment
EC 9.10	Modern methods of digital diagnostics, surgical navigation, virtual planning, and modeling of results		Summative module assessment

	<i>Block 10</i>		
EC 10.1.	Novel Technologies in Dental Practice	4	Examination
EC 10.2.	Modern Methods of Dental Disease Prevention and Treatment		Examination
Overall total of EP elective components		31	
Overall total of Education Program components		300	

2.2. Structural and logical scheme of the Professional Education Program



3. Student Certification Form

Certification of degree seeking applicants for the second (master) level of higher education according to Professional Education Program in specialty II “Dentistry” is carried out in the form of the Unified State Qualification Examination (USQE).

The USQE is carried out in accordance with the Procedure of implementation of the Unified State Qualification Examination for master degree trainees in the field of knowledge “Healthcare” and consists of the following components:

- Integrated Examination “STEP”, which assesses the conformity of education quality to higher education standards and is conducted by the State Organization “Testing Board for Professional Competence Assessment of Higher Education Trainees in Medicine and Pharmacy” at the Ministry of Health of Ukraine (hereinafter the Testing Board at the Ministry of Health of Ukraine), in accordance with the Regulations on the system of licensed integrated examinations;
- Examination in Professional English, which assesses a student’s competence in professional English and is conducted by the Testing Board at the Ministry of Health of Ukraine;
- Objective Structured Practical (Clinical) Examination, which assesses the graduate’s readiness for professional activities in accordance with the requirements of higher education standard by demonstrating practical (clinical) components of professional competence on a real object or model and is conducted by the University Examination Board.

Documents received by a graduate on the basis of successful completion of Professional Education Program

In accordance with the current legislation of Ukraine, graduates who have successfully completed Professional Education Program and have successfully passed the state certification are awarded master degree in Dentistry.

Individuals who demonstrated high academic performance and received at least 75% of excellent (A) grades in all the disciplines and practical training sessions and grades B, C (“good”) in other disciplines as well as passed certification with grades A “excellent”, receive honours master degree in Dentistry.

An integral part of master degree in Dentistry (honours master degree in Dentistry) is DIPLOMA SUPPLEMENT of the European model.

4. Matrices of correspondence of program competencies to the Education Program components

4.1. Matrix of correspondence of program competencies to the mandatory components of Education Program

Educational components	MCG 1	MCG 2	MCG 3	MCG 4	MCG 5	MCG 6	MCG 7	MCG 8	MCP 1	MCP 2	MCP 3	MCP 4	MCP 5	MCP 6	MCP 7	MCP 8	MCP 9	MCP 10	MCP 11	MCP 12	MCP 13	MCP 14	MCP 15	MCP 16	MCP 17	MCP 18	MCP 19	MCP 20	MCP 21	MCP 22	MCP 23	MCP 24	MCP 25	MCP 26							
	Program competencies																																								
	<i>General Competencies</i>																																								
GC 1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+						
GC 2		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+						
GC 3	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+						
GC 4	+		+		+	+	+	+	+	+	+	+	+			+			+	+	+	+	+	+	+		+		+	+	+	+	+	+	+						
GC 5		+	+	+			+	+	+	+				+				+	+		+	+	+	+	+	+		+	+	+	+	+	+	+	+						
GC 6	+	+	+	+		+	+	+	+	+	+		+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					
GC 7	+	+	+	+		+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+					
GC 8	+	+	+	+		+			+	+		+		+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					
GC 9	+	+	+	+		+	+	+	+	+			+	+	+	+		+	+		+	+	+	+	+		+	+	+	+	+	+	+	+	+	+					
GC 10	+	+	+	+		+	+		+	+					+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+	+	+	+	+					
GC 11	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+				
GC 12		+				+	+	+	+	+			+			+		+	+	+	+	+	+	+	+		+		+	+	+	+	+	+	+	+					
GC 13	+	+	+	+		+	+	+	+	+			+	+		+	+	+			+	+	+			+	+	+	+	+	+	+	+	+	+	+	+				
GC 14		+	+			+	+		+	+		+				+		+				+	+				+		+		+	+	+	+	+	+	+				
GC 15			+			+	+	+	+	+			+			+			+				+	+			+		+		+	+	+	+	+	+	+				
GC 16																																					+	+	+	+	+
	<i>Professional Competencies</i>																																								
PC 1	+			+	+				+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
PC 2									+	+	+	+		+		+	+	+	+	+	+	+		+		+	+	+	+	+	+	+	+	+	+	+	+	+	+		
PC 3		+			+				+	+	+		+			+	+	+	+	+	+		+		+		+	+	+	+	+	+	+	+	+	+	+	+	+		
PC 4		+							+	+	+		+			+	+	+	+	+	+		+		+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	

Educational components	MCG 1	MCG 2	MCG 3	MCG 4	MCG 5	MCG 6	MCG 7	MCG 8	MCP 1	MCP 2	MCP 3	MCP 4	MCP 5	MCP 6	MCP 7	MCP 8	MCP 9	MCP 10	MCP 11	MCP 12	MCP 13	MCP 14	MCP 15	MCP 16	MCP 17	MCP 18	MCP 19	MCP 20	MCP 21	MCP 22	MCP 23	MCP 24	MCP 25	MCP 26		
Program competencies																																				
PC 5								+	+	+						+		+	+	+		+		+		+	+	+		+	+	+	+			
PC 6		+						+	+	+					+	+			+	+		+		+		+	+	+	+	+	+	+	+	+		
PC 7								+	+	+						+	+	+	+	+		+		+		+	+	+	+	+	+	+	+	+	+	
PC 8								+	+		+							+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
PC 9		+						+	+							+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
PC 10									+							+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
PC 11								+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
PC 12							+	+		+							+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
PC 13			+				+	+		+			+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
PC 14	+			+	+			+		+				+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
PC 15			+	+	+			+		+			+	+		+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
PC 16								+									+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
PC 17							+	+								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
PC 18								+								+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Educational components	MCP 27	MCP 28	MCP 29	MCP 30	MCP 31	MCP 32	MCP 33	MCP 34	MCP 35	MCP 36	MCP 37	MCPT 1	MCPT 2	MCPT 3	MCPT 4	MCPT 5	MCPT 6	MCPT 7	
	Program competencies																		
	<i>General Competencies</i>																		
GC 1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC 2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC 3	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+
GC 4	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+	+
GC 5	+		+	+	+	+		+	+	+		+	+	+	+	+	+	+	+
GC 6	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC 7		+		+	+	+		+	+	+	+		+	+	+	+	+	+	+
GC 8	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+
GC 9	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+	+
GC 10		+	+	+	+	+		+	+	+	+		+	+	+	+	+	+	+
GC 11		+		+	+	+		+	+	+	+		+	+	+	+	+	+	+
GC 12		+		+	+	+		+	+	+	+		+	+	+	+	+	+	+
GC 13	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+	+
GC 14		+	+	+		+		+	+	+	+								
GC 15		+	+	+		+		+	+	+	+								
GC 16		+		+	+						+								
	<i>Professional Competencies</i>																		
PC 1		+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+
PC 2			+	+	+	+	+	+	+			+		+	+	+	+	+	+
PC 3			+	+	+	+		+	+	+		+							
PC 4	+	+	+	+	+	+			+		+	+		+	+	+	+	+	+
PC 5		+	+	+	+	+			+		+								
PC 6	+		+	+	+	+			+		+			+	+	+	+	+	+
PC 7				+	+	+	+	+	+										
PC 8			+	+	+	+		+	+			+	+	+	+	+	+	+	+
PC 9			+	+	+	+			+										
PC 10		+	+	+	+	+		+	+	+	+								
PC 11	+	+	+	+	+	+	+	+	+		+								
PC 12		+	+	+	+	+			+		+			+	+	+	+	+	+
PC 13		+		+	+	+		+	+	+	+			+	+	+	+	+	+
PC 14	+	+		+	+	+		+	+		+		+	+	+	+	+	+	+
PC 15	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+	+
PC 16	+	+		+	+	+					+								
PC 17	+	+	+	+	+						+								
PC 18				+	+					+									

5. Matrices providing Program Learning Outcomes (PLO) with relevant components of the Education Program

5.1 Matrix providing Program Learning Outcomes (PLO) with mandatory components of the Education Program

Program Learning Outcomes \ Educational components	MCG 1	MCG 2	MCG 3	MCG 4	MCG 5	MCG 6	MCG 7	MCG 8	MCP 1	MCP 2	MCP 3	MCP 4	MCP 5	MCP 6	MCP 7	MCP 8	MCP 9	MCP 10	MCP 11	MCP 12	MCP 13	MCP 14	MCP 15	MCP 16	MCP 17
PLO 1					+				+	+	+	+				+	+	+	+			+			+
PLO 2		+			+	+			+	+	+	+	+	+		+	+	+	+	+		+			+
PLO 3		+				+				+		+	+			+	+	+	+			+			+
PLO 4					+						+	+				+	+	+				+		+	+
PLO 5		+				+	+	+									+	+	+						
PLO 6		+					+		+	+				+			+	+	+	+		+		+	
PLO 7						+	+	+	+	+							+	+	+	+		+		+	
PLO 8						+			+	+						+	+	+		+				+	
PLO 9						+			+	+					+		+			+				+	+
PLO 10						+		+		+							+	+			+				
PLO 11						+			+								+								
PLO 12						+	+	+									+				+				
PLO 13						+		+										+	+					+	+
PLO 14	+	+		+	+	+	+	+	+	+			+	+			+	+			+	+	+		
PLO 15			+			+	+	+	+	+			+		+	+	+	+				+	+		
PLO 16			+			+	+	+		+					+		+	+	+	+	+	+	+		+
PLO 17							+	+	+	+					+			+		+	+	+	+	+	+
PLO 18	+	+	+	+			+	+		+				+			+	+			+	+		+	+
PLO 19	+	+	+				+	+		+						+		+			+	+		+	+
PLO 20		+					+	+		+						+	+	+	+	+	+	+	+	+	
PLO 21								+	+								+					+			+
PLO 22																	+				+	+	+	+	
PLO 23								+										+			+				

Continuation of Chart 5.1

Program learning outcomes \ Educational components	MCP 18	MCP 19	MCP 20	MCP 21	MCP 22	MCP 23	MCP 24	MCP 25	MCP 26	MCP 27	MCP 28	MCP 29	MCP 30	MCP 31	MCP 32	MCP 33	MCP 34	MCP 35	MCP 36	MCP 37	MCPT 1	MCPT 2	MCPT 3	MCPT 4	MCPT 5	MCPT 6	MCPT 7
PLO 1	+	+	+		+	+	+	+	+			+	+	+	+	+	+	+			+		+	+	+	+	+
PLO 2	+	+	+		+	+	+	+	+	+		+	+	+	+	+	+	+			+		+	+	+	+	+
PLO 3	+	+	+		+	+	+	+	+			+	+	+	+		+	+			+		+	+	+	+	+
PLO 4		+	+		+	+	+	+	+	+		+	+	+	+		+	+			+		+	+	+	+	+
PLO 5	+	+	+		+	+	+	+	+	+		+	+	+	+		+	+	+		+		+	+	+	+	+
PLO 6		+	+	+	+	+	+	+		+	+	+	+	+	+						+	+		+	+	+	+
PLO 7		+	+	+	+	+	+	+		+	+	+	+	+	+					+	+	+		+	+	+	+
PLO 8	+	+	+		+	+	+	+	+	+		+	+	+	+									+	+	+	+
PLO 9		+	+	+	+	+	+	+		+			+	+	+									+	+	+	+
PLO 10			+		+	+	+	+		+			+	+										+	+	+	+
PLO 11			+		+	+	+	+				+	+	+				+						+	+	+	+
PLO 12		+	+		+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+			+	+	+	+
PLO 13	+	+	+		+	+	+	+				+	+	+			+	+			+		+	+	+	+	+
PLO 14	+		+	+	+	+	+	+	+		+		+	+			+	+			+		+	+	+	+	+
PLO 15		+	+	+	+	+	+	+	+		+	+	+	+			+	+	+	+	+			+	+	+	+
PLO 16		+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+			+	+	+	+
PLO 17		+	+	+	+	+	+	+		+	+	+	+	+			+	+	+	+	+		+	+	+	+	+
PLO 18		+	+	+	+	+	+	+	+		+	+	+	+			+	+	+	+	+			+	+	+	+
PLO 19		+	+	+	+	+	+	+	+		+	+	+	+			+	+	+	+	+			+	+	+	+
PLO 20			+	+	+	+	+	+	+		+		+	+			+	+	+	+	+		+	+	+	+	+
PLO 21	+	+	+		+	+	+	+	+				+	+	+		+	+	+	+				+	+	+	+
PLO 22	+			+	+	+	+	+	+			+	+	+	+								+	+	+	+	+
PLO 23	+	+			+	+	+	+	+	+			+	+	+		+	+						+	+	+	+

6. Requirements for Availability of Internal Quality Assurance System in Higher Education

In accordance with the Law of Ukraine “On Higher Education”, the University has developed and implemented Internal Quality Assurance System based on the principles contained in the “Standards and Guidelines for Quality in the European Higher Education Area” of the European Association for Quality Assurance in Higher Education and National Standard of Ukraine “Quality Management Systems” (UNSS) ISO 9001: 2015, Regulations of the National Agency for Quality Assurance in Higher Education on the introduction of Internal Quality Assurance System (by the decision of NAQAHE, Minutes no. 6 of June 26th, 2019).

IFNMU Quality Management System (QMS) is certified to provide services in the field of higher education at the university level and in the field of health care UNSS ISO 9001: 2015 (no. UA MQ. 048-167-17 of June 12th, 2017). In 2018, 2019 the University was under follow-up external supervisory audits and got confirmation that QAS of IFNMU matched the internationally recognized current certificate.

Primary ways and means of education quality assurance at IFNMU:

- education programs development solely on grounds of competence, transition to an all-European understanding of education content of in the field of health care;
- monitoring of trends in the development of the world education and science in order to respond timely to global challenges, changes in educational services market conditions, introduction of new technologies;
- educational programs with a focus on the needs of educational and medical establishments, practical healthcare institutions by involving them in the educational process;
- development and implementation of intensive student-centred learning technologies (individualization of learning);
- introduction of distant learning technologies in the educational process;
- assisting students to acquire communicative competence in a foreign language at the required level;
- expansion of the University participation in international programs of academic mobility of students and academic staff;
- integration with educational institutions of different levels and with medical institutions;
- involvement of employers’ representatives and leading specialists in the educational programs content development, in the educational process participation and in graduates certification;
- provision of appropriate conditions for students practical training;
- marketing of educational services and formulation of proposals for new education programs introduction, systematic analysis of employment and career growth of graduates;
- improvement of measures aimed at strengthening of the students assessment objectivity;
- control of feedback procedures between educational process participants as a

necessary cornerstone component of the process of quality assurance in higher education in the field of II Healthcare and social security;

- creation of organizational and technical conditions and means of assessment of educational process quality by former graduates;
- continuous improvement of monitoring system and quality assurance of students training;
- introduction of a system for academic staff performance assessment in education programs implementation;
- participation in activities to foster a positive reputation of the institution;
- approval and implementation of advanced training programs for the academic staff at the University and other institutions.

Monitoring and Periodic Revision of Education Programs

Revision of education programs is based on the monitoring results. The criteria for the educational programs revision are formulated both as a result of feedback from external and internal stakeholders and as a result of the expected development of the field and the society's needs. Education programs are revised and reapproved at least once a year, usually before the beginning of the academic year.

Annual Assessment of Students

Annual assessment of students is made in accordance with the Regulations on the Organization of the Educational Process at IFNMU and is published on the website of the University.

Advanced Training of Academic Staff

Advanced training and traineeship of the academic staff are held in accordance with the Ukraine's regulatory legal act and Regulations on professional development of the academic staff of IFNMU.

Advanced training results are taken into account in the rating assessment of the academic staff. Ratings of the University's teachers are covered at the meetings of Learned Council and Rectorate and brought to the attention of the departments.

Publicity of Information on Education Programs, Degrees of Higher Education and Qualification

The official website of the University contains information that is subject to mandatory publication in accordance with the requirements of the Law of Ukraine "On Higher Education", "On Access to Public Information" (<https://www.ifnmu.edu.ua/uk>).

Prevention and Detection of Academic Plagiarism

Prevention of plagiarism in the University's academic environment is controlled by the "Regulations on the Detection and Prevention of Academic Plagiarism at the University" (https://www.ifnmu.edu.ua/images/diyalnist_universitetu/naukova_robota/komisiya_plagi_atu/Pologennya.pdf)

Recommendations for higher educational institutions on the development and implementation of the university system of academic honesty (by the decision of NAQAHE, Minutes no. 11 of October 29th, 2019).

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Appendix 1

List 1 (Syndromes and Symptoms)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. adentia 2. anemia 3. malocclusion 4. facial asymmetry 5. atrophy 6. temporomandibular joint syndrome 7. chest pain 8. toothache 9. abdominal pain 10. soft tissue pain in the maxillofacial area 11. facial pain 12. loss of consciousness 13. clinical attachment loss 14. hypermobility in TMJ 15. hemorrhagic syndrome 16. hyperesthesia 17. hypersalivation 18. headache 19. rhinolalia (open, closed) 20. mandibular deviation, bone tissue destruction 21. dental crown problems 22. facial skeleton deformity 23. occlusion deformity 24. tooth discoloration 25. facial disproportion 26. jaundice 27. shortness of breath and asphyxia 28. inflammatory infiltrate of the maxillofacial area 29. dizziness 30. discoloration of the oral mucosa and skin 31. teeth reshaping 32. change in interalveolar height 33. elements of lesion of oral mucosa and skin 34. convergence (divergence) of teeth | <ol style="list-style-type: none"> 35. xerostomia 36. fever 37. lymphadenopathy 38. macroglossia 39. macrocheilia 40. maceration of the corners of the mouth 41. meningeal syndrome 42. edematous syndrome 43. dental plaque 44. fistulous tract 45. restricted mouth opening 46. paresis, nerve palsy in the maxillofacial region 47. heartburn 48. dental abrasion 49. jaw movement dysfunction 50. taste disturbance 51. sensory disturbances of the maxillofacial region 52. disorders of sucking and swallowing, pathology tooth mobility 53. maxillofacial tumors and tumor-like lesions 54. gum recession 55. mobility of facial bone fragments 56. thinning of the cortical plate of the jaws 57. “devastation-filling” 58. partial and complete tooth loss 59. fluctuation 60. chemosis 61. cyanosis (diffuse and local) 62. cleft lip and cleft palate, I-II gill arch syndrome, first and second branchial arch syndromes 63. gingival, periodontal, bone pocket |
|---|--|

Appendix 2

(Dental Diseases)

1. Therapeutic dentistry:

A) Non-carious lesions of hard dental tissues:

1. hyperesthesia
2. hypoplasia, enamel hyperplasia
3. fluorosis
4. erosion of dental hard tissues
5. wedge-shaped defect
6. tooth abrasion

7. necrosis of dental hard tissues

8. discoloration

9. traumatic tooth injuries

B) Caries and its complications:

10. caries

11. pulpitis

12. periodontitis

C) Periodontal disease:

13. papillitis
14. gingivitis (localized, generalized)
15. periodontitis (localized, generalized)
16. parodontosis
17. idiopathic periodontal diseases

D) Diseases of the oral mucosa (OM):

18. traumatic lesions of the OM
19. autoinfectious diseases of the OM (acute aphthous stomatitis, herpetic, ulcerative-necrotic, candidal lesions of the OM)
20. secondary bacterial diseases (diphtheria, tuberculosis, syphilis, gonorrhoea)
21. diseases of the OM in dermatoses with autoimmune component of pathogenesis (pemphigus, lichen acuminatus, lupus erythematosus)
22. changes in the OM caused by allergies
23. changes in the OM caused by heavy metal poisoning
24. symptomatic viral diseases (AIDS, influenza, aphthous fever, infectious mononucleosis)
25. symptomatic manifestations of gastrointestinal disorders (peptic ulcer, gastritis, enteritis, colitis, chronic hepatitis) on the OM
26. symptomatic manifestations of cardiovascular diseases (circulatory failure, essential hypertension) on the OM
27. symptomatic manifestations of endocrine disorders (acromegaly, Cushing's syndrome, diabetes, hyper- and hypothyroidism) on the OM
28. symptomatic manifestations of blood diseases (anemia, thrombocytopenic purpura, leukemia) on the OM
29. symptomatic manifestations of hypo- and avitaminosis on the OM
30. tongue diseases and abnormalities (desquamative glossitis, rhomboid glossitis, folded tongue, hairy tongue)
31. neurogenic disorders of the tongue (glossalgia, stomalgia, ganglionitis)
32. independent and symptomatic cheilitis (actinic, meteorological, contact allergic, glandular, exfoliative, eczematous, atopic)

E) Precancerous lesion of the OM and vermilion border:

33. obligate precancers (Bowen's disease, nodular precancer, limited precancerous hyperkeratosis, Manganotti's cheilitis)
34. facultative precancerous diseases

2. Pediatric dentistry:

A) Tooth Pathology:

35. enamel hypoplasia (systemic and local)
36. endemic fluorosis
37. congenital dental hard tissue anomalies in children
38. caries and its complications in children's temporary and permanent teeth
39. traumatic lesions of the teeth

B) Periodontal pathology:

40. gingivitis
41. idiopathic periodontal disease
42. periodontitis

C) Oral mucosa (OM) pathology:

43. allergic diseases of the OM
44. tongue abnormalities and diseases
45. oral mucosal fungal infections in children
46. OM manifestations of systemic diseases
47. OM manifestations of specific diseases
48. influence of acute viral and infectious diseases on the OM (diphtheria, chickenpox, measles, infectious mononucleosis, scarlet fever)
49. oral mucosal viral diseases (acute herpetic stomatitis, recurrent herpetic stomatitis, shingles)
50. primary and symptomatic cheilitis, glossitis

D) Inflammatory diseases of the maxillofacial area:

51. periostitis
52. osteomyelitis of the jaws
53. temporomandibular joint (TMJ) disorders
54. salivary gland disorders
55. lymphadenitis
56. nonodontogenic soft tissue inflammation (furunculus, carbuncle, erysipelas)
57. specific inflammation (tuberculosis, syphilis, actinomycosis)
58. phlegmons and abscesses

E) Maxillofacial injuries:

59. injuries of the soft tissue (wounds, burns), teeth, jaws, facial bones, TMJ

F) Maxillofacial tumors and tumor-like lesions:

60. benign tumors and tumor-like lesions of soft tissues and facial bones
61. malignant tumors of soft tissues and facial bones

G) Congenital malformations of the face:

62. nonunion of the upper lip, alveolar process, hard and soft palate (isolated and dipnoous)
63. defects of soft tissue attachment (lip and tongue ties, shallow vestibule of the oral cavity)

64. congenital syndromes

H) TMJ disorders, ankylosis

3. Surgical dentistry:

A) Inflammatory diseases of the maxillofacial area:

65. deep and superficial phlegmons, abscesses
66. lymphadenitis
67. trigeminal neuralgia, Bell's palsy, neuralgia
68. nonodontogenic inflammation
69. odontogenic sinusitis
70. parodontitis, periodontitis, alveolitis, periostitis, osteomyelitis; pericoronaritis
71. inflammatory disorders of the salivary glands
72. specific inflammatory diseases (tuberculosis, syphilis, actinomycosis)

B) Maxillofacial injuries:

73. dental and facial traumas
74. soft tissue, tongue and OM injuries
75. maxillofacial gunshot wounds and non-gunshot injuries; cranio-maxillary-facial injuries
76. thermal, chemical, electrical and radiation maxillofacial tissues damage; combined injury

C) Temporomandibular joint (TMJ) disorders:

77. arthritis, arthrosis-arthritis, arthrosis
78. ankylosis
79. TMJ disorder, mandibular dislocations and contractures

D) Tumors and tumor-like lesions of the OM, salivary glands, maxillofacial, neck and facial soft tissues

80. benign tumors and tumor-like lesions
81. precancerous diseases and malignant tumors of the OM, salivary glands, soft tissues of the maxillofacial area, neck and facial bones

E) Congenital and acquired defects and deformities of the tissues of the head and neck:

82. developmental dental anomalies, congenital jaw deformities, facial skull bone defects, mixed abnormalities and deformities of the cerebral, facial skull and the dentition
83. congenital malformations and deformities of the head and neck soft tissues
84. acquired defects and deformities of soft tissues of the maxillofacial area, neck and facial skeleton bones
85. age-related changes in the face and neck soft tissues, vertical and horizontal atrophy of the

alveolar processes of the jaw bones, adentia, gingival recession

86. cosmetic defects and deformities of the head and neck organs and tissues

F) Maxillofacial dysplastic abnormalities

87. degenerative diseases of periodontal tissues
88. sialose
89. dysplastic abnormalities of the head and neck soft tissues

G) Neurodental diseases:

90. neuritis, trigeminal neuralgia

4. Orthopedic dentistry:

91. partial tooth loss

- a) limited distal defects of the dentition
- b) unlimited distal defects of the dentition

92. complete tooth loss

93. tooth abrasion

94. dental crown problems

95. complete destruction of the tooth crown

96. dentofacial deformities

97. masticatory muscles parafunctions

98. occlusal trauma

99. injuries and defects of the jaws, nose, ears, orbits, combined defects

100. TMJ diseases

101. TMJ dysfunction

5. Orthodontics

A) single tooth abnormalities:

102. size

103. shape

104. number

105. retention

B) abnormalities of tooth position:

106. diastema and trema

107. dental crowding

108. tortoanomaly

109. vestibulo-oral position of teeth, dystopia, transposition, supra-infraposition

C) sagittal malocclusion:

110. progeny (mesial) (skeletal, dentoalveolar)

111. prognathism (distal) (skeletal, dentoalveolar)

D) vertical malocclusion:

112. open (skeletal, dentoalveolar)

113. deep (skeletal, dentoalveolar)

E) transverse malocclusion:

114. cross (unilateral or bilateral, with or without mandibular dislocation) (skeletal, dentoalveolar).

List 2.1 (Main Dental Diseases)

1. non-carious dental lesions
2. caries of temporary and permanent teeth
3. pulpitis of temporary and permanent teeth
4. periodontitis of temporary and permanent teeth
5. papillitis
6. gingivitis
7. periodontitis
8. periodontosis
9. traumatic injuries
10. oral mucosa auto-infections (acute ulcerative stomatitis, herpetic, necrotizing ulcerative, mycotic lesions of the oral mucosa)
11. secondary bacterial infections (diphtheria, tuberculosis, syphilis, gonorrhoea гонорея)
12. oral manifestations of immunodeficiency states (AIDS)
13. allergies
14. alveolitis
15. pericoronitis
16. periostitis
17. lymphadenitis
18. traumatic injuries of the facial soft tissues
19. acute mandibular dislocation and jaw claudication
20. mandible and maxilla noncomplicated fractures
21. dental crown defects
22. partial and complete edentia

List 3 (Physiological states and somatic diseases requiring special tactics of patient managements)

A) Physiological states:

1. pregnancy

B) Diseases of blood and blood-forming organs:

2. anemia
3. hemophilia
4. leukemia
5. thrombocytopenic purpura

B) Cardio-vascular diseases:

6. arterial hypertension
7. infectious endocarditis
8. heart defects
9. heart failure
10. cardiac arrhythmia
11. presence of a pacemaker

C) mental disorders:

12. acute psychosis including tromomania
13. epilepsy

D) Diseases of the respiratory system and mediastinum

14. bronchial asthma

E) ENT organs pathology:

15. tonsillitis
16. rhinitis

17. sinusitis

18. nasal septum deviation

F) Diseases of the Endocrine system:

19. diabetes mellitus
20. thyroid diseases

G) Musculoskeletal system and connective tissue pathologies:

21. widespread vasculitis (acute vascular purpura)
22. rheumatoid arthritis
23. postural disorder

H) Infectious and parasitic diseases

24. HIV infection / AIDS
25. viral hepatitis
26. diphtheria
27. tetanus
28. anthrax
29. tuberculosis of various localization
30. cholera
31. plague
32. gonorrhoea
33. syphilis

I) Diseases of the nervous system:

34. myasthenia
35. amyotrophic lateral sclerosis

List 4 (Emergencies)

1. asphyxia (including in newborns)
2. hypertensive crisis
3. acute respiratory failure
4. acute cardiac failure
5. acute poisoning
6. acute abdomen
7. electrical injury
8. unconsciousness
9. external bleeding
10. collapse

- | | |
|-----------------------------|------------------------|
| 11. coma | 17. physiologic labour |
| 12. laryngeal edema | 18. shock |
| 13. Quincke's edema | 19. bone injury |
| 14. burns and cold injuries | 20. epilepsy |
| 15. convulsions | 21. stroke |
| 16. drowning | |

List 5 (Laboratory and Instrumental Examination)

1. analysis of punctate of soft tissues and bones neoplasms
2. histomorphological examination of biopsy material of lymph nodes, salivary glands, mucous membranes, and soft tissues
3. blood glucose test
4. diagnostic jaw casts study
5. functions of the dentofacial system (respiration, swallowing, speaking, mastication, TMJ)
6. complete blood cell count
7. clinical urinalysis
8. metabolic panel
9. immunologic test in dental diseases
10. coagulogram
11. interpretation of the skull, dentofacial apparatus and salivary glands radiographs
12. cytologic screening of dentofacial organs and tissues
13. microbiological analysis of oral fluid, oral mucosa swabs and parodontium
14. functional diagnosis of the oral cavity health (luminescent, rheoparodontography, stomatoscopy, capillaroscopy, vacuum test, etc.)

List 6 (Medical Procedures)

1. to perform artificial respiration
2. to give closed-chest cardiac massage
3. to immobilize the tongue
4. to arrest external bleeding
5. to perform primary surgical debridement
6. to wash out the stomach, to evacuate the intestine
7. to carry out transport immobilization
8. to make injections (intramuscular, subcutaneous, intravenous, and drip infusion)
9. to measure blood pressure
10. to take primary neonate care
11. to determine blood type and rhesus factor

List 7 (Dental Procedures)

1. alveolotomy
2. pulp amputation of the temporary and permanent teeth
3. anthropometric study of jaw casts
4. selective tooth grinding, occlusion balance, occlusogram, periodontogram filling in
5. temporary splints manufacturing, splinting in fractures of teeth, alveolar processes and jaws
6. dental plaque removal
7. determination of dental enamel acid resistance (TER, CDERR, SCT test)
8. registration and stabilization of centric jaw relation
9. identification of Tsilinsky's symptom
10. identification of construction bite
11. identification of sagittal gap

12. identification of vertical gap
13. identification of signs of orthognatic occlusion and its types
14. identification of signs of pathologic occlusions
15. reduction of mandiblular dislocation
16. fissure sealing
17. the use of diagnostic dyes
18. diathermocoagulation
19. extirpation of temporary and permanent teeth pulp
20. electroodontodiagnosis
21. the use of topical medications in the treatment of periodontal and oral mucosa diseases
22. different techniques of local anesthesia in dental diseases treatment (application anesthesia, infiltration anesthesia, block anesthesia)
23. artificial crowns removal
24. surgeries performed in periodontitis to save teeth
25. post-extraction bleeding arrest
26. deep fluoridation of hard dental tissues
27. correction of partial and complete dentures
28. correction and activation of removable orthodontic appliances
29. dental socket curettage
30. periodontal pockets curettage
31. drug treatment of the affected oral mucosa and periodontium
32. tooth filling and removal of temporary fillings and airtight packing
33. rubber dam installation
34. installation of dentofacial appliances (repositioning, reforming, substituting, retaining)
35. sealing of root canals of temporary and permanent teeth with different materials
36. anatomical and functional impression taking using various impression materials
37. jaw denture frames
38. endosseous dental implant impression taking
39. parallelometry in clasp denture design
40. testing of prosthetic constructions for patients with partially or completely edentulous jaw
41. periostotomy
42. filling dental cavities of temporary and permanent teeth using different dental filling materials
43. teeth curative and protective lacquer, gel or desensitizer covering
44. teeth preparation for metal swaged, acrylic cast, non-metal crowns
45. teeth preparation of inlays and veneers
46. preparation and cleaning of root canals of temporary and permanent teeth
47. root canal preparation for a post
48. preparation of carious cavities of temporary and permanent teeth considering of filling material type
49. fitting of different types of artificial crowns
50. intradental electrophoresis
51. teeth ligation
52. professional oral cavity hygiene
53. professional oral cavity hygiene of dental implants
54. physiological separation
55. periodontal probing
56. direct and indirect pulp cap
57. registration of maxilla position using a facebow
58. periodontal abscess lancing
59. operculum incision and removal in pericoronitis
60. creation of algorithm for individual oral hygiene

61. temporary immobilization in jaw fractures
62. typical and atypical extraction of temporary and permanent teeth
63. cystostomy
64. crowns and bridgeworks fixing
65. ring banding
66. centric jaw relation registration in classes 2, 3, and 4 defects
67. debridement of facial soft tissues within a single anatomical area
68. shaping and polishing of fillings made from different types of materials