

"REVIEWED"

at the meeting of the Academic
Council of International Medical
Faculty, Protocol № 2
from "29" 10 2018 y.



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Dean of the International Medical
Faculty of Osh State University
d.m.s. professor Muratov Zh.K.

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GRADUATE MODEL

Area of training (specialty): **560001 General Medicine (GM)**

Qualification (degree) - **Specialist (Physician)**

I. Aims of higher professional education in the field of training 560001- General Medicine (GM):

- **Objective 1:** To train a qualified professional capable of performing basic medical skills, with organizational, managerial, educational, and research abilities, who meets the requirements of the quality assurance system in the international educational process;
- **Objective 2:** To provide fundamental knowledge and skills for the acquisition of basic professional skills to provide therapeutic and preventive and medical and social care to the population, based on a competency-based approach;
- **Objective 3:** To ensure readiness for postgraduate training, social and professional mobility in the international labor market; integration in the international scientific and educational space in the field of professional activity;
- **Objective 4:** Formation of universal human and cultural-moral values, professional-ethical and civic responsibility, critical thinking skills, self-development, self-actualization and self-education, demanded in modern society;

II. Learning outcomes of EP:

LO1 - Is able to use basic knowledge of humanities, natural sciences, economic disciplines in professional work;

LO1 = GSC1+GSC2+GSC3+GSC4+SPC2

LO2 - Capable of using modern communication technologies, including in a foreign language, for academic and professional interaction;

LO2 = GSC5+GSC6+IC2

LO3 - Able to identify and implement the priorities of his/her own activities and ways to improve them on the basis of accepted moral and legal norms of society;

LO3 = SPC1+GSC7+GSC8+IC3+PC1+PC21+PC25+AC1+AC2

LO4 - Capable of solving standard tasks using medical and technical equipment, information and communication resources and technology;

LO4 = IC1+PC5

LO5 - Capable of assessing morph functional, physiological conditions and pathological processes and apply research methods to adult and pediatric patients to solve professional problems;

LO5 = PC2+PC3+PC4+AC3

LO6 - Can apply basic knowledge in prevention to solve professional problems;

LO6 = SPC5+PC7+PC8+PC9+PC10+PC22

LO7 - Can apply basic knowledge of diagnostic activities to solve professional problems;

LO7 = PC11+PC12+PC13

LO8 - Can apply basic knowledge of therapeutic activities to solve professional problems;

LO8 = PC14+PC15+PC16+PC17+PC18

LO9 - Can apply basic knowledge of rehabilitation activities to solve professional problems;

LO9 = PC19+PC20+PC26

LO10 - Knows how to manage the health care system, keep records and analyze statistical data;

LO10 = SPC4+PC6+PC23+PC24

LO11 - Can apply basic knowledge in the field of research activities to solve professional problems:

LO11 = IC4+SPC3+PC27

III. Area of professional activity of the graduate:

a set of technologies, means, methods and techniques of human activity aimed at preserving and improving public health by ensuring the proper quality of medical care (therapeutic and preventive, medico-social) and dispensary care.

IV. The objects of the graduate's professional activity:

- adolescents between the ages of 15 and 18;
- adults over the age of 18;
- a set of means and technologies aimed at creating conditions for the preservation of health, ensuring the prevention, diagnosis and treatment of diseases.

V. Types of professional activity of the graduate

- preventive;
- diagnostic;
- therapeutic;
- rehabilitative;
- psycho-pedagogical;
- organizational and managerial;
- research.

VI. Tasks of the graduate's professional activity

A specialist in the field of training (specialty) 560001 - General Medicine (GM) must solve the following professional problems:

Preventive activities:
<ul style="list-style-type: none">- implementation of measures to promote the health of children, adolescents and adults;- disease prevention among children, adolescents, and adults;- to motivate adults and children to preserve and improve their health;- conducting preventive and anti-epidemiological measures aimed at preventing the emergence of diseases;- dispensary care for adults, adolescents, and children;- health education for adults, children, their relatives, and medical staff to promote healthy lifestyles.
Diagnostic activities:
<ul style="list-style-type: none">- diagnosis of diseases and pathological conditions in children, adolescents and adults on the basis of knowledge of propaedeutic and laboratory-instrumental methods of research;- diagnosis of emergency conditions in children, adolescents and adults;- pregnancy diagnosis.
Therapeutic activities:

<ul style="list-style-type: none"> - treatment of adults, adolescents and children using therapeutic and surgical methods; - management of physiological and pathological pregnancy; - providing medical care to adults, adolescents and children in case of emergencies; - conducting therapeutic and evacuation activities in an emergency situation and providing medical care to the population in extreme conditions of epidemics, in the foci of mass destruction; - organization of work with medications and compliance with the rules of their use and storage.
Rehabilitation activities:
<ul style="list-style-type: none"> - rehabilitation activities for adults, adolescents and children who have had a somatic illness, trauma or surgery; - the use of therapeutic exercise, physical therapy and spa factors in adults, adolescents and children, with a preventive purpose and in need of rehabilitation.
Educational activities:
<ul style="list-style-type: none"> - to promote positive health behaviors among adults, adolescents, and children aimed at preserving and improving their health; - motivating adults, adolescents and children to lead healthy lifestyles, including the elimination of bad habits that have an adverse effect on the health of the younger generation; - training adults, adolescents and children in basic recreational activities that promote disease prevention and health promotion.
Organizational and managerial activities:
<ul style="list-style-type: none"> - knowledge of the health care organization and referral system; - maintaining medical records at the hospital and primary care level; - compliance with the quality of medical, diagnostic, rehabilitation and preventive care for adults and children; - maintaining business correspondence (memos, reports, letters, etc.).
Research activities:
<ul style="list-style-type: none"> - analysis of scientific literature and official statistical reviews; - preparation of reports on the specialty; - participation in conducting statistical analysis and preparing a report on the study.

VII. Graduate Model:

Universal Competencies / Expected Results	
Systems approach and critical thinking skills	Is able to use basic knowledge of humanities, natural sciences, economics in professional work (LO1)
Communication skills and intercultural interaction	Able to use modern communication technologies, including in a foreign language, for academic and professional interaction (LO2)
Self-organization and self education. Leadership and teamwork	Is able to identify and implement the priorities of their own activities and ways to improve them on the basis of accepted moral and legal norms of society (LO3).
Information literacy and security	Is able to solve standard tasks using medical and technical equipment, information and communication resources and technologies, taking into account the basic requirements of information and technical security (LO4).
General professional competencies / Expected results	
Morph physiological and pathophysiological essence of diseases and conditions	Able to assess morph functional, physiological conditions and pathological processes to solve professional problems (LO5).
Professional competencies / Expected results	

Preventive activities	Can apply basic knowledge of prevention activities to solve professional problems (LO6).
Diagnostic activities	Is able to apply basic knowledge in the field of diagnostic activities to solve professional problems (LO7).
Therapeutic activities	Is able to apply basic knowledge in the field of therapeutic activities to solve professional problems (LO8).
Rehabilitation activities	Can apply basic knowledge of rehabilitation activities to solve professional problems (LO9).
Organizational and managerial activities	Knows how to manage the health care system, keep accounting and reporting records, analyze statistical data (LO10).
Research activities	Is able to apply basic knowledge in the field of research activities to solve professional problems (LO11).

VIII. The graduate must have the following **universal** and **professional** competencies (according to the State Educational Standard):

UNIVERSAL COMPETENCES	
General science competencies:	
<ul style="list-style-type: none"> - able to analyze socially significant problems and processes, to use in practice the methods of humanities, natural sciences, medical-biological and clinical sciences in various types of professional and social activities (GSC-1); - able to analyze worldview, socially and personally significant problems, basic philosophical categories, to self-improvement (GSC -2); - able to analyze significant political events and trends, to master the basic concepts and patterns of the world historical process, to respect and cherish the historical heritage and traditions, have knowledge of historical and medical terminology (GSC -3); - able to analyze economic problems and social processes, use the methods of economic relations in the health care system (GSC -4); - is capable of logical and reasoned analysis, public speaking, debate and controversy, conducting educational and training activities, cooperation and conflict resolution; tolerance (GSC -5); - able and willing to learn one of the foreign languages at the level of everyday communication, to write and communicate orally in the state language and the official language (GSC -6); - is able to use management methods; organize teamwork, find and make responsible managerial decisions within his professional competence (GSC -7); - is able to carry out his/her activities taking into account moral and legal norms accepted in the society; to comply with the rules of medical ethics, laws and regulations on working with confidential information; to keep medical secrets (GSC -8). 	
Instrumental competencies	
<ul style="list-style-type: none"> - ability to work independently on the computer (elementary skills) (IC-1); - ready for written and oral communication in the state language and the official language, able to master one of the foreign languages at the level of everyday communication (IC - 2); - is able to use management methods; organize the work of performers; find and make responsible management decisions in a variety of opinions and within their professional competence (IC - 3); - Readiness to work with information from a variety of sources (IC -4). 	
Socio-personal and general cultural competencies	
<ul style="list-style-type: none"> - able to implement ethical and deontological aspects of medical activity in communication with colleagues, nurses and junior staff, adults and children (SPC-1); able and willing to identify the natural scientific essence of the problems arising in the course of the doctor's professional activity (SPC -2); - able to analyze medical information based on the principles of evidence-based medicine (SPC -3); 	

- is able to use modern socio-hygienic methods of collecting and medico-statistical analysis of information on the health indicators of the child population (SPC -4);
- is able to use methods to assess natural (including climatic and geographical) and medical and social environmental factors in the development of diseases in children and adolescents, to carry out their correction (SPC -5);

PROFESSIONAL COMPETENCES

General professional competencies

- able to analyze the results of their own activities to prevent medical errors, while being aware of disciplinary, administrative, civil and criminal responsibility (PC-1);
- able and willing to conduct and interpret the interview, physical examination, clinical examination, results of modern laboratory and instrumental studies, write medical records of outpatient and inpatient adult and child patients (PC-2);
- able to conduct pathophysiological analysis of clinical syndromes, justify pathogenically justified methods (principles) of diagnosis, treatment, rehabilitation and prevention in adults and children, taking into account their age and gender groups (PC-3);
- able to use aseptic and antiseptic methods, use medical instruments, know the technique of caring for sick adults and children (PC-4);
- able to work with medical and technical equipment used in working with patients, own computer equipment, obtain information from various sources, work with information in global computer networks, apply the capabilities of modern information technology to solve professional problems (PC-5);
- is able to apply up-to-date information about public health indicators at the level of health care institutions (PC-6);

Preventive activities

- carry out preventive measures to prevent infectious, parasitic and non-infectious diseases, conduct health education on hygienic issues (PC-7);
- is able to carry out with the attached population preventive measures to prevent the occurrence of the most common diseases, to carry out general health measures to form a healthy lifestyle, taking into account risk factors, to give recommendations for a healthy diet (PC-8);
- able to select individuals for observation, taking into account the results of mass tuberculin diagnostics and fluorographic examination, to assess its results for the early detection of tuberculosis (PC-9);
- able to carry out anti-epidemic measures, protection of the population in foci of especially dangerous infections, in a deteriorating radiation situation and natural disasters (PC-10);

Diagnostic activities

- able and ready to make a diagnosis based on the results of biochemical and clinical studies, taking into account the course of the pathology of the organs, systems and the body as a whole (PC-11);
- able to analyze the patterns of functioning of individual organs and systems, to use knowledge of anatomical and physiological features, basic methods of clinical and laboratory examination and assessment of the functional state of the adult and child body, for timely diagnosis of diseases and pathological processes (PC-12);
- able to identify patients with the main pathological symptoms and disease syndromes, using knowledge of the basics of biomedical and clinical disciplines, taking into account the course of pathology in organs, body systems as a whole, analyze the patterns of functioning of organs and systems in various diseases and pathological processes, use an algorithm for diagnosis (major, related, complications) with the ICD-10, perform basic diagnostic measures to identify emergencies and life-threatening conditions (PC- 13)

Therapeutic activities

- able to perform basic therapeutic measures for the most common diseases and conditions in adults and children (PC-14);
- able to prescribe adequate treatment to patients according to the diagnosis (PC-15);
- able to provide first aid to adults and children in case of emergencies and life-threatening conditions, to send patients for hospitalization on a planned and emergency basis (PC- 16);

<ul style="list-style-type: none"> - able to prescribe adequate treatment to patients according to the diagnosis (PC-17); - able to provide first aid to adults and children in case of emergencies and life-threatening conditions, to refer patients for hospitalization on a planned and emergency basis (PC- 18)
Rehabilitation activities
<ul style="list-style-type: none"> - able and ready to apply rehabilitation measures (medical, social and professional) among adults and children for the most common pathological conditions and injuries (PC-19); - able to give recommendations on the choice of regime, to determine indications and contraindications for the appointment of physical therapy, physical therapy, nonmedical therapy, to use the main spa factors in the treatment of adults and children (PC- 20)
Educational activities
<ul style="list-style-type: none"> - able to train nursing and junior medical staff and patients in the rules of sanitary- hygienic regime, ethical and deontological principles (PC-21); - able to teach adults and children the rules of medical behavior; to conduct hygienic procedures by them, to form skills for a healthy lifestyle (PC-22);
Organizational and managerial activities
<ul style="list-style-type: none"> - able to use the regulatory documentation adopted in the health care of the Kyrgyz Republic (PC-23); - is able to use the knowledge of the organizational structure, health care organizations, Referral and referral system (PC-24); - able to ensure the rational organization of work of nursing staff and junior medical personnel of medical and preventive institutions (PC-25); - must know the basic issues of the examination of the ability to work (temporary) among the population, to carry out the prevention of disability among adults and children (PC- 26);

The decision of the working group meeting of the EP on 15.10.18, the Protocol № 4 for the formation of LO-3, LO-5 introduced additional competencies:

AC-1 - readiness for self-development, self-actualization, self-education, and the use of creative potential;

AC-2 - readiness to work in a team, tolerant of social, ethnic, religious and cultural differences;

AC-3 - able and ready to assess morph functional and physiological conditions and pathological processes in the human body, taking into account their age and gender groups to solve professional problems;

IX. Draft curriculum:

Term of study - 6 years (full-time education). The workload for each academic year - 60 credits (credits), for one semester (at two-semester structure of the educational process) - 30 credits. One credit is equivalent to 30 hours of academic work of the student:

Codes of educational cycles and sections	Study cycles and sections	Labor intensity, credits
C. 1	Humanities, Social and Economic Cycle	36 / 1080
C. 1. B.	Basic part	30 / 900
C. 1. B.	Variative part	6 / 180
C. 2	Mathematical and Natural Science Cycle	21 / 630
C. 2. B.	Basic part	15 / 450
C. 2. B.	Variative part	6 / 180
C. 3	Professional cycle	287 / 8610
C. 3. B.	Basic part	200 / 6000
C. 3. B.	Variative part	87 / 2610

C. 4	Additional types of training	500 hours
C. 5.	Clinical practice	16 / 480
<i>Total labor input</i>		360 / 10800

X. **The workload of the educational program** includes all types of classroom and independent work, practical training and time allocated to quality control of the educational program (all types of certification). Assessment of the quality of training includes current, intermediate, and final state attestation. For the certification of graduates on the compliance of their personal achievements with the stage-by-stage or final requirements there are created databases of assessment tools, including typical tasks, tests, tests, etc., allowing to assess the knowledge, skills and level of acquired competencies (*DIPLOMA SUPPLEMENT* is attached).

XI. Career opportunities for the graduate:

Upon mastering the educational program and successfully passing the state final attestation in the prescribed manner is issued a diploma of higher professional education with the qualification "Doctor". The graduate *must be prepared to*:

- to postgraduate education in clinical disciplines;
- and has the right:*
- to hold physician positions not related to the self-management of patients;
 - engage in research activities (postgraduate, master's, PhD doctoral studies) in theoretical and fundamental areas of medicine;
 - engage in scientific and pedagogical (trainee teacher) activities.

AGREED:

1. Sakibaev K.Sh. - chairman of the working group, c.m.s., assoc.prof., head of the depart.;
 2. Bugubaeva M.M. - secretary of the working group, c.m.s., assoc.prof., head of the depart.;
- Working Group Members:*
3. Dzhumaeva L.M. - PhD, assoc.prof., vice dean (3-6 c.);
 4. Atabaev I.N. - vice dean (1-2 c.);
 5. Azhimamatova R.M. - chairperson of the EMC of the faculty;
 6. Mamatova S.M. - c.m.s., assoc.prof., head of the depart.;
 7. Belov G.V. - d.m.s., prof., head of the depart.;
 8. Kurbanaliev A.Y. - d.ph-m.s., prof., head of the depart.;
 9. Ysmailova R.A. - assoc.prof., head of the depart.;
 10. Turusbekova A.K. - assoc.prof., head of the depart.;
 11. Mamasaidov A.T. - d.m.s., prof.;
 12. Belekov Zh.O. - d.m.s., prof., director of OIROC;
 13. Kalmatov R.K. - d.m.s., prof., director of «MC of OshSU»;
 14. Mamasharipov K.M. - c.m.s., deputy director of Osh City Clinical Hospital;
 15. Mohd Musheer - a graduate of Osh State University;
 16. Muhammad Wasim - a broker at 'WCI' company and a graduate of OshSU;
 17. Muhammad Yasir - a sixth-year student;