



Некоммерческое образовательное учреждение
Учебно-научно-производственный комплекс
«Международный университет Кыргызстана»

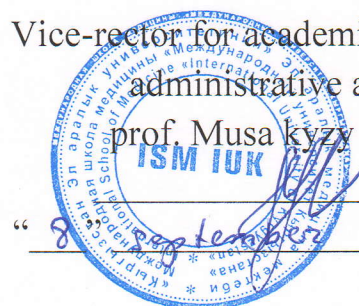
Система менеджмента качества
Учебно-методический комплекс дисциплины «Травматология и ортопедия»
ООП «Лечебное дело» МШМ МУК

International University of Kyrgyzstan
International School of Medicine
Department of “Surgery”



“APPROVED”

Vice-rector for academic and
administrative affairs
prof. Musa kyzy Alina



2021

**ACADEMIC-METHODOLOGICAL COMPLEX
OF THE DISCIPLINE**

“Traumatology and orthopedics”

main educational program

specialty of **General Medicine (for foreign citizens)**

graduate qualification: general practitioner

Bishkek 2021



Table of contents

1. The work program of the discipline.....	5
1.1. Explanatory note:	5
1.2. Recommended educational technologies.....	8
1.3. The scope of the discipline and types of educational work	9
1.4. Discipline structure.....	10
1.4.2. Organization of students' independent work	21
1.4.3. Evaluative Assessment Tools.....	38
1.4.4. Course Policy and Assessment Criteria.....	53
1.4.5. Educational-methodical and informational support of discipline.....	54
1.4.6. Material and technical support of discipline.....	63
1.4.7. Student research work.....	64
2. Teaching materials.....	67
2.1. Lecture notes	67
2.2. Development of practical / seminar / laboratory classes.....	173
3.1. Methodological recommendations for students on the study of discipline... 202	
3.2. Methodical recommendations for the implementation of practical / seminar classes, laboratory work.....	203
3.3. Methodical recommendations for the implementation of independent work.	203
3.4. Methodological instructions for the implementation of abstracts, reports, essays.....	204
3.5. Methodical instructions for preparation for the final certification.....	205
3.6. Methodical recommendations for the student's research work.	206
4. GLOSSARY.....	207



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THE WORK PROGRAM OF THE DISCIPLINE
"Traumatology and orthopedics"

main educational program

specialty of **General Medicine (for foreign citizens)**

graduate qualification: general practitioner

Full-time education

Course	3,4
Semester	5,7
Credit / Exam (semester)	5,7
Total credits for curriculum	5sem-10h, 7sem-180h
Total curriculum hours	190

Work program developer:

Kasymov A.A.
(Full name)


Reviewed and approved at a meeting of
the department "Surgery"

Minutes No. 1 from "6" September 2021.

Head of the Department,
Candidate of Medical Sciences,
acting associate prof. Alymkulov M.Ch

M. [Signature] (signature)

Bishkek 2021

	Некоммерческое образовательное учреждение Учебно-научно-производственный комплекс «Международный университет Кыргызстана»
	Система менеджмента качества Учебно-методический комплекс дисциплины «Травматология и ортопедия» ООП «Лечебное дело» МШМ МУК

The work program is agreed with the academic and methodological sector of the ISM,

Chairman of the AMD Otorova A. A.
(Full name)

[Signature]
(signature)

« 08 » September 2021

The work program is agreed with the head of the main educational program in the direction / specialty _____

(code, name of the specialty/direction)

Head of the MEP Azimov B. K.
(Full name)

[Signature]
(signature)

« 08 » September 2021

External review given by Kyrgyz State Medical Institute
for Retraining and Advanced Training Ass. prof. C. M. S. Ismailov
 (place of work, position, academic degree, academic title, full name)

« 11 » 10 20 21 (the review is attached)

The work program is agreed with the ISM "IUK" Quality and Monitoring Department

Head of the QMD /AMD Khalilova M. V.
(Full name)

[Signature]
(signature)

« 08 » September 2021



1. The work program of the academic discipline

1.1. Explanatory note

- **Mission of MShM MUK** - *training of competent specialists in the field of medicine, corresponding to international standards and traditions of medical ethics, ready for continuous professional growth using modern achievements of science and practice, to solve public health problems.*

Annotation of the academic discipline

Traumatology and orthopedics is a branch of surgery focused on the diagnosis and treatment of pathologies and malformations of the musculoskeletal system in adults and children, as well as various injuries requiring surgery or correction.

The purpose and objectives of the discipline

The purpose of the discipline

The purpose of this educational program is the formation of professional competencies necessary for the successful mastering by students of the section "Traumatology and Orthopedics". Knowledge of traumatology and orthopedics and the ability to provide medical care for injuries and treat patients with certain diseases of the musculoskeletal system is necessary for a doctor of any profile.

The objectives of mastering the discipline "Traumatology, Orthopedics" are to provide students with information on the basics of modern theoretical knowledge and practical skills in traumatology, to study the basics of diagnosing injuries of the musculoskeletal system for a rational choice of treatment methods depending on the type and nature of the fracture and other injuries.

The formation of students' stereotypes of thinking for the timely recognition of diseases of the musculoskeletal system and damage to the bones of the skeleton will allow them to provide assistance at the prehospital stage and send the patient to a specialized institution capable of fully implementing therapeutic measures. In the process of teaching, it is necessary to pay great attention to the issues of ethics and deontology in traumatology, orthopedics.

The study of the section of Traumatology and Orthopedics provides for 180 hours, of which 40 hours are lectures, 60 hours are devoted to practical classes, 80 hours are intended for IWS and IWS. At the end of the cycle, an exam is envisaged.

The result of the passage of the cycle is the setting of points according to the university program of the BRS, where points for attendance, activity in the classroom and the results of the control survey are summed up.

Discipline objectives:



1. Students reviewing the anatomy of the musculoskeletal system.
2. Teaching students the methods of examination of traumatological and orthopedic patients, symptoms of fractures of various localization, dislocations and injuries of the ligamentous-tendon apparatus and the basic principles of treatment of fractures and dislocations on the basis of which treatment methods are selected.
3. Teaching students the principles of providing emergency care to patients with injuries of varying severity.
4. Familiarization of students with the etiology and pathogenesis of some orthopedic diseases, as well as with the diagnosis and treatment of orthopedic diseases provided by the program.
5. Familiarization of students with basic and additional methods diagnostics of injuries and diseases of the musculoskeletal system.
6. Familiarization of students with the mechanism of action of the main medicinal substances used in traumatology and orthopedics.
7. Formation of students' theoretical foundations for the prevention of injuries and some orthopedic diseases.

Place of discipline in the structure of OOP (prerequisites, postrequisites)

Requirements for the preliminary preparation of the student:

To study this academic discipline (module), you need the following knowledge, skills and abilities formed by the previous disciplines:

1. Latin language
2. Physics, mathematics
3. Biology, ecology
4. Biological chemistry
5. Human anatomy,
6. Histology, embryology, cytology
7. Normal physiology
8. Pathological anatomy, sectional course
9. Pathological physiology
10. Pharmacology
11. General surgery,
12. Operative surgery, anesthesiology, urology
13. Resuscitation, intensive care
14. Physiotherapy exercises, medical supervision

Competencies of students, formed as a result of mastering the discipline, the planned results of mastering the discipline -

A graduate in the specialty "General Medicine" with the assignment of the qualification of a specialist "Doctor" in accordance with the goals of the PLO and the tasks of professional activity, must have



Code	Content of competence
PK-18	is able to provide the adult population and children with first medical aid in the event of urgent and life-threatening conditions, to send patients to hospitalization in a planned and emergency manner.
PK-20	is able to give recommendations on the choice of the regimen, to determine the indications and contraindications for the appointment of remedies for exercise therapy, physiotherapy, non-drug therapy, use the main resort factors in the treatment of adults and children.
DPK-1	is able to apply specialized skills when solving problems in unpredictable conditions;
DPK-2.	able to bear responsibility for the decisions made in the diagnosis, treatment and rehabilitation of patients;

Planned results of mastering the academic discipline that completed the study program of this discipline.

P06 - the ability to learn throughout life and apply basic knowledge in the field of fundamental disciplines in professional activities for the timely diagnosis and choice of therapy tactics (PKZ, PK12, PKI, DPK-1, DPK-2, DPK-3)

P07 - the ability to use the results of clinical and laboratory-instrumental studies in order to make a diagnosis and determine the scope of therapy (PK2, PK11, PK13, DPK-4)

P08 - the ability to perform basic therapeutic measures for the most common diseases and conditions in adults and children, including life-threatening conditions (PC 14, PC15 / PC17, PC 16 / PC18, DPK-1, DPK-2)

After mastering the discipline "Traumatology and Orthopedics" the student:

will know

- The main groups of drugs used in traumatology and orthopedics.
- Basic medical instruments for emergency and planned traumatology and orthopedics. Orthopedic correction means.
- Methods of diagnostics and research of a patient with a surgical profile.
- Modern methods of clinical, laboratory, instrumental examination of patients with traumatological and orthopedic profile.
- Criteria for the diagnosis of various orthopedic diseases.
- Clinical manifestations of the main syndromes in traumatology.
- Criteria for establishing temporary incapacity for work. Criteria biological death of a person.
- Features of the treatment of patients with various nosological forms on an outpatient basis and in a day hospital.
- Features of providing medical care for conditions not accompanied by a threat to the patient's life and not requiring emergency medical care.



- Features of first aid and resuscitation measures for victims of road traffic injuries, drowning, electrical injury, strangulation asphyxia.
- Clinical symptoms of injuries of the musculoskeletal system, pelvis, chest, abdominal cavity, head.
- Indications for the use of rehabilitation methods for patients with traumatological and orthopedic profile.

will be able

- Focus on modern forms of paper and electronic document flow of the hospital and polyclinic.
- Rationally use drugs in accordance with etiopathogenesis of the disease / emergency.
- Interpret data from laboratory and instrumental methods research.
- Select an individual type of medical device for treating a patient in accordance with the situation: emergency care, outpatient clinic, hospital.
- Participate in the organization and provision of treatment-and-prophylactic and Sanitary and anti-epidemic assistance to the population, taking into account its social, professional and age-sex structure -Participate in the organization and conduct of preventive medical examinations.
- Gathering anamnesis, interviewing the patient, carrying out physical examination of the patient.
- Conduct a primary examination of systems and organs. To survey patients with various traumatic injuries.
- Fill in the medical history.
- Choose an individual type of care for the patient's treatment in accordance with the situation: primary care, ambulance, hospitalization.
- Formulate a clinical diagnosis.
- Organize and conduct an examination of temporary disability.
- To select an individual type of care for the treatment of the patient in accordance with the nosological form.
- To select an individual type of care for the treatment of the patient in accordance with the nosological form on an outpatient basis and in a day hospital.
- Develop a treatment plan for the patient.
- Provide first aid in case of emergency, first medical aid to victims in lesions in emergency situations.
- Develop a plan of surgical actions, taking into account the course of the disease and its treatment.
- Identify life-threatening conditions with bleeding. Be able to apply transport tires, bandages.
- To identify syndromes requiring correction in the process of staged medical rehabilitation.
- Use prevention methods in treatment activities (based on evidence-based medicine).

Will own



- Skills of practical work to eliminate the factors of the social environment that affect the level of injuries.
- Creating a pharmacological support program
the treatment process of a traumatological and orthopedic patient.
- Basic research methods of a patient of a traumatological and orthopedic profile.
- Basic surgical techniques: PHO wounds, bandages, osteosynthesis.
- Means of orthocorrection.
- Basic deontological methods of working with patients, relationships with colleagues, with the population of adult adolescents.
- Method of preventive medical examinations in orthopedics: adults, children.
- Methods of general clinical examination, interpretation of the results of laboratory, instrumental diagnostic methods, the correct maintenance of medical records.
- An algorithm for formulating a detailed clinical diagnosis.
- The main medical diagnostic measures for
establishing the degree of incapacity for work.
- Drawing up a plan of medical and diagnostic measures.
- Creating a treatment plan for patients with various nosological forms on an outpatient basis and in a day hospital.
- The main medical diagnostic and therapeutic measures for the provision of first aid in non-life-threatening conditions.
- The main medical diagnostic and therapeutic measures for the provision of first aid in urgent and life-threatening conditions.
- Creating an individual rehabilitation route for the patient.
- Must demonstrate the ability and willingness to apply the acquired knowledge in practice

will be able to analyze

- data of physical examination of the patient of the adult population (examination, palpation, auscultation, measurement of blood pressure, determination of the characteristics of the pulse, respiratory rate, etc.) when making a clinical diagnosis;

will be able to synthesize

- the results of laboratory and functional diagnostics, thermometry, clinical examination data, symptoms and syndromes to identify pathological processes in organs and systems in adults;

will be able to assess

- results of laboratory, instrumental diagnostic methods in patients;
- the patient's condition, the severity of the disease.
- the use of medical devices provided for by the procedures for the provision of medical care to patients;

1.2. Recommended educational technologies



For the development of students of the educational discipline "Traumatology and Orthopedics", the acquisition of knowledge and the formation of professional competencies, the following educational technologies are used:

- lecture-electronic presentation,
- problem lecture,
- lesson-conference,
- training,
- brainstorm,
- small group method,
- participation in scientific and practical conferences, congresses, symposia,
- student research work,
- written analytical work
- preparation and defense of abstracts,
- distance educational technologies.
- Simulation technologies

1.3. The scope of the discipline and types of educational work

Course -3, 4

Semester-5, 7

Number of academic weeks -20 Total hours according to plan-190 hours

According to the curriculum 2017	5sem	7th.
Total labor intensity	10h	180h (5 credits)
Classroom work	6	100
Lectures	2	40
Practical lessons	4	60
Seminars		
Laboratory works		
Independent work	4	80
CPC	2	40
SRSP	2	40
Final control type	offset	exam