

Ошский государственный университет  
Международный медицинский факультет  
Кафедра клинических дисциплин 2

«УТВЕРЖДЕНО»

зав. каф «Клинических дисциплин 2»  
к.м.н., доцент Бугубаева М.М.

Протокол № 2  
« 13 » сентября 2025 год

«Согласовано»

Председатель УМС ММФ  
к.э.н., доцент Базиева А.М.

12.09.25

Учебно-методический комплекс  
По дисциплине «Травматология и ортопедия»  
на 2025-2026 учебный год  
Направление (специальность): 560001 General Medicine  
Форма обучения: Очная  
Курс: 4 Семестр: 7  
Общий объем курса: 4 кредита, академических часов-120  
Количество аудиторных занятий: 48 часов  
Лекции-20, семинарские занятия-28, СРСР-12  
Самостоятельная работа студента-60  
Отчетность-экзамен

УМК разработан на основе Бюллетеня №19 ОшГУ и Положения  
Административного совета ОшГУ №15 от «31» января 2025 года

Разработан: д.м.н., профессор Шамшиев А. А., к.м.н., доцент Жапаров К. А.,  
Абдыкадыров Т. Ж., Азимжанов И. С., Анарбаев Н. А.

Ош- 2025 год

Osh State University

International Medical Faculty

Department of clinical disciplines 2

Syllabus

Specialty (direction)	General Medicine	Course code	“560001”
Language of instruction	English	Discipline	« Traumatology and Orthopedics »
Academic year	4	Number of credits	4
Teacher	Anarbaev N.	Semester	VII
E-Mail	<a href="mailto:nanarbaev@oshsu.kg">nanarbaev@oshsu.kg</a>	Schedule for the application “OshSU Student”	
Consultations (time/audience)	OMDKB block B 09:00-17:00	Location (building/room)	1, 2 3 class 09:00-17:00
Form of study (daytime/correspondence/evening/distance learning)	Full-time daytime	Course type: (compulsory/elective)	compulsory

*Course Description:*

*Course Objective:*

2025year

## 1. The goal of the discipline

Characteristics of course: The purpose of studying "Traumatology and Orthopedics" is to form foundation and gain knowledge about **orthopedical diseases**, methods of their prevention and treatment, to prepare future physicians for independent work with such patients.

*Aim of course:* is to learn how to diagnose, to learn management, and treatment of the disorders related to **musculoskeletal system**.

## 2. Learning outcomes ( LOD ) and student competencies formed in the process of studying the discipline " Traumatology and Orthopedics ":

In the process of mastering the discipline, the student must achieve the following learning outcomes ( LO ) and will have the appropriate competencies:

Prerequisites	anatomy, physiology, histology, normal and pathological physiology, pathological anatomy, pharmacology, first aid, general nursing, general surgery, faculty surgery
Postrequisites	hospital surgery, pediatric surgery, traumatology, obstetrics and gynecology, oncology.
Co-requisites (if necessary)	Activity and desire to learn the subject
By the end of the course the student:	
LO (learning outcome)	Competencies
SR 7-Is able to apply basic knowledge in the field of diagnostic activities to solve professional problems	PC 15-is able to prescribe adequate treatment to patients in accordance with the diagnosis;
SR 8 – Is able to apply basic knowledge in the field of medical activity to solve professional problems	<i>PC-17 is capable and ready to perform basic therapeutic measures for the most common diseases and conditions (in adults and children in outpatient and hospital settings;</i>
SR11-Able to apply basic knowledge in the field of research activities to solve professional problems	<i>IC-2 is capable and ready to use information, bibliographic resources and information and communication technologies, taking into account the basic requirements of information security;</i>

3. Technological map of the discipline " Traumatology and Orthopedics ".

**THEMATIC PLAN**  
**of Orthopedics and Traumatology subject**  
**Calendar and thematic plan of Lectures**  
**for students majoring in 560001-Medical Science (GM)**  
**(8th semester, 2025-2026 academic year.)**

1	No lessons	Name of topics	Number of hours
Work program	1.	Classification of fractures. Anatomy of bone. Phases of fracture healing.	2 h.
	2.	General principles of fracture treatment. Modern methods of immobilization.	2 h.
	3.	Imaging methods in orthopedics.	2 h.
	4.	Complications of fractures. Dislocations and subluxations.	2 h.
	5.	Fractures in children: features and treatment. Module: I	2 h.
	6.	Pelvic fractures.	2 h.
	7.	Hip joint injuries.	2 h.
	8.	Femoral shaft fractures. Fat embolism syndrome.	2 h.
	9.	Injuries of the knee joint, leg, ankle and foot.	2 h.
	10.	Spinal and chest injuries. Bone and joint infections. Module : II	2 h.
	Total		20 h.
			20 hours

No	Topic for lecture SW	Tasks for the ISWT	Hours	Assessment means	Scores	Literature	Deadline
1.	Classification of fractures. Anatomy of bone. Phases of fracture healing.	<p>Write a review: "Modern diagnostic methods of osteoporosis; DEXA vs X-ray".</p> <p>Collect data from 10–15 patient histories and determine in which age/sex group osteoporosis occurs more often.</p> <p>Create a leaflet: "How to prevent osteoporosis" (diet, physical activity, vitamins).</p> <p>Prepare a presentation: "Osteoporosis as a cause of fractures in elderly patients".</p> <p>Make a comparative table: "Clinical features of osteoporosis vs osteomalacia".</p>	4	<p>Literature review</p> <p>Mini-study (medical record analysis)</p> <p>Educational project</p>	App 2	<p>Electronic textbooks:</p> <p>1. Medscape.org - <a href="http://https://www.medscape.org/orthopedics">http://https://www.medscape.org/orthopedics</a></p> <p>2. OrthoPedia.com - <a href="http://https://www.orthopedia.com/">http://https://www.orthopedia.com/</a></p>	1 week
2.	Severe crush injury and compartment syndrome of extremities	<p>Prepare a case report: "Patient with crush syndrome (symptoms, complications, treatment)".</p> <p>Write a review: "Pathophysiology and modern treatment of compartment syndrome".</p> <p>Create an algorithm: "Emergency management of severe limb injury".</p> <p>Conduct a simulation: application of tourniquet or bandage for bleeding control.</p> <p>Prepare a poster: "Early diagnosis of compartment syndrome: key clinical signs".</p>	4	<p>Clinical case report</p> <p>Literature review</p> <p>Simulation / practice-oriented project</p>	App 2	<p>3. <a href="https://jorsonline.biomedcentral.com/">Journal of Orthopaedic Surgery and Research-https://jorsonline.biomedcentral.com/</a></p> <p>Textbooks (library):</p> <p>1. John Ebnezar, Rakesh John. 5<sup>th</sup> edition 2017. <a href="https://www.amazon.com/Textbook-Orthopedics-Clinical-Examination-Methods/dp/9386056682">https://www.amazon.com/Textbook-Orthopedics-Clinical-Examination-Methods/dp/9386056682</a></p> <p>2. Essential Orthopedics. Maheshwari and Mhaskar 4<sup>th</sup> edition 2011 <a href="https://www">https://www</a></p>	1 week
3	Hemorrhage and shocks in traumatology	<p>Conduct a mini-study: "Frequency of hemorrhagic shock in patients with fractures (based on 10–20 case records)".</p> <p>Write a review: "Modern approaches to infusion therapy in traumatic shock".</p> <p>Prepare a presentation: "Classification of hemorrhage and first aid algorithm".</p> <p>Demonstrate the technique: application of a tourniquet and pressure bandage.</p> <p>Develop a student guide: "How to act in case of acute bleeding".</p>	2	<p>Statistical analysis</p> <p>Literature review</p> <p>Practical simulation</p>	App 2 Checklist (RBL).	<p>1. John Ebnezar, Rakesh John. 5<sup>th</sup> edition 2017. <a href="https://www.amazon.com/Textbook-Orthopedics-Clinical-Examination-Methods/dp/9386056682">https://www.amazon.com/Textbook-Orthopedics-Clinical-Examination-Methods/dp/9386056682</a></p> <p>2. Essential Orthopedics. Maheshwari and Mhaskar 4<sup>th</sup> edition 2011 <a href="https://www">https://www</a></p>	1 week
4	Osteoarthritis of the knee and other joints	<p>Collect data from 15–20 outpatient records: "Age-related characteristics of knee osteoarthritis".</p> <p>Write a review: "Comparison of</p>	4	<p>Mini-study (analysis of outpatient records)</p> <p>Literature review</p>	App 2 Checklist (presentation, abstract).	<p>1. John Ebnezar, Rakesh John. 5<sup>th</sup> edition 2017. <a href="https://www.amazon.com/Textbook-Orthopedics-Clinical-Examination-Methods/dp/9386056682">https://www.amazon.com/Textbook-Orthopedics-Clinical-Examination-Methods/dp/9386056682</a></p> <p>2. Essential Orthopedics. Maheshwari and Mhaskar 4<sup>th</sup> edition 2011 <a href="https://www">https://www</a></p>	1 week

No	Topic for lecture SW	Tasks for the ISWT	Hours	Assessment means	Scores	Literature	Deadline
1.	Classification of fractures. Anatomy of bone. Phases of fracture healing.	<p>Write a review: "Modern diagnostic methods of osteoporosis: DEXA vs X-ray".</p> <p>Collect data from 10–15 patient histories and determine in which age/sex group osteoporosis occurs more often.</p> <p>Create a leaflet: "How to prevent osteoporosis" (diet, physical activity, vitamins).</p> <p>Prepare a presentation: "Osteoporosis as a cause of fractures in elderly patients".</p> <p>Make a comparative table: "Clinical features of osteoporosis vs osteomalacia".</p>	4	<p>Literature review</p> <p>Mini-study (medical record analysis)</p> <p>Educational project</p>	App 2	<p>Electronic textbooks:</p> <p>1. Medscape.org - <a href="http://https://www.medscape.org/orthopedics">http://https://www.medscape.org/orthopedics</a></p> <p>2. OrthoPedia.com - <a href="http://https://www.orthopedia.com/">http://https://www.orthopedia.com/</a></p>	1 week
2.	Severe crush injury and compartment syndrome of extremities	<p>Prepare a case report: "Patient with crush syndrome (symptoms, complications, treatment)".</p> <p>Write a review: "Pathophysiology and modern treatment of compartment syndrome".</p> <p>Create an algorithm: "Emergency management of severe limb injury".</p> <p>Conduct a simulation: application of tourniquet or bandage for bleeding control.</p> <p>Prepare a poster: "Early diagnosis of compartment syndrome: key clinical signs".</p>	4	<p>Clinical case report</p> <p>Literature review</p> <p>Simulation / practice-oriented project</p>	App 2	<p>3. <a href="https://jor-online.biom-edcentral.com/">Journal of Orthopaedic Surgery and Research-https://jor-online.biom-edcentral.com/</a></p> <p>Textbooks (library):</p> <p>1. John Ebnezar, Rakesh John. 5<sup>th</sup> edition 2017. <a href="https://www.amazon.com/Textbook-Orthopedics-Clinical-Examination-Methods/dp/9386056682">https://www.amazon.com/Textbook-Orthopedics-Clinical-Examination-Methods/dp/9386056682</a></p> <p>2. Essential Orthopedics - Maheshwari and Mhaskar 4<sup>th</sup> edition 2011 <a href="https://www">https://www</a></p>	1 week
3	Hemorrhage and shocks in traumatology	<p>Conduct a mini-study: "Frequency of hemorrhagic shock in patients with fractures (based on 10–20 case records)".</p> <p>Write a review: "Modern approaches to infusion therapy in traumatic shock".</p> <p>Prepare a presentation: "Classification of hemorrhage and first aid algorithm".</p> <p>Demonstrate the technique: application of a tourniquet and pressure bandage.</p> <p>Develop a student guide: "How to act in case of acute bleeding".</p>	2	<p>Statistical analysis</p> <p>Literature review</p> <p>Practical simulation</p>	App 2 Checklist (RBL).		1 week
4	Osteoarthritis of the knee and other joints	<p>Collect data from 15–20 outpatient records: "Age-related characteristics of knee osteoarthritis".</p> <p>Write a review: "Comparison of</p>	4	<p>Mini-study (analysis of outpatient records)</p> <p>Literature review</p>	App 2 Checklist (presentation, abstract).		1 week

		<p>treatment methods for osteoarthritis: medication vs joint replacement".</p> <p>Create a diagram: "Pathogenesis of osteoarthritis".</p> <p>Design a patient leaflet: "Prevention of osteoarthritis in elderly people".</p> <p>Prepare a presentation: "Knee osteoarthritis: clinical features and diagnostics".</p>		Educational project		<a href="https://www.amazon.com/Essential-Orthopaedics-J-Maheshwari/dp/8184655428">w.amazon.com/Essential-Orthopaedics-J-Maheshwari/dp/8184655428</a> 3. <b>Orthopedics quick review</b> by Anil Arora, Apurv Mehra, Thameem Saif <a href="https://www.jaypeedigital.com/book/9789386322432">https://www.jaypeedigital.com/book/9789386322432</a>	
5	Bone tumors	<p>Write a review: "Benign vs malignant bone tumors: differences and treatment".</p> <p>Describe a clinical case of a patient with osteosarcoma (symptoms, diagnostics, prognosis).</p> <p>Conduct a mini-study: "Frequency of bone tumors in orthopedic department over the past 5 years".</p> <p>Make a comparative table: "Osteosarcoma vs chondrosarcoma".</p> <p>Prepare a poster: "Early diagnosis of bone tumors".</p>	4	<p>Literature review</p> <p>Clinical case report</p> <p>Statistical analysis</p>	App 2 Checklist (RBL).		4-week

**THEMATIC PLAN**  
**of Orthopedics and Traumatology subject**  
**Calendar and thematic plan of Practice classes**  
**for students majoring in 560001-Medical Science (GM)**  
**(8th semester, 2025-2026 academic year.)**

1	No of Weeks	Name of topics	Number of hours
Work program	1 <sup>st</sup> week	Classification of fractures: clinical examples and diagnostics.	2h.
	2 <sup>nd</sup> week	Fracture healing: determination of healing stages and influencing factors.	2h
	3 <sup>rd</sup> week	Modern immobilization methods: application of plaster and synthetic casts.	2 h.
	4 <sup>th</sup> week	Types of splints, skeletal traction: practice on models.	2 h.
	5 <sup>th</sup> week	Practice in interpretation of radiographs in fractures.	2 h.
	6 <sup>th</sup> week	Dislocations and subluxations: reduction techniques (clinical case discussions).	2 h.
	7 <sup>th</sup> week	Fractures in children: treatment features (solving clinical problems).	2 h.
	8 <sup>th</sup> week	Shoulder and humerus injuries: diagnostics and immobilization.	2 h.
	9 <sup>th</sup> week.	Elbow joint injuries: clinical presentation and first aid. Module: I	2 h.
	10 <sup>th</sup> week	Pelvic fractures: diagnostics and transportation immobilization.	2 h.
	11 <sup>th</sup> week	Hip joint injuries: algorithms of management.	2 h.
	12 <sup>th</sup> week	Femoral fractures. Fat embolism: clinical cases.	2 h.
			28 hours

13 <sup>th</sup> week	Knee joint injuries: diagnostics, immobilization, complications.	2 h.
14 <sup>th</sup> week	Injuries of the leg, ankle and foot: practical aspects of treatment.	2 h.
15 <sup>th</sup> week	Spinal and chest injuries. Bone and joint infections: clinical features and management. <b>Module : II</b>	2 h.
<b>Total</b>		<b>28 h.</b>

No	Topic for practical SW	Tasks for the ISWT	Hours	Assessment means	Scores	Literature	Deadline
1.	Infections of the hand	<p>Write a review: "Types of hand infections: paronychia, felon, tenosynovitis, paronychia".</p> <p>Analyze a case: "Clinical course of deep hand infection and treatment strategy".</p> <p>Collect 5 case records and identify the most common causes of hand infections.</p> <p>Prepare a poster: "First aid in hand infections".</p> <p>Compare conservative vs surgical treatment methods.</p>	4	<p>Literature review</p> <p>Case report</p> <p>Educational project.</p>	App 2	<p>Electronic textbooks:</p> <p>1. Medscape.org - <a href="http://https://www.medscape.org/orthopedics">http://https://www.medscape.org/orthopedics</a></p> <p>2. OrthoPedia.com - <a href="http://https://www.orthopediacom/">http://https://www.orthopediacom/</a></p>	1 week
2.	Congenital malformations of limbs. Congenital clubfoot	<p>Write a review: "Epidemiology and treatment of congenital clubfoot".</p> <p>Describe 2-3 cases of congenital limb malformations from hospital data.</p> <p>Compare Ponseti method vs surgical treatment in clubfoot.</p> <p>Make an educational leaflet for parents: "Early detection of clubfoot".</p> <p>Prepare a presentation: "Classification of congenital limb malformations".</p>	4	<p>Literature review</p> <p>Case series</p> <p>Educational project</p>	App 2	<p>3. <u>Journal of Orthopaedic Surgery and Research</u> - <a href="https://josr-online.biomedcentral.com/">https://josr-online.biomedcentral.com/</a></p> <p>Textbooks (library):</p> <p>1. John Ebnezar, Rakesh John. 5<sup>th</sup> edition 2017. <a href="https://www.amazon.com/Textbook-Orthopedics-Clinical-Examination-Methods/dp/938605668">https://www.amazon.com/Textbook-Orthopedics-Clinical-Examination-Methods/dp/938605668</a></p>	1 week
3	Poliomyelitis and other neuromuscular disorders	<p>Write a review: "Orthopedic consequences of poliomyelitis".</p> <p>Prepare a case study: "Patient with poliomyelitis and limb deformity".</p> <p>Compare poliomyelitis with other neuromuscular disorders (e.g., muscular dystrophy).</p> <p>Develop an educational leaflet: "Polio vaccination and prevention".</p> <p>Analyze the role of orthoses in rehabilitation.</p>	2	<p>Literature review</p> <p>Case study</p> <p>Public health/educational project</p>	App 2 Checklist (RBL).		

4	Rickets and osteomalacia	<p>Write a review: "Differences between rickets in children and osteomalacia in adults".</p> <p>Collect 10 patient records and identify the most common clinical features.</p> <p>Make a comparative table: "Causes, symptoms, treatment of rickets vs osteomalacia".</p> <p>Create a poster for parents: "Prevention of rickets in children".</p> <p>Prepare a presentation: "Vitamin D deficiency and bone health".</p>	4	<p>Literature review</p> <p>Mini-study (case records)</p> <p>Educational project</p>	App 2 Checklist (presentation, abstract).	2 2. <b>Essential Orthopedics</b> Maheshwari and Mhaskar 4th edition 2011 <a href="https://www.amazon.com/Essential-Orthopaedics-J-Maheshwari/dp/8184655428">https://www.amazon.com/Essential-Orthopaedics-J-Maheshwari/dp/8184655428</a> 3. <b>Orthopedics quick review</b> by Anil Arora, Apurv Mehra, Thameem Saif <a href="https://www.jaypeedigital.com/book/9789386322432">https://www.jaypeedigital.com/book/9789386322432</a>	1 week
5	Thermal burns and frostbite of extremities	<p>Write a review: "Classification and stages of frostbite and burns".</p> <p>Describe a case: "Severe frostbite of extremities and its treatment".</p> <p>Make an algorithm of emergency management for burns.</p> <p>Conduct a simulation: "First aid for frostbite and thermal burns".</p> <p>Prepare a leaflet: "How to prevent frostbite in winter".</p>	4	<p>Case report</p> <p>Literature review</p> <p>Simulation / educational project</p>	App 2 Checklist (RBL).		4 week
6	Peripheral nerve injuries (radial, ulnar, sciatic, median nerves; foot drop)	<p>Write a review: "Clinical features of radial, ulnar, median, and sciatic nerve injuries".</p> <p>Describe a case: "Patient with foot drop after sciatic nerve injury".</p> <p>Compare conservative vs surgical treatment of peripheral nerve injuries.</p> <p>Draw diagrams of motor/sensory deficits in different nerve injuries.</p> <p>Create an educational poster: "Peripheral nerve injury: when to suspect and how to treat".</p>		<p>Literature review</p> <p>Case study</p> <p>Practical project</p>			
7	Rheumatoid arthritis	<p>Write a review: "Modern approaches to treatment of rheumatoid arthritis".</p> <p>Collect 10-15 case records and analyze age and sex distribution of patients with RA.</p> <p>Prepare a case report: "Patient with RA and joint deformity".</p> <p>Compare rheumatoid arthritis with osteoarthritis in a table (symptoms, diagnosis, treatment).</p> <p>Create a patient leaflet: "Lifestyle advice for people with rheumatoid arthritis".</p>		<p>Literature review</p> <p>Statistical analysis</p> <p>Case report</p>			

### Calendar and thematic plan of ISW

No week	No less	Topics	Number of hours
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1	1.	<i>Osteoporosis. Clinical features. Diagnosis. Treatment.</i>	<i>2 hours</i>
	2.	<i>Severe crush injury. Compartment syndrome of extremities.</i>	<i>2 hours</i>
	3	<i>Bitten wounds. Rabies. Clinical features. Diagnosis. Treatment</i>	<i>2 hours</i>
2	4.	<i>Hemorrhage and shocks.</i>	<i>2 hours</i>
	5.	<i>Osteoarthritis of Knee and other joints</i>	<i>2 hours</i>
	6.	<i>Infections of the Hand</i>	<i>2 hours</i>
3	7.	<i>Bone tumors</i>	<i>3 hours</i>
	8.	<i>Congenital malformations of limbs. Congenital clubfoot</i>	<i>2 hours</i>
	9.	<i>Poliomyelitis and other Neuromuscular disorders</i>	<i>2 hours</i>
4	10.	<i>Rickets and Osteomalacia</i>	<i>3 hours</i>
	11.	<i>Degenerative disorders</i>	<i>2 hours</i>
	12.	<i>Arthroscopic Surgery</i>	<i>2 hours</i>
5	13.	<i>Approach to a Patient with Back Pain</i>	<i>3 hours</i>
	14	<i>Thermal burns. Emergency management</i>	<i>2 hours</i>
	15	<i>Frostbite of extremities</i>	<i>2 hours</i>
6	16	<i>Torticollis and Cervical rib</i>	<i>2 hours</i>
	17	<i>Peripheral nerve injuries. Radial and Ulnar nerve injuries</i>	<i>3 hours</i>
	18	<i>Popliteal cyst</i>	<i>2 hours</i>
7	19	<i>Flat foot</i>	<i>2 hours</i>
	20	<i>Peripheral nerve injuries. Sciatic nerve injury and Footdrop</i>	<i>3 hours</i>
	21	<i>Plantar fasciitis</i>	<i>2 hours</i>
8	22	<i>Sport injuries</i>	<i>2 hours</i>
	23	<i>Fibromyalgia</i>	<i>2 hours</i>
	24	<i>Rheumatoid arthritis</i>	<i>2 hours</i>
9	25	<i>Erb's palsy</i>	<i>2 hours</i>
	26	<i>Klumpkes's palsy</i>	<i>2 hours</i>
	27	<i>Peripheral nerve injuries. Median nerve injury</i>	<i>3 hours</i>
<b>Total</b>			<b>60 hours</b>

### Calendar and thematic plan of ISWT



№	Topic	Task for independent work	hours	Evaluation tools	Points	Literature	Completion date
1.	Tracheal intubation.	Dimedus	3	Work on the Dimedus	4	Dimedus	4 week
2.	Cardiopulmonary resuscitation.	Dimedus	4	Work on the Dimedus	4	Dimedus	6 week
3.	Methods of complex resuscitation measures and intensive care in severe injuries. Traumatic shock. Bleeding.	Dimedus	3	Work on the Dimedus	4	Dimedus	8week
4.	Methods of complex resuscitation measures and intensive care in case of circulatory arrest.	Dimedus	2	Work on the Dimedus	4	Dimedus	10 week

## COURSE POLICY

The policy of the discipline is aimed at the most complete mastering by students of the educational material and fruitful cooperation of teachers and students

Students are required to:

- Fully master knowledge, skills and practical skills;
- Respectfully and correctly treat teachers, staff and students;
- Students must be disciplined and tidy, behave with dignity at the University, in hospitals.
- With the beginning of classes in all educational and adjacent premises, the silence and order necessary for the normal course of educational sessions must be ensured;
- The entrance of students into the classroom and exit from the classroom after the start of classes (the actual start of classes by the teacher) is allowed only with the permission of the teacher;
- Be sure to attend lectures, practical (seminars, laboratory) classes, classes on the IWSP;
- To attend practical (seminars, laboratory) classes, examinations in medical uniform;
- Have sanitary books at clinical departments with an admission from the SES.

- Take good care of the property of the department;
- Observe fire safety regulations
- Observe the internal regulations of the academy
- Actively participate in the life of the department (work in the SSS circle, department events, etc.).
- Disable mobile phones during lectures, classes; taking cell phones for exams is prohibited.
- Attendance at lectures is compulsory. In case of missing lectures, the material is worked out in the form of preparing a lecture synopsis and an interview with the lecturer.
- Working out at departments and courses should be carried out after hours - on Saturdays, in the clinic - it is allowed to carry out tests during the night duty of the teaching staff.
- The student is obliged to work out the lesson in the number of hours missed according to the program.
- In case of missing classes by students for a good reason (being in hospital, the occurrence of emergency events: natural disasters, accidents and others), the student or his relatives are obliged to inform the department within 24 hours about what happened in any way (by phone, etc.) with the provision of within three days of documents confirming this circumstance. The supporting documents are: a certificate from a student clinic, a death certificate of loved ones, a donor certificate, a marriage certificate, a child's birth certificate. In the absence of supporting documents, the reason is considered disrespectful.

#### Система оценки

Декларация об академической честности: Студенты, проходящие этот курс, должны подать декларацию, требующую от них соблюдать политику университета в отношении академической честности. Положение «Организация образовательного процесса в ОшГУ» [https://www.oshsu.kg/storage/uploads/files/21725274455Okuu\\_proc\\_reg\\_ZhOBO\\_Dlya\\_sayta\\_UTVERZhdEN.pdf](https://www.oshsu.kg/storage/uploads/files/21725274455Okuu_proc_reg_ZhOBO_Dlya_sayta_UTVERZhdEN.pdf)

#### Технологическая карта для двух модулей в разрезе одного семестра, лекция + практические зан. (M1+M2):

Дисц.	Кр.	Аудит. часы	CPC	1-module (25 баллов)				2-module (25 баллов)				Exam (50 баллов)
		40%	60%	Аудит.часы		ISW/ RK		Аудит.часы		ISW/ RK		ИК (E)
				lec	sem	ISWT	(r)	lec	sem	ISWT	(r)	
ПЦ	4	28	72	10	14	30/6		10	14	30/6		
Карта накопления баллов				4	4	8	9	4	4	8	9	
Результаты модулей и экзамена				(M=tcп.+r+s) до 25				(M=tcп.+r+s) до 25				50
				Rдоп.=M1+M2 (30-50)								
Итоговая оценка				I=Rдоп.+ E								100

## Educational resources

<i>(use the full link and indicate where the texts/materials can be accessed)</i>	
<b>Electronic textbooks</b>	<p>1. Medscape.org - <a href="http://https://www.medscape.org/orthopedics">http://https://www.medscape.org/orthopedics</a>.</p> <p>2. OrthoPedia.com-http: <a href="https://www.orthopediacom/">https://www.orthopediacom/</a></p> <p>3. <u>Journal of Orthopaedic Surgery and Research-</u> <a href="https://jorsonline.biomedcentral.com/">https://jorsonline.biomedcentral.com/</a></p>
<b>Laboratory Physical Resources</b>	<i>Dimedus. K-Plus</i>
<b>Textbooks (library))</b>	<p>1. John Ebnezar, Rakesh John. <b>5<sup>th</sup> edition 2017.</b> <a href="https://www.amazon.com/Textbook-Orthopedics-Clinical-Examination-Methods/dp/9386056682">https://www.amazon.com/Textbook-Orthopedics-Clinical-Examination-Methods/dp/9386056682</a></p> <p>2. <b>Essential Orthopedics.</b> Maheshwari and Mhaskar 4<sup>th</sup> edition 2011 <a href="https://www.amazon.com/Essential-Orthopaedics-J-Maheshwari/dp/8184655428">https://www.amazon.com/Essential-Orthopaedics-J-Maheshwari/dp/8184655428</a></p> <p>3. <b>Orthopedics quick review</b> by Anil Arora, Apurv Mehra, Thameem Saif <a href="https://www.jaypeedigital.com/book/9789386322432">https://www.jaypeedigital.com/book/9789386322432</a></p>

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