INTERNATIONAL HIGHER SCHOOL OF MEDICINE

INTERNAL MEDICINE DEPARTMENT

SYLLABUS

Rheumatology

2026-2027 academic year

for students of medical faculty

4 course 7 semester, 1-40 groups

2 credits (60h, including auditorial 36h, independent work 24 h)

Lecturer:	Moldoeva Salamat
	Phone: + 996504757575 (Whatsapp)
	Email: s.moldoeva@gmail.com
Venue:	Zoom
Practical classes:	Moldoeva Salamat
	Phone: + 996504757575 (Whatsapp)
	Email: s.moldoeva@gmail.com
	Seydakmatova Elina Almazbekovna
	Phone: + 996 773411450
	Email:elinaseydakmatova@icloud.com
	Sagynbaeva Gulzira Askarbekovna
	Phone: + 996705972443
	Email:g_sagyn@mail.ru
Venue:	Clinical hospital № 2.

The Syllabus is considered
at the meeting of the department of internal medicine
Protocol № 1 dated 28.08.2026
Head of the department prof. Kudaibergenova N.T.

.

Course Objective: consists in mastering the knowledge of diseases of internal organs, as well as the principles of diagnosis, skills and abilities for the treatment and prevention of internal diseases.

After study of the discipline the student must:

Knowledge:

- issues of medical ethics and deontology;
- epidemiology, the influence of etiological factors and risk factors on the course and outcome of diseases of internal organs;
- modern theories of the pathogenesis of the main internal diseases in adults;
- modern classification, etiology, pathogenesis, clinical and laboratory investigation of the main diseases of internal organs;
- modern diagnostic methods, standards for the treatment of diseases of internal organs;
- therapeutic nutrition for internal diseases;
- examination of a patient with pathology of internal organs;
- principles of preventive measures - identification of risk factors, primary and secondary prevention of non-communicable diseases;
- rules for issuing certificates and certificates for work of patients with internal diseases.

Skill:

- communicate with patients in compliance with deontological norms and principles;
- get information about the disease, establish possible causes, taking into account the influence of social, hereditary, age and climatic factors on the body;
- assess the severity of the patient's condition and, if necessary, provide emergency care;
- make the right decision on the tactics of patient management;
- conduct functional, laboratory and instrumental studies, evaluate them;
- recognize the features of the clinical course, identify complications and concomitant diseases;
- conduct differential diagnosis, formulate and substantiate a clinical diagnosis;
- choose the tactics of management due to individual and pathogenetic characteristics;
- make a rehabilitation and prevention plan;
- monitor the patient in the intensive care unit;
- write a medical documentation in accordance with the law;
- analyze the scientific literature and prepare an essay on modern problems of diseases of internal organs.

Attitude:

- fundamentals of medical deontology and medical ethics;
- evaluation of the results of laboratory and special research methods (clinical, functional, morphological, biochemical, immunological, serological parameters of blood, urine, sputum, feces, cerebrospinal fluid, coagulogram indicators);
- interpretation of the results of functional examination of the respiratory system, cardiovascular system, gastrointestinal tract, liver, kidneys, central nervous system, blood system etc.;
- the method of management of internal diseases, pathological conditions, in accordance with the standard of medical care for diseases of internal organs;
- registration of medical documentation in the hospital and on an outpatient basis.

Pre-requisites.

Anatomy (macro-microanatomy)
Normal physiology
Pathological anatomy
Pathological physiology
Clinical Pharmacology
Propedtherapy

Post-requisites.

Surgical diseases
Occupational diseases
Oncology
Public health
Dermatovenereology
Outpatient conditions
Medical supervision
Family Medicine
Anesthesiology, Intensive Care, Emergency Conditions

THEMATIC PLAN OF LECTURES

№	Theme of lecture	Hours	Date
1.	Differential Diagnosis of Joint Syndromes.	2	09.2026-05.2027
2.	Gout. Definition, Etiology, Pathogenesis, Classification, Clinical Features, Disease Progression, Complications, Diagnosis, Treatment, and Prevention.	2	09.2026-05.2027
3.	Deforming Osteoarthritis. Definition, Etiology, Pathogenesis, Classification, Clinical Features, Disease Progression, Complications, Diagnosis, Treatment, and Prevention.	2	09.2026-05.2027
4.	Systemic Connective Tissue Diseases (SCTDs). Systemic Lupus Erythematosus. Definition, Etiology, Pathogenesis, Classification, Clinical Features, Disease Progression, Complications, Diagnosis, Treatment, and Prevention.	2	09.2026-05.2027
5.	Systemic Connective Tissue Diseases (SCTDs). Systemic Scleroderma. Definition, Etiology, Pathogenesis, Classification, Clinical Features, Disease Progression, Complications, Diagnosis, Treatment, and Prevention.	2	09.2026-05.2027
6	Systemic Connective Tissue Diseases (SCTDs). Dermatomyositis. Definition, etiology, pathogenesis, classification, clinical picture, course of the disease, complications, diagnosis, treatment and prevention.	2	09.2026-05.2027

THEMATIC PLAN OF PRACTICAL CLASSES

№	Theme of practical class	Hours	Date
1.	Acute Rheumatic Fever (ARF) - Clinical Review of Patients with ARF. Primary and Secondary Prevention.	2	09.2026-05.2027
2.	Clinical Review of Patients with Rheumatoid Arthritis and X-ray Interpretation.	2	09.2026-05.2027
3.	Clinical Review of Patients with Gouty Arthritis. Gouty Kidney.	2	09.2026-05.2027
4.	Clinical Review of Patients with Deforming Osteoarthritis.	2	09.2026-05.2027
5.	Clinical Review of Patients with Ankylosing Spondylitis.	2	09.2026-05.2027
6.	Module 1.		09.2026-05.2027
7.	Clinical Review of Patients with Systemic Lupus Erythematosus (SLE).	2	09.2026-05.2027
8.	Complications of SLE. Lupus Nephritis. Pulse Glucocorticosteroid Therapy.	2	09.2026-05.2027
9.	Clinical case study of systemic sclerosis.	2	09.2026-05.2027
10.	Clinical case study of polydermatomyositis.	2	09.2026-05.2027
11.	Antiphospholipid syndrome. Clinical case study.	2	09.2026-05.2027
12.	Module 2.	2	09.2026-05.2027

THEMATIC PLAN OF INDEPENDENT WORK OF STUDENTS

№	Theme of independent work	Hours	Date
1.	Psoriatic arthritis	3	09.2026-05.2027
2.	Juvenile rheumatoid arthritis	3	09.2026-05.2027
3.	Reiter's syndrome	3	09.2026-05.2027
4.	Surgical treatment of joint diseases	3	09.2026-05.2027
5.	Raynaud's syndrome	3	09.2026-05.2027
6.	Polymyositis	3	09.2026-05.2027
7.	Systemic vasculitis	3	09.2026-05.2027
8.	Sjögren's syndrome	3	09.2026-05.2027

Recommended reading for the discipline:

1. Basic:

№	**Authors**	**Title**	**The year of publishing**
1.	Harrison. Braunwald E.	Internal Medicine	2001

2.	Harrison. Braunwald E.	Principles of Internal Medicine	2001
3.	Harrison. Braunwald E.	Principles of Internal Medicine	2001
4.	Harrison. Braunwald E.	Principles of Internal Medicine	2005
5.	Harrison.Wiener Ch.M.	Principles of Internal Medicine. Self-Assessment and Board Review	2005
6.	Harrison. Fauci A.S.	Principles of Internal Medicine	2008
7.	Harrison's Kasper D.L.	Principal of Internal Medicine.	2015
8.	S Melmed, R Koenig, C Rosen., et al.	Textbook of Endocrinology	2017
9.	Harrison Liu KD, Chertow GM.	Principles of Internal Medicine	2022

1. Additional:

№	Authors	Title	The year of publishing
1.	Davidson. Haslett C.	Priciples and Practice of Medicine	2002
2.	Davidson. Boon N.	Priciples and Practice of Medicine	2006
3.	Davidson. Ralston S.	Priciples and Practice of Medicine	2018

Grading policy and procedures for all types of work

For the period of studying the discipline, the student gains points for the relevant parameters (per unit):
current score - 40 points
independent work - 20 points
control score (final assessment of knowledge per unit) - 40 points
Maximum score - 100 (40+20+40)

Grading system for student's achievements

Criteria for assigning grades for the course				
Maximum score	Intervals			
	« unsatisfactory»	« satisfactory»	«good »	«excellent»
40	0-23	24-30	31-35	36-40
Interval criteria	Does not complete homework or prepare for class, and is inactive in class. Unable to apply acquired knowledge to solving clinical problems.	Completes assignments, but with serious errors, is active in class, but does not differentiate the diagnosis of various diseases.	Completes homework, and is almost always prepared for class. Able to solve clinical problems, but with minor errors.	Completes homework, and correctly analyzes clinical problems involving various diseases
IWS-20	0-11	12-14	15-17	18-20
Interval criteria	assignments for independent work are not completed, or they contain numerous errors; the student has not met the requirements for composing the work	The tasks for independent work are completed, but with errors; 2 points are missing from the program.	assignments for independent work are completed, mostly without errors or with minor errors, one point is missing from the program	assignments for independent work are completed without errors, the material is fully prepared according to the sample
40	0-23	24-30	31-35	36-40
Interval criteria	The answer represents disjointed knowledge with significant errors regarding the question; - fragmentary and illogical presentation; the student does not understand the connection between the question being discussed and other subjects of the	The answer is incomplete, contains errors in detail, the ability to convey the meaning of generalized knowledge is not demonstrated, and the student's speech requires correction and adjustments; - the logic and consistency of presentation are impaired; the student is unable to independently identify essential and non-essential	A complete, detailed answer to the question was given, demonstrating the ability to distinguish essential and non-essential features and cause-and-effect relationships; - the narrative is not logical enough, with isolated errors in details, which the student corrected with the teacher's assistance;	A complete, detailed answer to the question posed is provided; - the answer has a clear structure and logical sequence, reflecting the essence of the concepts, theories, and phenomena being explored;

	course; speech is illiterate; - significant errors in demonstrating exercises; incorrect choice of tactics for the given disease; - incorrect answers to additional questions.	features and cause-and-effect relationships; - errors in the prescription and correct choice of treatment method; - numerous errors in patient management tactics; - the student is unable to answer most of the additional questions.	- insufficient confidence and speed in demonstrating the exercises; - isolated errors in technique; - answers to additional questions are correct, but not sufficiently complete and clear.	- the exercises are selected and performed correctly; - answers to additional questions are clear and concise;

Conduct Policy: (lateness, absence, behavior in the auditorium, late submission of work).

- Punctuality and completion of tasks.
- Mandatory attendance of classes.
- Attending class in a clean medical uniform.
- Eliminating conversations on a cell phone in the classroom.
- Active participation in the learning process.
- Doing homework on time.
- Academic detention at the time specified by the teacher.

For violations of the Conduct Policy, the total points for discipline might be reduced to 1-10 points.

Academic Ethics Policy.

- Be tolerant, respect the opinions of others.
- Formulate objections in the correct form.
- Constructively support feedback in all classes.
- Plagiarism and other forms of dishonest work are unacceptable. Plagiarism includes the following: the absence of references when using printed and electronic materials, quotes, thoughts and works of other authors or students.
- Prompting and cheating during tests, exams, classes is unacceptable as well as passing an exam for another student, unauthorized copying of materials.

For violations of the Academic Ethics Policy, the total points for the discipline may be reduced to 1-10 points.

Guidelines for the lessons of the discipline

Key questions in practical class №1 Theme: Acute Rheumatic Fever (ARF) - Clinical Review of Patients with ARF. Primary and Secondary Prevention.

1. Definition.
2. Etiology and pathogenesis.
3. Risk factors. Clinical characteristics.
4. Major and minor diagnostic criteria.
5. Management and treatment. Antibiotic therapy guidelines. Secondary prevention.

List of recommended reading for students:

[1] pp. 2766 - 2771

Key questions in practical class № 2 Theme: Clinical Review of Patients with Rheumatoid Arthritis and X-ray Interpretation.

1. Definition. Genetic predispositions. Pathogenesis.
2. Classification. Clinical manifestations.
3. Diagnosis of RA. Radiographic features. Specific antibodies.
4. Basic treatment. Classification of DMARD.

List of recommended reading for students:

[1] pp. 2751- 2766

Key questions in practical class № 3 Theme: Clinical Review of Patients with Gouty Arthritis. Gouty Kidney.

1. Definition. Purine metabolism. Risk factors and pathogenesis.
2 Classification of Gout. Clinical manifestation.
3. The criteria for diagnosis Basic treatment.
4. Prevention. Diet therapy.
5. Complication of Gout.

List of recommended reading for students:

[1] pp. 2862 - 2868

Key questions in practical class № 4 Theme: Clinical Review of Patients with Deforming Osteoarthritis.

1. Definition. Epidemiology. Risk factors.

2. Pathogenesis. Classification: primary and secondary DOA.
3. Characteristic features of DOA.
4. Drug therapy and physiotherapy. Surgical treatment.

List of recommended reading for students:
[1] pp. 2854 - 2862

Key questions in practical class № 5 Theme: Clinical Review of Patients with Ankylosing Spondylitis.
1. Definition. Genetic predispositions.Risk factor.
2. Pathogenesis. Features of articular syndrome. Shober's and Otto's symptom.
3. The criteria for diagnosis. Radiographic features of spinal column and sacroiliac joints.
4. Treatment.

List of recommended reading for students:
[1] pp. 2790 – 2802

Key questions in practical class № 7 Theme: Clinical Review of Patients with Systemic Lupus Erythematosus (SLE).
1. Definition. Genetic predispositions.
2. Diagnosis of SLE. Autoantibodies for SLE. Differential diagnosis.
3. Basic and symptomatically treatment.
4. Prognosis and complication of SLE.

List of recommended reading for students:
[1] pp. 2736 – 2749

Key questions in practical class № 8 Theme: Complications of SLE. Lupus Nephritis. Pulse Glucocorticosteroid Therapy.
1. Definition. Genetic predispositions.
2. Diagnosis of SLE. Autoantibodies for SLE. Differential diagnosis.
3. Basic and symptomatically treatment.
4. Prognosis and complication of SLE.

List of recommended reading for students:
[1] pp. 2736 – 2749

Key questions in practical class № 9 Theme Clinical case study of systemic sclerosis.
1. Etiology and pathogenesis. Classification.
2. Clinical feature: skin and systemic manifestations. Diagnostic criteria.
3. Management and treatment

List of recommended reading for students:
[1] pp. 2771– 2787

Key questions in practical class № 10 Theme: Clinical case study of polydermatomyositis.
1. Definition. Genetic predispositions.
2. Diagnosis of Dermatomyositis.
3. Basic and symptomatically treatment.

List of recommended reading for students:
[1] pp. 2819 – 2826

Key questions in practical class № 11 Theme: Antiphospholipid syndrome. Clinical case study.
1. Definition. Genetic predispositions.
2. Diagnosis of Dermatomyositis.
3. Basic and symptomatically treatment.

List of recommended reading for students:
[1] pp. 2790 – 2802

Methodological instructions for the implementation of independent work on the discipline

Students on their own, in preparation for the practical exercises, solve clinical problems:
1) Clinical Cases
2) Comparative test questions

Students get clinical problems from the teacher. The results of independent work of students are discussed at the beginning of classroom (practical) exercises.