INTERNATIONAL HIGHER SCHOOL OF MEDICINE

INTERNAL MEDICINE DEPARTMENT

SYLLABUS

Gastroenterology

2026-2027 academic year

for students of medical faculty

3 course 6 semester, 1-40 groups

2,5 credits (75 h, including auditorial 44 h, independent work – 31 h)

Lecturer: Tabyshova Aizhamal
Phone: +996 556 800 365 phone (Whatsapp)
Email: aijamaltabyshova@gmail.com

Practical classes: Kim Tatiana
Phone: +996 703827975 (Whatsapp)
Email: tanya_ko06@mail.ru

Tabyshova Aizhamal
Phone: +996 556 800 365 phone (Whatsapp)
Email: aijamaltabyshova@gmail.com

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.	Chronic Gastritis. Definition, Etiology, Pathogenesis, Classification, Clinical Features, Disease Progression, Complications, Diagnosis, Treatment, and Prevention.	2	09.2026-05.2027
2.	Gastric Ulcer and Duodenal Ulcer. Definition, Etiology, Pathogenesis, Classification, Clinical Features, Disease Progression, Complications, Diagnosis, Treatment, and Prevention.	2	09.2026-05.2027

3.	Functional Bowel Diseases. Small Intestinal Bacterial Overgrowth and Irritable Bowel Syndrome. Definition, Etiology, Pathogenesis, Classification, Clinical Features, Disease Progression, Complications, Diagnosis, Treatment, and Prevention.	2	09.2026-05.2027
4.	Inflammatory Bowel Diseases. Ulcerative Colitis, Crohn's Disease. Definition, Etiology, Pathogenesis, Classification, Clinical Features, Disease Progression, Complications, Diagnosis, Treatment, and Prevention.	2	09.2026-05.2027
5.	Viral and Autoimmune Hepatitis. Definition, etiology, pathogenesis, classification, clinical presentation, disease progression, complications, diagnosis, treatment, and prevention.	2	09.2026-05.2027
6.	Alcoholic Hepatitis. Definition, etiology, pathogenesis, classification, clinical presentation, disease progression, diagnosis, treatment, and prevention.	2	09.2026-05.2027
7.	Liver Cirrhosis, Chronic Liver Failure. Definition, etiology, pathogenesis, classification, clinical presentation, disease progression, complications, diagnosis, treatment, and prevention.	2	09.2026-05.2027
8.	Chronic Cholecystitis and Pancreatitis. Definition, etiology, pathogenesis, classification, clinical presentation, disease progression, complications, diagnosis, treatment, and prevention.	2	09.2026-05.2027

THEMATIC PLAN OF PRACTICAL CLASSES

№	Theme of practical class	Hours	Date
1.	Chronic Gastritis. Clinical Case Study.	2	09.2026-05.2027
2.	Gastric Ulcer and Duodenal Ulcer. Clinical Case Study.	2	09.2026-05.2027
3.	Complications of Gastric Ulcer and Duodenal Ulcer. Clinical Case Study.	2	09.2026-05.2027
4.	Functional Dyspepsia. Bacterial Overgrowth and Irritable Bowel Syndrome. Clinical Case Study.	2	09.2026-05.2027
5.	Inflammatory Bowel Disease. Crohn's Disease and Ulcerative Colitis. Case Study.	2	09.2026-05.2027
6.	Inflammatory Bowel Disease. Clinical Case Study.	2	09.2026-05.2027
7.	Module 1.	2	09.2026-05.2027
8.	Viral Hepatitis with Clinical Case Study.	4	09.2026-05.2027
9.	Autoimmune Hepatitis with Clinical Case Study.	2	09.2026-05.2027
10.	Alcoholic hepatitis with clinical case studies.	2	09.2026-05.2027
11.	Case studies of patients with liver cirrhosis. Liver failure. Hepatic coma with clinical case studies.	2	09.2026-05.2027
12.	Clinical case studies of patients with chronic calculous and acalculous cholecystitis.	2	09.2026-05.2027
13.	Clinical case studies of patients with chronic pancreatitis.	2	09.2026-05.2027
14.	Module 2	2	09.2026-05.2027

THEMATIC PLAN OF INDEPENDENT WORK OF STUDENTS

Unit №	Theme of independent work	Hours	Date
1	Major manifestations of the upper part of the GIT (dysphagia, dyspepsia, vomiting, abdominal pain).	3	during the unit 1

2	Major manifestations of the lower tract of the GIT (diarrhea, malabsorption, weight loss, constipation, gastrointestinal bleeding).	2	during the unit 1
3	Diet for gastrointestinal diseases	3	during the unit 1
4	Characteristics of H. pylori.	3	during the unit 1
5	Comparison table: autoimmune gastritis and H. pylori.	3	during the unit 1
6	Pathogenesis of PUD (diagram)	2	during the unit 1
7	Microbiota in disease and health.	2	during the unit 1
8	Comparison table: Ulcerative colitis, Crohn's disease	2	during the unit 1
9	Comparison table: autoimmune hepatitis, viral hepatitis	3	during the unit 2
10	Ethanol metabolism diagram	2	during the unit 2
11	Transplantation of liver.	2	during the unit2
12	Hepatotoxic drugs.	2	during the unit 2
13	Hepatorenal syndrom	2	during the unit 2

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	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

	problems.			
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 course; speech is illiterate; - significant errors in demonstrating exercises; incorrect choice of tactics for the given disease; - incorrect answers to additional questions.	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 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.	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; - insufficient confidence and speed in demonstrating the exercises; - isolated errors in technique; - answers to additional questions are correct, but not sufficiently complete and clear.	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; - 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 covered in lesson 1.

1. What are the main symptoms of gastric dyspepsia?
2. What is the difference between pathogenic mechanisms of autoimmune gastritis and Helicobacter pylori (HP)?
4. Give definition to the syndrome of non-ulcer dyspepsia.
5. What are the indications to administer antibiotic therapy for HP infection?
6. The main method of verifying the diagnosis of stomach cancer.

List of recommended reading for studentsa:

[1] pp 8968-8978

Key questions covered in lesson 2.
1. What are the predisposing factors of Peptic ulcer (PU)?
2. What are the characteristics of the PU clinic, depending on the location of the ulcer?
3. Clinical manifestations of special forms of ulcers (postbulbar, multiple, juvenile, ulcers in the elderly, etc.).
4. Diagnosis and Differential diagnosis of PU.
5. Principals of PU treatment.

List of recommended reading for students:
[1] pp 8888-8955

Key questions covered in lesson 3.
1. Complications of peptic ulcer disease: Bleeding, Perforation, Penetration, Obstruction.
2. Dumping syndrome.
3. Clinical signs of pyloric stenosis.
4. Clinical signs of ulcer perforation.
5. How to confirm the penetration of ulcer?

List of recommended reading for students:
[1] pp 8916-8920

Key questions covered in lesson 4.
1. Microbiota in health and diseases.
2. Small bowel bacterial overgrowth (SIBO). Causes. Clinical symptoms.
3. SIBO. Investigations. Treatment.

List of recommended reading for students:
[1] pp 8991-8993

Key questions covered in lesson 5.
1. Etiological factors of (Ulcerative colitis, Crohn's disease).
2. Pathogenesis of Ulcerative colitis, Crohn's disease.
3. Clinical manifestations of U. colitis, Crohn's disease
4. Modern possibilities of diagnosing the disease. Genetic analysis.
5. Crohn's disease – complications.
6. Indications for surgical correction of disease complications.
7. The role of immunological parameters (immunogram, specific antibodies) in the diagnosis of nonspecific ulcerative colitis and Crohn's disease.
8. Modern methods of treatment of patients with nonspecific Ulcerative colitis, Crohn's disease.

List of recommended reading for studentsa:
[1] pp 9021-9093

Key questions covered in lesson 6.
1. Definition of irritable bowel syndrome.
2. Risk factors for IBS.
3. Modern ideas about the etiology and pathogenesis of IBS.
4. The main clinical manifestations of IBS.
5. Diagnostic methods of IBS.
6. Classification of IBS.
7. Diagnostic criteria for IBS.
8. Algorithm for the treatment of IBS.
9. Prognosis.

List of recommended reading for studentsa:
[1] pp 9094-9119

Key questions covered in lesson 8.
1. Chronic viral hepatitis B, C. Clinical manifestations.
2. Diagnosis of viral hepatitis B, C.
3. Treatment chronic viral hepatitis B, C.
4. Prevention of viral hepatitis B, C. Vaccination.

List of recommended reading for studentsa:
[1] pp 9462-9537

Key questions covered in lesson 9.
1. Definition and epidemiology

2. Pathogenesis (role of immune dysregulation, autoantibodies, genetic predisposition)
3. Classification (Type 1, Type 2, Type 3 AIH)
4. Clinical Manifestations
5. Diagnosis
6. Treatment

List of recommended reading for studentsa:
[1] pp 9462-9537

Key questions covered in lesson 10.

5. Alcoholic (ethanolic) liver disease. Clinical features, investigations.
6. Clinical syndromes of non-alcoholic steatohepatitis.
7. Laboratory marker of alcoholic hepatitis.
8. The morphological criteria for non-alcoholic steatohepatitis.
9. Treatment and prognosis of Alcoholic liver disease.

List of recommended reading for studentsa:
[1] pp 9552-9561

Key questions covered in lesson 11.

1. Cirrhosis of the liver. Definition, etiology, pathogenesis, morphogenesis, morphological changes in the liver.
2. Classification of cirrhosis.
3. Extrahepatic changes in the liver cirrhosis. Port-caval anastomoses.
4. Clinical manifestations of the liver cirrhosis.
5. Diagnosis of liver cirrhosis.
6. Management. Prognosis.
7. Diagnostic and therapeutic value of paracentesis.
8. Indications for transplantation.

List of recommended reading for studentsa:
[1] pp 9581-9612

1. The most common causes of Chronic liver failure
2. Clinical and laboratory features (hepatomegaly, jaundice, ascites, portal hypertension, hepatic encephalopathy and other feature).
3. Hepatic encephalopathy. Pathogenesis.
4. Clinical manifestations of hepatic encephalopathy. , stages.
5. Hepatic encephalopathy. Management. Prognosis.

Key questions covered in lesson 12.

1. Definition of chronic cholecystitis
2. Epidemiology and risk factors
3. Difference between calculous (with gallstones) and acalculous forms
4. Pathogenesis and Etiology
5. Diagnosis
6. Treatment

[1] pp 9462-9537

Key questions covered in lesson 13.

1. Definition of chronic pancreatitis
2. Epidemiology and risk factors (alcohol abuse, smoking, genetic predisposition, metabolic disorders)
3. Pathophysiology: progressive inflammation → fibrosis → loss of exocrine and endocrine function
4. Pathogenesis and Etiology
5. Diagnosis
6. Treatment

List of recommended reading for studentsa:
[1] pp 9613-9616

Methodological instructions for the implementation of independent work on the discipline

Student must choose and prepare a presentation on one of the following topics:

N п/п	Topic	Instructions
1.	Major manifestations of the upper part of the GIT (dysphagia, dyspepsia, vomiting, abdominal pain).	To prepare PPT presentation
2.	Major manifestations of the lower tract of the GIT (diarrhea, malabsorption, weight loss, constipation, gastrointestinal bleeding).	To prepare PPT presentation
3.	Diet for gastrointestinal diseases	To prepare PPT presentation
4.	Characteristics of H. pylori.	To prepare PPT presentation
5.	Comparison table: autoimmune gastritis and H. pylori.	To create table
6.	Pathogenesis of PUD (diagram)	To draw chart
7.	Microbiota in disease and health.	To prepare PPT presentation
8.	Comparison table: Ulcerative colitis, Crohn's disease	To create table
9.	Comparison table: autoimmune hepatitis, viral hepatitis	To create table
10.	Ethanol metabolism diagram	To draw chart
11.	Transplantation of liver.	To prepare PPT presentation
12.	Hepatotoxic drugs.	To prepare PPT presentation
13.	Hepatorenal syndrom	To prepare PPT presentation