MINISTRY OF HEALTH OF THE REPUBLIC OF BELARUS
Educational Institution
«BELARUSIAN STATE MEDICAL UNIVERSITY»

Контрольный экземпляр

APPROVED
by Rector of the Educational Institution «Belarusian State Medical University»

S.P.Rubnikovich
24.09.2026
Reg. # UD-01-133/2627 /add.

CURRENT PROBLEMS IN GASTROENTEROLOGY

Curriculum of the educational institution in the additional course for the specialty

7-07-0911-01 «General Medicine»

2026

Curriculum of the additional course is based on the educational program «Актуальные проблемы гастроэнтерологии», approved 24.09.2026 registration # УД-01-132/2627/р.

COMPILERS:

N.Y.Dostanko, Associate Professor of the Department of Internal Diseases, Cardiology and Rheumatology with a course of advanced training and retraining of the Educational Institution «Belarusian State Medical University», PhD, Associate Professor;

A.M.Prystrom, Head of the Department of Internal Diseases, Cardiology and Rheumatology with a course of advanced training and retraining of the Educational Institution «Belarusian State Medical University», DMSc, Professor

RECOMMENDED FOR APPROVAL:

by the Department of Internal Diseases, Cardiology and Rheumatology with a course of advanced training and retraining of the Educational Institution «Belarusian State Medical University»
(protocol # 12 of 30.06.2026);

by the Methodological Commission of Therapeutic Disciplines of the Educational Institution «Belarusian State Medical University»
(protocol # 1 of 24.09.2026)

EXPLANATORY NOTE

«Current problems in gastroenterology» is the additional course on the discipline «Internal Diseases» that contains systematized scientific knowledge in the field of gastroenterology including modern methods of diagnosis, differential diagnosis, prevention, management of different gastroenterological diseases and the latest scientific data and practical guidelines on gastroenterology.

The aim of the additional course «Current problems in gastroenterology» is to develop students' competencies required for the diagnosis, differential diagnosis, and treatment of both common and clinically significant gastrointestinal pathologies, as well as rarer, poorly recognized diseases.

The objectives of the additional course are to form students' scientific knowledge about fundamental concepts, terminology, the principal clinical and laboratory syndromes in gastroenterology; the etiology and pathogenesis, clinical manifestations, complications, outcomes, factors influencing disease course, prognosis, and efficacy of treatment of gastrointestinal diseases; the diagnostic criteria and parameters for evaluating treatment efficacy and the principles of evidence-based therapy; skills and abilities required for conducting a diagnostic search and performing differential diagnosis in individual patients; competently interpreting the results of laboratory and instrumental investigations; correctly formulating diagnoses for the completion of medical records; selecting and justifying treatment strategies appropriate to the clinical situation; determining the required duration of therapy and assessing its effectiveness; and promptly identifying indications for surgical treatment of digestive tract diseases.

Relations to other academic disciplines

Teaching and successful study of the additional course «Current problems in gastroenterology» is carried out on the basis of the knowledge and skills acquired by the student in the relevant sections of the following disciplines: «Internal Diseases», «Clinical Pathological Physiology», «Clinical Evaluation of Laboratory Tests»

As a result of studying the additional course «Current problems in gastroenterology» the student should

know:

etiology, pathogenesis, principal symptoms, and syndromes of the digestive system diseases;

current classifications for gastrointestinal tract diseases;

diagnostic criteria and principles of differential diagnosis of gastrointestinal tract diseases

indications for laboratory and instrumental diagnostic methods in modern gastroenterology;

capabilities and limitations of laboratory and instrumental diagnostic methods;

principles of evidence-based and differentiated therapy and prevention of the digestive system diseases;

be able to:

conduct a targeted history-taking and collection of patient complaints;

perform a physical examination of a patient with gastrointestinal pathology;

justify the necessary laboratory and instrumental diagnostic methods;

formulate a diagnosis in accordance with generally accepted classifications and clinical protocols;

determine the activity of the pathological process and the degree of functional disorders of the affected organ;

substantiate the choice of treatment modalities and the duration of therapy;

individualize the treatment based on identified risk factors, disease activity, functional impairment, and severity of the patient's condition;

evaluate the effectiveness of ongoing therapy and plan active patient monitoring;

master skills to:

conduct a clinical examination of the patient;

interpret the results of modern laboratory and instrumental diagnostic methods;

conduct a differential diagnostic search and formulate a diagnosis;

document the results of the patient interview and physical examination data;

select treatment modalities and appropriate classes of pharmacological agents.

Total number of hours for the study of the additional course is 40 academic hours. Classroom hours according to the types of studies: practical classes - 25 hours, student independent work (self-study) - 15 hours.

Intermediate assessment is carried out according to the syllabus of the specialty in the form of a credit (9 semester).

Form of higher education – full-time.

THEMATIC PLAN

Section (topic) name	Number of class hours
	practical
1. Modern principles of diagnosis and treatment of acid peptic disorders	5
2. Approach to the patient with liver disease. Alcoholic, metabolic dysfunction-associated and drug-induced liver disease	5
3. Autoimmune and genetic liver diseases	5
4. Malabsorption, bacterial overgrowth syndrome and small bowel diseases	5
5. Large intestine diseases	5
Total hours	**25**

CONTENT OF THE EDUCATIONAL DISCIPLINE

1. Modern principles of diagnosis and treatment of acid peptic disorders

Diagnostic capabilities, methodology and analysis of the results of 24-hour esophageal pH monitoring (pH-impedance monitoring).

High-resolution esophageal manometry in differential diagnosis of esophageal diseases: indications, interpretation of results.

Gastroesophageal reflux disease: risk factors, clinical presentation, diagnosis, prevention, treatment.

Peptic ulcer disease: risk factors, clinical presentation, complications, prevention, treatment. Stress ulcers. NSAID-induced gastropathy.

H.pylori and acid peptic disorders: relationship, diagnosis, principles and regimens of modern eradication therapy.

2. Approach to the patient with liver disease. Alcoholic, metabolic dysfunction-associated and drug-induced liver disease

Classification, risk factors, clinical and laboratory syndromes in liver diseases.

The capabilities of hepatic imaging methods, elastography, and liver biopsy; assessment of liver disease stage, course, severity, activity, compensation. Complications of liver cirrhosis: clinical features, diagnosis, prognosis and treatment.

Alcoholic liver disease: ethanol metabolism and pathophysiology, concepts of a "standard drink" and "consumption regimens", clinical and laboratory syndromes, markers of alcoholic liver disease, diagnosis, severity assessment, prognosis, treatment.

Metabolic dysfunction-associated steatotic liver disease: pathogenesis, clinical and laboratory syndromes, diagnosis, prognosis, treatment, and associated comorbidities.

Overview of drug metabolism in the liver. Toxin/drug-induced liver injury: hepatotoxic drugs, mechanisms of hepatic toxicity, classification, risk factors, diagnosis, prevention, treatment.

3. Autoimmune and genetic liver diseases

Autoimmune hepatitis: classification, clinical features, diagnosis, prognosis, treatment.

Primary biliary cholangitis: clinical presentation, diagnosis, prognosis, treatment.

Primary sclerosing cholangitis: clinical presentation, diagnosis, prognosis, treatment.

Wilson's disease: copper metabolism and pathophysiology, inheritance and gene function, mechanism of liver injury, histology, classification, clinical manifestations, diagnosis, prognosis, treatment, prevention.

Hereditary hemochromatosis: iron metabolism and pathophysiology, iron overload syndromes, inheritance and gene function, histology, clinical manifestations, diagnosis, prognosis, treatment, prevention.

Alpha1-antitrypsin deficiency: inheritance and function of the alpha1-antitrypsin gene, mechanism of liver injury, clinical manifestations, diagnosis, prognosis, treatment.

Porphyrias: hemoglobin synthesis, inheritance and function of genes involved in hemoglobin synthesis, mechanisms of liver and gastrointestinal injury, classification, diagnosis, prognosis, treatment.

4. Malabsorption, bacterial overgrowth syndrome and small bowel diseases

Lipids, proteins and carbohydrates digestion and absorption. Role of bile acids, pancreatic enzymes and microbiota.

Malabsorption: mechanisms, classification, clinical manifestations, diagnosis, and treatment principles. Methods for assessing nutritional status and nutritional risk, definition and diagnosis of sarcopenia.

Bacterial overgrowth syndrome: definition, risk factors, clinical manifestations, classification, diagnosis, treatment.

Celiac disease: etiology, inheritance, classification, diagnosis, associated diseases, treatment.

Whipple's disease: etiology, pathogenesis, stages, clinical presentation, diagnosis, prognosis, treatment.

5. Large intestine diseases

Bristol stool scale.

Functional bowel disorders and irritable bowel syndrome: definition, etiology, pathogenesis, classification, diagnostic criteria, treatment.

Ulcerative colitis: epidemiology, risk factors, clinical presentation, classification, diagnosis, prognosis, associated diseases, treatment.

Crohn's disease: epidemiology, risk factors, clinical presentation, classification, diagnosis, prognosis, complications, treatment.

Diverticular disease: epidemiology, risk factors, clinical presentation, complications, diagnosis, treatment, prevention.

ACADEMIC DISCIPLINE CURRICULAR CHART

Section, topic #	Section (topic) name	Number of hours	Self-studies	Form of control
		practical		
1.	Modern principles of diagnosis and treatment of acid peptic disorders	5	3	Interview; test
2.	Approach to the patient with liver disease. Alcoholic, metabolic dysfunction-associated and drug-induced liver disease	5	3	Interview; test
3.	Autoimmune and genetic liver diseases	5	3	Interview; test
4.	Malabsorption, bacterial overgrowth syndrome and small bowel diseases	5	3	Interview; test
5.	Large intestine diseases	5	3	Interview; test. Credit
	Total hours	**25**	**15**	

INFORMATION AND INSTRUCTIONAL UNIT

LITERATURE

Basic (relevant):

1. Internal diseases : textbook. In 2 Vols. Vol. 1 / ed. by A. I. Martynov, J. D. Kobalava, S. V. Moiseev. - Moskow : Geotar-Media, 2022. - 683 p.
2. Internal diseases : textbook. In 2 Vols. Vol. 2 / ed. by A. I. Martynov, J. D. Kobalava, S. V. Moiseev. - Moskow : Geotar-Media, 2022. - 614 p.

Additional:

3. Harrison`s principles of internal medicine. Vol. 2 / ed. by D. L. Longo, D. L. Kasper, J. L. Jameson [et. al]. - 20th ed. - New York [etc.] : McGrawHill Medical, 2018. – 3610 p.
4. Internal medicine : textbook for English-speaking students of higher medical educational esablishment. P. 2 : Pulmonology. Gastroenterology. Nephrology. Diseases of the internal organs in countries with hot climate / ed. by M. A. Stanislavchuk, V. K. Sierkova. - Vinnytsya : Nova Knyha, 2019. - 359 [2] p.
5. Сиденко В. М. Гастродуоденальные язвы = Peptic ulcer disease: учебно - методическое пособие. – Минск : БГМУ, 2019. – 24 с.

LIST OF AVAILABLE DIAGNOSTIC TOOLS

The following forms of current certification are used to diagnose competencies:
interview;
test;
solving situational tasks.

LIST OF AVAILABLE TEACHING METHODS

Traditional method;
Case-Based Learning (CBL).

LIST OF PRACTICAL SKILLS

Name of practical skills	Form of practical skills control
Conducting a patient interview and physical examination	Interview
Planning diagnostic methods for a patient	Solving situational tasks
Interpreting the results of pH-monitoring (pH-impedance monitoring), esophageal manometry, and endoscopy of the gastrointestinal tract	Solving situational tasks
Formulating preliminary and final diagnoses of gastrointestinal diseases	Interview
Drawing up a treatment plan for a patient in accordance with clinical guidelines	Interview

COMPILERS/AUTHORS:

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Head of the Department of Internal Diseases, Cardiology and Rheumatology with a course of advanced training and retraining of the educational institution «Belarusian State Medical University», DSc, Professor — A.M.Prystrom

Curriculum content, composition and the accompanying documents comply with the established requirements.

Head of the Office of Educational Activities of the Educational Institution «Belarusian State Medical University» — I.L.Kotovich

14.09.2026

Methodologist of the Educational and Methodological Department of the Office of Educational Activities of the Educational Institution «Belarusian State Medical University» — N.A.Kukashinova

14.09.2026