

**MINISTRY OF HEALTH OF THE REPUBLIC OF BELARUS  
EDUCATIONAL INSTITUTION  
BELARUSIAN STATE MEDICAL UNIVERSITY**

Контрольный  
экземпляр

**APPROVED**

by First Vice-Rector, Professor

S.V. Gubkin



Reg. # УД-349 а/1617/уч.

**OUTPATIENT INTERNAL MEDICINE**

**Curriculum of higher educational institution  
in the educational discipline for the specialty**

**1-79 01 01 General Medicine**

Minsk, BSMU 2016

Curriculum is based on the standard educational program «Outpatient Internal Medicine», approved 31.08.2016, registration # TRh.549/men

**COMPILERS:**

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**RECOMMENDED FOR APPROVAL:**

by the Outpatient Internal Medicine Department, Educational Institution “Belarusian State Medical University”  
(protocol # 15, 11.05.2016);

by the Methodological Commission of Therapeutic Disciplines, Educational Institution “Belarusian State Medical University”  
(protocol #193/1, 11.05.2016)

## EXPLANATORY NOTE

**Outpatient Internal Medicine** – is an academic discipline comprising systematic scientific knowledge and techniques of internal medicine outpatient aspects (diagnosis, treatment and management, temporary disability examination, clinical examination, rehabilitation) and primary disease prevention, as well as the methods of this knowledge assimilation.

Outpatient internal medicine is a complex discipline that takes a certain place among other general medical disciplines and has extensive interdisciplinary links.

Curriculum for academic discipline "Outpatient Internal Medicine" includes the latest scientific data on outpatient diagnosis, treatment and prevention of the internal organs most common diseases as well as outpatient internal medicine general issues of the district therapist work practical organization.

The purpose of training in the academic discipline "Outpatient Internal Medicine" is students' formation and acquisition of scientific knowledge on the methods of diagnosis, treatment and prevention of the internal organs most common diseases, office-based patients' rehabilitation, temporary disability examination, preventive medical examination, as well as the systematization and consolidation of knowledge in related academic disciplines.

Tasks of the discipline studying include the acquisition of academic competencies by students, based on the ability to independent search for information resources as well as on the ability of knowledge acquisition and understanding mastering methods:

- principles of urban and rural outpatient internal medicine service organization and district therapist's scope of work;
- modern outpatient diagnostic capabilities of commonly encountered conditions in district therapist's practice;
- issues of patient management and tactics (indications for hospital and day care unit admission, specialists' consultations, indications for special diagnostic tests);
- issues of up-to-date medical treatment of patients with internal diseases in outpatient settings, including team work with other specialists;
- issues of pre-hospital emergency medical care;
- principles of primary and secondary prevention, including preventive medical examination and rehabilitation of the patients with main therapeutic diseases, temporary disability examination and medical-social examination bases.

Teaching tasks include the development of social, personal and professional competencies based on the knowledge and application of:

- syndromal semiotics, algorithms of differential diagnosis in outpatient settings that contribute to the formation of clinical thinking;
- contemporary methods of diagnostics diagnosis, treatment and prevention of internal organs diseases in outpatient settings in compliance with medical ethics and deontology.

Teaching and successful mastering of the academic discipline "Outpatient internal medicine" is provided by previous or simultaneous training in the following disciplines:

**Pharmacology.** Principles of pharmacokinetics and pharmacodynamics of medicines. Factors determining the therapeutic efficacy, side effects, toxicity and allergenicity of medicines. Management of medicines effects based on pharmacokinetic and pharmacodynamic principles. Individual strategy of pharmacotherapy, peculiarities in patients of different age groups.

Major medicines used in various pathological processes and most common diseases. Pharmacological means of human organism protection from various types of biological aggression and parasitism.

Doctor's prescription. Prescribing medicines in various medicine forms.

**Propaedeutics of Internal Diseases.** Age-related anatomical and physiological features peculiarities of organs and body systems. Methodics of the healthy and sick person's examination. Additional diagnostic tests and methods, principles of diagnostic programs development. The diagnostic process. Semiotics and syndromes of organs and body systems common major lesions. Basics of rational nutrition in therapeutic diseases in different age groups. International Diseases Classification.

**Radiation and Environmental Medicine.** Peculiarities of radiation lesions in human formation. Medical and biological effects of radiation and principles of reducing radiation effect on population. Radioecological situation in the Republic of Belarus. Behavior of radionuclides in different ecosystems. Evaluation of radiation dose and exposure. Hygienic education, preventive medical examination, health promotion, protection of the population exposed to radiation. General and medical ecology: main concepts, goals, objectives. Environmental factors. Ecological and medical effects of air pollution, hydrosphere and lithosphere pollution. Ecological problems of nutrition. Environmental protection.

**Medical psychology.** Psychology of Personality psychology. Development of the psyche in ontogenesis. General regularities principles of mental factors' influence on human health, psychological characteristic peculiarities doctor-patient contact interaction, the basics of Mental Health hygiene. Medical psychology of deviant behavior. Internal picture image of illness and individual personality response to disease. Medical deontology.

**Surgical diseases.** Methodics of surgical patient's examination. Modern methods of clinical physical and additional (laboratory, medical imaging, functional, endoscopic) patient's examination. Aetiology, pathogenesis, clinical presentation and possible complications of the most common surgical diseases. Prevention of surgical diseases.

**Internal diseases.** Methods of examination of patients with internal diseases. Aetiology and pathogenesis, clinical presentation of major respiratory, circulatory, digestive, kidney and urinary tract, haematological diseases. Diagnostics, semiotic analysis and differential diagnosis, methods and medicines used in therapeutic treatment of internal diseases.

**Phthisiopulmonology.** Examination of the patient with suspected pulmonary tuberculosis. Epidemiology, aetiology, pathogenesis, pathomorphology of

tuberculosis, classification, diagnosis, differential diagnosis, clinical features and treatment of pulmonary and extrapulmonary forms; complications. Specific, sanitary and social tuberculosis prevention. Classification, clinical presentation, diagnosis, differential diagnosis, treatment and complications of pulmonary sarcoidosis. Medical expertise, medical rehabilitation of patients with tuberculosis and pulmonary sarcoidosis.

**Neurology and Neurosurgery.** Methods of examination of patients in neurology and neurosurgery, neurological examination. Aetiology, pathogenesis, clinical presentation, diagnosis and treatment of neurological and neurosurgical diseases.

**Otorhinolaryngology.** Aetiology, pathogenesis, clinical presentation, diagnosis, treatment and prevention of otorhinolaryngological diseases. Special methods of investigation of the upper respiratory tract and the ear.

**As a result of studying the discipline "Outpatient Internal Medicine" the student should**

**know:**

- goals, objectives, structure and principles of primary therapeutic care service organization in outpatient settings in the Republic of Belarus;
- clinical protocols(standards) of managing therapeutic patients on all steps of medical care; rehabilitation and treatment methods in outpatient settings;
- principles of organizing an outpatient clinic and a district therapist's work, scope of work , rights and responsibilities, principles of interaction and cooperation, teamwork in the district therapist's work, other specialists and healthcare organizations;
- indications for other specialists consultations, regulations and indications for therapeutic patients' hospital admission, principles of medical care outside healthcare facility;
- types of temporary disability, rules and regulations for giving out and prolongation of a sick leave and temporary disability certificate in case of illness, functions of a sick leave;
- structure and functions of medical consulting commission(MCC), structure, types and main functions of Medical and Rehabilitation Expert Commission (MREC), criteria for determining disability groups;
- types of medical rehabilitation, principles of rehabilitation in outpatient settings;
- main directions of preventive activities in outpatient internal medicine, concept of preventive medical examination;
- general indications and contraindications for patient's admission to sanatorium and resort treatment;
- methods of active detection of tuberculosis(TB) and various localizations cancer;
- basic principles of internal diseases treatment (complicated and uncomplicated) and comorbidities in outpatient settings; exacerbation, recovery and remission criteria;
- diagnosis, management and emergency medical care at preadmission stage;

**be able to:**

- conduct patient's interview, perform physical examination and detect objective signs and symptoms of diseases, make a plan of diagnostic tests and investigations suitable for outpatient settings;

- interpret results of laboratory and diagnostic tests, formulate diagnosis of internal therapeutic disease;
- - make individual plan of disease treatment and prevention, rehabilitation program for therapeutic patient;
- fill in essential medical records and documentation, prescribe medicines commonly used in outpatient settings;
- recognize indications for hospital admission;
- define types and causes of therapeutic patients' temporary disability and employability restoration criteria, recognize symptoms of permanent disability, arrange referral to the MREC;
- carry out population preventive medical examination;
- take swabs from the throat and nose for bacteriological exam;
- take conduct anti-epidemic and preventive actions measures in infection outbreak location;
- provide emergency medical care in outpatient settings;

**master:**

- history taking, performing patient's physical examination, making a rational plan of diagnostic tests and investigations, treatment and prevention of diseases in outpatient settings, patient's individual rehabilitation program;
- interpretation of laboratory and diagnostic tests results, filling in essential medical records and documentation, writing out prescriptions;
- principles of making a diagnostic and therapeutic interventions plan for therapeutic patients's dispensary group, evaluate efficiency and quality of preventive medical examination;
- technique of taking swabs from the throat and nose for bacteriological exam;
- methodics of various population education sanitation and hygiene forms;
- methods of providing emergency care in outpatient settings.

The structure of the curriculum in the educational discipline "**Outpatient Internal Medicine**" includes 6 sections.

**Total number** of hours for the study of the discipline is 136 academic hours. Classroom hours according to the types of studies: lectures – 6 hours, practical classes - 80 hours, student independent work (self-study) – 50 hours.

Current assessment is carried out according to the syllabus of the specialty in the form of a credit (7, 10 semester).

Form of higher education – full-time.

**ALLOCATION OF ACADEMIC TIME  
ACCORDING TO SEMESTERS OF STUDY**

Code, name of the specialty	semester	Number of academic hours					Form of current assessment
		total	in-class	including		out-of-class self-studies	
				lectures	practical classes		
1-79 01 01 General Medicine	7	72	46	6	40	26	credit
	10	64	40	-	40	24	credit
<b>Total</b>		<b>136</b>	<b>86</b>	<b>6</b>	<b>80</b>	<b>50</b>	

**THEMATIC PLAN**

Section (topic) name	Number of class hours	
	Lectures	Practical
<b>1. Organization of ambulatory therapeutic medical care in the Republic of Belarus</b>	<b>4</b>	<b>10</b>
1.1. District therapist's scope of work, main outpatient medical documentation (approved forms). Population preventive medical examination	-	5
1.2. Preventive activities in outpatient internal medicine	4	-
1.3. Temporary disability examination. Functions of the medical consulting commission (MCC). The concept of medical and rehabilitation expert commission (MREC)	--	5
<b>2. Emergency care in outpatient settings</b>	<b>2</b>	<b>-</b>
<b>3. Respiratory diseases</b>	<b>-</b>	<b>6</b>
3.1. Acute respiratory tract infections, acute tonsillitis, acute bronchitis, pneumonia: outpatient aspects diagnosis and treatment	-	6
<b>4. Cardiovascular diseases</b>	<b>-</b>	<b>12</b>
4.1. Essential and secondary arterial hypertension, somatoform autonomic dysfunction: outpatient aspects of	-	6

Section (topic) name	Number of class hours	
	Lectures	Practical
diagnosis and treatment. Office based emergency care in hypertensive crisis		
4.2. Ischemic heart disease: outpatient aspects of different types diagnosis and treatment. Office based emergency care in angina attack and acute coronary syndrome	-	6
<b>5. Digestive tract diseases</b>	-	12
5.1. Functional dyspepsia, chronic gastritis, gastric and duodenal: outpatient aspects diagnosis and treatment. Medical tactics and office based emergency care in suspected gastrointestinal bleeding	-	6
5.2. Chronic cholecystitis, functional disorders of the biliary tract, chronic pancreatitis: outpatient aspects of diagnosis and treatment. Office based emergency care in biliary colic	-	6
<b>6. Differential diagnosis of internal diseases</b>	-	40
6.1. Differential diagnosis of bronchial obstruction syndrome. Outpatient aspects of diagnosis and treatment of bronchial asthma and chronic obstructive pulmonary disease (COPD). Office based emergency care in asthma attack.	-	5
6.2. Differential diagnosis of chest pain. Outpatient aspects of diagnosis and treatment of noncoronary heart diseases	-	5
6.3. Differential diagnosis of joint syndrome. Outpatient aspects of diagnosis and treatment of inflammatory and degenerative joint diseases (rheumatoid arthritis, reactive polyarthritis, primary osteoarthritis)	-	5
6.4. Differential diagnosis of dyspepsia and abdominal pain. Diagnosis and treatment of irritable bowel syndrome. Office based emergency care in "acute abdomen"	-	5
6.5. Differential diagnosis of jaundice, hepatomegaly and splenomegaly. Outpatient aspects of diagnosis and treatment of chronic hepatitis and cirrhosis	-	5
6.6. Differential diagnosis of urinary syndrome. Outpatient aspects of diagnosis and treatment of chronic pyelonephritis, glomerulonephritis and chronic renal failure. Office based emergency care in renal colic	-	5
6.7. Differential diagnosis of anaemia syndrome. Outpatient aspects of diagnosis and treatment of anemias	-	5



Section (topic) name	Number of class hours	
	Lectures	Practical
caused by iron deficiency, vitamins B12 and folic acid		
6.8. Therapeutic aspects of managing of outpatients with type II diabetes mellitus in outpatient settings, prevention of complications. Differential diagnosis of conditions accompanied by loss of consciousness	-	5
<b>Total hours</b>	<b>6</b>	<b>80</b>

## CONTENT OF THE EDUCATIONAL MATERIAL

### 1. Organization of ambulatory therapeutic medical care in the Republic of Belarus

#### 1.1. District therapist's scope of work, main outpatient medical documentation (approved forms). Population medical examination

Organization of ambulatory therapeutic medical care in the Republic of Belarus. Therapeutic territorial or factorial district, concept of factory medical service, concept of general practitioner.

Scope of work, rights and obligations of a district therapist. Main directions of district therapist's work.

Therapeutic and diagnostic work of a district therapist. Organization of medical care at home. Regulations for referral patients to paraclinical tests. Indications for hospital referral, indications for referral to diagnostic center consultation, to specialists, indications for sanatorium and resort treatment.

Medical rehabilitation in the district therapist's work. General indications and contraindications for sanatorium and resort treatment referral.

Main directions of preventive activities in outpatient internal medicine. Concept of population preventive medical examination, method of preventive medical examination conducting. Groups of dispensary surveillance. Analysis of quality and effectiveness of preventive medical examination.

Principles of teamwork, interaction and cooperation of a district therapist with other specialists.

Approved forms of essential medical records and documentation of approved forms. Regulations for filling in medication prescriptions for patients's different categories.

#### 1.2. Preventive activities in outpatient internal medicine

Prevention: concept of prevention, types of prevention. Principal directions of preventive activities. Concept of health, healthy lifestyle and its criteria. Sufficient physical activity and healthy diet as the mainstay of healthy lifestyle. Concept of diseases risk factors.

Concept of preventive medical examination. Preventive medical examination as the main method of preventive activity. Preventive medical examination methodic. Preventive checkups of population, types of preventive checkups. Groups of dispensary surveillance. Analysis of quality and effectiveness of preventive medical examination.

Acute tonsillitis and pharyngitis, pneumonia: preventive medical examination, prevention.

Ischemic heart disease (IHD): preventive medical examination, prevention.

Arterial hypertension: preventive medical examination, prevention.

Chronic gastritis and peptic ulcer: preventive medical examination, prevention.

### **1.3. Temporary disability examination. Functions of the medical consulting commission (MCC). The concept of medical and rehabilitation expert commission (MREC)**

Concept of temporary disability examination.

Temporary disability and its types. Documents, certifying temporary disability (sick leave and temporary disability certificate). Functions of sick leave. General rules and regulations for giving out and prolongation of sick leave and temporary disability certificate in healthcare facilities. Violations of prescribed regimen during temporary disability.

Structure and functions of medical consulting commission.

Permanent disability, permanent disability groups.

Structure, types and main functions of MREC. Procedures and indications for referral to MREC.

## **2. Office based emergency care**

Concept of emergency care. Peculiarities of emergency care in outpatient clinic and at patient's home. Management of medical emergencies. Regulations and indications for hospital admission.

Emergency care in hyperthermal fever reaction, asthma attack, cardiac asthma and pulmonary edema, angina attack and acute coronary syndrome, paroxysmal arrhythmias (paroxysmal narrow QRS complex and wide QRS complex tachycardia, atrial fibrillation, Morgagni-Adams-Stokes attacks), hypertensive crisis, "Acute" abdomen, gastrointestinal bleeding, renal colic, biliary "colic".

## **3. Respiratory diseases**

### **3.1. Acute respiratory tract infections, acute tonsillitis, acute bronchitis, pneumonia: outpatient aspects of diagnosis and treatment**

Concept of acute respiratory infections (ARI). Etiology and clinical features of ARI, caused by most common agents. Complications of ARI. Workup plan of the patient with ARI, diagnosis formulation. Treatment, indications for antibiotic therapy in ARI. Indications for hospital admission. Temporary disability examination in ARI. Prevention of ARI.

Acute tonsillitis: definition, etiology, pathogenesis, classification, clinical features, complications. Patient workup plan, physician's tactics. Differential diagnosis. Diagnosis formulation, treatment. Temporary disability expertise, follow-up and preventive medical examination of patients suffered acute tonsillitis. Prevention of acute tonsillitis.

Definition of acute bronchitis and pneumonia, etiology, clinical features. Workup plan of the patient with bronchitis and pneumonia in outpatient settings, diagnosis formulation, indications for hospital admission. Outpatient treatment, indications for antibiotic therapy in acute bronchitis.

Complications of acute bronchitis and pneumonia, temporary disability examination in acute bronchitis and pneumonia. Follow-up and preventive medical examination, rehabilitation, prevention of acute bronchitis and pneumonia.

#### **4. Cardiovascular diseases**

##### **4.1. Essential and secondary arterial hypertension, somatoform autonomic dysfunction: outpatient aspects diagnosis and treatment. Office based emergency care in hypertensive crisis**

Arterial hypertension: definition, classification.

Workup plan of a hypertensive patient in outpatient settings. Differential diagnosis of primary(essential) and secondary arterial hypertension. Principles of arterial hypertension treatment, indications for patients' hospital admission.

Hypertensive crisis, their types. Emergency care in hypertensive crisis in outpatient settings.

Hypertension and hypertensive crisis: temporary disability examination, indications for referral to MREP. Follow-up and preventive medical examination of patients with essential hypertension. Prevention of hypertension.

Somatoform autonomic dysfunction: definition, classification, diagnosis and treatment principles.

##### **4.2. Ischemic heart disease: outpatient aspects of different types diagnosis and treatment. Office based emergency care in angina attack and acute coronary syndrome**

Concept of ischemic heart disease (IHD). Risk factors of IHD, classification.

Angina pectoris: types classification, outpatient workup plan, differential diagnosis. Treatment and management of stable and unstable angina, indications for hospital admission. Outpatient treatment and management of angina pectoris, temporary disability examination, indications for referral to MREC. Follow-up and preventive medical examination. Prevention of angina pectoris.

Office based emergency care in angina attack and acute coronary syndrome.

#### **5. Digestive tract diseases**

##### **5.1. Functional dyspepsia, chronic gastritis, gastric and duodenal: outpatient aspects of diagnosis and treatment. Medical tactics and office based emergency care in suspected gastrointestinal bleeding**

Definition of functional dyspepsia, chronic gastritis, peptic ulcer, classification, outpatient's work-up plan, indications for hospital admission of patients with chronic gastritis and peptic ulcer.

Treatment and management of patients with functional dyspepsia, chronic gastritis and peptic ulcer, temporary disability examination.

Follow-up and preventive medical examination of patients with chronic gastritis and peptic ulcer.

Prevention of chronic gastritis and peptic ulcer.

Office-based emergency care in suspected gastrointestinal bleeding.

**5.2. Chronic cholecystitis, functional disorders of the biliary tract, chronic pancreatitis: outpatient aspects of diagnosis and treatment. Office based emergency care in biliary colic**

Chronic cholecystitis, functional disorders of the biliary tract (gallbladder dysfunction and sphincter of Oddi dysfunction), chronic pancreatitis: patient's workup plan, differential diagnosis, outpatient treatment, indications for surgical referral, temporary disability examination, preventive medical examination.

Prevention of biliary tract, pancreas and gallbladder diseases.

Office based emergency care in biliary colic, medical tactics.

**6. Differential diagnosis of internal diseases**

**6.1. Differential diagnosis of bronchial obstruction syndrome. Outpatient aspects of diagnosis and treatment of bronchial asthma and chronic obstructive pulmonary disease (COPD). Office based emergency care in asthma attack**

Concept of bronchial obstruction syndrome, major diseases associated with this syndrome, diagnostic algorithm in bronchial obstruction syndrome. Differential diagnosis of cough.

Risk factors of developing asthma and chronic obstructive pulmonary disease(COPD). Classification of asthma and COPD, outpatient's work-up, diagnosis formulation, indications for hospital admission.

Principles of asthma and COPD treatment in outpatient settings, temporary disability examination, indications for referral to MREC, follow-up and preventive medical examination.

Prevention of asthma and COPD.

Office based emergency care in asthma attack.

**6.2. Differential diagnosis of chest pain. Outpatient aspects of diagnosis and treatment of noncoronary heart diseases**

Major diseases and conditions that present with cardiac-like chest pain (cardialgia).

Pain characteristics in heart disease (IHD, pericarditis, myocarditis, cardiomyopathies), and somatoform autonomic dysfunction, mitral valve prolaps. Diagnostic algorithm. Differential diagnosis.

Characteristics of pain accompanied by extracardiac pathology (of abdominal organs, lungs and pleura, mediastinum, spine, peripheral nervous system and muscles of the shoulder girdle), differential diagnosis with heart diseases.

Noncoronary heart diseases (myocarditis, pericarditis, primary and secondary cardiomyopathies, acute rheumatic fever and chronic rheumatic heart disease): risk factors, outpatient's work-up, diagnostic criteria, indications for hospital admission. Principles of noncoronary heart diseases treatment in outpatient settings, temporary disability examination, indications for referral to MREC, follow-up and preventive medical examination.

Primary and secondary prevention of noncoronary heart diseases.

**6.3. Differential diagnosis of joint syndrome. Outpatient aspects of diagnosis and treatment of inflammatory and degenerative joint diseases (rheumatoid arthritis, reactive polyarthritis, primary osteoarthritis)**

Joints syndrome: concept of arthritis, arthrosis and arthropathy, periarticular soft tissue diseases. Physical examination of joints and spine, diagnostic tests. Major diseases associated with joint syndrome, diagnostic algorithm.

Rheumatoid arthritis: outpatient work-up, diagnostic criteria, physician's tactics, indications for hospital referral and admission. General principles of rheumatoid arthritis treatment and management in outpatient settings, temporary disability examination, indications for referral to MREC, follow-up and preventive medical examination.

Reactive arthritis: definition, patients' work-up, differential diagnosis, management, physician's tactics, general principles of treatment in outpatient settings, temporary disability examination, follow-up and preventive medical examination.

Primary osteoarthritis: diagnostic criteria, patients work-up, tactics, outpatient treatment and management, temporary disability examination, indications for referral to MREP, follow-up and preventive medical examination.

Risk factors and prevention of degenerative and inflammatory joint diseases.

**6.4. Differential diagnosis of dyspepsia and abdominal pain. Diagnosis and treatment of irritable bowel syndrome. Office based emergency care of "acute abdomen"**

Dyspepsia as a collective term, describing motor dysfunction of different parts of digestive tract: "stomach" dyspepsia, "intestinal" and "biliary" symptoms, their pathogenesis. Range of diseases, accompanied by these symptoms, patients' work-up.

Causes and types of abdominal pain, pathogenesis. Concept of acute and chronic abdominal pain, "acute" abdomen, range of diseases, accompanied by the above-mentioned types of pain.

Concept of malabsorption, maldigestion and malnutrition, pathogenesis. Differential diagnosis of the lesion level (small, large intestine).

General principles of diagnosis and differential diagnosis of diseases accompanied by abdominal pain and dyspepsia, symptomatic treatment (indications for prokinetics, antispasmodics, laxatives and anti-obstipation agents).

Work-up of a patient with suspected bowel disease.

Irritable bowel syndrome: diagnostic criteria, general principles of treatment and rehabilitation, prevention.

Office based emergency care in "acute abdomen" and acute abdominal pain.

**6.5. Differential diagnosis of jaundice, hepatomegaly and splenomegaly. Outpatient aspects of diagnosis and treatment of chronic hepatitis and cirrhosis**

Jaundice: concept, classification, causes.

Hepatomegaly, splenomegaly, hypersplenism: concept, causes; diseases accompanied by hepatomegaly and/or splenomegaly, differential diagnosis.

Clinical and laboratory syndromes of liver damage (cytolysis, mesenchymal inflammation, cholestasis, hepatocellular insufficiency), clinical significance.

Chronic hepatitis and liver cirrhosis: work-up plan, differential diagnosis, general principles of treatment in outpatient settings, tactics, temporary disability examination, indications for referral to MREC, follow-up and preventive medical examination. Risk factors and prevention of liver diseases.

**6.6. Differential diagnosis of urinary syndrome. Outpatient aspects of diagnosis and treatment of chronic pyelonephritis, glomerulonephritis and chronic renal failure. Office based emergency care in renal colic**

Concept of urinary syndrome, its features in pyelonephritis, glomerulonephritis, urinary stone disease, urethritis, cystitis, urinary tract tumors, nephropathies.

Diagnostic methods for kidney diseases in outpatient settings. Diagnostic algorithm in urinary syndrome.

Chronic kidney disease: definition, classification, principles of diagnosis.

Work-up plan the patient with chronic pyelonephritis, chronic glomerulonephritis, chronic renal failure in outpatient settings, indications for hospital admission. Physician's tactics in chronic renal failure.

Chronic pyelonephritis, chronic glomerulonephritis, chronic kidney disease: general principles of treatment in outpatient settings, temporary disability examination, indications for referral to MREC, follow-up and preventive medical examination.

Risk factors of kidney diseases. Prevention of chronic pyelonephritis, chronic glomerulonephritis, chronic kidney disease.

Renal colic: symptoms and signs, emergency care in outpatient settings.

**6.7. Differential diagnosis of anaemia syndrome. Outpatient aspects of diagnosis and treatment of anemias caused by iron deficiency, vitamins B12 and folic acid**

Definition of anaemia syndrome. Classification of anaemia according to pathogenesis (hemorrhagic, dyserythropoetic, haemolytic), haematocrit, size and volume of erythrocytes, haemoglobin concentration, bone marrow regenerative ability.

Differential diagnosis of hypochromic anaemia (iron-deficiency and iron-insufficiency).

Differential diagnosis of hyperchromic anaemia (vitamin B12 and folic acid deficiency).

Differential diagnosis of normochromic anaemia (hypoplastic, aplastic, haemolytic).

Iron deficiency anaemia: causes, signs and symptoms, blood analysis changes, physician's tactics, patient's work-up, management in outpatient settings, rehabilitation, temporary disability examination, prevention.

Vitamin B12 and folic acid deficiency anaemia: causes, signs and symptoms, blood changes, differential diagnosis, physician's tactics in outpatient settings, rehabilitation, temporary disability examination, prevention.

**6.8. Therapeutic aspects of managing outpatients with type II diabetes mellitus in outpatient settings, prevention of complications. Differential diagnosis of conditions accompanied by loss of consciousness**

Type 2 diabetes mellitus: risk factors, carbohydrates metabolism abnormalities screening charts, principles of diagnostics.

Management of type 2 diabetes mellitus in outpatient settings: lifestyle modification, administration of antidiabetic medications and differential administration of these medications.

Temporary disability examination, indications for referral to MREC, prevention of type 2 diabetes mellitus complications.

Conditions associated with loss of consciousness.

Differential diagnosis of conditions associated with loss of consciousness. Order and peculiarities of physical examination of the unconscious patient. Emergency care of the unconscious patient.

## EDUCATIONAL DISCIPLINE CURRICULAR CHART

Section, topic #	Section (topic) name	number of hours		Self-studies	Literature	Form of control
		lectures	practical			
7 semester						
1.	<b>Organization of ambulatory therapeutic medical care in the Republic of Belarus</b>					
1.1.	District therapist's scope of work, main outpatient medical documentation (approved forms). Population preventive medical examination	-	5	3	1, 2, 3, 4, 5, 6, 10, 11, 12	Interviews, assessment based on case-method
1.2.	Preventive activities in outpatient internal medicine	4	-	2	1, 2, 3, 4, 5, 6, 10, 11, 12	Interviews, assessment based on role-playing
1.3.	Temporary disability examination. Functions of the medical consulting commission (MCC). The concept of medical and rehabilitation expert commission(MREC)	-	5	3	14, 15	Interviews, standardized electronic tests
2.	<b>Emergency care in outpatient settings</b>	2	-	3	1, 2, 3, 4, 5, 6, 8, 9, 10, 13	Interviews, assessment based on role-playing
3.	<b>Respiratory diseases</b>					
3.1.	Acute respiratory tract infections, acute tonsillitis, acute bronchitis, pneumonia: outpatient aspects of diagnosis and treatment	-	6	3	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	Interviews, assessment based on role-playing, assessment based on case-method
4.	<b>Cardiovascular diseases</b>					



4.1.	Essential and secondary arterial hypertension, somatoform autonomic dysfunction: outpatient aspects of diagnosis and treatment. Office based emergency care in hypertensive crisis	-	6	33	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	Interviews, assessment based on role-playing, assessment based on case-method
4.2.	Ischemic heart disease: outpatient aspects of different types diagnosis and treatment. Office based emergency care in angina attack and acute coronary syndrome	-	6	3	1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13	Interviews, assessment based on role-playing, assessment based on case-method
5.	<b>Digestive tract diseases</b>					
5.1.	Functional dyspepsia, chronic gastritis, gastric and duodenal: outpatient aspects of diagnosis and treatment. Medical tactics and office based emergency care in suspected gastrointestinal bleeding	-	6	3	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	Interviews, assessment based on role-playing, assessment based on case-method
5.2.	Chronic cholecystitis, functional disorders of the biliary tract, chronic pancreatitis: outpatient aspects of diagnosis and treatment. Office based emergency care in biliary colic	-	6	3	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	Control questioning, oral presentation of academic outpatient's medical card, presentation of the essay on the discipline curriculum topic, interviews, assessment based on role-playing, assessment based on case-method, assessment based on module-rating system, credits.
<i>10 semester</i>						
6.	<b>Differential diagnosis of internal diseases</b>					
6.1	Differential diagnosis of bronchial obstruction syndrome. Outpatient aspects diagnosis and treatment of bronchial asthma and chronic obstructive pulmonary disease (COPD). Office based emergency care in asthma attack	-	5	3	1, 2, 3, 4, 5, 6, 10, 11, 12, 13	Interviews, assessment based on role-playing, assessment based on case-method, tests

6.2.	Differential diagnosis of chest pain. Outpatient aspects of diagnosis and treatment of noncoronary heart diseases		5	3	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	Interviews, assessment based on role-playing, assessment based on case-method, tests
6.3.	Differential diagnosis of joint syndrome. Outpatient aspects of diagnosis and treatment of inflammatory and degenerative joint diseases (rheumatoid arthritis, reactive polyarthritis, primary osteoarthritis)	-	5	3	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	Interviews, assessment based on role-playing, assessment based on case-method, tests
6.4.	Differential diagnosis of dyspepsia and abdominal pain. Diagnosis and treatment of irritable bowel syndrome. Office based emergency care in "acute abdomen"	-	5	3	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	Interviews, assessment based on role-playing, assessment based on case-method, tests
6.5.	Differential diagnosis of jaundice, hepatomegaly and splenomegaly. Outpatient aspects of diagnosis and treatment of chronic hepatitis and cirrhosis	-	5	3	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	Interviews, assessment based on role-playing, assessment based on case-method, tests
6.6.	Differential diagnosis of urinary syndrome. Outpatient aspects of diagnosis and treatment of chronic pyelonephritis, glomerulonephritis and chronic renal failure. Office based emergency care in renal colic	-	5	3	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	Interviews, assessment based on role-playing, assessment based on case-method, tests
6.7.	Differential diagnosis of anaemia syndrome. Outpatient aspects of diagnosis and treatment of anemias caused by iron deficiency, vitamins B12 and folic acid	-	5	3	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	Interviews, assessment based on role-playing, assessment based on case-method
6.8.	Therapeutic aspects of managing outpatients with type II diabetes mellitus in outpatient settings, prevention of complications. Differential diagnosis of conditions accompanied by loss of consciousness	-	5	3	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	Control questioning, defence of the essay on topic of the curriculum of the discipline, interviews, assessment based on role-playing, assessment based on case-



## INFORMATION AND INSTRUCTIONAL UNIT

### LITERATURE

#### **Basic (relevant):**

1. John Murtagh's General Practice - McGraw-Hill Australia; 6th Revised edition (July 10, 2015); 1603 pages
2. Essential Med Notes 2016(or Toronto Notes 2016) - Thieme Medical Pub; 2 New edition (April 2016); 1386 pages
3. Oxford Handbook of Clinical Medicine - Oxford University Press, USA; 9 edition (March 9, 2014); 920 pages
4. Oxford Handbook of General Practice - Oxford University Press, USA; 4 edition (May 27, 2014); 1200 pages

#### **Additional:**

5. Goldman-Cecil Medicine - Elsevier; 25 edition (May 11, 2015); 3024 pages
6. CURRENT Medical Diagnosis and Treatment 2016 - McGraw-Hill Education / Medical; 55 edition (September 8, 2015); 1920 pages
7. Learning Radiology: Recognizing the Basics - Saunders; 3 edition (April 30, 2015); 352 pages
8. First Aid for the USMLE Step 2 CK - McGraw-Hill Education / Medical; 9 edition (November 13, 2015); 592 pages
9. First Aid for the USMLE Step 3 - McGraw-Hill Education / Medical; 4 edition (October 8, 2015); 525 pages
10. Harrison's Principles of Internal Medicine - McGraw-Hill Education / Medical; 12 edition (April 8, 2015); 3000 pages
11. Oxford Handbook of Clinical Examination and Practical Skills - Oxford University Press; 2 edition (September 17, 2014); 768 pages
12. Clinical Examination: A Systematic Guide to Physical Diagnosis, 7e - Churchill Livingstone; 6 edition (January 12, 2014); 480 pages
13. The Washington Manual of Medical Therapeutics - Lippincott Williams & Wilkins; Thirty-Fifth edition (March 4, 2016); 954 pages

#### **Normative regulatory acts:**

14. "Instruction on the Procedure of Giving Out Sick Leaves and Certificates of Disability"
15. "Instruction for Filling in Sick Leaves and Certificates of Temporary Disability"

**LIST OF AVAILABLE DIAGNOSTIC TOOLS**

The following forms are used for competences assessment:

1. Oral form:
  - interviews;
  - assessment based on role-playing.
2. Written form:
  - tests;
  - control questioning;
  - academic outpatient medical card;
  - essays;
  - assessment based on case-method;
  - assessment based on role-playing.
3. Oral-written form:
  - oral defence of academic outpatient medical card;
  - presentation of the essay on the discipline curriculum topic;
  - credits;
  - assessment based on case-method;
  - assessment based on module-rating system;
4. Technical form:
  - standardized electronic tests.

**LIST OF LECTURES**

*7 semesters*

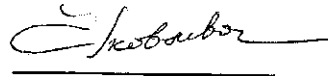
1. Lecture (multimedia presentation) «Preventive activities in outpatient internal medicine. Part I. A healthy lifestyle - the basis of the primary prevention of diseases».
2. Lecture (multimedia presentation) « Preventive activities in outpatient internal medicine. Part II. Preventive medical examination in work the district physician ».
3. Lecture (multimedia presentation) «Emergency care in outpatient settings».

**PROTOCOL OF THE CURRICULUM APPROVAL  
BY OTHER DEPARTMENTS**

Title of the discipline requiring approval	Department	Amendments to the curriculum of the academic discipline	Decision of the department, designed the curriculum (date, protocol # ) <sup>1</sup>
1.Internal Medicine	1 <sup>st</sup> , 2 <sup>nd</sup> Departments of Internal medicine, Department of Cardiology and Internal medicine.	No changes	Agreed, protocol # 15, May 11, 2016
2. Infectious Diseases	Department of Infectious Diseases	No changes	Agreed, protocol # 15, May 11, 2016
3.Public Health	Department of Public Health	No changes	Agreed, protocol # 15, May 11, 2016
4.Endocrinology	Department of Endocrinology	No changes	Agreed, protocol # 15, May 11, 2016

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signature

A.V.Yakauleva

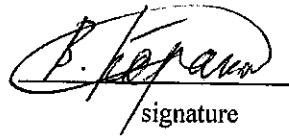
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R.V.Khursa

Assistant of the Outpatient Internal  
Medicine Department , Educational  
Institution "Belarusian State Medical  
University"



signature

V.V.Droshchanka

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

Dean of the Medical Faculty of  
International Students

01.04 2016



V.V.Davydov

Methodologist of Educational  
Institution

"Belarusian State Medical  
University"

01.04 2016



S.A.Kharytonava

Head of the Foreign Languages  
Department



M.N.Petrova

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