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Federal State Budget Educational Institution
of Higher Education
Pacific State Medical University
of the Ministry of Health of the Russian Federation

APPROVED BY

Director of the Institute of Therapy (Internal
Medicine) and Instrumental Diagnostics
 / Nevzorova V.A
"14th" of April 2025

SUBJECT GUIDE FOR TEACHERS AND STUDENTS FOR

Б1.О.31 Hospital therapy (internal medicine)

(Name of discipline)

Specialty

**31.05.01 General Medicine
for international students (in English)**

(code, name)

Degree

Specialist's degree

Profile

02 "Healthcare"

(in the field of providing primary health care to the
population in medical organizations: polyclinics,
outpatient clinics, inpatient/outpatient facilities of the
municipal health care system)

Mode of study

Full-time

Period of mastering the BEP

6 years

(nominal length of study)

Institute

of Therapy (Internal Medicine) and
Instrumental Diagnostics

Subject guide for teachers and students for **B1.O.31 Hospital therapy (internal medicine)** is based on:

1) Federal State Educational Standard of Higher Education for the specialty approved by the Order No. 988 of Ministry of Science and Higher Education of the Russian Federation dated August 12, 2020.

2) Curriculum for the 31.05.01 General Medicine for international students (in English), profile 02 "Healthcare" (in the field of providing primary health care to the population in medical organizations: polyclinics, outpatient clinics, inpatient/outpatient facilities of the municipal health care system), approved by the Academic Council of FSBEI HE PSMU of the Ministry of Health of Russia, Report No. 8/24-25 dated March 31, 2025.

Subject guide for teachers and students for **B1.O.31 Hospital therapy (internal medicine)** was developed by the writing team of the Institute of Therapy (Internal Medicine) and Instrumental Diagnostics of the FSBEI HE PSMU of the Ministry of Health of Russia, under the guidance of the director of the Institute, Doctor of Medical Sciences, Professor Nevzorova V.A.

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1. GENERAL PROVISIONS

Subject guide for **B1.O.31 Hospital therapy (internal medicine)** is a set of recommendations and explanations that facilitate to optimal organization of mastering this discipline.

Regular analysis of lecture materials and work with end-of-the-text questions are necessary for better understanding of the material and systematization of knowledge of **B1.O.31 Hospital therapy (internal medicine)**. Particular attention should be paid to emerging questions, confusing terms, and conflicts of points of view during the independent review of the lecture material. If necessary, a student should contact the teacher for advice. Lecture material streamlines students' thinking, while practical classes provide deeper insight into the material of the discipline.

Special attention should be paid to the content of the main provisions and conclusions, explanation of phenomena and facts, and clarification of the practical application of theoretic aspects of topic when preparing for a practical class. During this process students should aim to understand and remember the main provisions of the material under consideration, examples provided, as well as understand the illustrative material.

Collections of assessment tools are used to organize independent study of topics of **B1.O.31 Hospital therapy (internal medicine)**.

Independent work of students is facilitated by the following:

1. availability and accessibility of the necessary educational and reference material;
2. a system of regular quality control of completed independent work;
3. availability of teacher's advice.

Subject guides for self-study are presented as literary sources. Subject guides for independent work of students include a list of library resources of the educational institution and other materials accessible to students.

Independent work is a type of in-person extracurricular work of teachers and students of **B1.O.31 Hospital therapy (internal medicine)**. Control of independent work is conducted by the leading teacher. Evaluation of independent work results is taken into account when conducting interim examination of students throughout the **B1.O.46 Endocrinology** course.

Continuous assessment during **B1.O.31 Hospital therapy (internal medicine)** course is implemented in order to check indicators of achieving competencies, to stimulate students' academic work, and improve methods of mastering new knowledge. Continuous assessment during **B1.O.31 Hospital therapy (internal medicine)** course is conducted during the semester to assess all types and sections of the academic discipline that encompass the competencies developed by the discipline: classroom questioning, conducting discussions, working with tests, preparing reports, writing reports, and analysis of diagnostic procedures results. Continuous assessment of students' knowledge and results of their preparation for practical classes is conducted during every class session.

Interim assessment aims to determine the level of mastery of competency indicators. It is conducted in the exam format after the student has mastered all sections of **B1.O.31 Hospital therapy (internal medicine)** and takes into account learning outcomes for all types of student work over the entire period of mastering **B1.O.31 Hospital therapy (internal medicine)** course.

Time allotted for interim assessment is indicated in the schedule.

Assignments given during practical classes, as well as assignments aimed to prepare students for continuous and interim assessment, are included in the collection of assessment tools for **B1.O.31 Hospital therapy (internal medicine)**. If necessary, students should contact the teacher for advice. It is necessary to thoroughly think over questions that need clarification before seeking teacher's advice.

2. SUBJECT GUIDES FOR LECTURE CLASSES

Table 1. Subject Guides for **B1.O.31 Hospital therapy (internal medicine)** Lectures

Topic No.1 Diseases of the esophagus. Differential diagnosis and pharmacological treatment	
Duration of the lecture (in academic hours):	2
Purpose of the lecture: 1. tell students about the relevance of esophageal diseases, including GERD; 2. define GERD; 3. examine methods of diagnosis and differential diagnosis of esophageal diseases.	
Lecture plan, order of presentation of its sections: <ul style="list-style-type: none"> - Relevance of the GERD (overview) - Disease pathophysiology: anti-reflux protection and aggression factors - Modern classification of GERD - Diagnosis and differential diagnosis of GERD - Insight into eosinophilic esophagitis and Barrett's esophagus - Differential diagnosis of extra-esophageal manifestations - Treatment and prevention principles 	
Recommended literature 1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html	
Topic No.2 Diseases of the stomach and duodenum. Diagnostic and treatment standards	
Duration of the lecture (in academic hours):	2
Purpose of the lecture: 1. tell students about the relevance of stomach diseases: peptic ulcer and chronic gastritis; 2. define chronic gastritis and peptic ulcer; 3. examine methods for the diagnosis and treatment of gastric diseases associated and not associated with Helicobacter pylori.	
Lecture plan, order of presentation of its sections: <ul style="list-style-type: none"> - Peptic ulcer of the stomach and duodenum - Pharmaceutical treatment of ulcer disease associated with Helicobacter pylori - Pharmaceutical treatment of ulcer disease not associated with Helicobacter pylori - Diagnostic methods for Helicobacter pylori infection - Chronic gastritis: definition, classification, phenotypes, diagnostic methods, principles of treatment - Helicobacter pylori and NSAID-associated diseases of gastro-intestinal tract: definition, risk factors, classification, diagnostic methods, treatment. 	
Recommended literature 1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html	
Topic No.3 Differential diagnosis and management tactics in patients with pancreatic	

diseases. Treatment standards	
Duration of the lecture (in academic hours):	2
Purpose of the lecture: 1. tell students about pancreatic diseases; 2. define chronic pancreatitis; 3. examine diagnostic methods and treatment standards for chronic pancreatitis.	
Lecture plan, order of presentation of its sections: <ul style="list-style-type: none"> - Main pancreatic diseases - Signs of pancreatic disease - Epidemiology of chronic pancreatitis - Definition. Modern classifications. Features of major clinical syndromes - Disease stages - Diagnostic standards Differential diagnosis of pancreatic diseases - Standards for the treatment of pain, external secretory failure syndrome in chronic pancreatitis 	
Recommended literature 1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html	
Topic No.4 Liver diseases. Differential diagnosis and pharmacological treatment	
Duration of the lecture (in academic hours):	2
Purpose of the lecture: 1. tell students about the causes and mechanisms of liver damage; 2. define chronic hepatitis, cirrhosis of the liver; 3. examine methods of diagnosis and differential diagnosis of liver diseases.	
Lecture plan, order of presentation of its sections: <ul style="list-style-type: none"> - Causes and mechanisms of liver damage - Main forms of liver damage - Diagnosis of liver disease. Clinical and laboratory syndromes - Current classification of chronic hepatitis and cirrhosis - Hepatic vascular disease - Issues of differential diagnostics and treatment of liver disease 	
Recommended literature 1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html	
Topic No.5 Inflammatory bowel disease, differential diagnosis. Diagnostic and treatment standards	
Duration of the lecture (in academic hours):	2

Purpose of the lecture:

1. tell students about the relevance of inflammatory bowel diseases;
2. define Crohn's disease, ulcerative colitis;
3. examine methods of diagnosis and principles of treatment of intestinal diseases.

Lecture plan, order of presentation of its sections:

- Relevance of inflammatory bowel diseases, epidemiology
- Etiology of inflammatory bowel disease
- Current clinical guidelines for the diagnosis and treatment of inflammatory intestinal disease
- Crohn's disease: terms, definition, evolution of diagnostic methods, classification
- Classification of inflammatory bowel diseases according to ICD-10
- Principles and goals of treatment of inflammatory intestinal disease
- Approaches to the treatment of Crohn's disease
- Ulcerative colitis: terms, definition, evolution of diagnostic methods, classification
- Differential diagnosis of Crohn's disease and ulcerative colitis
- Ulcerative colitis. Treatment
- Colorectal cancer screening
- Quality criteria of medical care
- Conclusion

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.6 Functional bowel disorders. Diagnostic and treatment standards

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about functional gastrointestinal disorders (FGIDs);
2. define functional gastrointestinal disorders;
3. examine methods of diagnosis, treatment and prevention of FGIDs.

Lecture plan, order of presentation of its sections:

- The concept of functional gastrointestinal disorders (FGID)
- Differences between FGIDs and other digestive diseases.
- Current classification (Rome criteria)
- Diagnostic criteria for the most common FGIDs (functional disorders of the gastroduodenal zone, intestine, biliary system)
- Procedures for diagnosis, treatment, and prevention at the outpatient stage

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.7 Severe pneumonia. Diagnostic criteria. Diagnostic and treatment standards

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about features of severe pneumonia;
2. define severe community-acquired pneumonia;
3. examine methods for the diagnosis, treatment and prevention of severe pneumonia.

Lecture plan, order of presentation of its sections:

- Definition of pneumonia
- Classification of pneumonia
- Pathogenesis of severe community-acquired pneumonia
- Diagnostic criteria of sepsis
- Diagnostic criteria of community-acquired pneumonia
- Severity assessment and prognosis
- Viral pneumonia
- Antibacterial treatment of pneumonia

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V
Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.8 Differential diagnostics and pharmacological treatment in patients with COPD

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about relevance of the socio-economic burden of COPD;
2. define COPD and its phenotypes;
3. examine methods of diagnosis, treatment and modern algorithms of management of patients with COPD.

Lecture plan, order of presentation of its sections:

- Clinical example
- Main regulatory documents for diagnosis and management of COPD
- Socioeconomic burden of COPD
- Issues of COPD classification according to GOLD and current edition of federal guidelines
- Short-term and long-term goals of COPD treatment
- Principles of stable COPD pharmacotherapy
- State-of-the-art management of COPD patients according to national guidelines
- Conclusion

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V
Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.9 Bronchial asthma. Differential diagnosis and pharmacological treatment

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about the relevance of bronchial asthma (BA);
2. define bronchial asthma, its phenotypes;
3. examine methods for assessing the severity of BA, differential diagnosis of BA.

Lecture plan, order of presentation of its sections:

- Clinical case
- Current clinical guidelines
- Definition of bronchial asthma. ICD-10
- BA phenotypes
- Diagnostic criteria
- Pulmonary function evaluation
- Differential diagnosis of asthma
- Assessment of BA severity
- Asthma management
- Conclusion

Topic No.10 Interstitial lung disease. Diagnostic and treatment standards

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about interstitial lung diseases;
2. define interstitial lung diseases;
3. examine methods of diagnosis and principles of treatment of patients with interstitial lung diseases.

Lecture plan, order of presentation of its sections:

- Relevance of interstitial lung disease
- Diagnostic criteria
- Differential diagnosis of interstitial lung disease
- Diagnostic methods: evaluation of lung function
- Principles of pharmacological treatment
- Prognosis of interstitial lung disease

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.11 Sarcoidosis. Cystic fibrosis. Bronchiectasis. Differential diagnosis and pharmacological treatment

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about the features of the diseases: sarcoidosis, cystic fibrosis, and bronchiectasis;
2. define sarcoidosis, cystic fibrosis, bronchiectasis;
3. examine methods of diagnosis and pharmacological treatment.

Lecture plan, order of presentation of its sections:

- Definition of sarcoidosis, cystic fibrosis, bronchiectasis

- Diagnostic criteria
- Instrumental and laboratory diagnostic methods
- Differential diagnostics
- Principles of pharmacotherapy
- Prognosis

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.12 Classification of stable coronary artery disease (ischaemic heart disease) according to ICD-10 and clinical guidelines. Risk stratification and choice of treatment

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about stable coronary artery disease (ischaemic heart disease);
2. define stable coronary artery disease, pre-test probability of a diagnosis of coronary artery disease depending on gender, age and nature of chest pain;
3. examine diagnostic methods, recommendations on the type of revascularization in patients with coronary artery disease.

Lecture plan, order of presentation of its sections:

- Recommendations for the diagnosis and treatment of a stable course of coronary artery disease
- Comments on the features of chronic coronary disease and statistical coding
- Classification of the stable coronary artery disease
- Clinical issues of diagnosing stable coronary artery disease
- Principles of laboratory and instrumental diagnostics of stable coronary artery disease
- Pre-test probability of chronic coronary disease diagnosis according to gender, age and nature of chest pain
- Diagnostic methods in a patient diagnosed with coronary artery disease
- Principles of treatment
- Recommendations on the type of revascularization (coronary artery bypass grafting or PCI)
- Medical rehabilitation, medical indications and contraindications to the use of rehabilitation methods
- Prevention and follow-up observation

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.13 Non-ST-segment elevation acute coronary syndromes. Diagnostic criteria. Treatment principles

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about the terminology related to acute coronary syndromes;
2. define infarction and types of infarction;
3. examine methods of risk assessment in patients with non-ST-segment elevation acute coronary syndromes.

Lecture plan, order of presentation of its sections:

- Guidelines and terminology regarding acute coronary syndromes according to current clinical guidelines
- Definition and types of myocardial infarction
- Clinical, laboratory, and instrumental criteria for the diagnosis of non-ST-segment elevation myocardial infarction
- Differential diagnosis of acute coronary syndromes
- Risk assessment in patients with NSTEMI-ACS
- Choice of treatment strategy in patients with NSTEMI-ACS. Organization of patient monitoring
- Principles of prevention, rehabilitation, and follow-up care and observation
- Conclusion

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21st edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.14 ST-segment elevation myocardial infarction. Diagnostic criteria. Emergency care. Treatment strategy

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about guidelines and terminology related to ST-segment elevation infarction;
2. outline differential diagnosis of ST-segment elevation infarction;
3. examine antithrombotic and anticoagulant reperfusion techniques.

Lecture plan, order of presentation of its sections:

- Guidelines and terminology related to ST-segment elevation infarction
- ST-segment elevation infarction coding according to ICD-10
- Differential diagnosis of ST-segment elevation infarction
- Reperfusion in patients with STEMI at various stages of care
- Thrombolytic therapy
- Antithrombotic and anticoagulant reperfusion support
- Other pharmaceutical treatment methods
- Principles of prevention, rehabilitation, and follow-up care and observation
- Conclusion

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21st edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.15 Myocardial and pericardial diseases. Diagnostic and treatment principles

Duration of the lecture (in academic hours):	2
Purpose of the lecture: 1. tell students about epidemiology of myocarditis and pericarditis; 2. define myocarditis and pericarditis; 3. examine methods of diagnosis and pharmacotherapy of myocarditis and pericarditis.	
Lecture plan, order of presentation of its sections: <ul style="list-style-type: none"> - Epidemiology of myocarditis and pericarditis - Definition of myocarditis and pericarditis - Clinical manifestation of myocarditis and pericarditis - Differential diagnosis - Diagnostic methods - Pharmacological treatment of myocarditis and pericarditis 	
Recommended literature 1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html	
Topic No.16 Cardiomyopathy. Classification. Diagnostics, differential diagnostics. Treatment principles	
Duration of the lecture (in academic hours):	2
Purpose of the lecture: 1. tell students about relevance of cardiomyopathies; 2. define cardiomyopathies according to the classification; 3. examine diagnostic methods and an algorithm of managing patients with cardiomyopathies.	
Lecture plan, order of presentation of its sections: <ul style="list-style-type: none"> - Relevance of the question on cardiomyopathies - Modern classification of cardiomyopathies - Algorithm for diagnosing cardiomyopathies - Differential diagnostics - Modern pharmacotherapy of cardiomyopathies - Prognosis 	
Recommended literature 1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html	
Topic No.17 Pulmonary hypertension. Diagnostics, differential diagnostics. Treatment principles	
Duration of the lecture (in academic hours):	2
Purpose of the lecture: 1. tell students about pulmonary hypertension; 2. define pulmonary heart (cor pulmonale), pulmonary hypertension; 3. examine methods for diagnosing pulmonary hypertension.	

Lecture plan, order of presentation of its sections:

- Clinical case
- Pulmonary heart epidemiology
- Definition of pulmonary hypertension and pulmonary heart
- Etiology of pulmonary hypertension and pulmonary heart
- Pathogenesis and pathomorphology of pulmonary hypertension and pulmonary heart
- Classification of pulmonary hypertension and pulmonary heart
- Treatment of pulmonary hypertension and pulmonary heart
- Prognosis in pulmonary hypertension and pulmonary heart

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.18 Atrial fibrillation and flutter. Diagnostic and treatment strategies

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about supraventricular arrhythmias;
2. define atrial flutter and fibrillation;
3. examine methods of diagnosing and treating atrial fibrillation.

Lecture plan, order of presentation of its sections:

- Atrial fibrillation: definition
- Etiology, pathogenesis, epidemiology
- Urgency of the problem
- Major prognostic adverse factors associated with atrial fibrillation
- Classification
- Clinic and diagnostic standards. Differential diagnosis of supraventricular arrhythmias
- Therapeutic measures aimed at preventing stroke. Antithrombotic therapy
- Treatment strategies for atrial fibrillation
- Conclusion

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.19 Ventricular arrhythmias. Heart conduction disorders. Tactics of a general practitioner

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about ventricular arrhythmias and heart conduction disorders;
2. define ventricular arrhythmias and heart conduction disorders;
3. examine ECG methods for diagnosing ventricular arrhythmias and heart conduction disorders.

Lecture plan, order of presentation of its sections:

- Definition of ventricular arrhythmias

- Epidemiology. Etiology, pathogenesis of ventricular arrhythmias
- Clinical manifestations and prognosis of ventricular arrhythmias
- Definition of heart conduction disorders
- Epidemiology. Etiology, pathogenesis of conduction disorders
- Clinical manifestations and diagnostic standards for conduction disorders
- Treatment principles

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.20 Differential diagnostics of essential and symptomatic hypertension

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about the modern approach to hypertension;
2. define hypertension;
3. examine methods for diagnosing hypertension.

Lecture plan, order of presentation of its sections:

- Current guidelines for hypertension
- Terms and definitions
- Diagnostic criteria
- ICD-10 codes
- Risk stratification and target organ involvement
- Signs of possible secondary hypertension
- The most common causes of secondary hypertension
- Treatment principles
- Resistant AH
- Emergency conditions in hypertension. Hypertensive crisis
- Quality criteria of medical care

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.21 Acute heart failure. Etiology. Differential diagnostics. Emergency care

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about relevance of acute heart failure (AHF);
2. define acute heart failure;
3. examine diagnostic methods, respiratory support, and pharmacological treatment of AHF.

Lecture plan, order of presentation of its sections:

- Current guidelines for acute heart failure (AHF)
- Definition of AHF. Trigger factors
- AHF classification

- Diagnostic tactics for AHF
- Criteria for admission to ICU
- Respiratory support during AHF
- Pharmacological treatment of AHF
- Tactics for the most common causes of AHF
- Hospital discharge phase and outpatient follow-up observation
- Devices for mechanical support of blood circulation, heart transplantation

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.22 Congestive (chronic) heart failure depending on the left ventricular ejection fraction. Diagnostic criteria, diagnostic and treatment standards

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about relevance of the diagnosis and treatment of congestive heart failure (CHF);
2. define congestive heart failure;
3. examine diagnostic methods, indications for hospitalization, principles of treatment and follow-up care and observation of patients with CHF.

Lecture plan, order of presentation of its sections:

- Current clinical guidelines for the diagnosis and treatment of congestive heart failure (CHF)
- Etiology of CHF
- Typical symptoms and signs of heart failure
- Classification of CHF
- Diagnostic methods
- CHF depending on the left ventricular ejection fraction, diagnostic criteria
- Pharmacological treatment
- Indications for hospitalization
- Surgical and other methods of treatment
- Comorbid states
- Follow-up care and observation
- Quality criteria of medical care

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.23 Cardiovascular risk factor stratification in outpatient practice. Patient management tactics

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about cardiovascular risk factors of the SCORE scale;
2. define cardiovascular risk;
3. examine methods of pharmacological correction of low density lipoprotein cholesterol.

Lecture plan, order of presentation of its sections:

- Cardiovascular risk classification factors (SCORE scale)
- 10-year cardiovascular risk global assessment scale
- Interventions dependent on cardiovascular risk value and low density lipoprotein cholesterol levels
- Carotid ultrasound and CT coronary calcium examination
- Recommendations for target levels of low density lipoprotein cholesterol

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.24 Main cardiovascular diseases contributing to population mortality. Diagnosis, treatment, prevention

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about diseases that contribute to mortality: cardiovascular diseases;
2. define CHF, ischemic cardiomyopathy, myocardial infarction;
3. examine methods of diagnosis and treatment of CHF, myocardial infarction, and ischemic cardiomyopathy.

Lecture plan, order of presentation of its sections:

- Congestive heart failure
- ICD 10. I25.2 Past myocardial infarction. I25.5 Ischemic cardiomyopathy
- Disease-modifying medications for the treatment of CHF with or after MI
- Myocardial infarction type 1 and 2

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.25 Inflammatory joint diseases. Diagnosis, treatment, prevention

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about inflammatory joint diseases;
2. define rheumatoid arthritis (RA);
3. examine methods of diagnosis and treatment of RA.

Lecture plan, order of presentation of its sections:

- Rheumatoid arthritis (RA), as the main representative of inflammatory joint diseases
- Definition of the concept

- Relevance of the question
- Clinical manifestation, diagnostic methods
- Diagnostic criteria
- Treatment principles
- Non-pharmacological treatment

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.26 Degenerative joint diseases. Diagnosis, treatment, prevention

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about metabolic and degenerative joint diseases;
2. define gout, osteoarthritis;
3. examine diagnostic and treatment methods.

Lecture plan, order of presentation of its sections:

- Gout as the main representative of metabolic joint diseases
- Definition of the concept
- Urgency of the problem
- Clinical manifestation, diagnostic methods
- Diagnostic criteria
- Treatment principles
- Osteoarthritis. Degenerative joint diseases

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.27 Differential diagnosis of systemic vasculitis. Classification. Diagnostic criteria. Treatment principles

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about systemic vasculitis;
2. define systemic vasculitis;
3. examine diagnostic methods, diagnostic criteria.

Lecture plan, order of presentation of its sections:

- Systemic vasculitis. Definition
- Urgency of the problem
- Clinical manifestation, diagnostic methods. Diagnostic criteria
- Treatment principles

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-

McGrawHill LLC, 2022.- p.4132

2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V
Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.28 Systemic diseases (SLE, systemic scleroderma). Diagnosis, treatment, prevention

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about systemic diseases;
2. define systemic lupus erythematosus (SLE), systemic scleroderma, dermatomyositis;
3. examine methods for diagnosing and treating systemic diseases.

Lecture plan, order of presentation of its sections:

- Systemic lupus erythematosus (SLE). Significance of the problem
- Current understanding of the etiology and pathogenesis of SLE
- Clinical manifestation. Diagnostic criteria for SLE
- Principles of SLE management
- Systemic scleroderma (SSD). Definition
- Relevance of the SSD problem
- Clinical manifestation of SSD, diagnostic methods. Diagnostic criteria
- Principles of SSD treatment

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V
Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.29 Differential diagnostics of anemia. Diagnosis, treatment, prevention

Duration of the lecture (in academic hours):

2

Purpose of the lecture:

1. tell students about anemias;
2. define iron deficiency and B12 deficiency anemias;
3. examine methods of diagnosing and treating anemia.

Lecture plan, order of presentation of its sections:

- Definition of anemia. Diagnostic criteria for anemic syndrome
- Iron deficiency anemia (IDA). Etiology, pathogenesis. Diagnostic criteria. Differential diagnosis
- IDA. Treatment principles
- B12-deficient anemia. Etiology. Pathogenesis. Diagnostic criteria. Differential diagnosis
- B12-deficient anemia. Treatment principles
- Summary

Recommended literature

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V
Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.30 Acute and chronic leucosis. Diagnosis, treatment, prevention	
Duration of the lecture (in academic hours):	2
Purpose of the lecture: 1. tell students about hemoblastoses; 2. define hemoblastosis, leucosis; 3. examine methods of diagnosis and principles of treatment of leucosis.	
Lecture plan, order of presentation of its sections: <ul style="list-style-type: none"> - Definitions of hemoblastosis, leucosis, acute leucosis, chronic leucosis - Etiological factors of hemoblastosis - Classifications. Diagnostic criteria - Principles and effectiveness of treatment - CL. Definition. Classifications - CML. Definition. Diagnostic criteria. Treatment principles - CLL. Definition. Diagnostic criteria. Treatment principles - Summary 	
Recommended literature 1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html	
Topic No.31 Acute and chronic kidney injury. Diagnosis, treatment, prevention	
Duration of the lecture (in academic hours):	2
Purpose of the lecture: 1. tell students about acute and chronic kidney injury; 2. define pyelonephritis and glomerulonephritis; 3. examine methods of diagnosis and treatment of pyelonephritis and glomerulonephritis.	
Lecture plan, order of presentation of its sections: <ul style="list-style-type: none"> - Acute and chronic pyelonephritis - Diagnostic criteria - Treatment and prevention of acute and chronic pyelonephritis - Acute and chronic glomerulonephritis - Diagnostic criteria and principles of treatment - Major syndromes - Prognosis and issues of medical examination 	
Recommended literature 1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html	
Topic No.32 Differential diagnosis of nephrotic and nephritic syndromes. Diagnosis, treatment, prevention	
Duration of the lecture (in academic hours):	2

<p>Purpose of the lecture:</p> <ol style="list-style-type: none"> 1. tell students about nephrotic and nephritic syndromes; 2. define nephrotic and nephritic syndromes; 3. examine methods of diagnosing urinary syndrome.
<p>Lecture plan, order of presentation of its sections:</p> <ul style="list-style-type: none"> - Nephritic syndrome - Nephrotic syndrome - Urinary syndrome - Indications for urinalysis and types of urinalysis - Urinalysis parameters and their interpretation as a result of laboratory examination
<p>Recommended literature</p> <ol style="list-style-type: none"> 1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition-McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html

3. SUBJECT GUIDES FOR PRACTICAL CLASSES

Table 2. Subject Guides for Practical **B1.O.31 Hospital therapy (internal medicine)** Classes

<p>Topic No.1 Severe pneumonia. Diagnostic criteria. Diagnostic and treatment standards Practical skills training: Analysis of radiographs</p>	
Duration of the practical class (in academic hours):	6
<p>Purpose of the practical class:</p> <ol style="list-style-type: none"> 1. consolidate knowledge acquired during lectures; 2. during the discussion, outline the main diagnostic criteria, standards for examination and treatment of pneumonia; 3. thoroughly go over classification and mechanisms of the development of the disease; 4. study the progression of the disease. 	
<p>Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, sets of radiographs, facilities for supervised patient management, and subject guides for the discipline.</p>	
<p>Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.</p>	
<p>Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.</p>	
<p>Recommended reading:</p> <ol style="list-style-type: none"> 1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition-McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html 	
<p>Topic No.2 Differential diagnostics and pharmacological treatment in patients with COPD Practical skills training: Analysis of flow-volume curves (spiograms)</p>	

Duration of the practical class (in academic hours):	6
<p>Purpose of the practical class:</p> <ol style="list-style-type: none"> 1. consolidate knowledge acquired during lectures; 2. during the discussion, outline the main risk factors and mechanisms of the development of the disease; 3. thoroughly go over COPD phenotypes; 4. study the progression of the disease, algorithm of differential diagnosis with diseases with bronchial obstruction; 5. develop an understanding of the severity and prognosis of the disease. 	
<p>Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for conducting spirometry, and subject guides for the discipline.</p>	
<p>Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.</p>	
<p>Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.</p>	
<p>Recommended reading:</p> <ol style="list-style-type: none"> 1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21st edition- McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html 	
<p>Topic No.3 Bronchial asthma. Differential diagnosis and pharmacological treatment Practical skills training: Analysis of flow-volume curves (spirometry)</p>	
Duration of the practical class (in academic hours):	6
<p>Purpose of the practical class:</p> <ol style="list-style-type: none"> 1. consolidate knowledge acquired during lectures; 2. during the discussion, outline the main phenotypes of bronchial asthma; 3. thoroughly go over etiological factors and mechanisms of the development of the disease; 4. study the progression of the disease; 5. develop an understanding of modern treatment and prognosis of the disease. 	
<p>Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, a set of spirometry, facilities for supervised patient management, and subject guides for the discipline.</p>	
<p>Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture, analysis of flow-volume curves (spirometry)</p>	
<p>Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.</p>	
<p>Recommended reading:</p> <ol style="list-style-type: none"> 1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21st edition- McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html 	

**Topic No.4 Interstitial lung disease. Diagnostic criteria. Diagnostic and treatment standards
Practical skills training: Analysis of radiographs**

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the main causes and mechanisms of the development of the disease;
3. thoroughly go over definitions and concepts of interstitial lung diseases;
4. study the progression and prognosis of the disease;
5. develop an understanding of the diagnosis and treatment of interstitial diseases.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.5 Differential diagnosis in esophageal and gastric dyspepsia syndrome

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the main causes of the esophageal and gastric dyspepsia syndrome;
3. thoroughly go over classification and principles of treatment of dyspepsia syndrome;
4. study the progression of the disease;
5. develop an understanding of methods of diagnosis and differential diagnosis of esophageal and gastric dyspepsia syndrome.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.6 Differential diagnosis of icterus (jaundice) and cholestasis. Differential diagnosis in hepatomegaly and hepatolienal syndrome. Chronic hepatitis. Liver cirrhosis. Portal hypertension. Hepatic encephalopathy

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline main diseases with icterus and cholestasis syndrome;
3. thoroughly go over classifications and mechanisms for the development of liver diseases;
4. study the progression of the liver diseases;
5. develop an understanding of methods and diagnostics and the basic principles of treating liver diseases.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, a set of radiographs, facilities for supervised patient management, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.7 Differential diagnosis and management tactics in patients with diseases of the gallbladder and pancreas. Treatment standards

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the main symptoms and syndromes in diseases of the gallbladder and pancreas;
3. thoroughly go over classifications and mechanisms of the development of the disease;
4. study the patterns and mechanisms of action of pharmacological treatment;
5. develop an understanding of differential diagnosis of diseases of the gallbladder and pancreas.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V

Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.8 Differential diagnosis of intestinal dyspepsia. Inflammatory bowel disease. Crohn's disease. Ulcerative colitis

Duration of the practical class (in academic hours): 6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the basic concepts of intestinal dyspepsia and the main causes of the development of inflammatory bowel diseases;
3. thoroughly go over the main mechanisms of the development of intestinal diseases;
4. study pharmacotherapy and classification of intestinal diseases;
5. develop an understanding of differential diagnosis and prognosis of intestinal diseases.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V
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Topic No.9 Functional bowel disorders. Diagnostic and treatment standards. Irritable bowel syndrome. Malabsorption syndrome

Duration of the practical class (in academic hours): 6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the basic standards for the examination and treatment of functional bowel disorders;
3. thoroughly go over the mechanisms of development of irritable bowel syndrome and malabsorption syndrome;
4. study the progression of the disease;
5. develop an understanding of the possibilities of examination and treatment of this pathology.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-

McGrawHill LLC, 2022.- p.4132

2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V
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Topic No.10 Stable coronary artery disease (ischaemic heart disease). Diagnostic criteria. Treatment principles

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the main etiological factors and mechanisms of coronary artery disease development;
3. thoroughly go over stable coronary artery disease;
4. study the progression of the disease;
5. develop an understanding of treatment and changes in ECG with stable angina.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, ECG interpretation, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic, ECG interpretation.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V
Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

**Topic No.11 Non-ST-segment elevation acute coronary syndromes. Diagnostic criteria. Treatment principles. ECG diagnostics
Practical skills training: ECG interpretation**

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the main criteria for diagnosing ACS;
3. thoroughly go over definitions and concepts of ACS and unstable angina;
4. study the algorithm for managing a patient with ACS;
5. develop an understanding of the differential diagnosis of ACS and unstable angina.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, a set of radiographs, facilities for supervised patient management, sets of ECG records, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, ECG interpretation, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic, ECG interpretation.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition-McGrawHill LLC, 2022.- p.4132

2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.12 ST-segment elevation acute coronary syndromes. Diagnostic criteria. Treatment principles. Diagnostic significance of ECG and cardiac ultrasound Practical skills training: ECG interpretation

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the main criteria of myocardial infarction;
3. thoroughly go over definitions and concepts of myocardial infarction, clinical manifestations;
4. study the progression of the myocardial infarction, classification, diagnostic methods;
5. develop an understanding of patterns of the development of the disease, possible complications and the algorithm for managing patients with myocardial infarction.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, a set of radiographs, facilities for supervised patient management, sets of ECG records, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, ECG interpretation, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic, ECG interpretation.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition-McGrawHill LLC, 2022.- p.4132

2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.13 Myocardial and pericardial diseases. Diagnostic criteria. Treatment standards

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the main causes of myocarditis and pericarditis;
3. thoroughly go over the definitions and concepts of myocarditis, pericarditis, diagnostic criteria;
4. study the progression of the disease, classifications, principles of treatment;
5. develop an understanding of the severity of diseases, complications, prognosis of these diseases.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, a set of radiographs, facilities for supervised patient management, sets of ECG records, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition-McGrawHill LLC, 2022.- p.4132

2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V
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Topic No.14 Differential diagnostics of essential and symptomatic arterial hypertension. Hypertension. Diagnostic criteria. Treatment and prevention standards

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline classification, modern views on the pathogenesis of hypertension;
3. thoroughly go over definitions and concepts of AH, diagnostic methods, risk factors;
4. study the progression and classification of hypertension;
5. develop an understanding of principles of treatment and prognosis of hypertension.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, a set of radiographs, sets of ECG and cardiac ultrasound records, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic, ECG and cardiac ultrasound interpretation.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition-McGrawHill LLC, 2022.- p.4132

2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V
Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.15 Differential diagnosis of hypertension. Symptomatic hypertension. Diagnostic criteria. Treatment and standards. Preventive measures

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the main mechanisms of the development of symptomatic hypertension;

3. thoroughly go over definitions and concepts of nephrogenic, endocrine, hemodynamic, drug-induced symptomatic hypertension;
4. study pharmacological treatment, principles of treatment of symptomatic hypertension;
5. develop an understanding of the incidence rate of symptomatic hypertension, diagnosis, treatment principles.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.16 Acute and congestive (chronic) heart failure. Diagnostic criteria. Differential diagnostics. Emergency care. Treatment standards

Duration of the practical class (in academic hours):	6
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- Purpose of the practical class:
1. consolidate knowledge acquired during lectures;
 2. during the discussion, outline the main risk factors for the development of AHF and CHF;
 3. thoroughly go over definitions and concepts of heart failure;
 4. study patterns of hemodynamic impairment in patients with CHF and CHF;
 5. develop an understanding of the possibilities of diagnosing and treating CHF with different fractions of cardiac output.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.17 Supraventricular arrhythmias. Atrial fibrillation. Diagnostic criteria. Emergency care. Treatment standards. Preventive measures

Duration of the practical class (in academic hours):	6
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Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the main diagnostic criteria of atrial fibrillation;
3. thoroughly go over definitions and concepts of arrhythmias;
4. study the progression and classification of supraventricular arrhythmias;
5. develop skills of interpreting ECG records of patients with arrhythmias.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, interpretation of ECG records of patients with arrhythmia, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic, ECG interpretation.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.18 Heart conduction disorders. Diagnostic criteria. Treatment standards

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the main types of ventricular arrhythmias and heart conduction disorders;
3. thoroughly go over definitions and concepts of blockade, fibrillation, flutter;
4. study the patterns of ECG changes and pharmacotherapy in patients with ventricular arrhythmias and heart conduction disorders;
5. develop skills of interpreting ECG records of patients with ventricular arrhythmias and heart conduction disorders.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, interpretation of ECG records of patients with arrhythmia, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.19 Practical skills training: ECG interpretation

Duration of the practical class (in academic hours):	6
Purpose of the practical class: 1. consolidate knowledge acquired during lectures; 2. during the discussion, outline main examination methods; 3. thoroughly go over definitions and concepts of palpation, percussion, auscultation; 4. study the use of methods in the examination of patients; 5. develop practical skills of patient examination.	
Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, and subject guides for the discipline.	
Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.	
Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.	
Recommended reading: 1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition- McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html	
Topic No.20 Diagnostics, differential diagnostics of joint diseases: rheumatoid arthritis, osteoarthritis (arthrosis deformans)	
Duration of the practical class (in academic hours):	6
Purpose of the practical class: 1. consolidate knowledge acquired during lectures; 2. during the discussion, outline the main risk factors of joint diseases; 3. thoroughly go over definitions and concepts of rheumatoid arthritis and osteoarthritis (arthrosis deformans), diagnostic criteria; 4. study the patterns of differential diagnosis of rheumatoid arthritis and osteoarthritis; 5. develop an understanding of the methods of diagnosis and principles of treatment of rheumatoid arthritis and osteoarthritis.	
Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, set of radiographs, facilities for supervised patient management, and subject guides for the discipline.	
Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, analysis of radiographs, and preparation of a report on the lecture.	
Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.	
Recommended reading: 1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition- McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html	

Topic No.21 Diagnostics, differential diagnostics of joint diseases: ankylosing spondylitis, reactive arthritis, gout, psoriatic arthritis. Treatment standards

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the main risk factors for the diagnosis of joint diseases;
3. thoroughly go over definitions and concepts of ankylosing spondylitis, reactive arthritis, gout, psoriatic arthritis, diagnostic criteria;
4. study differential diagnosis and treatment standards;
5. develop an understanding of the course and prognosis of the diseases.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, set of radiographs, facilities for supervised patient management, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, analysis of radiographs, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition- McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.22 Diagnosis, differential diagnosis and principles of treatment of systemic diseases: systemic lupus erythematosus, systemic scleroderma, dermatomyositis, systemic vasculitis

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the main risk factors of systemic diseases;
3. thoroughly go over definitions and concepts of differential diagnostics, mechanisms of pharmacological treatment;
4. study the progression of the disease, diagnostic criteria;
5. develop an understanding of progression and prognosis of systemic diseases.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition- McGrawHill LLC, 2022.- p.4132

2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V
Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.23 Diagnosis, differential diagnosis and principles of treatment of anemia: iron deficiency anemia, B12 deficiency anemia

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline discuss the main etiological factors anemia;
3. thoroughly go over classification of anemia, diagnostic methods;
4. study the progression of the disease, complications;
5. develop an understanding of the severity of diseases, principles of treatment and prognosis.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, sets of blood test results, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V
Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.24 Diagnosis, differential diagnosis and principles of treatment of acute leucosis

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the main risk factors of acute leucosis;
3. thoroughly go over definitions and concepts of the hematopoietic pattern, changes characteristic of acute leucosis;
4. study the progression of acute leucosis, treatment regimens;
5. develop an understanding of the possibilities of diagnosis and treatment of acute leucosis.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, sets of blood test results, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-

McGrawHill LLC, 2022.- p.4132

2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V
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Topic No.25 Diagnosis, differential diagnosis and principles of treatment of chronic leucosis

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the main etiological factors;
3. thoroughly go over definitions and concepts of chronic leucosis, diagnostic criteria;
4. study the progression of the disease, classification of chronic leucosis, differential diagnosis with acute leucosis;
5. develop an understanding of modern approaches and methods of treating chronic leucosis, prognosis.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, sets of blood test results, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic, analysis of complete blood count results.

Recommended reading:

1. Principles of internal medicine [English electronic textbook] T.R. Harrison at al. 21th edition-McGrawHill LLC, 2022.- p.4132
2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V
Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : <https://www.studentlibrary.ru/book/ISBN9785970467671.html>

Topic No.26 Clinical and laboratory criteria of nephrotic syndrome. Differential diagnosis and management tactics in patients with nephrotic syndrome

Duration of the practical class (in academic hours):

6

Purpose of the practical class:

1. consolidate knowledge acquired during lectures;
2. during the discussion, outline the main clinical manifestations of the syndrome;
3. thoroughly go over definitions and concepts of nephrotic syndrome, differential diagnosis with nephritic syndrome;
4. study the progression of kidney disease with this syndrome;
5. develop an understanding of the principles of treatment and prognosis in this syndrome.

Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, sets of urinalysis results, and subject guides for the discipline.

Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.

Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic.	
Recommended reading: 1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition-McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html	
Topic No.27 Acute kidney injury. Etiology. Diagnostic and treatment standards tactics. Chronic kidney disease. Diagnostic issues. Tactics of a general practitioner	
Duration of the practical class (in academic hours):	6
Purpose of the practical class: 1. consolidate knowledge acquired during lectures; 2. during the discussion, outline the basic principles of diagnosing AKI and CKD; 3. thoroughly go over medical tactics in AKI and CKD; 4. study the progression and differential diagnosis of AKI and CKD; 5. develop an understanding of the principles of treatment and prognosis in AKI and CKD.	
Practical classes requirements: classrooms equipped with multimedia equipment, blackboards, facilities for supervised patient management, and subject guides for the discipline.	
Independent work of the student: writing a fragment of the medical record of the supervised patient, working with study materials, and preparation of a report on the lecture.	
Methods of evaluation of acquired knowledge and skills: reviewing the reports, conducting discussions, classroom questioning, tests, working with case studies on the topic, analysis of laboratory test results.	
Recommended reading: 1. Principles of internal medicine [English electronic textbook] T.R. Harrison et al. 21th edition-McGrawHill LLC, 2022.- p.4132 2. Internal diseases [English electronic textbook] Martynov A. I., Kobalava Z. D., Moiseev S. V Internal diseases : Textbook / Moscow : GEOTAR-Media, 2022. - 616 c. - ISBN 978-5-9704-6767-1. - URL : https://www.studentlibrary.ru/book/ISBN9785970467671.html	

4. GUIDELINES FOR CONTINUOUS AND INTERIM ASSESSMENT

Table 3. Guidelines for Conducting Continuous and Interim Assessment during **B1.O.31 Hospital therapy (internal medicine)** Course

Type of assessment	Assessment format
Continuous assessment	<ul style="list-style-type: none"> - conducting and evaluating oral quizzes during practical classes; - assessment and evaluation of completion and results of assignments given during practical classes; - assess and evaluate completion and results of individual assignments and exam tasks given during practical classes; - assessment and evaluation of lecture notes quality.
Interim certification	is conducted in oral exam format; it allows to assess the development of students' competencies correlating with types of professional activity.

5 ASPECTS OF THE IMPLEMENTATION OF THE COURSE FOR STUDENTS WITH DISABILITIES AND SPECIAL NEEDS

5.1. Availability of accessible environment

For students with disabilities and special needs, if a written application is submitted, lectures and practical classes are carried out taking into account health limitations, individual capabilities and medical status (hereinafter referred to as individual characteristics) of the student. Compliance with the following general requirements is ensured: teaching aids for collective and individual use are provided, required technical assistance is provided by an assistant, buildings and premises where lectures and practical classes are taking place meet accessibility requirements, other arrangements lack of which makes it impossible or difficult to master the discipline are made.

5.2. Compliance with general requirements

When lectures and practical classes are carried out at the written application of the student, the following general requirements are met: lectures and practical classes for students with disabilities and special needs take place at the same location as for students who do not have disabilities, if this does not cause difficulties for students; an assistant (assistants), who provide(s) students with the necessary technical assistance taking into account individual characteristics of the student, is (are) provided; necessary teaching aids are provided, taking into account individual characteristics of the student.

5.3. Availability of the internal policies and procedures of FSBEI HE PSMU of the Ministry of Health of Russia to students with disabilities in a form accessible to them.

All internal policies and procedures of FSBEI HE PSMU of the Ministry of Health of Russia concerning the discipline are made available to students with disabilities in a form accessible to them.

5.4. Increase in the duration of interim assessment of students with disabilities and special needs in relation to the established duration

Format of the interim assessment of academic performance within the scope of the discipline for students with disabilities and special needs is selected taking into account individual characteristics (orally, by writing on paper, by typing on a computer, as a test, etc.). The duration of the interim assessment in relation to the established duration is increased at the written application of the student with disabilities. Time limit for the student's preparation for the test is increased by at least 0.5 hours

6. STAFFING REQUIREMENTS OF THE DISCIPLINE

Academic teaching personnel that ensure the implementation of the discipline education process meet the requirements of the Federal State Educational Standard of Higher Education for the 31.05.01 General Medicine for international students (in English) specialty; list of the aforementioned personnel is available on the website of the educational organization.

