

Ministry of science and high education RF Ulyanovsk State University	Form	
F-Educational plan of the discipline		

APPROVED BY
by the decision of the Academic Council of the USU
Institute of Medicine, Ecology and Physical Culture
16 « 05 » 2024, Record No. 9260

Chairman Mashin V.V.
(Signature, Name)
16 « 05 » May 2024.



**EDUCATIONAL PLAN OF PRACTICE
“DIAGNOSTIC PRACTICE”**

Practice	Diagnostic practice
Method and form	Stationar, Discret
Faculty	Medicine named after T.Z. Biktimirov
Name of department	Propedeutics of internal diseases;
Course	3

Direction (specialty) 31.05.01 General medicine (specialty level)

(code of direction (specialty), full name)

Orientation (profile) not provided

(full name)

Form of training full-time

Date of introduction into the academic process at Ulyanovsk State University « 1 » 09 2024


Revised at the Department meeting, Record No. _____ of _____ « » 20


Revised at the Department meeting, Record No. _____ of _____ « » 20

Revised at the Department meeting, Record No. _____ of _____ « » 20

Information about developers

Initials	Abbreviation of the department	Degree, scientific rank
Krestjyaninov M.V.	Propaedeutics of internal diseases	PhD, senior lecturer

Agreed	
Head of the graduating Department	
	/Vize-Khripunova M.A./
Signature	Full name
« 16 » 05 2024 г.	

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1. OBJECTIVES AND AIM

The aim of the discipline are the formation of knowledge, skills and competencies for the interpretation of the results of functional diagnostics and general clinical laboratory studies in diseases of internal organs.

Objectives of the discipline:

- to introduce students to the main methods of functional and laboratory diagnostics in the main therapeutic diseases;
- to teach students the interpretation of the results of functional diagnostics and general clinical laboratory tests for major therapeutic diseases.

2. PLACE OF THE SUBJECT IN THE STRUCTURE OF GEP:

Discipline “Diagnostic practice” is referred to professional cycle variable part of GEP HE of speciality «General medicine».


The basic knowledge indispensable for learning the subject are formed in the cycle pertaining to chemistry, biology, biochemistry, and normal anatomy, microbiology and virology, histology, embryology, cytology and normal physiology, Physiology of visceral systems, Embryonic development of body tissues, Neuroanatomy, Patanatomy, General care of surgical patient, General care of therapeutic patient, Junior staff assistant, Introductory practice Assistant Ward Nurse, Assistant Nurse. Practice on obtaining professional skills and professional experience in the positions of secondary medical personnel.

Discipline “Diagnostic practice” is preceding discipline for the learning of following disciplines: Dentistry, Otorhinolaryngology, Faculty Surgery, Ophthalmology, Traumatology, Orthopedics, Assistant to the procedural nurse, neurology, medical genetics, neurosurgery, Pediatrics, Faculty Surgery, Faculty therapy, Occupational diseases, Psychiatry, medical psychology, Forensic medicine, Endocrinology, Hospital therapy, traumatology, orthopedics, hospital surgery, children's surgery, Phthiology, oncology, radiation therapy, Radiation diagnostics, Obstetrics and gynecology, Modern aspects of neurology, Topical issues of gynecology, Modern aspects of oncology, Topical issues of internal diseases, Diagnosis and treatment of extrapulmonary tuberculosis, Urology, Andrology, Surgical gastroenterology and endoscopy, Palliative medicine, Current problems of HIV infection, Diabetology and Emergency Endocrinology, Practice Assistant physician of the hospital, , Preparation for and passing the State exam.


3. LIST OF EXPECTED RESULTS OF INSTRUCTION ON THE SUBJECT (UNIT), CORELATED WITH PLANNED RESULTS OF COMPLETING THE PROGRAM

The study of the subject «Basis of functional and laboratory diagnosis» within the completion of the educational program is directed towards the formation of the following general and professional competences in students:

Code and name of the general professional competence	Code and name of the indicator of achievement of general professional competence
GPC – 5 A capability to assess morpho-functional, physiological conditions and pathologies in the human body to solve professional objectives.	IA 1 of GPC -5 To know: ethiology, pathogenesis, diagnostics, peculiar features of a clinical course, possible complications of the common internal organs

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	<p>diseases.</p> <p>functional systems of the human organism, their regulation and self-regulation after being exposed to the effects of the environment, peculiarities of functioning in the normal state and in pathology</p> <p>IA 2 of GPC -5</p> <p>Be able to: use educational, scientific, popular scientific literature, the Internet for professional activities;</p> <p>to work with magnifying equipment (microscopes, optical and simple magnifiers);</p> <p>to describe morphological changes electronograms; interpret the results of the most common methods of functional diagnostics used to detect the pathology of blood, heart and blood vessels, lungs, kidneys, liver and other organs and systems; evaluate the results of electrocardiography; spirometry; thermometry; hematological parameters; distinguish normal values of metabolite levels in blood serum (glucose, urea, bilirubin, uric acid, lactic and pyruvic acids, etc.), to register ECG in experimental animals and humans, to determine the main types of arrhythmias, signs of ischemia and myocardial infarction from ECG data; carry out cytological assessment of inflammatory exudate and determination of phagocytic activity; calculate and analyze the leukocyte formula; formulate, determine and evaluate the results of electrocardiography; spirometry; thermometry; hematological indicators; distinguish normal values of metabolite levels in blood serum (glucose, urea, bilirubin, uric acid, lactic and pyruvic acids, etc.) from pathologically altered ones</p> <p>AI-3 of GPC-5</p> <p>To own to: methods of physical examination of the patient.</p>
<p>PC – 2</p> <p>Readiness to collect and analyze the patient's complaints, the data of his case history, examination results laboratory, instrumental, pathological and anatomical and other</p>	<p>IA1 of PC -2</p> <p>To know:</p> <p>diagnostic significance of measurements, found at a clinical examination of a patient, while using the methods of laboratory and</p>

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investigations for the purpose of identifying the condition or establishing the fact if the disease is present or not.	instrumental diagnostics. IA2 of PC -2 To be able to: carry out interviewing, a physical examination of a patient; to read the results of lab and instrumental diagnostics and use them to support a clinical diagnosis. IA3 of PC -2 To own to: clinical examination of a patient, interpretation of additional examination methods' findings, an algorithm of supporting a preliminary and clinical diagnosis.
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4. Place and date of the practice

Practical training is conducted in the 5nd semester department of propaedeutic of internal diseases of UISU


Date: 5nd semester of 3 course.

5. Content of Practice


Total volume of practice		Duration of practice
Credit units	Hours	Weeks
3	108	2

6. The structure and Workload

№	Name of sections and themes	The form of practice, including independent work	Total	The amount of hours of contact work of the student with the teacher	Form of current control
Preparatory stage of practice					
1.	Objectives and aim of practice	Objectives and aim of practice	1	1	
Production stage					
Section 1. Electrocardiography					
2.	Electrophysiological basis of ECG	Processing and systematization	9	1	Questioning, testing

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		of factual and literary material, performing ECG			
3.	Atrial and ventricular hypertrophy	Collection, processing and systematization of factual and literary material	9	1	Questioning, testing
4.	Cardiac ischemia. Myocardial infarction. Laboratory markers of MI	Collection, processing and systematization of factual and literary material	18	1	Questioning, testing
5.	Arrhythmias: extrasystole, fibrillation and flutter of atrial, ventricular	Collection, processing and systematization of factual and literary material	9	1	Questioning, testing
6.	Conduction disturbances: atrioventricular block	Collection, processing and systematization of factual and literary material	9	1	Questioning, testing
7.	Conduction disturbances: left bundle branch block, right bundle branch block	Collection, processing and systematization of factual and literary material	9	1	Questioning, testing
Section II. Spirometry					
8.	Methods and modes of spirometry, respiratory volume.	Processing and systematization of factual and literary material, performing spirometry	8	1	Questioning, testing
9.	Syndromes of respiratory disorders; diagnostic tests with bronchodilators	Collection, processing and systematization of factual and	9	1	Questioning, testing

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		literary material			
Section III. Laboratory Diagnostics					
9	Complete blood count, inflammatory changes. General urine analysis.	Collection, processing and systematization of factual and literary material	9	1	Questioning, testing
10	Biochemical blood test Laboratory diagnosis of diabetes mellitus and jaundice. General analysis of sputum. Methods of investigation of Helicobacter pylori	Collection, processing and systematization of factual and literary material	9	1	Questioning, testing
Final stage of practice					
11	Submission and verification of the abstract. TEST.	Collection, processing and systematization of factual and literary material	9	1	Testing, checking reports
	TOTAL		108	12	

7. Scientific research technologies: not provided.

8. Interim certification is carried out in the form of differentiated credit.

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9. EDUCATIONAL-METHODICAL AND INFORMATION SUPPORT OF DISCIPLINE

a) Core reading:

1. Smirnova A. Yu. Basis of functional and laboratory diagnostics : textbook of medicine for medicine faculty students / Smirnova A. Yu., V. V. Gnoevykh; Ulyanovsk State University, Institute of Medicine, Ecology and Physical culture. - Ulyanovsk : ULSU, 2018. - Текст на англ. яз.; Загл. с экрана. - Электрон. текстовые дан. (1 файл : 6,75 МБ). - Текст : электронный. <http://lib.ulsu.ru/MegaPro/Download/MObject/1237>
2. Ивашкин, В. Т. Internal diseases propedeutics / V. T. Ivashkin, A. V. Okhlobystin. - Moscow : GEOTAR-Media, 2020. - 176 p. - 176 с. - ISBN 978-5-9704-5555-5. - Текст : электронный // ЭБС "Консультант студента" : [сайт]. - URL : <https://www.studentlibrary.ru/book/ISBN9785970455555.html>

b) Supplementary reading:

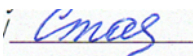
1. Internal diseases propedeutics : textbook of medicine for medicine faculty students. P. 1. Diagnostics of pulmonary diseases / Smirnova A. Yu., V. V. Gnoevykh ; Ulyanovsk State University, Institute of Medicine, Ecology and Physical culture. - Электрон. текстовые дан. (1 файл : 5,95 МБ). - Ulyanovsk : ULSU, 2016. - Текст на англ. яз. - Загл. с экрана. - Текст : электронный <http://lib.ulsu.ru/MegaPro/Download/MObject/437>
2. Internal diseases propedeutics : textbook of medicine for medicine faculty students. P. 2. Diagnostics of cardiovascular diseases / Smirnova A. Yu., V. V. Gnoevykh ; Ulyanovsk State University, Institute of Medicine, Ecology and Physical culture. - Электрон. текстовые дан. (1 файл : 18,7 МБ). - Ulyanovsk : ULSU, 2017. - Текст на англ. яз. - Загл. с экрана. - Текст : электронный <http://lib.ulsu.ru/MegaPro/Download/MObject/373>
3. Internal diseases propedeutics : textbook of medicine for medicine faculty students. Part 3. Diagnostics of diseases of gastrointestinal tract and kidneys / Smirnova A. Yu., V. V. Gnoevykh ; Ulyanovsk State University, Institute of Medicine, Ecology and Physical culture. - Электрон. текстовые дан. (1 файл : 30,6 МБ). - Ulyanovsk : ULSU, 2017. - Текст на англ. яз. - Загл. с экрана. - Текст : электронный <http://lib.ulsu.ru/MegaPro/Download/MObject/1186>

c) Educational and methodical literature


Smirnova A. Yu.

Methodical instructions for the self-independent work of the students at the practice "Diagnostic practice" for specialty 31.05.01 "General medicine» : / Smirnova A. Yu. - Ulyanovsk : ULSU, 2021. - 12 p. - Неопубликованный ресурс. - URL: <http://lib.ulsu.ru/MegaPro/Download/MObject/10530>. - Режим доступа: ЭБС УлГУ. - Текст : электронный.

AGREED:

Leading specialist Стадольникова/  / 2024_

The position of the worker scientific library Full name signature data

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d) Software:

1. Система «Антиплагиат.ВУЗ»
2. ОС MicrosoftWindows
3. MicrosoftOffice 2016
4. Мой Офис Стандартный

e) Professed data base, directory and search systems:

1. Электронно-библиотечные системы:

1.1. Цифровой образовательный ресурс IPRsmart : электронно-библиотечная система : сайт / ООО Компания «Ай Пи Ар Медиа». - Саратов, [2024]. – URL: <http://www.iprbookshop.ru>. – Режим доступа: для зарегистрир. пользователей. - Текст : электронный.

1.2. Образовательная платформа ЮРАЙТ : образовательный ресурс, электронная библиотека : сайт / ООО Электронное издательство «ЮРАЙТ». – Москва, [2024]. - URL: <https://urait.ru> . – Режим доступа: для зарегистрир. пользователей. - Текст : электронный.

1.3. База данных «Электронная библиотека технического ВУЗа (ЭБС «Консультант студента») : электронно-библиотечная система : сайт / ООО «Политехресурс». – Москва, [2024]. – URL: <https://www.studentlibrary.ru/cgi-bin/mb4x>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.4. Консультант врача. Электронная медицинская библиотека : база данных : сайт / ООО «Высшая школа организации и управления здравоохранением-Комплексный медицинский консалтинг». – Москва, [2024]. – URL: <https://www.rosmedlib.ru>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.5. Большая медицинская библиотека : электронно-библиотечная система : сайт / ООО «Букап». – Томск, [2024]. – URL: <https://www.books-up.ru/ru/library/> . – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.6. ЭБС Лань : электронно-библиотечная система : сайт / ООО ЭБС «Лань». – Санкт-Петербург, [2024]. – URL: <https://e.lanbook.com>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.7. ЭБС Znanium.com : электронно-библиотечная система : сайт / ООО «Знаниум». - Москва, [2024]. - URL: <http://znanium.com> . – Режим доступа : для зарегистрир. пользователей. - Текст : электронный.

2. КонсультантПлюс [Электронный ресурс]: справочная правовая система. / ООО «Консультант Плюс» - Электрон. дан. - Москва : КонсультантПлюс, [2024].

3. eLIBRARY.RU: научная электронная библиотека : сайт / ООО «Научная Электронная Библиотека». – Москва, [2024]. – URL: <http://elibrary.ru>. – Режим доступа: для авториз. пользователей. – Текст : электронный

4. Федеральная государственная информационная система «Национальная электронная библиотека» : электронная библиотека : сайт / ФГБУ РГБ. – Москва, [2024]. – URL: <https://нэб.рф>. – Режим доступа : для пользователей научной библиотеки. – Текст : электронный.

5. Российское образование : федеральный портал / учредитель ФГАУ «ФИЦТО». – URL: <http://www.edu.ru>. – Текст : электронный.


6. Электронная библиотечная система УлГУ : модуль «Электронная библиотека» АБИС Мега-ПРО / ООО «Дата Экспресс». – URL: <http://lib.ulsu.ru/MegaPro/Web>. – Режим доступа : для пользователей научной библиотеки. – Текст : электронный.

Инженер ведущий



Щуренко Ю.В.


2024

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Classrooms for seminars, for the current control and interim certification, group and individual consultations:

1. Classroom №31 (Ulyanovsk region, Ulyanovsk, Likhachev str., 12., therapeutic building, 4th floor.) for seminars, group and individual consultations, ongoing monitoring and interim certification (with a set of demonstration equipment to ensure the provision of illustrative material in accordance with the work program of the discipline, access to EBS). The room is equipped with a set of student furniture for 12 seats.
2. Classroom №28 (Ulyanovsk region, Ulyanovsk, Likhachev str., 12., therapeutic building, 4th floor.) for seminars (with a set of demonstration equipment to ensure the provision of illustrative material in accordance with the work program of the discipline, access to EBS). The room is designed with a set of student furniture for 12 seats.
3. Classroom №28 (Ulyanovsk region, Ulyanovsk, Likhachev str., 12., therapeutic building, 5th floor.) for seminars (with a set of demonstration equipment to ensure the provision of illustrative material in accordance with the work program of the discipline, access to EBS). The room is designed with a set of student furniture for 15 seats.
4. Classroom №20A (Ulyanovsk region, Ulyanovsk, Likhachev str., 12., diagnostic unit, 5th floor.) for conducting seminars (with a set of demonstrative equipment to ensure the provision of illustrative material in accordance with the working program of the discipline, access to EBS). The room is equipped with a set of student furniture for 20 seats.
5. The lecture room (No. 404 (clinic GUZ "the Ulyanovsk regional cardiological clinic", Ulyanovsk, Hrustalnaya street, 3A)
6. Classrooms for seminars, for the current control and interim certification, group and individual consultations of the Committee are designed with specialized furniture.
7. Rooms for independent work are equipped with computer equipment with the ability to connect to the Internet and provide access to electronic information and educational environment, electronic library system.
8. List of equipment used in the educational process:
 1. Electrocardiograph 12-channel computer, the model of "Poly-Spectrum-8/E" BA-sovam software
 2. Device for spirometry and pulse oximetry MIR, model "Spirodoc with module Bro2" with software
 3. Projector "Panasonic»
 4. computer – 2 PCs.
 5. laptop – 3 PCs

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6. laser Jet printer
7. hardware-software complex "kardiotekhnika with wearable monitor»
8. blood pressure meter

9. Information stands: State healthcare institution "Central clinical mediko- sanitary part of a name of V. A. Egorov. St. Likhachev, 12. Therap. building, 4 FL.

11. SPECIAL CONDITIONS FOR STUDENTS WITH DISABILITIES

Training students with disabilities is carried out taking into account the peculiarities of psychophysical development, individual capabilities and health of such students. Education of students with disabilities can be organized in conjunction with other students, and separately. If necessary, students from among persons with disabilities (at the request of the student) may be offered one of the following options for the perception of information, taking into account their individual psychophysical characteristics:

- for persons with visual impairment: in printed form in large print; in the form of an electronic document; in the form of an audio file (translation of educational materials into audio format); in printed form in Braille; individual consultations with the involvement of a special translator; individual tasks and consultations.
- for persons with hearing impairment: in printed form; in the form of an electronic document; video materials with subtitles; individual consultations with the assistance of a sign language interpreter; individual tasks and consultations.
- for persons with musculoskeletal disorders: in printed form; in the form of an electronic document; in the form of an audio file; individual tasks and consultations."

Разработчик  _____ ст. преподаватель Крестьянинов Максим Вячеславович
 подпись _____ должность _____ ФИО