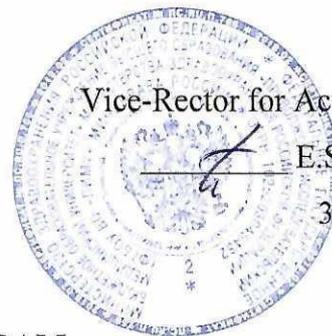


Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"
Ministry of Health of the Russian Federation



APPROVED

Vice-Rector for Academic Affairs

E.S. Bogomolova

31 August 2021

WORKING PROGRAM

Name of the academic discipline: **FUNDAMENTALS OF ENDOCRINOLOGY**

Specialty: **31.05.01 GENERAL MEDICINE**

Qualification: **GENERAL PRACTITIONER**

Department: **ENDOCRINOLOGY AND INTERNAL MEDICINE**

Mode of study: **FULL-TIME**

Labor intensity of the academic discipline: **72 academic hours**

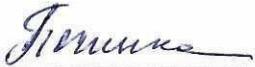
Nizhny Novgorod
2021

The working program has been developed in accordance with the Federal State Educational Standard for specialty 31.05.01 GENERAL MEDICINE approved by Order of the Ministry of Science and Higher Education of the Russian Federation No. 988 of August 12, 2020.

Developers of the working program:

Morozova E.P., MD, associate professor department of endocrinology and internal medicine

The program was reviewed and approved at the department meeting (protocol No. 01 June 2021)

Head of the Department,
MD, PhD, Associate professor  I.G. Pochinka
(signature)

01 June 2021

AGREED
Deputy Head of EMA ph.d. of biology  Lovtsova L.V.
(signature)

01 June 2021

1. The purpose and objectives of mastering the academic discipline Fundamentals of Endocrinology (hereinafter – the discipline):

1.1. The main goal of mastering and teaching the "Fundamentals of Endocrinology" to VI students the aim of the course is to form clinical (conceptual) thinking, including a professional algorithm in solving practical problems in this section of the Clinic of internal Diseases. To form a medical professional behavior in a therapeutic clinic based on deontological principles and ethical norms. To develop students' mental, sensory, motor skills and competencies necessary for a medical doctor to perform their professional duties. To contribute to the improvement of the general culture of a medical university student.

1.2. Tasks of the discipline:

Teaching "Fundamentals of Endocrinology" in a hospital clinic is based on reading clinical lectures, conducting practical classes and independent work of students at the bedside under the guidance of a teacher. The main purpose of studying the "Fundamentals of Endocrinology" at the Department of Endocrinology and Internal Diseases involves solving relevant professional tasks:

- to master the algorithm for making a clinical diagnosis, prescribing treatment, including medical rehabilitation and sanatorium treatment, as well as preventive measures for the main nosological forms of internal pathology;
- be able to collect and analyze information about the patient's condition, taking into account additional research methods;
- be able to diagnose emergency conditions and provide emergency medical care at the pre-hospital and hospital stages;
- be able to compile and maintain medical records in the clinic of internal diseases;
- be able to conduct an examination of temporary disability;
- be able to work independently with educational, scientific, regulatory and reference literature.

1.3. Requirements to the deliverables of mastering the discipline

As a result of completing the discipline, the student should

Know:

- etiology, pathogenesis, diagnosis, treatment and prevention of the most common endocrine diseases among the population;
- clinical picture, features of the course and possible complications of the most common endocrine diseases occurring in the typical form of the adult population;
- modern methods of clinical, laboratory and instrumental diagnostics of patients with endocrinological profile;
- features of providing medical care to the adult population in emergency conditions;
- clinical and pharmacological characteristics of the main groups of medicinal drugs and rational choice of specific medicines in the treatment of major pathological syndromes of endocrine diseases and emergency conditions in patients;
- indications and contraindications for referral of patients with the most common endocrine diseases to sanatorium treatment;
- fundamentals of the organization of inpatient care for the adult population;

- maintaining standard accounting and reporting medical documentation in medical and preventive institutions of the healthcare system, carrying out an examination of working capacity;
- fundamentals of the use of evidence-based medicine methods in assessing the health status of the adult population, the activities of medical institutions and in scientific research.

Be able to:

- collect anamnesis; conduct a survey of the patient and his relatives, conduct a physical examination of the patient (examination, palpation, percussion, auscultation, blood pressure measurement, determination of pulse characteristics, respiratory rate, etc.);
- send for laboratory and instrumental examination, for consultation with specialists;
- interpret the results of the examination, use the data of physical, laboratory and instrumental examination, laboratory data for diagnosis in outpatient and inpatient settings.
- outline the scope of additional studies to clarify the diagnosis;
- formulate a clinical diagnosis;
to develop an optimal treatment plan for a sick person taking into account the course of the disease, to select and prescribe drug therapy taking into account the pharmacokinetics and pharmacodynamics of drugs, to prevent their undesirable side effects, to use methods of non-drug treatment;
- to draw up a rehabilitation program at the hospital and polyclinic stage, to monitor its implementation;
- provide qualified assistance in the most common emergency conditions: acute adrenal insufficiency, hypothyroid coma, thyrotoxic crisis, etc.;
- diagnose and provide emergency care for comas in patients with diabetes mellitus;
- determine the fact of temporary disability, its cause, criteria for recovery and restoration of working capacity;
- determine the indications for employment, the establishment of a disability group and its prediction;
- maintain medical records of various types in outpatient and inpatient institutions;
- to carry out sanitary and educational work, to make its plan;
- manage the work of the nursing staff in the hospital.

Possess:

- basic technologies of information transformation: text, tabular editors; techniques of working on the Internet for professional activity;
- methods of maintaining medical accounting and reporting documentation in medical and preventive institutions of the healthcare system;
- assessments of the health status of the population of various age, gender and social groups;
- methods of general clinical examination of patients;
- interpretation of the results of laboratory, instrumental diagnostic methods in patients;

- an algorithm for making a preliminary diagnosis to patients with subsequent by sending them for additional examination and to specialist doctors;
- an algorithm for making a detailed clinical diagnosis;
- an algorithm for performing basic medical diagnostic and therapeutic measures to provide first aid to the population in 3 urgent and life-threatening conditions.

2. Position of the academic discipline in the structure of the General Educational Program of Higher Education (GEP HE) of the organization.

2.1. The discipline "Fundamentals of endocrinology" is a discipline of the choice of a professional cycle. The discipline is studied in the 12th semester/6 year of study.

2.2. The following knowledge, skills and abilities formed by previous academic disciplines are required for mastering the discipline:

1. in the cycle of humanities and socio-economic disciplines (philosophy, bioethics; law; history of medicine; Latin and foreign language)
2. in the cycle of mathematical, natural science disciplines: physics, mathematics; medical informatics; chemistry; psychiatry, biology; biochemistry; anatomy; topographic anatomy and operative surgery; histology, embryology, cytology; normal physiology; microbiology, virology; immunology; pathological anatomy, clinical pathological anatomy; pathophysiology, clinical pathophysiology; pharmacology;
3. in the cycle of professional disciplines: propaedeutics of internal diseases, radiation diagnostics; faculty therapy; polyclinic therapy; anesthesiology, intensive care, intensive care; traumatology, orthopedics, general surgery, radiation diagnostics; faculty surgery, urology; hospital surgery; obstetrics and gynecology; pediatrics; oncology, radiation therapy; dentistry; hygiene; public health and healthcare, health economics; infectious diseases; epidemiology; medical rehabilitation; clinical pharmacology; phthisiology; dermatovenerology; neurology, medical genetics, neurosurgery; psychiatry; medical psychology; otolaryngology; ophthalmology; forensic medicine; life safety, disaster medicine.

3. Deliverables of mastering the academic discipline and metrics of competence acquisition

Mastering the discipline aims at acquiring the following universal (UC) or/and general professional (GPC) or/and professional (PC) competencies

№	Competence code	The content of the competence (or its part)	As a result of mastering the discipline, the students should:		
			know	be able to	possess
1.	CC-1	ability to abstract thinking, analysis, synthesis		to assess the social factors affecting the state of the patient's	proper maintenance of medical documentation and interpretation of

				physical and psychological health: cultural, ethnic, religious, individual, family, social risk factors (unemployment, violence, illness and death of relatives, etc.)	laboratory results, tools of laboratory diagnostic methods
2.	CC-5	readiness for self-development, self-realization, self-education, use of creative potential		to assess the social factors affecting the state of the patient's physical and psychological health: cultural, ethnic, religious, individual family, social risk factors (unemployment, violence, illness and death of relatives , etc.)	proper maintenance of medical documentation and interpretation of laboratory results , tools of laboratory diagnostic methods
3.	CC-7	willingness to use first aid techniques , methods of protection in emergency situations	Methods of protection in emergency situations	Provide first aid	Manipulations during first aid
4.	CC-8	willingness to work in a team, to perceive social, ethnic, confessional and cultural differences with tolerance	fundamentals of legislation Russian Federations for the protection of public health, the main regulatory and technical documents;		

5.	GPC-1	willingness to solve standard tasks of professional activity using information, bibliographic resources, medical and biological terminology, willingness to solve standard tasks of professional activity using information, bibliographic resources, medical and biological terminology, information and communication technologies and taking into account the basic requirements of information security	etiology, pathogenesis and preventive measures and the most common diseases; modern classification and treatment of diseases; criteria for the diagnosis of various diseases	to assess the patient's condition in order to make a decision on the need to provide him with medical care;	proper maintenance of medical records and;
6.	GPC-2	readiness for communication in oral and written forms in Russian and foreign languages to solve the tasks of professional activity	terminology, using uytysya in professional literature	To present the clinical picture, principles of treatment and examination in Russian and English.	Written and oral speech in Russian and English to the extent sufficient for reading professional literature and communication with colleagues.
7.	GPC-4	ability and willingness to implement ethical and deontological principles in professional activity	fundamentals of legislation Russian Federations for the protection of public health, the main regulatory		

			and technical documents;		
8.	GPC-5	ability and willingness to analyze the results of their own activities to prevent professional mistakes	etiology, pathogenesis and preventive measures and the most common diseases; modern classification and treatment of diseases; criteria for the diagnosis of various diseases	to assess the patient's condition in order to make a decision on the need to provide him with medical care;	proper maintenance of medical records and;
9.	GPC-6	readiness to maintain medical records			proper maintenance of medical records and;
10.	GPC-7	readiness to use basic physico-chemical, mathematical and other natural science concepts and methods in solving professional tasks	Fundamentals of biomedical statistics used to describe the results of clinical trials	Interpret and interpret the results of clinical trials on which modern clinical practice is based	The main methods of data description, evaluation of variable differences in dependent and independent groups
11.	GPC-8	readiness for medical use of medicines and other substances and their combinations in solving professional tasks	The main groups of medicinal products used in the clinic of internal diseases, their dosages, multiplicity and routes of administration	To prescribe medications for various diseases of internal organs	Methods of evaluating the effectiveness of ti and the safety of the use of medicinal products
12.	GPC-9	ability to assess morphofunctional, physiological	diagnostic methods,	determine the status of the patient:	methods of general

		states and pathological processes in the human body for solving professional tasks	diagnostic capabilities of methods of direct examination of the patient therapeutic profile, modern methods of clinical, laboratory, instrumental examination of patients (including endoscopic diagnostic methods, ultrasound diagnostics); criteria for the diagnosis of various diseases; clinical picture, features of the course and possible complications of the most common diseases occurring in a typical form in various age groups;	collect anamnesis, conduct a survey of the patient and/ or his relatives, conduct a physical examination of the patient (examination, palpation, auscultation, measurement of arterial pressure, determination of the properties of arterial pulse , etc.); conduct a primary examination of systems and organs: endocrine, immune, respiratory, cardiovascular, blood and hematopoietic organs of the digestive system, urinary system, musculoskeletal and joints; fill out a medical history	clinical examination I; interpretation and analysis of the results of laboratory tests, tools of laboratory diagnostic methods; the algorithm of a detailed clinical diagnosis; proper maintenance of medical records and
13.	GPC-11	readiness for the use of medical devices provided for by the procedures for the provision of medical care	Fundamentals of the tool for laboratory diagnostics of internal diseases	To register an ECG using a portable electrocardiograph	Methods of functional diagnostics in the clinic of internal diseases
14.	PC-1	ability and readiness to implement a set	The main methods	To carry	Skills of conducting

		of measures aimed at preserving and strengthening health and including the formation of a healthy lifestyle, prevention of the occurrence and (or) spread of diseases, their early diagnosis, identification of the causes and conditions of their occurrence and development, as well as aimed at eliminating the harmful effects on human health of environmental factors	of primary and secondary prevention and diseases of internal organs	out educational work among the population and in groups of patients	classes in schools for patients with diseases of internal organs
15.	PC-5	readiness to collect and analyze patient complaints, medical history data, examination results, laboratory, instrumental, pathoanatomic and other studies in order to recognize the condition or establish the presence or absence of the disease	diagnostic methods, diagnostic capabilities of methods of direct examination of the patient therapeutic profile, modern methods of clinical, laboratory, instrumental examination of patients (incl endoscopic radiologists Czech methods, ultrasound diagnostics); criteria for the diagnosis of various	determine the status of the patient: collect anamnesis, conduct a survey of the patient and/ or his relatives , conduct a physical examination of the patient (examination, palpation, auscultation, measurement of arterial pressure, determination of the properties of arterial pulse, etc.); conduct a primary examination of systems and	methods of general clinical examinationI; interpretation and analysis of the results of laboratory tests, tools of laboratory diagnostic methods; the algorithm of a detailed clinical diagnosis; proper maintenance of medical records and

			diseases; clinical picture, features of the course and possible complications of the most common diseases occurring in a typical form in various age groups;	organs: endocrine, immune, respiratory, cardiovascular, blood and hematopoietic organs of digestive, urinary, musculoskeletal and joints; fill out a medical history	
16.	PC-6	the ability to determine in patients the main pathological conditions, symptoms, disease syndromes, nosological forms in accordance with the International Statistical Classification of Diseases and Health-Related Problems (ICD)	diagnostic methods, diagnostic capabilities of methods of direct examination of the patient therapeutic profile, modern methods of clinical, laboratory, instrumental examination of patients (incl young endoscopic Czech radiologists Czech methods, ultrasound diagnostics); criteria for the diagnosis of various diseases; clinical picture,	patient status: collect anamnesis, conduct a survey of the patient and/or his relatives, conduct a physical examination of the patient (examination, palpation, auscultation, measurement of arterial pressure, determination of the properties of arterial pulse, etc.); conduct a primary examination of systems and organs: endocrine, immune, respiratory, cardiovascular, blood and hematopoietic organs of	methods of general clinical examination I; interpretation and analysis of the results of laboratory tests, tools of laboratory diagnostic methods; the algorithm of a detailed clinical diagnosis; proper maintenance of medical records and

			features of the course and possible complications of the most common diseases occurring in a typical form in various age groups;	digestive, urinary, musculoskeletal and joints; fill out a medical history	
17.	PC-7	readiness to carry out the examination of temporary disability, participation in the medical and social examination, the statement of biological death of a person	The main criteria for temporary disability of the community in diseases of internal organs	To identify signs of persistent disability in diseases of internal organs	By the method of ascertaining the biological causes of human death
18.	PC-8	the ability to determine the tactics of managing patients with various nosological forms	Algorithms for diagnosis and treatment of major diseases of internal organs	Develop a plan for self-examination and treatment for diseases of internal organs	Skills to implement the developed treatment plan and examination I am a patient with pathology of internal organs
19.	PC-10	readiness to provide medical care in case of sudden acute diseases, conditions, exacerbation of chronic diseases that are not accompanied by a threat to the patient's life and do not require emergency medical care	Symptoms of acute underlying conditions encountered in the Clinic of Internal Diseases	To provide medical assistance in case of exacerbations of major chronic diseases of internal organs	Skills of providing medical care in exacerbations of chronic diseases
20.	PC-11	readiness to participate in the provision of emergency medical care in conditions requiring	Symptoms of acute underlying conditions encountered in the Clinic	Provide emergency medical care in case of exacerbations	Skills of providing emergency medical care for exacerbations

		urgent medical intervention	of Internal Diseases	of major chronic diseases	of chronic diseases of 10 internal organs
21.	PC-14	readiness to determine the need for the use of natural therapeutic factors, medicinal, non-drug therapy and other methods in patients in need of medical rehabilitation and spa treatment	The main methods of non-drug treatment of major diseases of internal organs	To determine indications for spa treatment for major diseases of internal organs	Skills of non-drug management of diseases of m internal organs
22.	PC-15	readiness to teach patients and their relatives basic hygienic measures of a health-improving nature, skills of self-control of basic physiological indicators that contribute to the preservation and promotion of health, disease prevention	The main methods of primary and secondary prevention and diseases of internal organs	To carry out educational work among the population and in groups of patients	Skills of conducting classes in schools for patients with diseases of internal organs
23.	PC-16	readiness for educational activities to eliminate risk factors and develop healthy lifestyle skills	The main methods of primary and secondary prevention and diseases of internal organs	To carry out educational work among the population and in groups of patients	Skills of conducting classes in schools for patients with diseases of internal organs
24.	PC-20	readiness to analyze and publicly present medical information based on evidence-based medicine	The main methods of biomedical statistics used in the analysis and description of the results of clinical	Make a presentation to colleagues	The skills of preparing a report with the use of multimedia equipment

			trials		
25.	PC-21	ability to participate in scientific research	diagnostic methods, diagnostic capabilities of methods of direct examination of the patient therapeutic profile, modern methods of clinical, laboratory, instrument of laboratory examination of patients (including yuchaya endoscopic, radiological methods, ultrasound diagnostics);	determine the status of the patient: collect anamnesis, conduct a survey of the patient and/ or his relatives, conduct a physical examination of the patient (examination, palpation, auscultation, measurement of arterial pressure, determination of arterial pulse properties, etc.);	methods of general clinical examination; interpretation and analysis of the results of laboratory tests, tools of laboratory diagnostic methods; the algorithm of a detailed clinical diagnosis; proper management of medical documentation and

4. Sections of the academic discipline and competencies that are formed when mastering them

№	Competence code	Section name of the discipline	The content of the section in teaching units
1	(CC-1, 4, 7, 8); (GPC-1, 2, 4, 5, 6, 7, 8, 9, 11); (PC -1, 5, 6, 7, 8, 10, 14, 16, 20, 21, 22)	Type 1 and type 2 diabetes mellitus	Type 1 diabetes mellitus. Pathogenetic features of the formation of microvascular complications (diabetic retinopathy, diabetic nephropathy, diabetic neuropathy). Clinical manifestations, diagnostic methods, therapeutic tactics. Diabetic ketoacidosis, severity, clinical manifestations, laboratory parameters. Differential diagnosis. Emergency care. Modes and methods of insulin therapy, rehydration, correction of electrolyte disorders, symptomatic therapy. Hypoglycemia. Clinical manifestations, severity. Emergency care. Differential diagnosis of hypoglycemic condition.

			Type 2 diabetes mellitus is a cardiovascular disease. Features of the course in patients with diabetes mellitus. The main and additional factors of cardiovascular risk. Clinical picture and diagnosis. Correction of risk factors. Primary and secondary prevention. The advantages of certain groups of hypoglycemic drugs in the treatment of patients with diabetes mellitus and cardiovascular pathology.
2	(CC-1, 4, 7, 8); (GPC-1, 2, 4, 5, 6, 7, 8, 9, 11); (PC -1, 5, 6, 7, 8, 10, 14, 16, 20, 21, 22)	Diseases of the thyroid and parathyroid glands	Causes of hypothyroidism. Differential diagnosis of primary hypothyroidism. Clinical manifestations, diagnostic criteria and hormone replacement therapy of autoimmune thyroiditis. Differential diagnosis of thyroid nodules (multi-nodular toxic goiter, toxic adenoma, nodular endemic goiter, thyroid cancer) Features of calcium-phosphorus metabolism. Hypoparathyroidism and hyperparathyroidism. Etiology and pathogenesis. Clinical manifestations, methods of laboratory and instrumental diagnostics, treatment.
	(CC-1, 4, 7, 8); (GPC-1, 2, 4, 5, 6, 7, 8, 9, 11); (PC -1, 5, 6, 7, 8, 10, 14, 16, 20, 21, 22)	Diseases of the pituitary gland and adrenal glands	Differential diagnosis of pituitary dysfunction. Features of clinical manifestations of hypopituitarism, hyperprolactinemia, hypersecretion of growth hormone. Modern laboratory and instrumental diagnostics. Indications for the conduct and interpretation of hormonal tests. Hormone replacement and drug therapy. Indications for surgical treatment. Hyperfunction of the adrenal cortex (syndrome Cushing, primary hyperaldosteronism). Features of clinical manifestations, laboratory and instrumental diagnostic methods. Carrying out hormonal diagnostic tests. Conservative and surgical treatment. Chronic adrenal insufficiency. Causes, clinical manifestations, diagnostics, features of hormone replacement therapy.

5. Volume of the academic discipline and types of academic work

The total labor intensity of the discipline is 2 credits

Type of educational work	Labor intensity		Labor intensity (AH) in semesters
	volume in credit units (CU)	volume in academic hours (AH)	
			12 semester

Classroom work, including			
Lectures (L)	0,28	10	10
Laboratory practicum (LP)*	-	-	-
Practicals (P)	0,94	34	34
Seminars (S)	-	-	-
Student's individual work (SIW)	0,78	28	28
Mid-term assessment			
credit/exam (<i>specify the type</i>)			credit
TOTAL LABOR INTENSITY	2	72	72

6. Content of the academic discipline

6.1. Sections of the discipline and types of academic work

№	Name of the section of the academic discipline	Types of academic work* (in AH)					
		L	LP	P	S	SIW	total
1	Diabetes mellitus type 1 and 2	4			12	8	24
2	Diseases of the thyroid and parathyroid glands	4			12	8	24
3	Diseases of the pituitary gland and adrenal glands	2			14	8	24
	TOTAL	10			38	24	72

* - L – lectures; LP – laboratory practicum; P – practicals; S – seminars; SIW – student's individual work.

6.2. Thematic schedule of educational work types:

6.2.1 Thematic schedule of lectures

№	Name of lecture topics	Volume in AH 12 semester
1	Diabetes mellitus in polyclinic practice	2
2	Diabetes mellitus – features of concomitant pathology	2
3	Nodular formations of the thyroid gland	2
4	Diseases of the parathyroid glands	2
5	Diseases of the adrenal glands	2
	TOTAL (total - AH)	10

6.2.2. Thematic plan of practicals

№	Name of laboratory practicums	Volume in AH 12 semester
1	Type 1 diabetes mellitus and microvascular complications. Acute complications of diabetes mellitus (diabetic ketoacidosis, hypoglycemic condition).	8
2	Type 2 diabetes mellitus and cardiovascular risks. Features of management of patients.	6
3	Chronic autoimmune thyroiditis. Hyperparathyroidism and hypoparathyroidism.	6
4	Features of clinical manifestations, diagnosis and treatment	6

	of pituitary dysfunction.	
5	Hyperfunction of the adrenal cortex (Cushing's syndrome, primary hyperaldosteronism).	6
6	Chronic adrenal insufficiency	6
	TOTAL (total - AH)	38

6.2.3. Types and topics of student's individual work (SIW)

№	Name of the topics of practicals	Volume in AH 12 semester
1	writing case histories, abstracts	6
2	preparation of reports, speeches	4
3	preparation for participation in classes in an interactive form (role-playing and business games, trainings, game design, computer simulation, discussions),	4
4	work with electronic educational resources posted on the educational portal of the Federal State Educational Institution of Higher Education "PIMU" of the Ministry of Health of the Russian Federation	4
5	work with literary and other sources of information on the section under study, including in an interactive form	6
	TOTAL (total - AH)	24

6.2.4. Student's research work:

№	The name of the topics of the student's research work	Volume in AH 12 semester
1	New medical technologies in the diagnosis and treatment of endocrinological diseases	
2	Rational pharmacotherapy of endocrine diseases	
3	Demonstration of clinical cases of endocrine pathology	
4	Preparation of abstracts on rare forms of endocrine pathology	
5	Treatment of endocrine diseases in the elderly	
	TOTAL (total - AH)	

7. Types of assessment formats for ongoing monitoring and mid-term assessment

№	Semester No.	Types of control		Name of section of academic discipline	Competence codes	Assessment formats		
						types	number of test questions	number of test task options
1.	12	Current monitoring	Control of mastering the topic	Diabetes mellitus type 1 and 2	(CC-1, 4, 7, 8); (GPC-1, 2, 4, 5, 6, 7, 8, 9, 11); (PC -1, 5, 6, 7, 8, 10, 14, 16, 20, 21, 22)	<i>control work, interview on situational tasks</i>	1	3

			Monitoring the student's individual work	Diseases thyroid and parathyroid glands	(CC-1, 4, 7, 8); (GPC-1, 2, 4, 5, 6, 7, 8, 9, 11); (PC -1, 5, 6, 7, 8, 10, 14, 16, 20, 21, 22)	<i>control work, interview on situational tasks</i>	1	3
2.	12	Mid-term assessment	Exam/Credit	Diseases of the pituitary gland and adrenal glands	(CC-1, 4, 7, 8); (GPC-1, 2, 4, 5, 6, 7, 8, 9, 11); (PC -1, 5, 6, 7, 8, 10, 14, 16, 20, 21, 22)	<i>control work, interview on situational tasks</i>	1	1

8. Educational, methodological and informational support for mastering the academic discipline (printed, electronic publications, the Internet and other network resources)

8.1. Key literature references

№	Name according to bibliographic requirements	Number of copies	
		at the department	in the library
1	National leadership. Short edition : practical guide / I.I. Dedova, G.A. Melnichenko; Dedova I.I. ; Melnichenko G.A. - Moscow : GEOTAR-Media, 2020. - 832 p. -ISBN ISBN 978-5-9704-5560-9. - Text : electronic. -URL: https://www.rosmedlib.ru/book/ISBN9785970455609.html	0	1

8.2. Further reading

№	Name according to bibliographic requirements	Number of copies	
		at the department	in the library
1	Mkrtumyan, A.M. Emergency endocrinology : textbook / A.M. Mkrtumyan, A.A. Nelaeva; Mkrtumyan A.M. ;Nelaeva A.A. - Moscow : GEOTAR-Media, 2020. - 128 p. - ISBN ISBN 978-5-9704-5615-6. - Text : electronic. - URL: https://www.rosmedlib.ru/book/ISBN9785970456156.html	0	1
2	Ametov, A.S. Type 2 diabetes mellitus. Problems and solutions. Volume 6 : textbook / A.S. Ametov; A.S. Ametov - Moscow: GEOTAR-Media, 2019. - 160 p. - ISBN 978-5-9704-5186-1. - Text : electronic. - URL: https://www.rosmedlib.ru/book/ISBN9785970451861.html	0	1
3	Dreval, A.V. Osteoporosis, hyperparathyroidism and vitamin D deficiency : textbook / A.V. Dreval; Dreval A.V. - Moscow : GEOTAR-Media, 2019. - 160 p. - ISBN 978-5-9704-4850-2. - Text : electronic. - URL: https://www.rosmedlib.ru/book/ISBN9785970448502.html	0	1
4	Strongin L. G. Diabetes mellitus: textbook for the international english speaking medical students. Publishing House of NNSMA, 2015.	2	30

5	Botova S. N. Practical aspects of spirometry: textbook for the overseas medical students. Publishing House of NNSMA, 2015.-	2	5
6	Strongin L. G. Interpretation of ECG data: textbook for the international english speaking medical students. Publishing House of NNSMA, 2014.	2	15
7	Strongin L. G. Guide to case report writing, history taking and physical examination : textbook for the international english speaking medical students. Publishing House of NNSMA, 2014.	2	10
8	Petrov A. V. Guide to case report writing for 6 course students. Publishing House of PIMU, 2020.	2	10

8.3. Electronic educational resources for teaching academic subjects

8.3.1. Internal Electronic Library System of the University (IELSU)

<i>№</i>	<i>Name of the electronic resource</i>	<i>Brief description (content)</i>	<i>Access conditions</i>	<i>Number of users</i>
	Internal electronic library system (WEB)	The works of the academic staff of the Academy: textbooks and manuals, monographs, collections of scientific papers, scientific articles, dissertations, abstracts of dissertations, patents.	from any computer located on the Internet, using an individual login and password [Electronic resource] – Access mode: http://95.79.46.206/login.php	Not limited

8.3.2. Electronic educational resources acquired by the University

<i>№</i>	<i>Name of the electronic resource</i>	<i>Brief description (content)</i>	<i>Access conditions</i>	<i>Number of users</i>
1	Electronic database " Student Consultant"	Educational literature + additional materials (audio, video, interactive materials, test tasks) for higher medical and pharmaceutical education. Publications are structured by specialties and disciplines in accordance with the current FGOS VPO.	from any computer located on the Internet, using an individual login and password [Electronic resource] – Access mode: http://www.studmedlib.ru/	General PIM subscription
2	Electronic library system "Bukap"	Educational and scientific medical literature of Russian	from any computer located on the Internet by login and password, from	General PIM

		publishers, including translations of foreign publications.	the computers of the academy. The subscription editions are available for reading . [Electronic resource] – Access mode: http://www.books-up.ru/	subscription
3	"Bibliopoisk"	Integrated "single window" search service for electronic catalogs, EBS and full-text databases. The results of a single search in the demo version include documents from domestic and foreign electronic libraries and databases available to the university as part of a subscription, as well as from open access databases.	PIM has access to the demo version of the Bibliopoisk search engine: http://bibliosearch.ru/pimu .	General PIM subscription
4	Domestic electronic periodicals	Periodicals on medical subjects and on higher school issues	from any computer located on the Internet by login and password, from the computers of the academy. The subscription editions are available for reading . [Electronic resource] – Access mode: http://www.books-up.ru/	
5	International Scientometric database "webofscienceconnection"	Web of Science covers materials on natural, technical, social, and humanitarian sciences; takes into account the mutual citation of publications developed and provided by ThomsonReuters; has built-in capabilities for searching, analyzing, and managing bibliographic information.	Access is free from PIM computers [Electronic resource] – Access to the resource at: http://apps.webofknowledge.com	From the computers of the PIM access is free

8.3.3 Open access resources

№	Name of the electronic resource	Brief description (content)	Access conditions
1	Federal Electronic Medical Library (FEMB)	Includes electronic analogues of printed publications and original electronic publications that have no analogues recorded on other media (dissertations, abstracts, books, magazines, etc.). [Electronic resource] – Access mode: http://h3b.pf/	from any computer on the network The Internet
2	Scientific Electronic Library eLIBRARY.RU	The largest Russian information portal in the field of science, technology, medicine and education, containing abstracts and full texts of scientific articles and publications. [Electronic resource] – Access mode: https://elibrary.ru/	from any computer on the network The Internet
3	Open Access Scientific Electronic Library CyberLeninka	Full texts of scientific articles with annotations published in scientific journals of Russia and neighboring countries. [Electronic resource] – Access mode: http://cyberleninka.ru/	from any computer on the network The Internet
4	Russian State Library (RSL)	Abstracts for which there are copyright agreements with permission for their open publication [Electronic resource] – Access mode: http://www.rsl.ru/	from any computer on the network The Internet
5	Legal reference system "Consultant Plus"	Federal and regional legislation, judicial practice, financial advice, comments on legislation, etc. [Electronic resource] – Access mode: http://www.consultant.ru/	from any computer on the network The Internet
6	Official website Ministry of Health	National clinical guidelines from any computer, Russian Federations [Electronic resource] – Mode доступа: cr.rosminzdrav.ru -	from any computer on the network The Internet

		Clinical recommendations	
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9. Material and technical support for mastering an academic discipline

9.1. List of premises for classroom activities for the discipline

- Lecture hall equipped with multimedia equipment and microphone
- Offices for conducting clinical practical classes
- Multidisciplinary accreditation and Simulation Center
- Chambers of endocrinology and Cardiology departments of the clinical base of the Department of Endocrinology and Internal Diseases

9.2. List of equipment for classroom activities for the discipline

- Multimedia complex
- Medical documentation: medical history, outpatient card
- Archival and educational case historie
- Glucose meters, continuous glucose monitoring systems, system automatic administration of insulin (insulin pump)
- A set of samples of laboratory analysis results
- Album of instrumental research results.
- Tonometers.
- Phonendoscopes.
- Tables.
- Slides and multimedia presentations of lectures.
- Standardized patient
- Role-playing and business game

9.3. A set of licensed and freely distributed software, including domestic production

Item no.	Software	number of licenses	Type of software	Manufacturer	Number in the unified register of Russian software	Contract No. and date
1	Wtware	100	Thin Client Operating System	Kovalev Andrey Alexandrovich	1960	2471/05-18 from 28.05.2018
2	MyOffice is Standard. A corporate user license for educational organizations, with no expiration date, with the right to receive updates for 1 year.	220	Office Application	LLC "NEW CLOUD TECHNOLOGIES"	283	without limitation, with the right to receive updates for 1 year.
3	LibreOffice		Office Application	The Document Foundation	Freely distributed software	

4	Windows 10 Education	700	Operating systems	Microsoft	Azure Dev Tools for Teaching Subscription	
5	Yandex. Browser		Browser	«Yandex»	3722	
6	Subscription to MS Office Pro for 170 PCs for FGBOU VO "PIMU" of the Ministry of Health of Russia	170	Office Application	Microsoft		23618/HN10030 LLC "Softline Trade" from 04.12.2020

10. List of changes to the working program (to be filled out by the template)

Federal State Budgetary Educational Institution of Higher Education
 "Privolzhsky Research Medical University"
 Ministry of Health of the Russian Federation
 (FSBEI HE "PRMU" of the Ministry of Health of Russia)

Department of
Endocrinology and internal diseases

CHANGE REGISTRATION SHEET

working program for the academic discipline
NAME OF THE ACADEMIC DISCIPLINE

Field of study / specialty / scientific specialty: _____

(code,

name)

Training profile: _____

(name) - for master's degree programs

Mode of study: _____

full-time/mixed attendance mode/extramural

Position	Number and name of the program section	Contents of the changes made	Effective date of the changes	Contributor's signature
1				

Approved at the department meeting

Protocol No. ____ of _____ 20__

Head of the Department

 department name, academic title

 signature

 print name