MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION,
MINISTRY OF SCIENCE, HIGHER EDUCATION AND INNOVATION
OF THE KYRGYZ REPUBLIC

Kyrgyz-Russian Slavic University
named after the first President of the Russian Federation B.N. Yeltsin



_____
(position)

_____
(full name)

_____2026

PROFESSIONAL CYCLE
Endocrinology

Work program of the discipline (module)

Assigned to the department: **Family Medicine & Therapy**

Curriculum: 310501_26_1 LD in.plx
560001 General Medicine (For International Students)

Qualification: **Doctor**

Form of study: **Full-time**

Total labor intensity: **2 ZET**

Hours according to the including:: 60

classroom classes: 48

independent work: 11,7

Types of control in semesters:

Score 5

Distribution of hours of the discipline by semesters

Semester (<Course>.<Semester>)	**5 (3.1)**		Total	
Weeks	18			
Type of classes	UP	WP	UP	WP
Lectures	16	16	16	16
Practical	32	32	32	32
Contact work during the period of theoretical training	0,3	0,3	0,3	0,3
Including int.	4	4	4	4
Total room.	48	48	48	48
Contact work	48,3	48,3	48,3	48,3
Myself. Work	11,7	11,7	11,7	11,7
Total	60	60	60	60

The program was compiled by:

Senior Lecturer, Uvaidillaeva F.T.
Senior Lecturer, Albakova A.O _____

Reviewer(s):

Doctor of Medical Sciences, Associate Professor of Hospital Therapy with a Course of Hematology of the KSMA, Toktogulova N.A

Approved by EPR: Zhamankulova M.K

Work program of the discipline

Endocrinology

developed in accordance with the Federal State Educational Standard 3++:

Federal State Educational Standard of Higher Education - Specialist in the Specialty 560001 General Medicine (For Foreign Students) (Order of the Ministry of Education and Science of the Russian Federation of No)

Compiled on the basis of the curriculum:

560001 General Medicine (For International Students)

approved by the Academic Council of the university dated 06/26/2026 protocol No 11.

The work program was approved at the meeting of the _____

Minutes dated 29.08.2026 No 1
Program duration: 2026-2030 academic year.
Head of Department: Suranova Gulbarchyn Zhanturevna

CHANGE REGISTRATION SHEET
to the work program of the discipline (module)

Endocrinology

_____

Name of the discipline

No p/ P	Foundation Contributions Changes	Section/ Item	Patch Contents
1.			
2.			
3.			
4.			
5.			

1. OBJECTIVES OF MASTERING THE DISCIPLINE	
1.1	The purpose of the discipline is to form students' fundamental knowledge, skills and abilities in the specialty of endocrinology.

2. THE PLACE OF THE DISCIPLINE IN THE STRUCTURE OF THE EDUCATIONAL PROGRAM	
Cycle (section) of the PLO:	B1.O.03
2.1	**Requirements for the preliminary training of the student:**
2.1.1	Biochemistry
2.1.2	Normal physiology
2.1.3	Practicum in Physiology
2.1.4	Anatomy
2.1.5	Topographic Anatomy and Operative Surgery
2.1.6	Psychology of communication
2.1.7	Psychiatry, Medical Psychology
2.1.8	Practice in Emergency Medical Manipulations (Fundamentals of Emergency Care)
2.1.9	Latin
2.1.10	Bioethics
2.1.11	Pharmacology
2.1.12	General Surgery
2.1.13	Practical training to obtain professional skills and professional experience in the positions of paramedical personnel (Assistant procedural nurse)
2.1.14	Propaedeutics of Internal Diseases
2.1.15	Occupational diseases
2.1.16	Practical training to obtain professional skills and professional experience in the positions of paramedical personnel (Assistant ward nurse)
2.1.17	Faculty Therapy
2.1.18	Therapeutic Practice (Physician Assistant)
2.1.19	Pathological anatomy
2.1.20	Orientation Practice (General Care for Therapeutic Patients)
2.1.21	Immunology
2.1.22	Fundamentals of research work
2.1.23	Radiation diagnostics
2.1.24	Pathophysiology, clinical pathophysiology
2.2	**Disciplines and practices for which the development of this discipline (module) is necessary as a previous:**
2.2.1	Medical Rehabilitation
2.2.2	Sports Medicine
2.2.3	Immunoprophylaxis of infectious diseases
2.2.4	Infectious diseases
2.2.5	Practice in emergency medical manipulations (Assistant anesthesiologist - resuscitator)
2.2.6	Faculty Surgery
2.2.7	Hospital surgery
2.2.8	Anesthesiology, Resuscitation, Intensive Care
2.2.9	Surgical Profile Practice (Physician Assistant)
2.2.10	Outpatient surgery
2.2.11	Faculty Therapy
2.2.12	Hospital Therapy
2.2.13	Outpatient therapy with a course of gerontology
2.2.14	General Medical Practice (Outpatient Physician Assistant)
2.2.15	Research work
2.2.16	Family Medicine
2.2.17	Oncology, radiation therapy
2.2.18	Ophthalmology
2.2.19	Neurology, Medical Genetics, Neurosurgery

2.2.20	Gynecology
2.2.21	Outpatient Obstetrics and Gynecology
2.2.22	Clinical pathanatomy

3. COMPETENCIES OF THE STUDENT FORMED AS A RESULT OF MASTERING THE DISCIPLINE (MODULE)	
PC-9: Able and ready to perform basic therapeutic measures for acute diseases, conditions and exacerbation of chronic diseases that are not accompanied by a threat to the life of an adult patient and do not require emergency medical care on an outpatient and inpatient basis.	
Know:	
Level 1	- Clinical manifestations of acute and chronic diseases.
Level 2	- Methods of treatment and medical manipulations for pathological conditions and diseases.
Level 3	- General principles of treatment. - Diseases, taking into account their etiology and pathogenesis; - Knowledge of pharmacological groups and their interaction with each other.
Be able to:	
Level 1	- Link symptoms, examination data and indicators of laboratory and instrumental examination methods into a single whole and make the correct diagnosis.
Level 2	- Prepare the patient, tools and medicines for the necessary manipulation.
Level 3	- Assess the stage of the disease and prescribe therapy appropriate to the stage of the disease.
Own:	
Level 1	- Skills to identify signs of an acute disease or exacerbation of a chronic disease.
Level 2	- Skills of etiological and pathogenetic therapy in treatment of diseases depending on the severity of the disease on an outpatient basis.
Level 3	- Skills and methods of providing medical care for acute and chronic diseases.

PC-8: Able and ready to use an algorithm of diagnostic measures to detect diseases, emergency and life-threatening conditions based on the results of clinical, laboratory and instrumental studies of organs, systems and the body as a whole to make a diagnosis (main, concomitant, complications) taking into account the ICD.	
Know:	
Level 1	- Etiology, pathogenesis, clinical presentation of the main diseases with various nosological forms.
Level 2	- Main types and methods of treatment of patients with various nosological forms.
Level 3	- Methods of management and treatment of patients with various nosological forms on an outpatient basis and in a day hospital.
Be able to:	
Level 1	- Correctly identify this disease.
Level 2	- To compare different types and methods of treatment of patients with different nosological forms, to develop a treatment plan for diseases.
Level 3	- Manage and treat patients on an outpatient basis and in a day hospital.
Own:	
Level 1	- Skills in analyzing various types of treatment of patients with different nosological forms.
Level 2	- Methods of searching for and comparing different methods of treatment of patients with different nosological forms.
Level 3	- Skills in managing and treating patients with various diseases on an outpatient basis and in a day hospital.

PC-7: Able and willing to conduct and interpret interviews, physical examinations, clinical examinations, results of modern laboratory and instrumental tests, and complete outpatient and inpatient medical records.	
Know:	
Level 1	- Etiology, pathogenesis, clinical presentation of diseases.
Level 2	- Main types and methods of treatment of patients with various nosological forms. - the main directions and problems in the management of patients with various diseases.
Be able to:	

Level 1	- To reveal the meaning of determining the tactics of managing patients with various diseases.
Level 2	- To compare different types and methods of treatment of patients with different nosological forms, to develop a treatment plan for diseases.
Level 3	- To note the practical value of individual tactics for the management of patients with various nosological forms.
Own:	
Level 1	- Skills in presenting and analyzing the etiology, pathogenesis of various clinical diseases to make a diagnosis.
Level 2	- Methods of searching for and comparing different methods of treatment of patients with different nosological forms.
Level 3	- Possess the skills of determining the tactics of managing patients with diseases.

As a result of mastering the discipline, the student must

3.1	**Know:**
3.1.1	Medical documentation in endocrinology organizations.
3.1.2	Medical documentation in endocrinology organizations.
3.1.3	Pathological symptoms and syndromes in the most common endocrine diseases
3.1.4	Etiology, pathogenesis and classification of the most common forms of endocrine diseases
3.1.5	Clinical picture, diagnostic criteria and complications of diseases of the endocrine system.
3.1.6	Modern methods of clinical, laboratory, instrumental examination of patients with endocrine pathology.
3.1.7	The main groups of drugs used to treat endocrine diseases.
3.1.8	Modern principles of treatment of diseases of the endocrine system within the framework of the nosological forms under consideration
3.1.9	Features of emergency care for endocrine diseases.
3.1.10	Basic principles of prevention of typical forms of endocrine diseases
3.2	**Be able to:**
3.2.1	Use educational, scientific literature, the Internet for professional activities
3.2.2	Be able to work with medical documentation, fill out medical histories, write prescriptions
3.2.3	Conduct a survey, physical examination of the patient, assess his condition, examine the organs of the endocrine system
3.2.4	Identify the main pathological symptoms and syndromes of endocrine diseases
3.2.5	Draw up a plan of laboratory and instrumental methods of examining patients to confirm the suspected diagnosis, interpret their results.
3.2.6	To determine the algorithm for diagnosing an endocrine disease, taking into account ICD-10, to formulate a detailed clinical diagnosis
3.2.7	Develop a treatment plan taking into account the course of the disease, select and prescribe drug and non-drug therapy
3.2.8	Identify urgent and life-threatening conditions and provide emergency medical care for diseases of endocrine genesis
3.2.9	To use methods of primary and secondary prevention of endocrine diseases based on evidence-based medicine in medical activities
3.3	**Own:**
3.3.1	Skills in maintaining medical records, the technique of drawing up a medical history.
3.3.2	Algorithm of general clinical examination of a patient with endocrine pathology;
3.3.3	Algorithm of laboratory and instrumental examination in case of suspected endocrine pathology, interpretation of the results obtained during the study;
3.3.4	Skills in making a preliminary diagnosis with the formation of an examination plan
3.3.5	• Skills in formulating a clinical diagnosis of patients with diseases of the endocrine glands, proceeding in a typical form;
3.3.6	Skills in the management and treatment of patients with endocrine pathology and assessment of the effectiveness of treatment
3.3.7	Methods of emergency care for endocrine diseases.
3.3.8	• Skills in planning measures for the prevention and treatment of the most common endocrine diseases;

4. STRUCTURE AND CONTENT OF THE DISCIPLINE (MODULE)								
Lesson code	**Name of sections and topics /type of lesson/**	**Semester / Course**	**Hours**	**The competence**	**References**	**Inté Rakt.**	**Pr. podg.**	**Note**
	Section 1. Diabetology (Diabetes Mellitus)							
1.1	Introduction to endocrinology. Diabetes mellitus: classification, etiology, pathogenesis, clinic, Diagnosis. Treatment of diabetes mellitus /Lek/	5	2	PP-8	L1.4 L1.7L2.1 L2.6			
1.2	Diabetes mellitus.Classification, etiology, pathogenesis, clinic, diagnosis. Supervision of a patient with diabetes mellitus. /Pr/	5	4		L1.2 L1.5 L1.11L2.1 L2.6			Students learn how to independently collect complaints, anamnesis, diagnose and
1.3	Treatment of type 1 and type 2 diabetes mellitus . Lifestyle changes. Principles of insulin therapy. Tableted hypoglycemic	5	4	PP-8 PP-7	L1.6 L1.7 L1.10			
1.4	Modern technologies in the treatment of diabetes mellitus: insulin pumps, glucose monitoring systems, artificial pancreas	5	3,5					
1.5	Micro- and macrovascular complications of diabetes mellitus /Lek/	5	2	PP-8 PP-7	L1.8			
1.6	Micro- and macrovascular complications of diabetes mellitus. Diabetic retinopathy, nephropathy, neuropathy. Features of coronary artery disease in diabetes mellitus. Arterial hypertension and	5	4	PP-8	L1.8 L1.13L2.2 L2.3 L2.4 L2.5 L2.7 L2.8			
1.7	Comas in diabetes mellitus /Lek/	5	2	PP-9 PP-7	L1.8			
1.8	Acute complications of diabetes mellitus. Ketoacidosis, ketoacidotic coma. Hypoglycemia, hypoglycemic coma. Clinic, diagnostics, Differential diagnosis. Emergency care. Hyperosmolar hyperglycemic states, lactic acid acidosis. Boundary Control No1 /Pr/	5	4	PP-8 PP-9	L1.8 L1.9	4		
1.9	Psychological aspects of diabetes mellitus: compliance, patient burnout syndrome, the role of motivational counseling /Sr/	5	2,2	PP-7				

1.10	/CrTO/	5	0,3					
	Section 2. Other endocrine diseases in adults							
2.1	Thyroid diseases . Thyrotoxicosis syndrome. Etiopathogenesis, classification, clinic, diagnostics, methods of treatment /Lek/	5	2	PP-7	L1.1 L1.12L2.2 L2.7			
2.2	Diffuse toxic goiter. Clinic, diagnosis, differential diagnosis. Treatment. Hypothyroidism. Classification. Etiology. Pathogenesis. Clinical manifestations. Diagnosis and treatment. Iodine deficiency diseases. Epidemiology, clinical Endemic goiter, etiopathogenesis, Clinic, diagnosis, treatment. Sporadic goiter /Pr/	5	4	PP-7	L1.5 L1.10			
2.3	Thyroid diseases. Thyroiditis /Sr/	5	3					
2.4	Hypothyroidism syndrome. Iodine deficiency diseases. Epidemiology, etiopathogenesis, classification, clinic, Diagnosis. Treatment. Prevention /Lek/	5	2		L1.1 L1.12			
2.5	Diseases of the parathyroid glands. Hyperparathyroidism. Hypoparathyroidism. Etiopathogenesis, clinic, diagnosis, treatment. /Pr/	5	4	PP-7	L1.3 L1.5 L1.10			
2.6	Hypocorticism syndrome, etiopathogenesis, clinic, diagnosis and treatment /Lek/	5	2	PP-7	R1.10			
2.7	Hypercortisolism syndrome. Etiopathogenesis, clinic, Diagnosis, Differential Diagnosis, Principles treatment. /Lek/	5	2	PP-7	L1.5			
2.8	Chronic insufficiency of the adrenal cortex. Classification. Adisson's disease, etiology, pathogenesis, clinic, diagnosis, treatment. Secondary adrenal insufficiency . Acute Insufficiency of the adrenal cortex. Diagnosis, treatment. hypercortisolism. Etiopathogenesis, clinic, diagnosis, differential diagnosis, principles of treatment /PR/	5	4	PP-8 PP-9 PP-7	R1.10			

2.9	Diseases of the hypothalamic-pituitary region. Growth disorders in children and adults. Somatotropic	5	3	PP-8				
2.10	Diseases of the hypothalamus of the pituitary region. Etiopathogenesis, Clinic, Diagnosis, Treatment /Lek/	5	2	PP-8 PP-7	L1.5			
2.11	Acromegaly. Diabetes insipidus . Hypopituitarism. Clinic, diagnosis, differential diagnosis, treatment. Boundary Control No2 /Pr/	5	4	PP-7	L1.5 L1.10			

5. FUND OF ASSESSMENT TOOLS

5.1. Control questions and tasks

1. Epidemiology and classification of DM
2. Risk factors of type 2 diabetes, diagnosis of carbohydrate metabolism disorders in the risk group.
3. Type 1 diabetes, etiology and pathogenesis.
4. Clinic, diagnosis of type 1 diabetes mellitus
5. Type 2 diabetes, etiology and pathogenesis.
6. Clinic, diagnosis of type 2 diabetes mellitus
7. Principles of treatment of type 2 diabetes mellitus: hypoglycemic oral drugs.
8. Indications for insulin therapy in type 2 diabetes mellitus
9. Etiology, pathogenesis, classification of macrovascular complications of diabetes mellitus.
10. Features of CHD in patients with diabetes mellitus.
11. Etiology, pathogenesis, classification of microvascular complications of diabetes mellitus.
12. Classification of diabetic retinopathy. Principles of diagnosis and treatment.
13. Classification of diabetic nephropathy. Principles of diagnosis and treatment.
14. Classification of diabetic neuropathy. Principles of diagnosis and treatment
15. Etiology and pathogenesis of diabetic ketoacidosis and coma.
16. Clinical variants of the course of diabetic ketoacidosis and coma.
17. Diagnosis, treatment of diabetic ketoacidosis and coma.
18. Hyperosmolar hyperglycemic states, diagnosis, principles of treatment.
19. Hypoglycemia, hypoglycemic coma, etiopathogenesis, clinic, diagnosis, emergency care.
20. Lactic acidosis, dagnostics, principles of treatment
21. Differential diagnosis of comatose states in diabetes mellitus.
20. Diffuse toxic goiter (Graves' disease), etiology, pathogenesis
22. Diffuse toxic goiter. Clinic, diagnosis, principles of treatment..
23. Hypothyroidism. Classification, etiology, pathogenesis, clinic, diagnosis, treatment.
24. Features of the clinic and diagnosis of secondary hypothyroidism.
25. Thyroiditis, classification, diagnosis, principles of treatment.
26. Hypoparathyroidism, diagnosis, principles of treatment.
27. Hyperparathyroidism, diagnosis, principles of treatment.
28. Iodine deficiency diseases. Classification. The role of iodine in the human body.
29. Prevention of IDD: mass, group, individual. Risk groups for IDD
30. Endemic and sporadic goiter, diagnosis and treatment
31. Chronic adrenal insufficiency. Etiology, pathogenesis, clinic, principles of diagnosis and treatment.
32. Differential diagnosis of primary and secondary CNN.
33. Acute adrenal insufficiency, Addisonian crisis, principles of diagnosis and treatment.
34. Itsenko-Cushing's disease, etiopathogenesis, clinic, principles of diagnosis and treatment
35. Differential diagnosis of disease and Itsenko-Cushing syndrome.
36. Acromegaly. Etiopathogenesis, clinic, principles of diagnosis and treatment
37. Diabetes insipidus. Etiopathogenesis, clinic, principles of diagnosis and treatment
38. Hypopituitarism. Etiopathogenesis, clinic, principles of diagnosis and treatment
39. Somatotropic insufficiency. Etiopathogenesis of diseases of the anterior pituitary gland.
40. Etiopathogenesis of obesity, classification, obesity as a risk factor of other diseases.
42. Clinical manifestations of obesity.
43. Prevention and treatment of obesity.

5.2. Topics of term papers (projects)

The curriculum does not provide for writing a term paper on the discipline

5.3. Fund of Assessment Tools

1. THEORETICAL TASK The list of theoretical questions from paragraph 5.1. according to the subject of the section.
2. SITUATIONAL TASKS
3. TEST. List of test questions according to the subject of the section in APPENDIX 2
4. CURATION OF THE PATIENT.
3.1 Each student receives one patient with endocrine pathology for supervision.
3.2. The curator conducts an interview and examination of the patient according to the attached scheme, gets acquainted with the results of the available
laboratory tests and images, with the treatment of patients.
3.3. Curation scheme:
• Passport details
• Complaints. First of all, complaints related to the disease that caused the
hospitalizations,
then - other complaints. Medical history. The onset of the disease, course, treatment in the past, causes, causes
hospitalization.
• Life history (brief). Diseases suffered in the past.
• Objective examination data containing a summary of pathological data by system and organ
Clinical description of the patient's endocrine system. Survey data.
• Diagnosis, conclusion on supervision.
5. MEDICAL HISTORY OF A PATIENT WITH DIABETES MELLITUS
During the training in the first section, the student is given a patient with diabetes mellitus to supervise, he works out his skills
by objective examination of the patient, learns to observe patients, develops clinical thinking and fills in the
medical history according to the given scheme (APPENDIX 3).
6. REPORT WITH PRESENTATION. The student independently chooses the topic of the report in accordance with the topic of the section
1. Self-control and training in type 1 and type 2 diabetes mellitus.
2. Insulin therapy and calculation of nutrition by bread units.
3. Diabetic foot syndrome
4. Thyroiditis.
1. Somatotropic insufficiency.
2. Hyperparathyroidism as part of endocrine syndromes.
3. Prevention of obesity. Healthy Lifestyle

5.4. List of types of assessment tools

1. Theoretical task
2. Patient Curation
3. Situational task
4. Report with presentation
5. Medical history

6. EDUCATIONAL, METHODOLOGICAL AND INFORMATION SUPPORT OF THE DISCIPLINE (MODULE)

6.1. Recommended Literature

6.1.1. References

	Authors, compilers	Title	Publisher, year
L1.1	Melmed S., Auchus	Williams Textbook of Endocrinology. : Endocrinology	Elsevier 2020
L1.2	Jameson J.L., De Groot	Endocrinology: Adult and Pediatric. : Эндокринология	Elsevier 2020
L1.3	Kronenberg H.M.,	Williams Textbook of Endocrinology. : Endocrinology	Elsevier 2019
L1.4	Gardner D.G., Shoback	Greenspan's Basic & Clinical Endocrinology: A Textbook for	McGraw-Hill 2020
L1.5	Feingold K.R., Anawalt	Endotext [Internet]. : Endocrinology	MDText.com, Inc. 2020
L1.6	Rossi E.A., Ferlin A.	Pharmacotherapy in Endocrinology : Эндокринология	Springer 2020
L1.7	American Diabetes	Standards of Medical Care in Diabetes — 2020 /Clinical Guidelines	Diabetes Care 2020
L1.8	American Diabetes	Diabetes Complications and Management /Clinical Protocol	Diabetes Care 2020
L1.9	International Diabetes	IDF Diabetes Atlas (9th Edition) /Clinical Protocol	IDF 2020
R1.10	Jameson J.L., Fauci	Harrison's Principles of Internal Medicine (20th ed.): краткое	McGraw-Hill 2020
L1.11	Kaplan S.L., Conte F.A.	Pediatric Endocrine Society Clinical Guidelines	PES 2020
L1.12	Brent G.A., Weetman	Thyroid Disorders : [руководство]	Elsevier 2020
R1.13	Goodman L.S., Brunton	Goodman & Gilman's: The Pharmacological Basis of Therapeutics	McGraw-Hill 2020

6.1.2. Further reading

	Authors, compilers	Title	Publisher, year
L2.1	American Diabetes Association	Standards of Medical Care in Diabetes — 2020: Algorithm of specialized medical care	Diabetes Care 2020

L2.2	Melmed S., Polonsky K.S., Larsen P.R., Kronenberg H.M.	Williams Textbook of Endocrinology: Учебник	Elsevier 2020
L2.3	Brook C.G.D., Clayton	Brook's Clinical Pediatric Endocrinology : Эндокринология	Wiley-Blackwell 2020
L2.4	Wallace I.R., Satti A.M.	Acute Endocrinology: Tutorial	Oxford 2020
L2.5	Lindsay J.R., Jonklaas J.	Surgical Methods in Endocrinology : Эндокринология	Springer 2020
L2.6	Braunwald E., Fauci A.S., Kasper D.L. et al.	Harrison's Principles of Internal Medicine : Эндокринология	McGraw-Hill 2020
L2.7	Zimmerman M.B., Boelaert K.	Iodine Deficiency and Thyroid Disorders in Endemic Areas	Thyroid 2020
L2.8	Katzung B.G., Vanderah T.W.	Basic & Clinical Pharmacology	McGraw-Hill 2020
L2.1	American Diabetes Association	Standards of Medical Care in Diabetes — 2020: Algorithm of specialized medical care	Diabetes Care 2020

6.3. List of Information and Educational Technologies

6.3.1 Competency-Oriented Educational Technologies

6.3.1.1	Competency-Oriented Educational Technologies
6.3.1.2	Traditional educational technologies are lectures, practical classes focused primarily on communicating knowledge and methods of action that are passed on to students in a ready-made form and are intended for reproducing the assimilation and analysis of specific samples. Lecture material is provided to students using multimedia equipment and periodic presentation of thematic
6.3.1.3	patients.
6.3.1.4	Practical classes are most often held directly on the basis of the endocrinology department of clinics with mandatory visits to patients, independent supervision of patients, with visits to "Diabetes Schools", where patients are taught to control their disease. Innovative educational technologies are classes that form systemic thinking and the ability to generate ideas when solving various creative tasks. These include practical classes, during which a case is used - methodology, problem-activity learning, role-playing games, brainstorming techniques.
6.3.1.5	Information educational technologies are the independent use of computer equipment and Internet resources by a student to perform practical tasks and independent work, as well as to familiarize themselves with Internet sources, photo and video materials in the relevant section. Preparation of lectures and presentations by the teacher.

6.3.2 List of information reference systems and software

6.3.2.1	List of resources of the information and telecommunication network "Internet"
6.3.2.2	List of Information and Educational Technologies

6.3.2.3	Competency-Oriented Educational Technologies
6.3.2.4	Traditional educational technologies are lectures, practical classes focused primarily on the communication of knowledge and methods of action that are passed on to students in a ready-made form and are intended for the reproducing assimilation and analysis of specific samples. Lecture material is provided to students using multimedia equipment and periodic presentation of thematic patients.
6.3.2.5	Practical classes are most often held directly on the basis of the endocrinology department of the clinic with mandatory visits to patients, independent supervision of patients, with visits to "Diabetes Schools", where patients are taught to control their disease.
6.3.2.6	Innovative educational technologies are classes that form systematic thinking and the ability to generate ideas when solving various creative problems. These include practical classes that use a case methodology, problem-based learning, role-playing games, and brainstorming techniques.
6.3.2.7	Information educational technologies are the independent use of computer equipment and Internet resources by a student to perform practical tasks and independent work, as well as to familiarize themselves with Internet sources, photo and video materials in the relevant section.
6.3.2.8	Preparation of lectures and presentations by the teacher.
6.3.2.9	List of information reference systems and software
6.3.2.10	Electronic library system "ZNANIUM.COM"
6.3.2.11	Information system "Single Window of Access to Educational Resources" (http://window.edu.ru/) www.med-edu.ru/articles
6.3.2.12	State Central Scientific Medical Library / [Electronic resource]. – Mode of access: http://www.scsml.rssi.ru. http://medvuz.info/
6.3.2.13	Electronic Library System "Student's Consultant" / [Electronic resource]. – Mode of access:
6.3.2.14	http://www.studmedlib.ru.
6.3.2.15	Electronic catalogue OPAC-Global / [Electronic resource]. Available at: http://library.stgma.ru.
6.3.2.16	Electronic library of the KRSU www.lib.krsu.kg
6.3.2.17	Electronic Library of the Ministry of Health of the Republic of Kazakhstan

7. MATERIAL AND TECHNICAL SUPPORT OF THE DISCIPLINE (MODULE)

7.1	The discipline is taught on the basis of the City Clinical Hospital No1, where the Department of Therapy No1, a specialized department of endocrinology, the "School of Diabetes", a lecture hall, 8 classrooms, with a total area of 200 sq.m are located. (block of desks, couches, blackboards). The department is equipped with a multimedia complex (laptop, personal computer, projector). Students have access to information stands, posters, electronic library.
7.2	Practical training in the study of the program in pediatric endocrinology is carried out on the basis of the pediatric endocrinology department of the National Center for Maternal and Child Health (NCOMiD), where there is a classroom, a children's "School of Diabetes".
7.3	Presentations of lectures on all sections of the discipline (PowerPoint)
7.4	Computer classes (Leo Tolstoy's building, room 4/12, 4/15) with access to the Internet for independent work, familiarization with Internet sources, video materials.

8. METHODICAL INSTRUCTIONS FOR STUDENTS ON MASTERING THE DISCIPLINE (MODULE)

MODULAR CONTROL IN THE DISCIPLINE INCLUDES:
1. Current control: assimilation of educational material in classroom classes (lectures, practical, including attendance and activity), supervision of the patient, solving situational tasks and performing mandatory tasks for independent work
2. Midterm control: checking the completeness of knowledge and skills on the material of the module as a whole. The implementation of modular control tasks is carried out in writing, in the form of tests
3. Intermediate control is a completed documented part of the academic discipline, carried out in the form of summing up the medical history, solving situational problems.
BASIC REQUIREMENTS FOR INTERMEDIATE CONTROL
1. When appearing for tests, students are required to have record books with them, which they present to the examiner at the beginning of the exam or to the teacher at the test.
2. The teacher is given the right to give a credit without a survey, to those students who scored more than 60 points for

current and midterm controls.
3. At the intermediate control, the student must correctly answer the theoretical questions of the ticket - (to know) and correctly complete the situational task (to be able, to possess).
4. During the intermediate control, the teacher sums up the results of the patient's supervision by students during the semester. Assessment of the intermediate control: - min 20 points - Questions to check the level of learning to know (if the student correctly formulates the basic concepts when answering the questions asked) - 20-25 points
Tasks to check the level of learning BE ABLE and POSSESS (if the student correctly formulates the essence of the problem set in the ticket and gives recommendations for its solution) - 25-30 points - Tasks to check the level of learning to BE ABLE and POSSESS (in case of complete completion of the control task).
I. BASIC REQUIREMENTS FOR CURRENT CONTROL.
• When building a practical lesson, teachers adhere to the following general orientation plan: 1) Organizational stage of the lesson (time – up to 2%): a) roll call; b) homework on the following topic; c) motivation of the topic of this practical lesson; d) familiarization of students with the goals and plan of the lesson;
• Control and correction of the initial level of knowledge (time – up to 20%): a) variants of test control; b) correction of students' theoretical knowledge by the teacher;
• Stage of demonstration of practical skills and/or thematic patients by the teacher (time – up to 15%);
• Stage of independent work of students at the bedside (time – up to 45%) or solving situational problems (in the absence of a thematic patient);
• Final stage of the lesson (time – up to 18%): a) final final control of the formed practical skills and abilities in the analysis of patients examined by students b) final final control of the formed theoretical knowledge and skills, including by solving situational clinical problems; c) summing up the results of the practical lesson (the teacher's characterization of the students' fulfillment of all the goals of the lesson, and individual assessment of knowledge and skills).
II. RECOMMENDATIONS FOR THE ORGANIZATION OF INDEPENDENT WORK OF THE STUDENT
1. Tips for planning and organizing the time necessary for studying the discipline. It is recommended to organize the time necessary for studying the discipline as follows: Study the lecture notes on the same day, after the lecture – 10-15 minutes. Study the lecture notes the day before the next lecture – 10-15 minutes. Study of theoretical material using the textbook and notes – 1 hour per week. Preparation for the practical lesson – 2 hours. week – 3 hours 30 minutes.
2. Description of the sequence of actions of the student for understanding the material and its qualitative assimilation is recommended the following sequence of actions: After listening to the lecture and finishing classes, when preparing for the next day's classes, you should first review and think about the text of the lecture listened to today (10-15 minutes). When preparing for the next day's lecture, you need to review the text of the previous lecture, think about what it can be topic of the next lecture (10-15 minutes). During the week, choose a time (1 hour) to work with the recommended literature in the library. When preparing for the next day's practical classes, you should first read the basic concepts and approaches to the topic of homework. When performing an exercise or task, you must first understand what is required in the problem, what theoretical material should be used, and outline a plan for solving the problem.
3. Recommendations for the use of materials of the educational and methodological complex. It is recommended to use the methodological instructions for the course and the text of the teacher's lectures.
4. Recommendations for working with literature. The theoretical material of the course becomes more understandable when, in addition to listening to the lecture and studying the notes, books are also studied. It is easier to master the course, adhering to one textbook and notes . It is recommended, in addition to "memorizing" the material, to achieve a state of understanding of the topic of the discipline being studied.
For this purpose, it is recommended to perform a few simple exercises for this topic. In addition, it is very useful to mentally ask yourself the following questions (and try to answer them): what is this paragraph about ?, what new concepts have been introduced, what is their meaning?, what will it give in practice?.
5. Tips for preparing for midterm and intermediate controls. In addition to studying the lecture notes , it is necessary to use a textbook. In addition to "memorizing" the material, it is very important to achieve a state of understanding of the topics studied in the discipline. For this purpose,

it is recommended to perform several exercises on this topic after studying the next paragraphon them): what is this paragraph about?, what new concepts have been introduced, what is their meaning?, what will it give in practice?. With
In preparation for intermediate control, it is necessary to study the theory: definitions of all concepts and approaches to assessment to the state of understanding the material and independently solve several typical problems from each topic. When solving problems, it is always necessary to be able to interpret the result of the solution qualitatively.
6. Instructions for organizing homework. When doing homework, you must first read the basic concepts and approaches to the topic of the task. When doing an exercise or task, you must first understand what is required in the task, what theoretical material should be used, outline a plan for solving the problem, and then proceed to calculations and make a high-quality conclusion.
7. In preparation for intermediate and midterm controls, you need to study the theory: definitions of all concepts and approaches to assessment to the state of understanding the material and independently complete several typical tasks.
8. Working out missed classes. Control over the assimilation of the material of the discipline curriculum by students is carried out systematically
A student who has received an unsatisfactory grade in the current material is obliged to prepare this section and answer it to the teacher at an individual interview. A lecture missed without valid reasons must be worked out by the method of oral questioning by the lecturer or the preparation of an essay on the materials of the missed lecture within a month from the date of absence methods of working out missed lectures (questioning at practical lectures, test control, etc.). Practicing practical classes.-Each lesson missed by a student without a valid reason is practiced mandatory.
Work is carried out according to the schedule of the department, agreed with the dean's office. Missed classes must be

Missed seminars are completed within 10 days from the date of absence. Missed seminars by a student without a valid reason are completed no more than one lesson per day.
for a valid reason (illness, absences with the permission of the dean's office) are worked out according to the thematic material without taking into account the hours.- A student who has not worked out the absence within the established time frame is allowed to attend the next classes only with
the permission of the dean or his deputy in writing. It is not allowed to remove
students who are poorly prepared for these classes from the next seminar.- for students who have missed seminars
classes due to a long-term illness, the work should be carried out after the permission of the dean's office according to an individual schedule
agreed with the department.- In exceptional cases (participation in interuniversity conferences, competitions,
Olympiads, duty, etc.), the dean and his deputy, in agreement with the department, can exempt students from working out some missed classes.
RECOMMENDATIONS FOR PREPARING A PRESENTATION
Multimedia presentations are a type of independent work of students to create visual aids
made with the help of a multimedia computer program PowerPoint. This type of work requires
coordination of the student's skills in collecting, systematizing, processing information, designing it in the form of a selection of materials that briefly reflect the main issues of the topic under study, in electronic form
Presentation
materials are prepared by the student in the form of slides using
Microsoft PowerPoint. Requirements for students to prepare a presentation and defend it in the classroom in the form of a report.
1. The topic of the presentation is chosen by the student from the proposed list of FOS and must be agreed with the teacher and correspond to the topic of the lesson.
2. Stages of preparing a presentation Drawing up a presentation plan (setting a task; goals of this work) Thinking through each slide (at first, this can be done manually on paper), while it is important to answer the questions: - how
does the idea of this slide reveal the main idea of the entire presentation? - what will be on the slide? - what will be said? - how will
the transition to the next slide be made?
3. Making a presentation using MS PowerPoint:
-It makes sense to be careful. Sloppily made slides (inconsistencies in fonts and indents, typographical
errors in formulas) raise suspicion that the student-speaker approached the substantive questions
half-heartedly.- The title page is necessary to introduce you and the topic of your report to the audience.-
The number of slides is no more than 30.- The optimal number of lines on a slide is from 6 to 11.
- A common mistake is to read the slide verbatim. It is best if detailed information
(definitions, formulas) is written on the slide, and the words tell their meaningful meaning. The information on the slide can be more formal and strictly stated than in speech.- The optimal switching speed is one slide in 1-2 minutes.-
It is recommended to use more drawings, pictures, formulas, graphs, tables in the presentation.
animation effects.- When explaining tables, it is necessary to say what the rows correspond to and what the columns correspond to.-
Introduce only those notations and concepts without which it is impossible to understand the main ideas of the report.- In a short speech, you cannot repeat the same idea, even in other words - time is precious.- Any phrase must
be said for some reason. Then the speech will be integral and leave a good impression.- The last slide with conclusions in
To
do this, it is convenient to make a blank
slide with one large Word object "Insert / Object / Microsoft Word Document", select its
size once and multiply it on the required number of
slidesor the like; the Times font looks bad from afar. Be sure to set the MathType to the basic font size equal to the basic font size in the text. Never manually adjust the size of the formula by pulling it out by the corner.
4. A student is obliged to prepare and make a report at a strictly allotted time by the teacher, and on time.
5. Instructions to the speakers.- to communicate new information;- to use technical means; - to know and
be well versed in the topic of the entire presentation;- to be able to discuss and quickly answer questions;- to strictly follow the established time limit: speaker - 10 min.; discussion - 5 min.; It should be remembered that the speech consists of three parts: introduction, main part and conclusion
The introduction should contain:- the title of the presentation;- the message of the main idea;-
a modern assessment of the subject of presentation;- a brief list of the issues under consideration;- a lively interesting form
of presentation; The main part, in which the speaker must deeply reveal the essence of the topic raised, is usually built on the principle of a report.
topic and wanted to get acquainted with the materials. At the same time, the logical structure of the theoretical block should not be given without visual aids, audio-visual and visual materials. The conclusion is a clear and concise generalization and brief conclusions that listeners are always waiting for.
RECOMMENDATIONS FOR WRITING AN ESSAY
It is important that the abstract: firstly, covers
both scientific and social aspects of the problem; and secondly, presents both general theoretical provisions and specific examples. The abstract should be based on the study of several sources additional to the main literature
. As a rule, these are special monographs or articles.
popular science magazines: "Children's Surgery", "Bulletin of the KRSU", "Health Care
The plan of the abstract
should be the author's. It shows the author's approach, his opinion, analysis of the problem. All facts and borrowed considerations given in the abstract
should be accompanied by references to the source of information. It is unacceptable to simply
compose an abstract from pieces of borrowed text.
source and page brackets. The absence of quotation marks and references means plagiarism and, in accordance with the established scientific

surname and initials of the student, number of the academic group, year and geographical location of the university. This is followed by a table of contents indicating the pages of the sections. The text of the abstract itself should be divided into sections: chapters, subchapters and title them. The use of quantitative data and illustrations (graphs, tables, diagrams, drawings) in the abstract is encouraged . The abstract ends with the sections "Conclusion" and "List of references".
conclusion, the main conclusions are clearly formulated in the form of a thesis and, usually, numbered.
The list of references should be compiled in full compliance with the current standard (rules), including a special arrangement of punctuation marks. To do this, it is enough to use as an example any book published by large scientific publishing houses: "GEOTAR-Media", "Progress", "Mir", "Publishing House of Moscow State University", etc.

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