MINISTRY OF HEALTH PROTECTION OF UKRAINE ODESSA NATIONAL MEDICAL UNIVERSITY

Faculty of medicine

Department of propaedeutics of internal diseases and therapy

CARE FOR PATIENTS"		
Scope of the academic discipline	Total number of hours per discipline:30 hours,1.0 credits. Semester: VI. 3 year of study.	
Days, time, place of educational discipline	According to the schedule of classes. Department of propaedeutics of internal diseases and therapy. Odesa, st. Pastera 9, Multidisciplinary Medical Center No. 1 of Odesa National Medical University, 1st, 2nd floors.	
Teacher(s)	Docents:e. honey n. Denis Sebov Assistants: Dr. Phil. Yehor Maznichenko, doctor of medicine. N. Natalia Antipova, Doctor of Medicine. N. Alla Serebryakova, Denis Zakrytov.	
Contact Information	 Help by phone: Olga Evgenivna Kravchuk, Head of Department 063-365-98-41 Valentyna Mykolaivna Stoyanova, laboratory technician of the department 098-437-12-54; Oleynyk Stepan Mykytovych, laboratory technician of the department 067-698-78-50 E-mail:kafedrapvb@gmail.com Face-to-face consultations: from 2:00 p.m. to 5:00 p.m. every Thursday, from 9:00 a.m. to 2:00 p.m. every Saturday Online consultations: from 4:00 p.m. to 6:00 p.m. every Thursday, from 9:00 a.m. to 2:00 p.m. every Saturday. A link to an online consultation is provided to each group during classes separately. 	

Syllabus of the academic discipline

COMMUNICATION

Communication with applicants will be conducted in the classroom (face-to-face).

During distance learning, communication is carried out through the Microsoft Teams platform, as well as through e-mail correspondence, Viber, Telegram messengers (through groups created in Viber, Telegram for each group, separately through the head of the group).

ABSTRACT OF THE EDUCATIONAL DISCIPLINE

Subject study of the discipline – studying the educational module of the discipline "Endocrinology" isstudying the principles of diagnosis and treatment of diseases of the endocrine system.

Prerequisites and post-requisites of the discipline (place of the discipline in the educational program):

Re-requisites: are based on student learningmedical biology, medical and biological physics

(instrumental research methods), human anatomy, physiology, bioorganic and biological chemistry, microbiology, virology and immunology, propaedeutics of internal medicine, surgery.

Pessentials:medical biology and biological physics, human anatomy and pathology, human physiology and pathology, pharmacology, microbiology, virology and immunology, internal medicine, general practice and family medicine.

*Purpose of the discipline:*mastering by the student of higher education knowledge and formation of elements of professional competences of examination of the patient and assessment of the main manifestations of diseases of internal organs and improvement of skills and competences acquired during the study of previous disciplines, in order to achieve the main final goals defined in the Standard of training of a specialist in the specialty 221 "Dentistry".

Tasks of the discipline:

- 1. conduct surveys and clinical examinations of patients with major diseases of the endocrine system and analyze their results;
- 2. determine the etiological and pathogenetic factors of the most common diseases of the endocrine system;
- 3. analyze a typical clinical picture, identify clinical variants and complications of the most common diseases of the endocrine system;
- 4. establish previous diagnosis most common diseases of the endocrine system;
- 5. prescribe laboratory and instrumental examination of patients with the most common diseases of the endocrine system;
- 6. on the basis of the evaluation of the results of laboratory and instrumental examination, carry out a differential diagnosis, justify and establish a clinical diagnosis of the most common diseases of the endocrine system;
- 7. determine the necessary mode of work and rest in the treatment of the most common diseases of the endocrine system;
- 8. determine the necessary medical nutrition in the treatment of the most common diseases of the endocrine system;
- 9. determine the principles and nature of treatment in the treatment of the most common diseases of the endocrine system;
- 10. prescribe treatment, including prognosis-modifying treatment, of the most common diseases of the endocrine system and their complications;
- 11. determine the tactics of providing emergency medical care based on the diagnosis of an emergency;
- 12. carry out primary and secondary prevention of the most common diseases of the endocrine system;
- 13. evaluate the prognosis and working capacity of patients with the most common diseases of the endocrine system;
- 14. perform medical manipulations;
- 15. keep medical records;
- 16. to comply with the requirements of ethics, bioethics and deontology in their professional activities.

Expected results:

As a result of studying the academic discipline, the applicant must:

Know:

- The most important etiological and pathogenetic factors in the formation of pathological processes in the human body in diseases of the organs of the endocrine system.
- Methodological bases of clinical examination of the patient, patient research scheme and writing of medical history for diseases of the endocrine system.

- Methodological bases of survey and physical examination of the patient examination, palpation, percussion, auscultation in diseases of the endocrine system.
- The most important symptoms and syndromes in the clinic of endocrine diseases and their semiological interpretation in diseases of the endocrine system.
- The most important changes in the oral cavity in the most common diseases of the endocrine system.
- Clinical-diagnostic interpretations of indicators of the most important laboratory-instrumental studies in diseases of the endocrine system.
- Basic principles and methods of prevention in diseases of the endocrine system.
- Basic principles and methods of treatment for diseases of the endocrine system.

Be able:

- Conduct surveys and physical examinations of patients and analyze their results in diseases of the endocrine system.
- To draw up a patient examination plan for the typical course of the most common diseases of the endocrine system.
- To analyze the results of basic laboratory and instrumental research methods for diseases of the endocrine system.
- Identify leading symptoms and syndromes in diseases of the endocrine system.
- Determine the most important changes in the oral cavity in the most common diseases of the endocrine system.
- Demonstrate the ability to methodically correctly present the results of the patient's examination in the form of a medical history with the justification of the diagnosis in diseases of the endocrine system.
- Determine the plan of preventive measures for diseases of the endocrine system.
- Determine the plan of treatment measures for diseases of the endocrine system.
- Demonstrate the ability to assess the effectiveness of preventive and therapeutic measures for diseases of the endocrine system.

DESCRIPTION OF THE EDUCATIONAL DISCIPLINE

Form and methods of education

The discipline will be taught in the form of practical sclasses (14 classroom hours); organization of independent work of the acquirer (12 hours), lectures (4years).

Teaching methods: conversation, solving clinical situational problems, patient examination, manipulations according to list 5, instruction and practicing skills on simulation dummies.

Content of the academic discipline

Content module #1 Diabetes

Topic 1. Diabetes. Modern classification. Etiology, pathogenesis, clinic. National program "Diabetes".

Definition and modern classification of diabetes. Epidemiology of diabetes in Ukraine and the world, disease forecast, prevalence of diabetes. The main risk factors and mechanisms of the development of type 1 diabetes. Type 1 diabetes mellitus: etiology, pathogenesis. Diabetes clinic. The main clinical symptoms of diabetes. Characteristics of internal organ damage in diabetes. Typical changes in the oral cavity. Diagnosis of diabetes. Indications and rules for the glucose

tolerance test. Diagnostic value of determination of glycated hemoglobin, C-peptide, glucosuria, ketonuria.

Topic 2. Type 2 diabetes. Clinic, diagnosis, principles of treatment.

Chronic complications of diabetes. Emergency conditions of diabetes.

The main risk factors and mechanisms of the development of type 2 diabetes. Etiology and pathogenesis of diabetes. Diabetes mellitus type 2: the role of genetic predisposition, obesity, external factors. Complaints, features of patient examination and physical examination data in type 2 diabetes. Changes in the dental and jaw system and manifestations on the mucous membranes. Principles and main methods of prevention of type 2 diabetes.

General principles of diabetes therapy. Criteria for compensation of carbohydrate metabolism in patients with type 2 diabetes. Insulin therapy. Modes of insulin therapy: traditional, intensified and pump. Protocols for providing assistance to patients with type 1 diabetes.

Algorithm for the treatment of type 2 diabetes. The main methods of treatment of type 2 diabetes mellitus: rational nutrition, dosed physical activity, drug therapy, teaching the patient self-control. Diet therapy of diabetes. Drug therapy: insulin sensitizers (metformin, thiazolidinediones), insulin secretagogues (sulfonylureas, glinides), incretin drugs (glucagon-like peptide 1 (GLP-1) analogues), dipeptidyl peptidase (DPP-4) inhibitors, α -glucosidase inhibitors, gliflozin (blockers glucose reabsorption in the kidneys), insulin therapy Protocols for providing medical care to patients with type 2 diabetes.

Chronic complications of diabetes: etiopathogenesis, classification, clinic, prevention and treatment.

The most frequent comatose states in diabetes (hyperketonemic, hypoglycemic coma), mechanism of development, clinical manifestations, emergency care (correction of glycemia, metabolic disorders, hypohydration of tissues), tactics of "small doses" of insulin.

Content module #2 Diseases of the thyroid gland and parathyroid glands

Topic 3. Diseases of the thyroid gland. Hypothyroidism. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention.

The main etiological factors of thyroid gland damage. Hypothyroid syndrome. Classification of hypothyroidism. The main clinical manifestations of hypothyroidism, the concept of hypothyroid coma. Definition of the concept of "iodine deficiency states". Manifestations of iodine deficiency. Determination of the size of the thyroid gland. The concept of simple non-toxic and nodular forms of goiter. The impact of exogenous environmental factors and man-made disasters on the state of the thyroid gland and the prevalence of its pathology. The importance of using iodized salt in the prevention of iodine deficiency diseases.

Topic 4. Diseases of the thyroid gland. Hyperthyroidism. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention.

The main etiological factors of thyroid gland damage. Hyperthyroid syndrome in diseases of the thyroid gland. Diffuse toxic goiter. The main complaints of the patient, the results of physical, instrumental and laboratory examination. Concept of thyrotoxic crisis. Mechanism of development, clinical manifestations, emergency care (thyrostatics, beta-blockers, infusion therapy, prevention of cardiovascular complications).

Topic 5. Diseases of parathyroid glands. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention.

The main etiological factors of damage to the parathyroid glands. Syndrome of hypoparathyroidism and hyperparathyroidism. Hypoparathyroidism, etiology, pathogenesis, clinic, diagnosis. Hypoparathyroidism against the background of autoimmune polyendocrinopathies. Subclinical. Treatment of hypoparathyroidism.

Hyperparathyroidism. Etiology. Pathogenesis. Classification. Clinic, clinical forms of hyperparathyroidism. Diagnostics. Differential diagnosis. Treatment. Indications for surgical treatment. Drug therapy.

Content module #3 Diseases of the adrenal glands and pituitary gland

Topic 6. Diseases of the adrenal glands. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention.

The main hormones of the cortex and medulla of the adrenal glands. The main etiological factors of damage to the adrenal glands. Classification of diseases of the adrenal glands. Definition of the concept, prevalence of acute and chronic adrenal insufficiency. Chronic adrenal insufficiency (Addison's disease). Etiology, pathogenesis, clinic, diagnosis, prevention and treatment. Acute adrenal insufficiency. Etiology, pathogenesis, clinic, diagnosis, prevention and treatment. Classification of tumors of the adrenal glands. Itsenko-Cushing syndrome. Clinic, diagnosis and differential diagnosis, treatment. Primary hyperaldosteronism (Kohn's syndrome). Clinic, diagnosis and differential diagnosis, treatment.

Topic 7. Diseases of the pituitary gland. Etiology, pathogenesis. Clinic, diagnosis and principles of treatment. Test.

The main etiological factors of damage to the hypothalamic-pituitary system. Classification of diseases of the pituitary gland. Clinic, diagnosis, treatment, prevention of pituitary diseases.

List of recommended literature:

Basic:

Basic literature:

1. Internal diseases: study guide / O. O. Yakymenko, V. V. Klochko, O. E. Kravchuk and others. ; under the editorship Prof. O. O. Yakymenko. — 2nd ed., corrected. and additional — Odesa: ONMedU, 2023. — 436 p.

2. Endocrinology in dental practice: training. manual [for students of higher education. institutions of the Ministry of Health of Ukraine] / edited by L. E. Bobireva, A. K. Nikolishina; L.E. Bobiryova, V.M. Bobiryov, L.P. Gordienko [and others] ; Ministry of Health of Ukraine, UMSA. – Poltava: Publisher S. V. Govorov, 2021. – 176 p.

3. Perederii V.G., Tkach S.M. Basics of internal medicine in 3 volumes. Manual. Vinnitsa. New book. 2018. - 784 p.

4. Davidson's Principles and Practice of Medicine 23rd Edition. Editors: Stuart Ralston, Ian Penman, Mark Strachan Richard Hobson. Elsevier. - 2018. – 1440 p.

5. Endocrinology: textbook /Ed. by prof. Peter M. Bodnar.- 4th ed. updated – Vinnitsa: Nova Knyha, 2017. – 328 pages.

Additional:

1. Endocrinology: a textbook for university students. honey. education closing IV level of accreditation / [P. M. Bodnar, G. P. Mikhalchyshyn, Yu. I. Komisarenko and others]; under the editorship P. M. Bodnar; National Acad. honey. of Sciences of Ukraine. - 4th ed., updated and supplemented. - Vinnytsia: New book, 2017. - 500 p. : fig. 2.

2. Standards of providing medical assistance to patients with pathological conditions of the thyroid and parathyroid glands under the influence of negative environmental factors (third edition, expanded) / Ed. O.V. Kaminsky - Kharkiv: "Juright", 2017. - 312 p.

3. Order of the Ministry of Health of Ukraine dated December 29, 2014 No. 1021 "Unified clinical protocol of primary, emergency, secondary (specialized) and tertiary (highly specialized) medical care "Type 1 diabetes in young people and adults."

4. Macleod's Clinical Examination / Ed. G.Douglas, F.Nicol, C.Robertson.- 13th ed.- Elsevier. 2013. - 471 p.

5. Bates' Guide to Physical Examination and History Taking /Ed. Lynn S. Bickley, Peter G. Szilagyi. – Wolters Kluwer, 2017. – 1066 p.

6. Harrison's Endocrinology. Ed. by J. Larry Jameson, Mc Graw – Hill., New York, Chicago, Toronto. e.a. 4th edition, 2016. - 608 p.

13. Electronic information resources

- 1. http://moz.gov.ua Ministry of Health of Ukraine
- 2. www.ama-assn.org American Medical Association /American Medical Association
- 3. www.who.int World Health Organization
- 4. <u>www.dec.gov.ua/mtd/home/ State Expert Center of the Ministry of Health of Ukraine</u>
- 5. <u>http://bma.org.uk</u> British Medical Association
- 6. <u>www.gmc-uk.org</u> General Medical Council (GMC)
- 7. <u>www.bundesaerztekammer.de</u> German Medical Association
- 8. <u>https://onmedu.edu.ua/</u> Odesa National Medical University
- 9. <u>https://onmedu.edu.ua/kafedra/propedevtiki-vnutrishnih-hvorob-ta-terapii/ Department of propaedeutics of internal diseases and therapy</u>Odessa National Medical University

EVALUATION

Current control:oral interview, evaluation of the performance of practical skills, level of theoretical knowledge, pass analysis of the obtained results of patient examination, assessment of communication skills during role play, solving situational clinical tasks, assessment of activity in class.

Final control: balance

Evaluation of the current educational activity in a practical session:

- 1. Evaluation of theoretical knowledge on the subject of the lesson:
 - methods: survey, solving a situational clinical problem
 - maximum score 5, minimum score 3, unsatisfactory score 2.
- 2. Evaluation of practical skills and manipulations on the subject of the lesson:
 - methods: assessment of the correctness of the performance of practical skills
 - maximum score 5, minimum score 3, unsatisfactory score 2.

- 3. Evaluation of work with a patient on the subject of the lesson:
 - methods: assessment of: a) communication skills of communicating with the patient and his parents, b) the correctness of prescribing and evaluating laboratory and instrumental studies, c) compliance with the differential diagnosis algorithm, d) substantiation of the clinical diagnosis, e) drawing up a treatment plan;
 - maximum score 5, minimum score 3, unsatisfactory score 2.

The grade for one practical session is the arithmetic average of all components and can only have a whole value (5, 4, 3, 2), which is rounded according to the statistical method.

Current evaluation criteria in practical training

Rating	Evaluation criteria
«5»	Graduates of higher education have a fluent command of the material, take an active part in discussing and solving a situational clinical problem, confidently demonstrate practical skills during the examination of a patient and the interpretation of clinical, laboratory and instrumental research data, express their opinion on the topic of the lesson, demonstrate clinical thinking.
«4»	Graduates of higher education have a good command of the material, participate in the discussion and solution of a situational clinical problem, demonstrate practical skills during the examination of a patient and the interpretation of clinical, laboratory and instrumental research data with some errors, express their opinion on the topic of the class, demonstrate clinical thinking.
«3»	Graduates of higher education do not have sufficient knowledge of the material, are unsure of participating in the discussion and solution of a situational clinical problem, demonstrate practical skills during the examination of a patient and the interpretation of clinical, laboratory and instrumental research data with significant errors.
«2»	Graduates of higher education do not possess the material, do not participate in the discussion and solution of the situational clinical problem, do not demonstrate practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data.

Credit is awarded to the applicant who has completed all the tasks of the work program of the academic discipline, actively participated in practical classes, completed and defended an individual assignment, and has an average current grade of at least 3.0 and has no academic debt.

Assessment is carried out: at the last lesson before the beginning of the examination session - with the tape system of learning, at the last lesson - with the cyclical system of learning. The credit score is the arithmetic mean of all components according to the traditional four-point scale and has a value that is rounded according to the statistics method with two decimal places after the decimal point.

INDEPENDENT WORK OF HIGHER EDUCATION ACQUIRES

Goal: ensuring the student's preparation for professional activity in conducting an anamnesis collection, physical examinationand diagnostics the patient with diseases of the endocrine system. *Task:*

- 1. Formation of skills and abilities: conducting a survey and physical examination of patients, analyzing their results in a patient with diseases of the endocrine system.
- 2. Mastering the ability to analyze the results of basic laboratory and instrumental research methods, to determine the leading symptoms and syndromes in a patient with diseases of the endocrine system.

Evaluation criteria of the student's independent work meet the general evaluation criteria, the deadlines for submitting tasks according to the thematic plan "Student's independent work" last class before the assessment class.

EDUCATIONAL DISCIPLINE POLICY

Deadlines and Rescheduling Policy:

- Absences of classes for non-respectable reasons will be worked out according to the schedule of the teacher on duty.
- Absences for valid reasons are worked out according to an individual schedule with the permission of the dean's office.
 - Academic Integrity Policy:

Applicants must observe academic integrity, namely:

- independent performance of all types of work, tasks, forms of control provided for by the work program of this educational discipline;
- references to sources of information in case of use of ideas, developments, statements, information;
- compliance with the legislation on copyright and related rights;
- provision of reliable information about the results of one's own educational (scientific) activity, used research methods and sources of information.

Unacceptable in educational activities for participants of the educational process are:

- the use of family or work connections to obtain a positive or higher grade when exercising any form of control of learning outcomes or advantages in academic work;
- use of prohibited auxiliary materials or technical means (cheat sheets, notes, micro-earphones, telephones, smartphones, tablets, etc.) during control measures;
- going through procedures for monitoring the results of training by fake persons.

For violation of academic integrity, students may be held to the following academic responsibility:

- a decrease in the results of assessment of the control work, assessment in class, credit, etc.;
- retaking the assessment (test, credit, etc.);
- assignment of additional control measures (additional individual tasks, control works, tests, etc.);
- conducting an additional inspection of other works authored by the violator.

Attendance and Tardiness Policy:

Uniform: a medical gown that completely covers the outer clothing, or medical pajamas, a cap, a mask, and a change of shoes.

Equipment: notebook, pen, phonendoscope.

State of health: applicants suffering from acute infectious diseases, including respiratory diseases, are not allowed to attend classes.

A student who is late for class can attend it, but if the teacher has put "nb" in the journal, he must complete it in the general order.

Use of mobile devices:

Mobile devices may be used by students with the permission of the instructor if they are needed for the assignment.

Behavior in the audience:

The behavior of applicants and teachers in the classrooms should be working and calm, strictly comply with the rules establishedRegulations on academic integrity and ethics of academic relations at Odessa National Medical University, in accordance withCode of Academic Ethics and Relations of the University Community of Odessa National Medical University, Regulation on

prevention and detection of academic plagiarism in research and educational work of higher education applicants, scientists and teachers of Odesa National Medical University.