

**Ministry of Health of Ukraine
Odessa National Medical University**

Department of Internal medicine № 1

**Syllabus course
«Actual issues of endocrinology»**

Scope of the academic discipline	Total number of hours per discipline: 90 hours (3 credits) Semester: VII - VIII 4th year of study.
Days, time, place of educational discipline	According to the schedule of classes. Department of Internal Medicine No. 1 Odesa, str. Zabolotnogo 26. Municipal non-commercial enterprise "Odesa Regional Clinical Hospital" of the Odesa Regional Council, 9th floor building, 7th floor.
Teacher(-s)	Head of the department: Karpenko Yuriy Ivanovych, DM, professor, Honored doctor of Ukraine, head of the Regional Cardiosurgical Center «Odesa Regional Clinical Hospital» Professor: Zolotaryova N.A., Izha, G. M Associate professors: Savelieva O. V., DM; Kryzhanovskiy Y. M., DM; Pavlovska K. M., DM; Potapchuk O. V., DM, Cherniavskiy V. H., Shukhtina I. N. DM. Assistants: Alavatska T. V., Kravtsova K. V., Maistrenko M.S., Riabinina A. H., Romanchenko, M. I., Uhan V.V., Bondarenko O.V., Zolotaryova K.O., Panin V.N., Yurdanova I.I.
Contact Number	Contact number: Savelieva Olha Valeriivna, head teacher of the department +380 95 279 28 52 Belozertseva-Baranova Yuliya Evgeniyvna, senior laboratory technician of the department +380668510435 E-mail vnutrimed1@onmedu.edu.ua Face-to-face consultations: every day from 14:40 to 16:00 Online consultations: every day from 14:40 to 16:00. A link to online counseling is provided to each group during classes separately.

COMMUNICATION

Communication with students will take place in the classroom (face-to-face).

During distance learning, communication develops through the Microsoft Teams platform, as well as through e-mail correspondence, Viber messengers (with groups created in Viber for each group, separately by the group leader).

Annotation of the academic discipline

The subject of the study of the discipline is the mastery by students of higher education of the methods and techniques of clinical examination of a patient with endocrine pathology, the peculiarities of professional communication between a doctor and a patient, subjective and objective manifestations of diseases (symptoms and syndromes) with the establishment of a diagnosis, treatment tactics of preventive

measures in an inpatient setting. at the stage of treatment of a patient with diseases of the endocrine system.

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

Prerequisites: ukrainian language (for professional fields), foreign language (for professional fields), Latin language and medical terminology, medical biology, medical and biological physics, biological and bioorganic chemistry, human anatomy, histology, cytology and embryology, physiology, microbiology, virology and immunology, life safety; basics of bioethics and biosafety, pathomorphology, pathophysiology, pharmacology, propaedeutics of therapy, medical psychology.

Postrequisites: internal medicine, surgery, obstetrics and gynecology, infectious diseases, epidemiology and principles of evidence-based medicine, oncology and radiation medicine, traumatology and orthopedics, physiology, anesthesiology and intensive care, emergency and emergency medical care, hygiene and ecology, palliative and hospital medicine, general practice (family medicine).

Goal of discipline: to prepare a candidate who is able to master professional competences and skills, to observe and manage a patient with endocrine pathology according to the specified lists of symptoms, syndromes and inappropriate conditions that require special tactics of managing places, laboratory and instrumental studies, medical manipulations for solving tasks and problems in the field of medicine, health care and further education.

Tasks of the discipline:

- formation of communication skills and clinical examination of patients with the main diseases of the endocrine system and analyze their results;
- formation of skills for determining etiological and pathogenetic factors of the most advanced diseases of the endocrine system;
- Formation of skills and abilities to establish a preliminary diagnosis of the most advanced diseases of the endocrine system.
- Formation of abilities and skills of drawing up a plan for laboratory and instrumental research of patients with the most common diseases of the endocrine system.
- Formation of abilities and skills of substantiation of clinical diagnosis, differential diagnosis of the most advanced diseases of the endocrine system.
- Formation of abilities and skills to determine the necessary medical nutrition in the case of the most advanced diseases of the endocrine system and to prescribe treatment, including prognostic-modifying.
- Mastering the ability to determine the tactics of emergency care, management, treatment and prevention of the most advanced diseases of the endocrine system.

Expected results:

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

Know: the basic principles of diagnosis and treatment of diseases of the endocrine system, which are based on the principles of evidence-based medicine.

Be able:

- Communicate with the patient and his relatives, in case of a bad clinical examination of a patient with diseases of the endocrine system, as well as collect data on the patient's complaints, medical history, and life history.
- To evaluate information about the diagnosis based on the results of laboratory and instrumental studies, as well as to determine the list of some clinical and laboratory and instrumental studies and to evaluate their results.
- Identify the leading clinical symptom or syndrome. Establish the most likely abolic syndrome of the disease. Assign laboratory and instrumental examination of the patient.
- Carry out differential diagnosis of the disease. Establish a preliminary and clinical diagnosis.
- To determine the nature and principles of treatment of patients on the basis of a preliminary clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.

- Diagnose emergency conditions.
- Determine tactics and provide emergency medical assistance.
- Perform medical manipulations. (according to list 5).
- Keep medical documentation.

DESCRIPTION OF THE EDUCATIONAL DISCIPLINE

Forms and methods of education

The discipline will be taught in the first part of seminar classes (30 classroom hours); organization of the applicant's independent work (60 hours).

Methods of education: conversation, role-playing, solving clinical situational problems, patient examination, manipulations according to list 5, instruction and practice of skills, training exercise on differential diagnosis of the most common diseases of the endocrine system.

Content of educational discipline

Topic 1: Diabetes mellitus: classification, etiology, pathogenesis, symptoms and signs, diagnosis. Type 1 diabetes: modern methods of treatment

Topic 2: Type 2 diabetes: modern methods of treatment. Emergency conditions of diabetes.

Hypoglycemic coma, hypoglycemic states. Ketoacidotic states and coma, hyperosmolar diabetic coma.

Topic 3: Chronic complications of diabetes. Features and treatment of diabetes mellitus in surgical patients and during pregnancy. Iodine deficiency diseases of the thyroid gland. Signs of an endemic area. Symptoms and signs, diagnosis, prevention and treatment. Thyroid cancer. Classification, symptoms, diagnosis, treatment. Diseases of the parathyroid glands.

Topic 4: Thyroiditis. Thyrotoxicosis syndrome: clinical forms. Diffuse-toxic goiter (DTG). Treatment complications. Hypothyroidism. Diseases of the adrenal glands. Chronic insufficiency of the cortex of the adrenal glands. Acute adrenal insufficiency.

Topic 7: Diseases of the adrenal glands. Chronic insufficiency of the adrenal cortex. Etiology, pathogenesis, symptoms, diagnosis, prevention and treatment. Hormone-producing adrenal tumors.

Topic 5: Hormone-producing tumors of the adrenal glands: primary hyperaldosteronism (Conn's syndrome). Pheochromocytoma. Androsteroma, corticosteroma, corticosteroma. Diseases of the hypothalamic-pituitary system: Itsenko-Cushing's diseases. Acromegaly. Hypopituitarism, diabetes insipidus Diseases of the gonads.

List of recommended literature:

Main

1. Essential Endocrinology and Diabetes (Essentials) 7th Edition, Wiley-lackwell; 7th edition (June 1, 2021), 336 pages
2. MCQs in Endocrinology and Diabetes SCE: Complete Explanation for Competitive Examination, independently published (August 1, 2021), Independently published (2021)
3. Diabetes and Endocrinology: Essentials of Clinical Practice, Momentum Press (2021), 337 pages

Additional:

1. Pediatric Endocrinology and Diabetes (Oxford Specialist Handbooks in Pediatrics) 2nd Edition, Oxford University Press; 2nd edition (May 10, 2020), 480 pages
3. Oxford Textbook of Endocrinology and Diabetes 3e 3rd Edition, Oxford University Press; 3rd edition (November 13, 2021), 2656 pages

Electronic information resources:

1. <http://moz.gov.ua> – Ministry of Health of Ukraine
2. www.ama-assn.org – American Medical Association
3. www.who.int – World Health Organization

4. www.dec.gov.ua/mtd/home/ - State Expert Center of the Ministry of Health of Ukraine

5. <http://bma.org.uk> – British Medical Association

ASSESSMENT

Forms and methods of current control: oral (survey), practical (working with a patient), assessment of communication skills and activity in class and during role play, assessment of interpretation of clinical, laboratory and instrumental research results.

Criteria of ongoing assessment at the practical class Assessment	The structure of assessment of the current educational activity of one seminar session
Perfectly «5»	The student freely uses the material, supports active participation in the role play, confidently demonstrates practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data, expresses his opinion on the subject of the lesson, demonstrates clinical thinking.
Good «4»	The student of good material, thanks to participation in the role-playing game, demonstrates practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data with some errors, expresses his opinion on the subject of the lesson, demonstrates clinical thinking.
Satisfactory «3»	The student does not have sufficient knowledge of the material, he is unsure of how to participate in the role play, he demonstrates practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data with significant errors.
Unsatisfactory «2»	The student does not possess the material, does not take part in the role-play, does not demonstrate practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data.

Forms and methods of final control: Credit Test is considered, if the student has completed all the tasks of the working program of the educational discipline. He/she took actively participated in the practical exercises, and completed an individual task. The student has an average current rating of at least 3.0 and has no academic debt.

Possibility and conditions of obtaining additional (bonus) points: not provided.

Independent work of students of higher education

Independent work of preparation for each seminar class.

Policy of educational discipline

Deadline and recompilation policy:

- Missing classes for unimportant reasons will be made up 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, form control provided by the work program of this educational discipline;

- references to sources of information in the case of using 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:

- using family or official ties to obtain a positive or higher grade during any form of control of learning outcomes or academic performance;
- use of prohibited auxiliary materials or technical means (cheat sheets, notes, micro-earphones, telephones, smartphones, tablets, etc.) during control measures;
- going through the procedure of control of training results by fake persons.

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

- decrease in the results of evaluation of control work, evaluations on employment, credits, etc.;
- retaking the assessment (test, final exam, etc.);
- appointment 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 form, a cap, a mask, and a change of shoes.

Equipment: notebook, pen, phonendoscope.

State of health: people with 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 "ab" 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 student and teachers in the classrooms should be working and calm, strictly comply with the rules established by the Regulations on academic integrity and ethics of academic relations at Odessa National Medical University, in accordance with the Code of Academic Ethics and University Community Relations of Odessa National Medical University, Regulations on Prevention and detection of academic plagiarism in the research and educational work of students of higher education, scientists and teachers of Odessa National Medical University.