

SYLLABUS

INTERNATIONAL EUROPEAN
UNIVERSITY



SCHOOL OF
MEDICINE

INTERNAL MEDICINE

2023



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Дисципліна				
		INTERNAL MEDICINE		
Викладач (-і)				
		Vitaliy Ivanovych Nechyporenko		
Профайл викладача (-ів)				
		https://medicine.ieu.edu.ua/kafedra-vnutrishnoyi-medytsyny-z-kursom-akusherstva-ta-hinikolohiyi		
Consultations				
Face-to-face consultations		Second Thursday of the month from 15:00 to 16:00		
Online consultations		Fourth Friday of the month from 15:00 to 16:00		
Контактний телефон				
E-mail				
		nechyporenkovitalii@ieu.edu.ua		
Discipline page				
		https://medicine.ieu.edu.ua/kafedra-vnutrishnoyi-medytsyny-z-kursom-akusherstva-ta-hinikolohiyi		
Form of final control		offset	differentiated offset	exam
		☐	☐	☒

1 Brief summary of the discipline

Internal medicine is a branch of medicine that deals with the etiology, pathogenesis and clinical manifestations of diseases of internal organs, their diagnosis, non-surgical treatment, prevention and rehabilitation.

2 Prerequisite for the course

The students study the basics of clinical examination of the patient, the main symptoms and syndromes in diseases of internal organs and their assessment, methodological bases of physical examination of the patient and semiological assessment of the results of the patient's examination, clinical and diagnostic interpretation of the most important laboratory and instrumental studies in the norm and in these diseases; basic principles of treatment, prognosis and prevention.

3 Purpose and objectives of the discipline

Objectives. Formation of the ability to apply the acquired knowledge, skills, abilities and understanding to solve typical problems of a doctor's activity in the field of health care, the scope of which is provided by certain lists of syndromes and symptoms of diseases, emergency conditions and diseases that require special tactics of patient management; laboratory and instrumental studies, medical manipulations.

4 Learning outcomes

PLR-1	Have a thorough knowledge of the structure of professional activity. Be able to carry out professional activities that require updating and integrating knowledge. To be responsible for professional development, the ability to further professional training with a high level of autonomy.
PLR-3	Specialised conceptual knowledge that includes scientific achievements in the field of healthcare and is the basis for research, critical thinking in the field of medicine and related interdisciplinary issues interdisciplinary issues.
PLR-4	To identify and identify the leading clinical symptoms and syndromes (according to list 1); using standard methods, using preliminary data from the patient's history, examination of the patient, knowledge of the person, his/her organs and systems, to establish a preliminary clinical diagnosis of the disease (according to list 2).
PLR-5	Collect complaints, anamnesis of life and diseases, assess psychomotor and physical development of the patient, condition of organs and body systems, based on the results of laboratory and instrumental studies to evaluate information on the diagnosis (according to list 4), taking into account the patient's age.
PLR-6	To establish the final clinical diagnosis by making an informed decision and analysing the obtained subjective and objective data of clinical, additional examination, conducting differential diagnosis, following the relevant ethical and legal standards, under the supervision of a supervising physician in a healthcare facility (according to list 2).
PLR-7	To prescribe and analyse additional (mandatory and optional) methods of examination (laboratory, functional and/or instrumental) (according to the list 4), patients with diseases of organs and body systems for differential diagnosis of diseases (according to list 2).
PLR-8	Determine the main clinical syndrome or what causes the severity of the victim's/injured person's condition (according to list 3) by making an informed decision and assessing the person's condition in any circumstances (in a healthcare facility, outside it), including in an emergency situation and hostilities, in the field, in conditions of lack of information and limited time.



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Результати навчання

PLR- 9	Determine the nature and principles of treatment of patients (conservative, surgical) with diseases (according to list 2), taking into account the patient's age, in a health care facility, outside it and at the stages of medical evacuation, including in the field, based on a preliminary clinical diagnosis, following the relevant ethical and legal standards, by making an informed decision according to existing algorithms and standard schemes, if necessary, expand the standard scheme, be able to justify personalised recommendations under the supervision of a supervising physicial.
PLR- 10	Determine the necessary work, rest and nutrition regime based on the final clinical diagnosis, in compliance with relevant ethical and legal standards, by making an informed decision based on existing algorithms and standardised schemes.
PLR- 14	Determine the tactics and provide emergency medical care for urgent conditions (according to list 3) in a time-limited environment in accordance with existing clinical protocols and treatment standards.
PLR- 16	Form rational medical routes for patients; organise interaction with colleagues in their own and other institutions, organisations and agencies; apply tools for promoting medical services on the market, based on an analysis of the needs of the population, in the conditions of functioning of a healthcare institution, its unit, in a competitive environment.
PLR- 17	Perform medical manipulations (according to List 5) in a healthcare facility, at home or at work based on a preliminary clinical diagnosis and/or patient's condition indicators by making an informed decision, following the relevant ethical and legal standards.
PLR- 18	Determine the state of functioning and limitations of a person's vital activity and the duration of disability with the preparation of relevant documents, in a healthcare facility, based on data on the disease and its course, the specifics of the person's professional activity, etc. Maintain medical records for the patient and the population on the basis of regulatory documents.
PLR- 19	To plan and implement a system of anti-epidemic and preventive measures against the occurrence and spread of diseases among the population.
PLR- 21	Search for relevant information in professional literature and databases other sources, analyse, evaluate and apply this information.
PLR- 22	Apply modern digital technologies, specialised software, statistical methods of data analysis to solve complex problems health care.
PLR- 23	Evaluate the impact of the environment on human health to assess the state of morbidity of the population.
PLR- 24	To organise the necessary level of individual safety (own and of persons under his/her care) in the event of typical dangerous situations in the individual field of activity.
PLR- 25	Clearly and unambiguously communicate own knowledge, conclusions and arguments on healthcare and related issues to specialists and non-specialists.
PLR- 27	Communicate fluently in the state language and English, both orally and in writing, to discuss professional activities, research and projects.
PLR- 28	Make effective decisions on healthcare issues, assess the resources required, and consider social, economic and ethical implications.

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Credits ECTS

The discipline takes 630 hours and 21 ECTS credits.

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Structure of the discipline

Titles of content modules and topics	Number of hours	
	Full-time form	
	Total	Among them



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1	2	L.	Pr.	Lab.	Ind.
3	4	5	6		
MODULE 1 4 YEARS INTERNAL MEDICINE (including endocrinology; haematology; pulmonology; gastroenterology)					
Content module 1: Basics of diagnosis, treatment and prevention of major endocrine diseases					
Topic 1: Diabetes mellitus, classification, etiology, pathogenesis, clinic, diagnosis.	11	2	3		6
Topic 2: Diabetes mellitus type 1 and type 2, modern methods of therapy.	9		3		6
Topic 3. Acute and chronic complications of diabetes mellitus.	8				8
Topic 4: Iodine deficiency diseases of the thyroid gland. Hypothyroidism and thyroiditis. Classification, diagnosis, clinic, treatment.	11	2	3		6
Topic 5. Thyrotoxicosis. Cancer of the thyroid gland. Diseases of the parathyroid glands.	9		3		6
Topic 6. Diseases of the adrenal glands. Hormonally active tumours of the adrenal glands.	11	2	3		6
Topic 7. Diseases of the hypothalamic-pituitary system. Diseases of the gonads	9		3		6
Total	68	6	18		44
Content module 2. Fundamentals of diagnosis, treatment and prevention of major diseases of the blood and haematopoietic organs					
Topic 8: Haemophilia and thrombocytopenic purpura	13	2	4		7
Topic 9: Anaemia	13	2	4		7
Topic 10. Acute leukaemias	13	2	4		7
Topic 11: Chronic leukaemias	11		4		7
Total	50	6	16		28
Content module 3: Basics of diagnosis, treatment and prevention of major respiratory diseases					
Topic 12: Chronic obstructive pulmonary disease	13	2	4		7
Topic 13. Bronchial asthma	13	2	4		7
Topic 14: Pneumonia	12	1	4		7
Topic 15: Pleurisy	8	1			7
Topic 16. Infectious and destructive diseases of the lungs. Bronchiectasis	13	2	4		7
Topic 17. Respiratory failure	11		4		7
Total	70	8	20		42
Content module 4: Basics of diagnostics, treatment and prevention of major diseases of the digestive system					
Topic 18: Gastroesophageal reflux disease	12	2	4		6
Topic 19: Dyspepsia. Chronic gastritis	10		4		6
Topic 20: Peptic ulcer of the stomach and duodenum	12	2	4		6
Topic 21. Celiac disease and other enteropathies	11	2	3		6
Topic 22. Inflammatory bowel disease. Irritable bowel syndrome	10	2	2		6
Topic 23: Gallstone disease, chronic cholecystitis and functional biliary disorders	12	2	4		6
Topic 24. Chronic hepatitis	12	2	4		6



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Topic 25: Cirrhosis of the liver	11	2	3		6
Topic 26: Chronic pancreatitis	11	2	4		5
Preparing and writing a medical history	5				5
Total	106	16	32		58
Content module 5: General issues of internal medicine					
Topic 27: Principles of evidence-based medicine	10	2			8
Topic 28. Diagnosis and treatment of diseases of internal organs in the elderly	10	2	3		5
Topic 29: Obesity and its consequences. Offset.	10	2	3		5
Total	30	6	6		18
Total for module	324	40	92		190
MODULE 2/ 5 COURSE					
INTERNAL MEDICINE (including cardiology, rheumatology, nephrology)					
Topic 1: Essential arterial hypertension. Secondary arterial hypertension.	7	2	3		2
Topic 2. Acute coronary syndromes. Acute myocardial infarction	7	2	3		2
Topic 3: Atherosclerosis. Chronic forms of coronary heart disease. of the heart.	7		5		2
Topic 4. Acquired heart disease. Congenital heart disease.	7		5		2
Topic 5. Cardiomyopathy. Myocarditis and pericarditis.	7	2	3		2
Topic 6. Pulmonary heart and pulmonary embolism.	8	2	4		2
Topic 7. Disorders of the heart rhythm. Conduction disorders.	7	2	3		2
Topic 8: Heart failure. Neurocirculatory dystonia.	7	2	3		2
Topic 9: Ankylosing spondylitis. Rheumatoid arthritis. Reactive arthritis.	7		5		2
Topic 10. Rheumatic fever. Infectious endocarditis	8	2	4		2
Topic 11: Osteoarthritis. Gout.	7		5		2
Topic 12: Systemic connective tissue diseases.	8	2	4		2
Topic 13. Glomerulonephritis. Nephrotic syndrome. Pyelonephritis.	8	2	4		2
Topic 14: Acute and chronic renal failure.	8	2	4		2
Topic 15: Tubulointerstitial nephritis and renal amyloidosis	5		5		
Total	108	20	60		28
MODULE 3/ 6 COURSE					
MODERN PRACTICE OF INTERNAL MEDICINE					
Section 1. "Management of patients with major symptoms and syndromes in a cardiology clinic"					
Topic 1: Management of a patient with cardialgia.	5		3		2
Topic 2. Management of patients with cardiac rhythm and conduction disorders. Indications for and methods of ECS, EIT.	6		3		3
Topic 3: Management of patients with cardiomegaly (cardiomyopathy).	5		3		2
Topic 4. Management of a patient with acute chest pain.	6		3		3
Topic 5. Management of patients with non-coronary heart disease (myocarditis, pericarditis)	5		3		2
Topic 6: Management of patients with heart failure and dyspnoea. Features of management of critically ill, incurable patients.	6		3		3
Topic 7. Management of patients with bleeding.	5		3		2
Topic 8: Management of patients with chronic heart failure	5		3		2



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Topic 9: Management of patients with arterial hypertension and hypotension. Combat and mental trauma.	6		3		3
Section 2. "Management of patients with major symptoms and syndromes in a rheumatological clinic clinic"					
Topic 10. Management of patients with joint syndrome	5		3		2
Topic 11: Management of patients with systemic connective tissue diseases (dermatopolymyositis, systemic scleroderma)	7		4		3
Topic 12: Systemic lupus erythematosus.	5		3		2
Topic 13: Management of patients with systemic vasculitis (polyarteritis nodosa, haemorrhagic vasculitis, hypersensitive vasculitis).	6		3		3
Section 3. "Management of patients with major symptoms and syndromes in a gastroenterological clinic".					
Topic14. Management of patients with dyspepsia.	6		4		2
Topic 15: Management of patients with chronic pancreatitis	6		3		3
Topic 16. Management of patients with chronic gastric and 12 duodenal diseases.	3		3		
Topic 17: Management of a patient with chronic diarrhoeal syndrome. Management of a patient with constipation.	5		3		2
Topic 18: Management of a patient with hepatoliver syndrome. Management of a patient with portal hypertension.	6		3		3
Topic 19: Management of the patient with jaundice	5		3		2
Topic 20: Management of a patient with ascites.	5		3		2
Chapter 4. "Management of patients with major symptoms and syndromes in a pulmonology clinic".					
Topic 21: Management of patients with chronic cough. Management of patients with bronchial obstructive syndrome	5		3		2
Topic 22. Management of patients with pulmonary insufficiency. Respiratory failure.	6		4		2
Topic 23: Management of a patient with haemoptysis.	6		3		3
Topic 24. Management of patients with pulmonary infiltrates. Management of patients with pleural effusion	5		3		2
Chapter 5. "Management of patients with major symptoms and syndromes in an endocrinological clinic".					
Topic 25: Management of patients with chronic complications of diabetes mellitus and metabolic syndrome. Features of auto-, allo-, and xenotransplantation of endocrine glands and culture of their tissues.	5		3		2
Topic 26: Management of patients with uncompensated forms of diabetes mellitus (ketoacidosis).	7		4		3
Topic 27. Management of a patient with goiter syndrome.	5		3		2
Topic 28: Management of patients with adrenal gland disorders.	6		3		3
Chapter 6: Management of patients with major symptoms and syndromes in a nephrology clinic.					
Topic 29: Management of patients with urinary syndrome.	5		3		2
Topic 30. Management of patients with nephrotic syndrome.	6		3		3
Topic 31: Management of patients with renal arterial hypertension.	6		4		2
Topic 32. Management of patients with chronic renal failure. Management of patients with edema.	6		3		3
Topic 33. Management of patients on haemodialysis	3		3		
Chapter 7. "Management of patients with major symptoms and syndromes in a haematology clinic".					
Topic 34. Management of patients with anaemia. Management of patients with haemorrhagic diathesis.	5		3		2
Topic 35. Management of management of leukaemia in patients with lymphadenopathy	7		4		3
Topic 36. Organ and system damage in HIV infection	5		3		2



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Topic 37. Protection of medical history.	4		2		2
Exam					
Total	200		116		84
Total of the discipline	630	60	268		302

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Signs of discipline

Duration of teaching	Semestr	International disciplinary integration	Course (year of study)	Cycles
3 years	VII, VIII, X, XI, XII	Yes	4, 5, 6	Professional training

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Evaluation system and requirements

Current control is carried out on the basis of control of theoretical knowledge, practical skills and abilities. The forms of current control are: oral questioning (frontal, individual, combined), interview; practical testing of the formed professional skills (conducted on the basis of the results of solving clinical cases, working with medical documentation, performing practical skills, working at the patient's bedside); test control ("open" and "closed" test tasks).

Ongoing control is mandatory. When assessing the mastery of each topic in all disciplines of the curriculum, the student is given grades on a 4-point (traditional) scale for current learning activities, taking into account the approved assessment criteria for the discipline. All types of work provided by the curriculum are taken into account. The student must receive a grade for each topic. The teacher conducts a survey of each student in the group at each lesson and gives a grade in the student's attendance and progress record on a traditional scale ("5", "4", "3", "2").

When assessing a student's current learning activities, 20% of the grade is based on the student's independent work, which takes into account the knowledge of the topic of the independent lesson and the work in the notebook.

The final (summative) control is carried out

- in the form of a written test, which includes test tasks, theoretical questions
- control of practical skills (solving clinical cases, defence of medical history, assessment of the correctness of practical skills - a practice-oriented exam.

In accordance with the specifics of professional training, preference is given to test and practice-oriented control.

The final control of the discipline is based on the control of theoretical knowledge, practical skills and abilities.

A test is a form of final control, which consists in assessing the student's mastery of the educational material solely on the basis of the results of performing certain types of work in practical, seminar or laboratory classes. A semester test in a discipline is conducted after the end of its study, before the start of the examination session.

An exam (differential test) is a form of final control of a student's mastery of theoretical and practical material in a discipline.

QR Code: <https://ieu.edu.ua/docs/pol-ornzvoems.pdf>

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Conditions for admission to the final control

Students who have completed all types of work and assignments provided for in the curriculum for the semester in accordance with the discipline, attended all classes provided for in the curriculum, written and submitted a medical history and have an average score for current academic activities of at least "3" (72



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points on a 120-point scale) are admitted to the semester final control.

QR Code: <https://ieu.edu.ua/docs/pol-ornzvoems.pdf>

10 Discipline policy

A prerequisite for a successful educational process is personal compliance by each student of a higher education institution with the rules of conduct accepted both at the university and in society. The future doctor must have a high level of behavioural culture, behave with dignity, tact, and self-control.

The student must be on time for classes and wear academic medical uniform (white coat or surgical suit). The student must adhere to the schedule of the educational process, come to class prepared on the topic of the lesson. During the class, the student must not leave the classroom without the permission of the teacher; use a mobile phone and other means of communication and information without the permission of the teacher; engage in outside activities, distract other students. When writing different types of papers, students must adhere to the rules of academic integrity.

The teacher must adhere to the implementation of the curriculum, objectively assess students' knowledge and skills. During the educational process, the teacher must be aware of anti-corruption measures and not engage in corrupt activities.

11 Policy on absences and late assignments

A student who, for valid reasons, confirmed by documentary evidence, was not subject to current control has the right to pass the current control within two weeks after returning to study.

A student who was absent from classes without valid reasons, did not participate in the current control activities, did not eliminate academic debt, is not allowed to take the final semester control of knowledge in this discipline, and on the day of the exam, the academic staff member gives the grade "not admitted" in the examination record. Retaking the differentiated test in the discipline is assigned subject to the completion of all types of educational, independent (individual) work provided for in the working curriculum of the discipline and is carried out in accordance with the schedule of liquidation of academic debt approved by the directorate.

QR Code: <https://ieu.edu.ua/docs/pol-ornzvoems.pdf>

12 Academic integrity policy

Participants in the educational process are guided by the principles of academic integrity

QR Code: <https://ieu.edu.ua/images/AndreyContent/docs/16.pdf>

13 Recommended sources of information

Basic

Internal medicine: rheumatology: a textbook / V.E. Kondratiuk, M.B.

Dzhus. - K.: VSV "Medicine", 2017. - 272 c.

Internal diseases. In 2 vols. Vol. 1 / L.V. Glushko, S.V. Fedorov, I.M. Skrypnyk, M.M. Ostrovsky / Edited by Prof. L.V. Glushko - Kyiv: VVS "Medicine", 2019. 680 p.

Internal diseases: Textbook based on the principles of evidence-based medicine 2018/19 / Project manager Alexandra Kubets, editor-in-chief Adriana Yaremchuk-Kochmarik, Anatoly Svintsitsky; translated from Polish - Krakow: Practical Medicine, 2018. 1632 p.

Gastroenterology. Textbook: In 2 volumes - Vol. 2 / edited by prof. N.V. Kharchenko, O.Ya.

Babak. - Kirovograd: Polium, 2017. - 432 p.

Endocrinology: a textbook for students of higher medical schools. IV level of accreditation / Ministry of Health of Ukraine, National Academy of Medical Sciences of Ukraine; edited by Yu. Edition 5, updated and supplemented - Vinnytsia: Nova Knyha, 2020. 536 p. : ill.

Unified (for the departments of internal medicine No. 1-4) methodological developments for practical classes in the discipline "Internal medicine (including clinical pharmacology, medical genetics, clinical immunology and allergology, occupational diseases)" in Ukrainian for 5th year students of medical faculties. Kyiv, 2022. 449 p.

Additional:

1. Emergency conditions in the clinic of internal medicine: a textbook: in 2 parts. Cardiology, endocrinology and rheumatology / L.N. Prystupa, V.G. Psareva, V.V. Laba et al: Sumy State University, 2017. - 217 c.

Emergency conditions in the clinic of internal medicine: a textbook: in 2 parts. Pulmonology, nephrology, allergology, haematology and gastroenterology / L.N. Prystupa, V.G. Psareva, V.V. Laba et al: Sumy State University, 2017. 219 p.

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

Harrison's Principles of Internal Medicine 20th Edition. Editors: J. Larry Jameson, Dennis L. Kasper, Dan L. Longo, Anthony S. Fauci, Stephen L. Hauser, Joseph Loscalzo. - 2018. - 3522 p.

Bilovol O.M. Rheumatology: a textbook / O.M. Bilovol, I.I. Kniazkova, V.V. Zlatkina, [et al: KhNMU Publishing House. - 2018. - 251 p.

Emergency and urgent medical care in questions and answers: a textbook / Ternopil: Ukrmedkn: Ukrmedkn. 2018. 311 p.

American Diabetes Association (2022). 2. Classification and Diagnosis of Diabetes: Standards of Medical Care in Diabetes-2022. Diabetes Care 2021;45(Suppl.1):S17-S38 / <https://doi.org/10.2337/dc22-S002>

Information resources:

<https://www.aasld.org/>

<http://www.acc.org/guidelines>

<https://www.asn-online.org/education/training/fellows/educational-resources.aspx#Guidelines>

www.brit-thoracic.org.uk/standards-of-care/guidelines

<https://cprguidelines.eu/>

https://dec.gov.ua/cat_mtd/galuzevi-standarti-ta-klinichni-nastanovi/

<https://www.escardio.org/Guidelines/Clinical-Practice-Guidelines>

<http://www.eagen.org/>

<http://www.ers-education.org/guidelines.aspx>

<http://www.enp-era-edta.org/#/44/page/home>

https://www.eular.org/recommendations_management.cfm

<http://www.european-renal-best-practice.org>

<http://www.esmo.org/Guidelines/Haematological-Malignancies>

<https://ehaweb.org/organization/committees/swg-unit/scientific-working-groups/structure-and-guidelines/>

<http://www.gastro.org/guidelines>

www.ginasthma.org

<http://goldcopd.org>

<http://inephrology.kiev.ua/>

http://www.ifp.kiev.ua/index_ukr.htm

<http://kdigo.org/home/guidelines/>

<https://www.nice.org.uk>

<http://www.oxfordmedicaleducation.com/>

http://professional.heart.org/professional/GuidelinesStatements/UCM_316885_Guidelines-Statements.jsp

<https://www.rheumatology.org/Practice-Quality/Clinical-Support/Clinical-Practice-Guidelines>

<https://www.thoracic.org/statements/>

<http://www.strazhesko.org.ua/advice>

<https://www.ueg.eu/guidelines/>

<http://ukrgastro.com.ua/>

Vernadsky National Library of Ukraine <http://www.nbuv.gov.ua/>

National Scientific Medical Library of Ukraine <https://library.gov.ua/>

National Library of Medicine of the National Institutes of Health <https://www.nlm.nih.gov/>

If you want to be successful in this discipline, you need to:

1. Be active, persistent, inquisitive, consistent
2. Be tidy and polite



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3. Systematically prepare for practical classes
4. Perform tasks for independent work and defend them in class.
5. To be present at the class in a medical gown
6. To solve tests and tasks independently, to work actively in class.
7. Prepare presentations and crosswords on the discipline. Participate in student scientific conferences and engage in research work in the department's scientific circles.

I wish you perseverance, dedication and motivation to learn. And then success will come to you! See you in class!

Don't forget your medical gowns!