

# ODESSA NATIONAL MEDICAL UNIVERSITY

## Pharmaceutical faculty

### Department of General Pharmacy with the course of Clinical Pharmacology

#### Syllabus of the discipline

#### «PHARMACOTHERAPY WITH THE BASICS OF PHARMACOKINETICS»

<b>Amount</b>	Credits (ECTS) – 3,0	Total number of hours – 90
<b>Year of study</b>	4	
<b>Semester</b>	7	
<b>Days, time, places</b>	In accordance with the approved schedule	
<b>Teachers</b>	Nikohosyan L.R., the head of department, doctor of medical sciences, professor Strechen S.B., candidate of medical sciences, docent Vidavskaya A.G., candidate of medical sciences, docent Tregub T.V., candidate of medical sciences, docent Poludenko A.A., assistant	
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<b>Consultation</b>	According to the schedule of the department	

**COMMUNICATION** [info.odmu.edu.ua/chair/general\\_pharmacy/](mailto:info.odmu.edu.ua/chair/general_pharmacy/)

Microsoft Teams

#### COURSE SUMMARY

**The subject of the discipline** is pharmacological properties, conditions of rational use of modern drugs and purposeful search for new drugs, methodology of clinical examination of patients, providing the most rational pharmacotherapy of the most common diseases in a particular patient.

**Prerequisites and postrequisites of the course:** medical biology, normal physiology, pathophysiology, microbiology, biochemistry, pharmacognosy and medical botany, pharmacology, laboratory and functional diagnostics, first aid; clinical pharmacy, pharmaceutical care, pharmacoeconomics.

**The purpose of teaching the course "Pharmacotherapy with the basics of pharmacokinetics"** - is to master the knowledge of the main symptoms and

syndromes, diagnostic methods and principles of drug therapy of the most common human diseases.

**The main objectives of the discipline "Pharmacotherapy with the basics of pharmacokinetics":** is the acquisition of theoretical knowledge and practical skills on the basic principles of medical ethics and deontology, the rules of conduct of the pharmacist in the clinic, the relationship between pharmacist and doctor; acquaintance with the main types of medical documentation; mastering the basic methods of clinical examination of patients, methods of laboratory and instrumental examination of patients; study of etiopathogenetic features of the most common human diseases; mastering the general syndromology and clinical symptoms of the most common diseases in the clinic of internal medicine; study of general principles of pharmacotherapy of the most common diseases of internal organs; mastering the general methodology and principles of drug selection for effective and safe pharmacotherapy, taking into account the individual condition of the patient and the pharmacological characteristics of the drug; mastering the principles of evaluating the effectiveness and safety of drugs during pharmacotherapy.

#### **Expected results:**

**The student must know:** - the principles of pharmacotherapy of major pathological conditions that develop as a result of therapeutic, surgical, gynecological, mental, skin, eye, otolaryngological, dental, infectious, childhood diseases that threaten the patient's life and require urgent or planned treatment;

-rules and methods of administration of drugs, based on their properties and characteristics of action;

-rules of pharmaceutical ethics and deontology, to solve a set of problems related to the relationship between doctor and patient, patient and pharmacist.

**The student must be able to:** - use knowledge of pharmacological effects, mechanism of action, pharmacokinetics of drugs, the principles of their dosage for the effectiveness and safety of pharmacotherapy;

-provide urgent pharmacotherapeutic care for dizziness, shock, collapse, asthma attacks, myocardial infarction, poisoning, renal and hepatic colic, etc .;

-prepare reports for doctors about traditional and new drugs, methods of their rational use.

#### **COURSE DESCRIPTION**

**Forms and methods of teaching:** a course of pharmacotherapy with the basics of pharmacokinetics involves and is taught in the form of lectures (10 hours), practical classes (30 hours) and independent work of students (50 hours).

## **Course content:**

**Topic 1. General methods of clinical examination of patients: subjective (questioning, complaints, history), physical (examination, palpation, percussion, auscultation). Medical, pharmaceutical deontology.**

**Topic 2. General laboratory and functional-instrumental methods of research of patients.**

**Topic 3. Basic pharmacokinetic parameters, their importance for pharmacotherapy.**

**Topic 4. Basic principles of pharmacotherapy of arterial hypertension and arterial hypotension.**

**Topic 5. Basic principles of pharmacotherapy of coronary heart disease.**

**Topic 6. Types of heart rhythm and conduction disorders, principles of pharmacotherapy. Heart failure: classification, principles of pharmacotherapy.**

**Topic 7. Pharmacotherapeutic principles of treatment of infectious and inflammatory diseases of the upper and lower respiratory tract.**

**Topic 8. Bronchial asthma: etiology, pathogenesis, classification, clinic, principles of treatment.**

**Topic 9. Principles of pharmacotherapy of diseases of the esophagus, stomach, intestines.**

**Topic 10. Pharmacotherapy of diseases of the liver, gallbladder, pancreas.**

**Topic 11. Principles of pharmacotherapy of diseases of the kidneys and urinary system.**

**Topic 12. Diseases of the blood system: classification, diagnosis, principles of pharmacotherapy.**

**Topic 13. Diabetes mellitus: classification, diagnosis, principles of pharmacotherapy.**

**Topic 14. Basic principles of pharmacotherapy of infectious diseases. Complications of antimicrobial therapy, their prevention and treatment.**

**Topic 15. Differential test.**

## **List of recommended literature:**

- 1) Basic and clinical pharmacology. – 9-th edition / Edited by Bertram G. Katsung. – Medical Publishing Division. - 2004. – 1202 p.

- 2) Pharmacology in rehabilitation. – 4-th edition / Charles D. Ciccone, PT. – USA, 2007. – 653 p.
- 3) Clinical pharmacology: Manual for practical classes. – 2-nd edition / Edited by O.V.Kraydashenko. – Vinnytsya: Nova Khyna Publishers, 2010. – 192 p.
- 4) Emergency management of internal diseases / Edited by O.Babak and O.Bilovol. – Kyiv: AUS Medicine Publishing, 2010. – 448 p.
- 5) Клініко-фармакологічний глосарій: навч. посібник / В.Й.Кресюн, В.В.Годован, С.Б.Стречень. – Одеса: ОНМедУ, 2015. – 328 с.
- 6) Educational and methodical manual for practical classes on pharmacotherapy for students of the IV course of the pharmaceutical faculty of full-time education | V.I.Kresyun, S.B.Strechen, I.V.Bazalieieva, A.G.Vidavskaya, N.V.Nregub, A.A.Poludenko. – Odessa: ONMddU, 2018. – 771 p.
- 7) Godovan V.V. Pharmacology in pictures and schemes. – Nova Knyha, 2021. – 464 p.

#### **Internet resources:**

1. State Expert Center of Ministry of Health of Ukraine  
<http://www.dec.gov.ua/index.php/ua/>
2. Ukrainian Scientific Pharmacopoeial Drug Quality Center <http://sphu.org>
3. National Scientific Medical Library of Ukraine <http://library.gov.ua>
4. Resources for predicting inter-drug interactions (based on FDA instructions, in English) URL: <http://www.drugs.com>
5. European Society of Clinical Pharmacologists and Pharmacists:  
<http://www.eacpt.org>

#### **EVALUATION**

General evaluation system	Participation in the work during the cycle on a 200-point scale
Rating scales	Traditional 4-point scale, multi-point (200-point) scale, ECTS rating scale
Conditions of admission to the final control	Students who have attended all classes provided by the curriculum, performed all types of work provided by the program and received grades sufficient to convert to the

	minimum number of points (not less than 120 points for current performance) are allowed to the final control.	
Differential test	Is to assess the student's mastery of educational material solely on the basis of the results of his performance of certain types of work in practical classes and during independent work, conducted in the last lesson of the discipline. Differential student test is assessed on a 4-point (traditional) scale. The average score for the discipline (traditional grade) is calculated as the arithmetic mean of current performance and grades for differential test.	<i>Maximum number of points – 200.</i> <i>Minimal number of points – 120.</i>

**INDEPENDENT WORK OF STUDENTS** involves preparation for practical classes and differential test, is controlled during the test of current knowledge of students and differential test.

## **PHARMACOTHERAPY WITH THE BASICS OF PHARMACOKINETICS COURSE POLICY**

### **Deadline and recompilation policy**

Students who have completed all types of work provided for in the initial program, completed all training sessions and scored at least the minimum number of points during the study of the module are admitted to the final control.

Rehearsals of missed practical classes, regardless of the reason for admission, and consultations take place in accordance with the departmental schedule of rehearsals and consultations. The practice of missed practical classes is carried out with an entry in the journal of the department's work and a mark on the permit form from the dean's office. Rearrangement of the current and final modules in order to increase the assessment is not allowed, except for situations provided by the "Regulations on the diploma of the state standard with honors".

### **Academic Integrity Policy**

Observance of academic integrity by students of education provides:

- independent performance of educational tasks, tasks of current and final control of learning outcomes (for persons with special educational needs this requirement is applied taking into account their individual needs and opportunities);

- links to sources of information in the case of the use of ideas, developments, statements, information;

- compliance with the legislation on copyright and related rights;

- providing reliable information about the results of their own (scientific, creative) activities, used research methods and sources of information.

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

- the use of family or business ties to obtain a positive or higher assessment in the implementation of any form of control over learning outcomes or advantages in scientific work;

- use of prohibited auxiliary materials or technical means (cheat sheets, abstracts, headphones, telephones, smartphones, tablets, etc.) during control measures;

- passing the procedures of control of learning outcomes by fictitious persons.

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

- reduction of results of assessment of control work, examination, credit, etc.);

- re-assessment (test, exam, test, etc.);

- appointment of additional control measures (additional individual tasks, tests, tests, etc.);

- re-passing the relevant educational component of the educational program;

- conducting additional verification of other works by the infringer;

- deprivation of the right to participate in competitions for scholarships, grants, etc .;

- notification of the entity that finances the training (research), the institution that issued the grant for training (research), potential employers, parents of the applicant for higher education about the violation;

- exclusion from the rating of applicants for an academic scholarship or accrual of penalty points in such a rating;

- deprivation of an academic scholarship;

- deprivation of tuition benefits provided by the University;

- expulsions from the University.

Attendance and lateness policy: attendance at all classes: lectures, practical classes, current and final control is mandatory (exception: good reason). Delay of more than 5 minutes without good reason is not allowed. Within two days, in any form convenient for the student, inform the dean's office about the reasons that make it impossible to attend classes and perform other tasks provided by the curriculum.

Mobile devices: it is forbidden to write off during knowledge control (including the use of mobile technical means of information transfer).

Audience behavior:

- attend lectures, practical classes according to the schedule in bathrobes;
- do not be late for class;
- do not talk during classes;
- turn off your mobile phone.

