ODESSA NATIONAL MEDICAL UNIVERSITY

Pharmaceutical faculty

Department of General Pharmacy with the course of Clinical Pharmacology

Syllabus of the discipline

Industrial practice «Clinical Pharmacy and pharmaceutical care»

Amount	Credits (ECTS) – 4,0	Total number of hours – 120	
Year of study	5		
Semester	10		
Days, time,	In accordance with the approved schedule		
places			
Teachers	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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Work place	Bazarnaya street, 77		
Consultation	According to the schedule of the department		

COMMUNICATION info.odmu.edu.ua/chair/general_pharmacy/

Microsoft Teams

COURSE SUMMARY

The subject of study of industrial practice is the methodology of choice the most effective and safe drugs for a particular patient, their combinations, taking into account the individual characteristics of the organism, clinical forms, severity of the disease, the presence of concomitant pathology; methodology of conducting, together with the doctor, clinical trials of new pharmacological agents.

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

The purpose of the industrial practice "Clinical Pharmacy and Pharmaceutical Care" - is to consolidate theoretical knowledge of clinical pharmacy and acquire practical skills in their use in the process of pharmaceutical care of patients and pharmacy visitors.

The main tasks of the industrial practice "Clinical Pharmacy and Pharmaceutical Care "are:

- acquaintance with the work of inpatient departments and pharmacies of the basic treatment and prevention facility, the main types of medical and special documentation;

- application of the principles of medical and pharmaceutical ethics and deontology in medical and pharmaceutical activities;

- analysis of clinical and pharmaceutical aspects of rational choice of drugs for a particular patient;

- formation of the motivated need of future pharmacists to systematically update their knowledge and creatively apply them in practice;

- acquisition of skills of pharmaceutical care when dispensing over-the-counter drugs;

- determination of conditions of rational use of prescription drugs, consultations on compatibility with food, alcohol, other drugs, dosage regimen, rules of application of a certain dosage form;

- acquisition of skills of individual approach to each patient taking into account the age criterion, the severity of the disease.

Expected results:

The student must know: -main current orders, regulations of the Ministry of Health of Ukraine on prescriptions, release of drugs from the pharmacy; -modern range and classification of drugs; - list and nomenclature of OTC drugs in Ukraine; rules of over-the-counter drug release; - features of branded and generic drugs, the concept of generic and therapeutic replacement of drugs; - characteristic clinical symptoms of the most common diseases that require mandatory medical intervention; - a list of pathological conditions in which responsible self-medication is possible; - basic principles of symptomatic pharmacotherapy of conditions in which responsible self-medication is possible; - principles of collecting the patient's questioning, collecting and differentiating complaints, collecting medical history, life history, medical history; - algorithm for selecting the optimal over-the-counter drug for the treatment of conditions in which responsible self-medication is possible, the principles of pharmaceutical care of pharmacy visitors and inpatients; - rules of labor protection, safety, sanitary and epidemiological regime when working in inpatient departments and pharmacies.

The student must be able to: - adhere to the provisions of pharmaceutical ethics and deontology; participate in the coordination of a set of tasks related to the relationship between doctor, pharmacist and patient; - to identify drugs registered in Ukraine with the help of international, trade, chemical name in relation to their assignment to a certain pharmacological or pharmacotherapeutic group; - use normative and reference literature on drugs; - on the basis of prescriptions to analyze the rationality of choosing the optimal dosage form, dose, route of administration and duration of their use; - prepare informational messages for doctors about traditional and new drugs, features of their action, methods of rational use; - to inform doctors about the peculiarities of pharmacodynamics and pharmacokinetics of new drugs entering the pharmacy network of Ukraine; - to provide pharmaceutical care to patients, to advise patients and members of their families on the rational use of prescription and over-the-counter drugs of different groups: manifestations of clinical action, method and time of administration, interaction with food, manifestations of side effects, etc.

COURSE DESCRIPTION

Forms and methods of teaching: industrial practice in clinical pharmacy and pharmaceutical care provides and is taught in the form of practical classes (40 hours) and independent work of students (80 hours).

Content of industrial practice:

Topic 1. Getting acquainted with the structure and principles of the basic multidisciplinary treatment and prevention facility, inpatient departments, diagnostic units, pharmacies, which are located on the basis of the hospital, equipping the pharmacist's workplace.

Topic 2. Basic methods of clinical examination of patients. Types of medical documentation. Medical history.

Topic 3. Analysis of clinical and pharmaceutical aspects of the use of drugs for the treatment of diseases of the cardiovascular system.

Topic 4. Pharmaceutical care of patients with pathology of the cardiovascular system, the formation of practical skills, informing patients about the conditions of rational and safe use of drugs in the department and pharmacy.

Topic 5. Analysis of clinical and pharmaceutical aspects of the use of drugs for the treatment of diseases of the respiratory system.

Topic 6. Pharmaceutical care of patients with respiratory pathology, the formation of practical skills, informing patients about the conditions of rational and safe use of drugs in the department and pharmacy.

Topic 7. Analysis of clinical and pharmaceutical aspects of the use of drugs for the treatment of diseases of the gastrointestinal tract and hepatobiliary system.

Topic 8. Pharmaceutical care of patients with pathology of the digestive system, the formation of practical skills, informing patients about the conditions of rational and safe use of drugs in the department and pharmacy.

Topic 9. Analysis of clinical and pharmaceutical aspects of the use of drugs for the treatment of diseases of the urinary system.

Topic 10. Pharmaceutical care of patients with pathology of the urinary tract, the formation of practical skills, informing patients about the conditions of rational and safe use of drugs in the department and pharmacy.

Topic 11. Differential test.

List of recommended literature:

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

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 h.

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 to practical training in clinical pharmacy for the students of pharmaceutical faculty / Strechen S.B., Vidavskaya A.G., Tregub T.V., Bazalieieva I.V., Poludenko A.A., Rzhevskaya Yu.I. – Part 1. – Odessa, 2019. – 665 p.; Part 2. – Odessa, 2019. – 732 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. Interregional Society of Evidence-Based Medicine:

http://www.osdm.org/index.php

EVALUATION

General	Participation in the work during the cycle on a 200-point		
evaluation	scale		
system			
Rating scales	Traditional 4-point scale, multi-point (200-point) scale,		
$C = 1^{\prime} t^{\prime}$	ECTS rating scale		
Conditions of	1 5		
admission to the	curriculum, performed all types of work provided by the		
final control	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	Maximum number of	
	educational material solely on the	points – 200.	
	basis of the results of his	Minimal number of	
	performance of certain types of	points – 120.	
	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.		

INDEPENDENT WORK OF STUDENTS involves preparation for practical classes and differential test, keeping a diary of industrial practice, is controlled during the test of current knowledge of students and differential test.

POLICY OF COURSE "INDUSTRIAL PRACTICE – CLINICAL PHARMACY AND PHARMACEUTICAL CARE"

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: 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.