UNIVERSITY OF WARMIA AND MAZURY IN OLSZTYN
Faculty of Medicine

Course sylabus – part A
Clinical Pharmacology

48SJ-CLP
ECTS: 2.00
CYCLE: 2024Z

SUBJECT MATTER CONTENT

CLASSES
1. Clinical Pharmacology - definition, purpose, tasks, and significance in clinical practice. Pharmacology during pregnancy and lactation 2. Adverse drug reactions. Drug interactions including pharmacology for children and the elderly. Polypharmacy. 3. Principles of pharmacological treatment of stroke. Anticoagulants. 4. Medications used in CPR and emergencies 5. Analgesia and sedation, short-term general anaesthesia, management of delirium. 6. Contemporary Pain Pharmacotherapy. The most common causes of pain encountered in family practice 7. Pharmacotherapy of bacterial infections and parasitic invasions. Pharmacotherapy of asthma and COPD 8. Medications used in gastroenterology and hepatology. - pharmacotherapy of symptoms from the gastrointestinal tract and peptic ulcer disease - treatment of acute and chronic hepatitis C and B infection 9. Pharmacotherapy in endocrinology, Pharmacotherapy of diabetes 10. Pharmacotherapy of disorders in the practice of a Cardiologist - coronary artery disease - arrhythmias - acute and chronic heart failure

TEACHING OBJECTIVE
The primary goal of teaching clinical pharmacology is to link pharmacological knowledge with clinical knowledge clinical knowledge. Students need to understand the aspects of drug use efficacy and safety. Clinical scenarios will provide practical skills related to pharmacotherapy. After taking the course, the student should be familiar with general concepts and issues in clinical pharmacology. Principles of drug action and a working knowledge of drug groups in terms of mechanisms of action, clinical effects, fate in the body, indications, contraindications, side effects, adverse effects, interactions, and dosage principles. Knowledge of pharmacotherapy of primary diseases of the cardiovascular, respiratory, nervous, gastrointestinal endocrine, systemic and sensory organs.

DESCRIPTION OF THE LEARNING OUTCOMES OF THE COURSE IN RELATION TO THE DESCRIPTION OF THE CHARACTERISTICS OF THE SECOND LEVEL LEARNING OUTCOMES FOR QUALIFICATIONS AT LEVELS 6-8 OF THE POLISH QUALIFICATION FRAMEWORK IN RELATION TO THE SCIENTIFIC DISCIPLINES AND THE EFFECTS FOR FIELDS OF STUDY:

Symbols for outcomes related to the discipline:	M/NMA_P7S_WG+++, M/NMA_P7S_ UW+++, M/NMA_P7S_UW+, M/NMA_P7S_KO++
Symbols for outcomes related to the field of study:	C.W30.+, E.U22.+, C.W9.+, B.W15.+, C.W35.+, C.W36.+, C.W37.+, K.2.+, E.W8.+, C.W28.+, C.W33.+, C.U13.+, C.U10.+, E.W27.+, K.7.+, C.W29.+, KA7_UW4+, E.W41.+, C.W32.+, C.U8.+, C.W34.+

LEARNING OUTCOMES:

Legal acts specifying learning outcomes: 467/2024
Disciplines: medical sciences
Status of the course: Obligatoryjny
Group of courses:B - przedmioty kierunkowe
Code: ISCED 0912
Field of study: Medicine
Scope of education:
Profile of education: General academic
Form of studies: full-time
Level of studies: uniform master's studies
Year/semester: 5/9

Types of classes: Classes
Number of hours in semester: Classes: 30.00
Language of instruction: English
Introductory subject: General Pharmacology Toxicology
Prerequisites: Physiology, Biochemistry and knowledge of pharmacology and toxicology

Name of the organisational unit conducting the course: Katedra Farmakologii i Toksykologii
Person responsible for the realization of the course:lek. Łukasz Smyk, dr n. med. Krzysztof Nosek
e-mail: lukasz.smyk@uwm.edu.pl

Additional remarks:

Knowledge:

W1 – The student can discuss the types of pharmacokinetic processes, clinical implications of genetic alterations of drug kinetics, clinical criteria, types of drug interactions, benefits of conducting therapy monitored, and factors determining the occurrence of drug complications. He knows the treatment of diseases, including cardiovascular, respiratory, nervous, gastrointestinal, and endocrine disorders, principles of of modern diabetes therapy, pharmacotherapy of pain, and basics of antibiotic treatment.

Skills:

U1 – The student performs simple pharmacokinetic calculations, can select drugs in appropriate doses to correct pathological phenomena in the body and individual organs, restores drug doses in pathological situations (e.g., hepatic and renal failure), designs schemes of rational pharmacotherapy, prepares records of all prescription forms of medicinal substances; uses pharmaceutical guides and databases of medicinal products, performs analysis of possible adverse reactions of individual drugs and interactions between them. He can propose individualizing applicable therapeutic guidelines and other treatment methods in the face of ineffectiveness or contraindications to standard therapy, recognize symptoms of drug dependence and propose therapeutic management, interpret pharmaceutical characteristics of medicinal products and critically evaluate advertising materials on drugs.

Social competence:

K1 – The student is aware of the fact that numerous pharmaceuticals appear on the market, many of which have uncertain or harmful effects. He understands that the result of improper use of drugs is the hospitalization of of patients with drug complications and the costs of treating adverse reactions burden hospital budgets. Uses objective sources of information and is aware of the responsibility associated with decisions made in the course of professional activities, including in terms of the safety of himself and others. Is guided by the welfare of the patient.

TEACHING FORMS AND METHODS:

Classes(W1;U1;K1;):Practical training

FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Classes (Colloquium test) - Single-choice test. -

BASIC LITERATURE:

1. Bertram G. Katzung, *Basic and Clinical Pharmacology 16th Edition*, Tom 1,2, Wyd. wyd. McGraw-Hill Medical, R. 2023

SUPPLEMENTARY LITERATURE:

Detailed description of ECTS credits awarded - part B

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Clinical Pharmacology

The number of ECTS credits awarded consists of:

1. Contact hours with the academic teacher:

- participation in: Classes	30.0 h
- consultation	2.0
	Total: 32.0 h.

2. Independent work of a student:

describing possible predictable drug interactions - practice	2.00 h
conducting a pharmacological consultation based on the presented clinical case.	2.00 h
preparing a presentation or presenting a summary of an article on a given topic to the class.	4.00 h
familiarizing yourself with the teaching materials provided before classes.	10.00 h

Total: 18.0 h

contact hours + independent work of a student Total: 50.0 h

1 ECTS credit = 25-30 h of an average student’s work, number of ECTS credit = 50.0 h : 25.0 h/ECTS = 2.00 ECTS on average: 2.0 ECTS

- including the number of ECTS credits for contact hours with the direct participation of an academic teacher: 0,00 ECTS points,

- including the number of ECTS credits for hours of independent work of a student: