

UNIVERSITY OF WARMIA AND MAZURY IN OLSZTYN Faculty of Medicine

Course sylabus - part A Pharmacology and Toxicology 3/3

48SJ-PHAT33 ECTS: 9.00 CYCLE: 2023L

SUBJECT MATTER CONTENT

LECTURE

Drugs used in the treatment of blood diseases. Analgesics and their antagonists Drugs used in respiratory diseases Drugs used in thetreatment of gastrointestinal diseases Endocrine drugs Chemotherapy of cancer Interaction between drugs. Adverse effects of drugs.

SEMINAR

Opioid analgesics and their antagonists. Drugs used in migraine treatment. Treatment of other headaches. Drugs used in the treatment of gastrointestinal diseases Endocrine drugs- part II - Thyroid and antithyroid drugs - Pancreatic hormones, anti- diabetics Toxicology Interaction between drugs. Adverse effects of drugs. Lifestyle drugs and drugs in sport. Biopharmaceuticals and gene therapy.

CLASSES

Eicosanoids: prostaglandins, thromboxanes, leucotrienes and related compounds NSAIDs, disease-modifying rheumatic drugs, non-opioid analgesics and drugs used in gout. Drugs used in the treatment of blood diseases - Anemia treatment; hematopoietic growth factors -Drugs used in the treatment of coagulation disorders Drugs used in respiratory diseases. Pediatric and geriatric pharmacology. Drugs used in dermatology and ophtalmology. Monoclonal antibodies used in medicine Endocrine drugs - Pituitary, hypothalamic hormones - Adrenal glands hormones - Drugs affecting bone mineral homeostasis Chemotherapy of cancer. Immunopharmacology.

TEACHING OBJECTIVE

The basic aim in the pharmacology and toxicology teaching is learning and understanding by students mechanisms of drug action, adverse and toxic effects and possible interactions which can occur during polytherapy. Special attention is given to pharmacotheraphy's safety and efficient drug use in a therapy of particular diseases.

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+++

Symbols for outcomes related to the field of study:

C.U19.+, C.W38.+, C.U14.+, C.W40.+, C.U18.+, C.W42.+, C.U16.+, K.6.+, K.10.+, K.8.+, C.W37.+, K.2.+, E.U27.+, E.W29.+, C.W47.+, K.7.+, C.U13.+, C.W35.+, C.W45.+, C.U15.+,

Legal acts specifying learning outcomes: 311/2023

Disciplines: medical sciences

Status of the course:Obligatoryjny Group of courses:A - przedmioty podstawowe 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:** 3/6

Types of classes: Lecture, Seminar, Classes Number of hours in semester:Lecture: 15.00, Seminar: 30.00, Classes:

Seminar: 30.00, Classes: 30.00
Language of

instruction: English Introductory subject: Biochemistry, physiology, patophysiology,

Prerequisites:

Understanding the basic physiological processes taking place in the body at the cellular, systemic and the whole organism level. Understanding the pathomechanism of diseases.

Name of the organisational unit conducting the

course:Katedra Farmakologii i Toksykologii

Person responsible for the realization of the course:dr wet. Piotr Jakubowski, dr hab. n. med. Michał Majewski, prof. UWM

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Additional remarks:

K.3.+, K.11.+, D.U3.+, K.4.+, K.5.+, C.W44.+, C.W49.+, C.W44.+, C.U17.+, C.W43.+, C.W36.+, C.W39.+, C.W48.+, C.W46.+, C.W41.+, D.W13.+, K.1.+

LEARNING OUTCOMES:

Knowledge:

W1 – The student is able to discuss the mechanisms of action of drugs, adverse effects, toxic, as well as possible interactions that may appear during polytherapy. Has knowledge of the indications, contraindications and dosage of drugs. He knows the rules for the use of antimicrobials, the principles of treatment for poisoning. Has knowledge of the pharmacology of developmental and geriatric age

Skills:

U1 – The student demonstrates the ability to use drugs in the therapy of specific diseases. He can prescribe medicines. Knowing the main groups of drugs that interact, can apply the drug in a given group of patients, e.g. older people, children.

Social competence:

K1 – The student can establish and maintain a deep and respectful contact with the patient. He is guided by the good of the patient, placing them in the first place. Respects medical confidentiality and patient's rights. He is aware of his own limitations and the ability to constantly improve his skills.

TEACHING FORMS AND METHODS:

Lecture(W1;U1;K1;):Multimedia presentation Seminar(W1;U1;K1;): Classes(W1;U1;K1;):

FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Lecture (Colloquium test) - 60 % - Seminar (Colloquium test) - - Classes (Colloquium test) - -

BASIC LITERATURE:

- 1. James M. Ritter, Rod J. Flower, Graeme Henderson, Yoon Kong Loke, David MacEwan, Humphrey Rang, *Rang Dale's Pharmacology*, Tom 9, Wyd. Elsevier, R. 2018, s. 808
- 2. Bertram Katzung, Anthony Trevor, *Basic and Clinical Pharmacology*, Tom 15, Wyd. McGraw Hill, R. 2020, s. 1328

SUPPLEMENTARY LITERATURE:

1. Laurence Brunton, Bjorn Knollmann, *Goodman and Gilman's The Pharmacological Basic of Therapeutics*, Tom 14, Wyd. McGraw Hill, R. 2022, s. 1664

Detailed description of ECTS credits awarded - part B

48SJ-PHAT33 ECTS: 9.00

Pharmacology and Toxicology 3/3

CYCLE: 2023L

The number of ECTS credits awarded consists of:

1. Contact hours with the academic teacher:

- participation in: Lecture	15.0 h
- participation in: Seminar	30.0 h
- participation in: Classes	30.0 h
- consultation	5.0
	Total: 80.0 h

Total: 80.0 h.

2. Independent work of a student:

Studying for classes and seminars	85.00 h
Studying for exam	60.00 h

Total: 145.0 h

contact hours + independent work of a student Total: 225.0 h

1 ECTS credit = 25-30 h of an average student's work, number of ECTS credit = 225.0 h : 25.0 h/ECTS = 9.00 ECTS on average: 9.0 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: