



Clinical Pharmacology

1. IMPRINT	
Academic Year	2022/2023
Department	Faculty of Dental Medicine
Field of study	English Dentistry Division
Main scientific discipline <i>(in accord with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	Medical Science
Study Profile <i>(general academic / practical)</i>	General academic
Level of studies <i>(1st level / 2nd level / uniform MSc)</i>	Uniform Master's studies
Form of studies	Stationary
Type of module / course <i>(obligatory / non-compulsory)</i>	Obligatory
Form of verification of learning outcomes <i>(exam / completion)</i>	Completion
Educational Unit / Educational Units <i>(and address / addresses of unit / units)</i>	Chair and Department of Experimental and Clinical Pharmacology Centre for Preclinical Research and Technology CePT, Banacha 1b, 02-927 Warsaw, tel. (+48) 022 1166160

Head of Educational Unit / Heads of Educational Units	Prof. Dagmara Mirowska-Guzel, MD, PhD tel. (+48) 022 1166160
Course coordinator (title, First Name, Last Name, contact)	Prof. Dagmara Mirowska-Guzel, MD, PhD; dmirowska@wum.edu.pl tel. (+48) 22 1166160
Person responsible for syllabus (First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported)	Prof. Dagmara Mirowska-Guzel, MD, PhD; dmirowska@wum.edu.pl tel. (+48) 22 1166160 Coordinator of the didactic Dr. Aleksandra Wisłowska-Stanek, aleksandra.wislowska-stanek@wum.edu.pl
Teachers	Ewa Widy-Tyszkiewicz MD, PhD, SciD; ewa.widy-tyszkiewicz@wum.edu.pl Marcin Granat, MSc; marcin.m.granat@wum.edu.pl Agata Karpińska MD, PhD; agata.karpinska@wum.edu.pl Maciej Niewada MD, PhD, SciD; maciej.niewada@wum.edu.pl Wojciech Masełbas MD, PhD; wojciech.maselbas@wum.edu.pl Aleksandra Wiśłowska-Stanek, MD, PhD; aleksandra.wislowska-stanek@wum.edu.pl

2. BASIC INFORMATION

Year and semester of studies	IVth year, VIIth semester	Number of ECTS credits	2
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)		5	0,2
Seminar (S)		25	1
Discussions (D)			
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		20	0,8

3. COURSE OBJECTIVES

O1	The knowledge in the field of planning and conducting clinical trials according to the principles and legal regulation of UE.
O2	Becoming familiar with the procedures in the process of safety monitoring after drug registration

O3	Knowledge about resources of information on pharmacology
O4	Knowledge update about safety profile of drugs commonly used in the dentistry.
O5	Knowledge about medical and legal aspects of the use of cannabinoids.
O6	Knowledge about pharmacotherapy of neuropathic pain.
O7	Student know how to conduct chemioterapeutic treatment in the specific clinical situation
O7	Gaining knowledge how to conduct pharmacotherapy in emergency situations
O8	Knowledge enabling the differentiating the diet supplement from the drug
O9	Gaining the knowledge about the rules of anesthesia in dentistry and basic drugs used in this condition

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)

<p>Code and number of effect of learning in accordance with standards of learning (in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</p>	<p>Effects in time</p>
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Knowledge – Graduate* knows and understands:

C.W18.	mechanisms of drug action as well as and the pharmacokinetics and biotransformation of individual drug groups
C.W19.	the indications, contraindications to the use of drugs, their dosage, side effects and toxic effects, and drug interactions;
C.W21.	principles of preventing and combating pain and anxiety, as well as the pharmacology of medications used in life-threatening situations;
F.W3.	viral, bacterial and fungal flora of the oral cavity and its importance;
F.W4.	symptoms, course and management in selected disorders of the oral cavity, head and neck diseases considering age groups;
F.W13.	principles of antibiotic therapy and antibiotic resistance;
F.W16.	principles of anesthesia in dentistry and basic pharmacological agents;

Skills– Graduate* is able to:

C.U8.	select medicines in appropriate doses and prescribe medicines according the indications;
F.U8.	conduct the treatment of acute and chronic odontogenic and non-odontogenic inflammatory processes within soft tissue of the oral cavity, peridontium and jaw bone;
F.U10.	prescribe medications taking into account their interactions and side effects;

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)	
Number of effect of learning	Effects of learning in time
Knowledge – Graduate knows and understands:	
W1	-
Skills– Graduate is able to:	
S1	-
Social Competencies – Graduate is ready for:	
SC1	providing the patients with basic information on the effectiveness, limitation and risk associated with drugs commonly used in dentistry in understandable and accessible way;

6. CLASSES		
Form of class	Class contents	Effects of Learning
Lectures	L1 - Lecture 1. NSAIDs - side effect. Content: lecture about a side effects of NSADs (non-steroidal antiinflammatory drugs based on reviews and metanalysis.	C.W19.
	L2 – Lecture 2 -Cannabinoids. Content: presentation of the medical and legal aspects of use of cannabinoids.	C.W19.
	L 3 – Lecture 3 Pain management in dentistry. Content: lecture devoted pain pharmacotherapy.	C.W21.
Seminars	S1 – Seminar1 – Good clinical practice. Content: seminar concerns preregistration drug evaluation – rules of good clinical practice and good laboratory practice.	C.W18.
	S 2 – Seminar 2 – anxiety management in dentistry Content: the seminar concerns the principles of the use of anxiety treatment in dentistry and danger associated with particular groups of drugs.	C.W18.
	S3 – Seminar 3- monitoring of the safety of pharmacotherapy and reliable sources of information about drugs. Content: the first part of the seminar concerns reporting of the adverse effects of medical product, the second part is devoted to reliable sources of information about drugs (clinical trials, meta-analysis, summary of medical products).	C.W19, C.U08.
	S4 – Seminar 4 - Antibiotics part 1	C.W19., C.U08., F.W3., F.W4.,

Content: chemioterapeutics in the dental practice.	F.W13., F.U8, F.U10, K1
S5– Seminar 5 - Antibiotics part 2. Content: chemioterapeutics in the dental practice.	C.W19., C.U08., F.W3., F.W4., F.W13., F.U8, F.U10, K1 F.U8.
S6 – Seminar 6. Pharmacotherapy of medical emergency and acute states part 1. Content: seminar concerns pharmacotherapy emergency states in dentistry office (e.g. cardiac arrest: rhythms requiring defibrillation and rhythms not requiring defibrillation; cute coronary syndrome; hypertensive crisis; anaphylactic shock; status epilepticus), are presented therapeutic recommendations.	C.W21.
S7 – Seminar 7 - Pharmacotherapy of medical emergency and acute states part 2. Content: seminar concerns pharmacotherapy emergency states in dentistry office (e.g. cardiac arrest: rhythms requiring defibrillation and rhythms not requiring defibrillation; cute coronary syndrome; hypertensive crisis; anaphylactic shock; status epilepticus), are presented therapeutic recommendation.	C.W21.
S8 – Seminar 8 – Anesthesia in dentistry. Content: seminar concerns the principles of anesthesia in dental procedures and basic pharmaceutics used in anesthesia.	F.W16.
S9 – Seminar 9 – oral side effects of drugs. Content: types of oral side effects and drugs associated with them.	F.U8.

7. LITERATURE

Obligatory

1. Katzung B, Masters S, Trevor A. Basic and Clinical Pharmacology 14/E (LANGE Basic Science), Appleton-Lange Medical Publications 2017
2. Rang HP, Dale \M, Ritter JM, Flower RJ, Henderson G. Rang & Dale's, Pharmacology: with STUDENT CONSULT Online Access, 7/E, Elsevier, Churchill Livingstone 2012

Supplementary

Goodman and Gilman's the Pharmacological Basis of Therapeutics. McGraw-Hill Professional; 12 edition, 2011

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
e.g. G.K1, G.S1, K1	<i>This field defines the methods used for grading students e.g. pop quiz, test, written report etc.</i>	e.g. threshold number of points
C.W18., C.W19., C.W21., C.U08.,	MCQ – Multiple Chopice Questions	>51%

F.W3., F.W4., F.W16., F.U8., F.U10., K1.		
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9. ADDITIONAL INFORMATION (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

1. Seminars and lectures are obligatory.
2. The schedule is provided on the pharmacology website: www.e-learning.wum.edu.pl/en
3. One absence at seminars and one absence at lectures during a semester is allowed.
4. Only one class representative can contact the pharmacology teachers (via e-mail or mobile phone) on the behalf of the class.
5. All seminars and lectures are provided in the pdf version by teachers responsible for particular topics. These materials will be delivered in the web site www.e-learning.wum.edu.pl/en within 7 days after seminar or lecture.
6. All applications concerning the didactic problems should be addressed to Head of the Department: Professor Mirowska-Guzel and directed to the Coordinator. The decision is made by Head of the Department in the consultation with the Coordinator of the Pharmacology.
7. Didactic secretariat: Department of Experimental and Clinical Pharmacology, Medical University of Warsaw, open: Monday – Friday, hours: 9.00 - 15.00, Banacha 1B; 02-097 Warsaw Phone: (+48) 22 116 61 60; fax: (+48) 22 116 62 02Mail: farmakologia@wum.edu.pl

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