

Course title	Pharmacology I				
Course Code	PHRM204				
Course Type	Theoretical				
Level	Diploma				
Year / Semester	2nd Year / 3rd Semester				
Teacher's Name	Mitsinga Mikaella				
ECTS	6	Lectures / week	3	Laboratories / week	0
Course Purpose and Objectives	The aim of the course of Pharmacology I is to introduce students to the science of Pharmacology and then to learn the categories and mechanisms of action of the drugs used to treat inflammation, pain and the main diseases of the nervous, circulatory (cardiovascular) and digestive systems, but also in renal function.				
Learning Outcomes	<p>Upon completion of the course, students are expected to:</p> <p>Knowledge</p> <ol style="list-style-type: none"> Understand the basic principles of pharmacology Explain the use (mainly indications and mechanism of action) and limitations of drugs (active substances) that affect the autonomic nervous system, the central nervous system, the cardiovascular and digestive systems, renal function as well as the basic actions of vitamins. Identify drugs, the route of administration, the mechanism of action, uses, contraindications, combinations thereof. Understand the pharmacodynamics and pharmacokinetics of drugs. <p>Skills</p> <ol style="list-style-type: none"> Represent and interpret the mechanism of action of drugs. <p>Competences</p> <ol style="list-style-type: none"> Synthesise their knowledge in the field of Pharmacology and acquire critical thinking for the selection of the appropriate pharmacologically active substance on a pathological basis and the appropriate dosage regimen, according to the Pharmacodynamics and Pharmacokinetics of the drug. 				
Prerequisites	MEDI103 Human Anatomy BIOL100 Biology with Biochemistry Elements MEDI101 Physiology			Required:	-
Course Content	<p>Basic principles of Pharmacology:</p> <ul style="list-style-type: none"> Basic mechanisms of action of drugs (receptors, transmitting substances, delivery systems) Routes of administration Drug absorption, distribution, metabolism and excretion Half-life and bioavailability Side effects and interactions concepts <p>Drugs acting on the Autonomic Nervous System:</p> <ul style="list-style-type: none"> Autonomic nervous system Cholinergic agonists and antagonists Adrenergic agonists and antagonists 				

	<p>Drugs that act on the Central Nervous System:</p> <ul style="list-style-type: none"> • Treatment of Parkinson's disease • Anxiolytics and hypnotics • Antidepressants • Neuroleptics (Schizophrenia) • Opioid analgesics • CNS Stimulants • Anaesthetics <p>Drugs for epilepsy treatment</p> <p>Drugs acting on the cardiovascular system:</p> <ul style="list-style-type: none"> • Treatment of Congestive Heart Failure • Antiarrhythmics • Antianginal • Anti-hypertensives • Antihyperlipidemic • Drugs affecting the blood (anticoagulants, platelet inhibitors, thrombolytics, antihemorrhages, treatment of anaemia) <p>Medicines that affect kidney function:</p> <ul style="list-style-type: none"> • Diuretics <p>Drugs acting on the digestive system:</p> <ul style="list-style-type: none"> • Proton pump inhibitors • H2-histamine receptor blockers • Antacids • Antidiarrheal • Laxatives • Antiemetics • Vitamins
<p>Teaching Methodology</p>	<p>The course content will be taught through: Power Point presentations, guided discussions with the active participation of students, individual and team work by students and the use of a variety of audiovisual media and other teaching tools as required for the delivery of each module.</p>
<p>Bibliography</p>	<p>Greek Bibliography</p> <ul style="list-style-type: none"> • Τσιφτσόγλου, Α. (2018). <i>Επίτομη μοριακή και κλινική φαρμακολογία: Βασικές αρχές της δράσης των φαρμάκων</i>, University Studio Press, ISBN 978-960-12-2394-0. • Ισσέγιεκ, Α. (2016). <i>Φαρμακολογία Ι</i>, KES College. • Rang, H. P. & Dale, M. M. (2013). <i>Φαρμακολογία</i>, Παρισιάνου Α.Ε., ISBN: 9789603949237. • Rang, H. P., and Dale, M. M. (2013). <i>Φαρμακολογία</i>. 2^η Έκδοση. Εκδόσεις Παρισιανού. ISBN: 9789603949237 • Katzung, B. G. (2009). <i>Βασική και κλινική φαρμακολογία</i>, Αθήνα, Ιατρικές Εκδόσεις Π.Χ. Πασχαλίδης, ISBN: 978-960-399-816-7. <p>English Bibliography</p> <ul style="list-style-type: none"> • Wiffen, P., Mitchell, M., Snelling, M., Stoner, N. (2017). <i>Oxford handbook of Clinical Pharmacy</i>. 3rd Edition. OUP Oxford, ISBN: 978-0198735823. • Shiew-Mei, H., Lertora Juan J.L., Atkinson, A. J., Jr. (2012). <i>Principles of Clinical Pharmacology</i>. 3rd Edition. London: Academic Press. ISBN: 9780123854711. EBSCOHost.

Assessment	<ul style="list-style-type: none"> • Attendance and participation: 10% • Tests: 20% • Midterm Written Examination: 20% • Final Written Examination: 50%
	<p><i>Written examination has two parts that are examined as part of one exam paper. The first part includes closed-ended questions, such as multiple choice questions, true or false, matching exercises, complete the gaps exercises, etc. The first part is usually worth 40% - 50% of the total marks of the exam paper. The second part includes open-ended questions that are meant to assess the students' abilities to analyse, reflect, explain, recall etc. The second part is usually worth 50% - 60%. The total marks of the exam paper are 100.</i></p>
Language	Greek or English