



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Scienze e Tecnologie Biologiche, Chimiche e Farmaceutiche		
ACADEMIC YEAR	2016/2017		
MASTER'S DEGREE (MSC)	PHARMACY		
SUBJECT	PHARMACOLOGY AND PHARMACOTHERAPY		
TYPE OF EDUCATIONAL ACTIVITY	B		
AMBIT	50322-Discipline Biologiche e Farmacologiche		
CODE	03153		
SCIENTIFIC SECTOR(S)	BIO/14		
HEAD PROFESSOR(S)	POMA PAOLA	Professore Associato	Univ. di PALERMO
OTHER PROFESSOR(S)			
CREDITS	10		
INDIVIDUAL STUDY (Hrs)	175		
COURSE ACTIVITY (Hrs)	75		
PROPAEDEUTICAL SUBJECTS	15171 - GENERAL PHYSIOLOGY AND PATHOLOGY - INTEGRATED COURSE		
MUTUALIZATION			
YEAR	4		
TERM (SEMESTER)	1° semester		
ATTENDANCE	Not mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	POMA PAOLA Wednesday 10:00 - 12:00 Studio Pt 35, Dip. STEBICEF, viale delle Scienze, Ed. 16, piano terra		

DOCENTE: Prof.ssa PAOLA POMA

PREREQUISITES	Students will have acquired the basics of physiology and pathology.
LEARNING OUTCOMES	Knowledge and understanding - Acquisition of the most appropriate instruments to the knowledge of the effects of pharmacological treatments - Ability to retain and apply a methodology to consolidate a critical knowledge of the main categories of pharmacological agents and their direct action on specific organs and systems - Acquisition of a dynamic and "analytical" assessment concerning the fields of pharmacological applications.
ASSESSMENT METHODS	The examinee must answer at least three orally questions regarding all object parts of the program, with reference to the recommended texts. Final assessment aims to evaluate whether the student has knowledge and understanding of topics concerning the effects of pharmacological agents. The pass mark will be reached when the student showed that he understood the arguments, at least in general lines, and has reached minimum competence regarding the knowledge of the main categories of pharmacological compounds and their direct action on specific organs and system. Below this threshold the examination will be considered insufficient. More the examinee is able to better expose the exam topics, more its assessment will be positive. The assessment is carried out of thirty
EDUCATIONAL OBJECTIVES	The goal of this course is to understand the composition, properties, and actions of drugs.
TEACHING METHODS	Lectures
SUGGESTED BIBLIOGRAPHY	Farmacologia Generale. Cannizzaro. Idelson-Gnocchi Farmacologia generale e molecolare. Francesco Clemente, Guido Fumagalli. UTET Trattato di Farmacologia. L. Annunziato – G. Di Renzo. Idelson-Gnocchi (II Edizione) The Pharmacological Basis of THERAPEUTICS. Goodman & Gilman's. Mc Graw Hill Principi di Farmacologia. Le basi farmacologiche della terapia. Casa Editrice Ambrosiana

SYLLABUS

Hrs	Frontal teaching
2	Introduction and presentation to the course
8	GENERAL PRINCIPLES. Pharmacokinetics; the dynamics of drug, absorption, metabolism and elimination. Pharmacodynamics; molecular mechanisms of drug action. Membrane transporter. Ion channels
18	NEUROPHARMACOLOGY. Neurotransmission. Muscarinic receptor agonist and antagonist. Anticholinesterase agents. Adrenergic agonist and antagonist. 5-Hydroxytryptamine and Dopamine. Neurotransmission and central nervous system. Drug therapy of depression and anxiety disorders. Pharmacotherapy of psychosis mania. Hypnotics and sedatives. Opioids, analgesia and pain management. General and local anesthetics. Pharmacotherapy of epilepsies. Treatment of degenerative disorders.
16	MODULATION OF CARDIOVASCULAR FUNCTION. Regulation of renal function. Renin angiotensin. Treatment of myocardial ischemia and hypertension. Congestive heart failure. Anti-arrhythmic drugs. Anticoagulant, fibrinolytic and antiplatelet drugs. Drug therapy of hypercholesterolemia and dyslipidemia.
6	INFLAMMATION, IMMUNOMODULATION AND HEMATOPOIESIS. Histamine, bradykinin and their agonist. Anti-inflammatory, antipyretic and analgesic agents, pharmacotherapy of the gout. Pulmonary pharmacology. Hematopoietic agents
7	DRUGS AFFECTING GASTROINTESTINAL FUNCTION. Pharmacotherapy of gastric acidity, peptic ulcers, and gastroesophageal reflux disease. Treatment of disorders of bowel motility. Pharmacotherapy of inflammatory bowel disease
8	CHEMOTHERAPY OF MICROBIAL DISEASE. General principles of antimicrobial therapy. Sulfonamides, quinolones and agents for urinary tract infections. Penicillins, cephalosporins, and other beta-lactam antibiotics. Aminoglycosides.
6	Chemotherapy of tuberculosis, Mycobacterium avium complex disease, and leprosy. Antifungal agents. Antiviral agents. Antiretroviral agents and treatment of HIV infection
4	General principles of cancer chemotherapy. Special system pharmacology. Ocular pharmacology, dermatological pharmacology.