UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Scienze e Tecnologie Biologiche, Chimiche e Farmaceutiche
ACADEMIC YEAR	2020/2021
MASTER'S DEGREE (MSC)	PHARMACY
SUBJECT	GENERAL PHARMACOLOGY AND PHARMACOTHERAPY
TYPE OF EDUCATIONAL ACTIVITY	B
AMBIT	50322-Discipline Biologiche e Farmacologiche
CODE	19173
SCIENTIFIC SECTOR(S)	BIO/14
HEAD PROFESSOR(S)	POMA PAOLA Professore Associato Univ. di PALERMO
OTHER PROFESSOR(S)	
CREDITS	10
INDIVIDUAL STUDY (Hrs)	170
COURSE ACTIVITY (Hrs)	80
PROPAEDEUTICAL SUBJECTS	
MUTUALIZATION	
YEAR	3
TERM (SEMESTER)	2° 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	The student must have knowledge about general chemistry and biochemistry, physiology, anatomy and pathology.
LEARNING OUTCOMES	Knowledge and understanding of molecular mechanisms of different drugs classes and knowledge and understanding of molecular mechanisms of toxic substances. Knowledge of action mechanisms of principal drugs and their pharmacocinetic; ability to apply methodologies to study interactions drug-receptor. Ability to apply knowledge about therapheutic and toxic features of natural drugs and of environmental toxics. Independent judgement Ability to express judgement on the subjects of the course. Oral ability Ability to explain studies about drugs mechanisms and xenobiotics with correct language. Learning ability Autonomy to study and to refer to scientific pubblications.
ASSESSMENT METHODS	The student must answer to three questions about general pharmacology, special pharmacology and toxicology. The student must shown knowledge and understanding of subjects and explain with specific language to obtain passing grade. More so the knowledge is detailed, more the rating is positive. Evaluation is out of 30.
EDUCATIONAL OBJECTIVES	The aim of this course is to provide the students with knowledge about fundamental concepts of the main pharmacological classes, the basic concepts of pharmacokinetics and pharmacodynamics of principal herbaldrugs, features and mechanisms of toxic substances, adverse drug reactions; to provide the students notions about principal targets of toxic substances and to acquire methods to evaluate toxicological risk.
TEACHING METHODS	Frontal lessons
SUGGESTED BIBLIOGRAPHY	H.P. Rang, M.M. Dale, J. M. Ritter, R.- Flower. Farmacologia. F. Clementi, G. Fumagalli. Farmacologia generale e molecolare. Casarett & Doull. Elementi di tossicologia. Goodman & Gilman - Le Basi Farmacologiche della Terapia.

SYLLABUS

Hrs	Frontal teaching
2	pharmacology, aim of course. definition of drug
8	pharmacokinetic: dugs administration, absorption distribution metabolism and elimination. variability of drug response
4	Receptors, dose-response curve, drug-receptor interaction, receptor binding study, potency and efficacy, agonist and antagonist.
2	pharmacogenetics
2	drug development and pharmacovigilance
10	anti-inflammatory drugs,immunosuppressants,pulmonary pharmacology, hematopoietic agents.
8	antimicrobial drugs
4	anticancer drugs
4	biotech drugs
8	Cardiovascular system drugs: treatment of hypertension, heart failure, ischemia and anti-arrhythmic drugs. Anticoagulant, fibrinolytic and antiplatelet drugs. Drug therapy for hypercholesterolemia and dyslipidemia.
4	digestive system drugs
4	Hormones and hormone antagonists: anti-tyroid drugs, pharmacotherapy of diabetes mellitus and hypoglycemia.
12	drugs classes acting on nervous system
8	brief focus on special pharmacology