
COURSE: PHARMACOLOGY AND PHARMACOTHERAPY

ACADEMIC YEAR: III

TYPE OF EDUCATIONAL ACTIVITY: Characterizing

TEACHER: Luigi Milella

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mobile (optional):

Language: italian

ECTS: **10** (9 lessons and
1 tutorials/practice)n. of hours: **84** (**72** lessons
and **12** tutorials/practice)Campus: **Potenza**
Dept./School: **Department of
Sciences**
Program: **Pharmacy (LM-13)**Semester: **I**
(**from 2 October
2017 to 31 January
2018**)

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

You will learn about drugs, starting from pharmacokinetic and pharmacodynamic and related Science. Classification, information about the effects and the correct use of drugs. An outline of the development of new therapeutic strategies

PRE-REQUIREMENTSAcquired knowledge of Biochemistry and Fisiology .

SYLLABUS

Definitions of pharmacology (20 hours), drug, medicine, poison or toxic. Branches of pharmacology. Drug pharmacodynamics and pharmacokinetic. Origin and nature of the drugs. Pharmaceutical forms. The practical significance of delayed absorption. First pass effects. Bioavailability. Kinetics of the first order (linear) and the zero-order (non-linear). Influence of dose schedule on the state of the system. Drug distribution. Drug binds serum proteins. Blood-brain barrier. Volume of distribution. Elimination of drugs: the routes of elimination (renal, biliary, lung, etc. Clearance. Half-life. The pharmacological action of drugs in relation to the association. Variations in sensitivity of the organism to drugs: habit, drug allergy, abnormal responses to drugs. Pharmacogenetics.

Pharmacotherapy (52 hours + 12 hours of practice), Direct cholinergic agonists, cholinergic agonists indirect (anticholinesterase), muscarinic antagonists, adrenergic agonists, adrenergic antagonists, alpha and beta blockers, neuromuscular blocking agents.

Drugs acting on the central nervous system: general anesthetics, anxiolytics, sedatives, hypnotics, anticonvulsants, antiparkinson, opioid analgesics and their antagonists, antipsychotics (neuroleptics), antidepressants, , stimulants of the central nervous system.

General and local anesthetics.

Autacoids, Cardiovascular Drugs, Diuretics, Drugs acting on blood and blood-forming organs, Drugs acting on the gastrointestinal system, Drugs acting on the respiratory system, Lipid metabolism, Antinflammatory drugs Drugs uterus: oxytocic and tocolytic.

TEACHING METHODSTheoretical lessons, Classroom tutorials, Laboratory tutorials, Project works, Technical visits.

EVALUATION METHODSIntermediate verifications: Written examination, Practical test, Oral examination

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

- o B.G. Katzung "Farmacologia generale e clinica" Piccin VII last edition
- o Goodman & Gilman "Le basi farmacologiche della terapia" McGraw-Hill last edition

INTERACTION WITH STUDENTS

Email contacts will be used for communication

EXAMINATION SESSIONS (FORECAST)¹

22/02/2018

01/03/2018

17/05/2018

07/06/2018

05/07/2018

13/09/2018

04/10/2018

29/11/2018

SEMINARS BY EXTERNAL EXPERTS YES NO

FURTHER INFORMATION

~~Any change will be available at the Department web page, for any other information you can send an email to the responsible of the course~~

¹ Subject to possible changes: check the web site of the Teacher or the Department/School for updates.