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**COURSE: PHARMACOLOGY AND PHARMACOTHERAPY**

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ACADEMIC YEAR: III

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TYPE OF EDUCATIONAL ACTIVITY: Characterizing

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TEACHER: Luigi Milella

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e-mail: [luigi.milella@unibas.it](mailto:luigi.milella@unibas.it)website:

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phone: +39 0971 205525

mobile (optional):

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Language: italian

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ECTS: 9 lessons + 1  
tutorials /practice)n. of hours: 72 lessons 12  
tutorials/practiceCampus: Potenza  
Dept./School: Science  
Program: PharmacySemester: I

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**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

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**PRE-REQUIREMENTS**

Biochemistry and Fisiology .

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**SYLLABUS**

Definitions of pharmacology, 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.

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.

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**TEACHING METHODS**

Theoretical lessons, Classroom tutorials, Laboratory tutorials, Project works, Technical visits.

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**EVALUATION METHODS**

Intermediate verifications: Written examination, Practical test, Oral examination

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**TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL**

o B.G. Katzung "Farmacologia generale e clinica" Piccin VII Ed. 2009

o Goodman & Gilman "Le basi farmacologiche della terapia" McGraw-Hill X Ed

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INTERACTION WITH STUDENTS

Email contacts will be used for communication

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EXAMINATION SESSIONS (FORECAST)<sup>1</sup>

22 /02/2016

16 /03/2016

17 05/2016

7 06/2016

5 /07/2016

20 /09/2016

18 /10/2016

15 /11/2016

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SEMINARS BY EXTERNAL EXPERTS    YES ☐    NO ☐

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FURTHER INFORMATION

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