
COURSE Analysis of Drugs I

ACADEMIC YEAR: 2016-17

TYPE OF EDUCATIONAL ACTIVITY: (Basic, Characterizing, Affine, Free choice, Other) Characterizing,

TEACHER: MANFRA MICHELE

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website:

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mobile (optional):

Language: ITALIAN

ECTS: 12 (5 lessons e 7 tutorials/practice)**n.124** of hours: (40 di lessons e84 tutorials/practice)**Sede: Potenza**
Dipartimento/Scuola: **Dipartimento di Scienze**
CdS: **FARMACIA (LM-13)****Semester:** II
(Anticipated dates of the beginning and end of the course:
03/06/2017,
06/21/2017)

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

Provide the student with theoretical and practical principles of quantitative analytical chemistry

Acquisition of analysis techniques applied to drugs, with particular reference to the techniques

Described in the Official Pharmacopoeia(FUI).

Capacity selected of optimal method and processing of the experimental data

PRE-REQUIREMENTS**GENERAL CHEMISTRY**

SYLLABUS

Analytical Objectives, or: What Analytical Chemists Do. Basic Tools and Operations of Analytical Chemistry. Data Handling and Spreadsheets in Analytical Chemistry. Good Laboratory Practice: Quality Assurance of Analytical Measurements. Stoichiometric Calculations: The Workhorse of the Analyst. General Concepts of Chemical Equilibrium. Acid–Base Equilibria. . Acid–Base Titrations. Complexometric Reactions and Titrations. Gravimetric Analysis and Precipitation Equilibria. . Precipitation Reactions and Titrations. Electrochemical Cells and Electrode Potentials. . Potentiometric Electrodes and Potentiometry. Redox and Potentiometric Titrations.

TEACHING METHODS**Lectures – Lab activities.**

EVALUATION METHODS**TEST/** Laboratory Practice Test

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

Riportare in lingua inglese i contenuti riportati nella scheda in lingua in italiana. 1) J) E. Abignente, D. Melisi, M.G. Rimoli, Principi di Analisi Quantitativa dei Medicinali,

Loghà, Napoli.

2) D. A. Skoog, D. H. West, Fundamentals of analytical chemistry, Saunders College

Publishing, VI Ed., 1992.

3) G. C. Porretta, Analisi quantitativa di composti farmaceutici, CISU, Roma.

4) J. M. Kolkthoff, E. B. Sandekll, Analisi chimica quantitativa, Piccin, Padova, 1974.

5) S. Salerno, Esercizi risolti di Analisi dei medicinali II, Ed. Servizio Editoriale

Universitario di Pisa, 2008.

6) Farmacopea Ufficiale X ed XI Ed

SLIDES OF COURSE TEACHER

INTERACTION WITH STUDENTS

Contacts will be constantly maintained through telematic platforms

EXAMINATION SESSIONS (FORECAST)¹

20/02/2017,13/03/2017,19/06/2017,10/07/2017,19/09/2017,02/10/2017,06/11/2017,04/12/2017

SEMINARS BY EXTERNAL EXPERTS YES ☐ NO X

FURTHER INFORMATION

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