
COURSE: PHARMACOGNOSY

ACADEMIC YEAR: 2018-2019

TYPE OF EDUCATIONAL ACTIVITY: : Characterizing

TEACHER: Dott. Luigi Milella

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mobile (optional):

Language: **ITALIAN**

**ECTS: 6 (5 lessons and 1
tutorials/practice)**n. of hours: **52 (40 lessons
and 12 tutorials/practice)**Campus: **Potenza**Dept./School: **Department of
Sciences**Program: **Pharmacy (LM-13)**Semester: **I**(from 1 october 2018 to
20 december 2018 -20
January 2019)

**EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES
KNOWLEDGE AND UNDERSTANDING**

- Basic knowledge on drugs of plant origin and of the active ingredients contained in them
- Biogenesis and biological activity of mevalonate
- Biosynthetic pathways of aromatic amino acids, alkaloids and phenylpropanoids
- Biological activities of some main classes of polyketides, terpenoids and steroids of Pharmaceutical, cosmetic and food interest

CAPACITY TO APPLY KNOWLEDGE AND UNDERSTANDING

- o Recognition of the activities of terpenoids and steroids and their derivatives
- o Acquisition of specific language of this discipline. Students must be able to communicate their acquired skills with an appropriate language from future health professionals.
- o Evaluation of the usefulness of biologically active substances of plant origin and possible use as drugs, as starting material for semi-syntheses and as molecular models

PRE-REQUIREMENTS

Plant and Cell Biology .

SYLLABUS

Definition and objectives of Pharmacognosy. Information about the use of Medicinal plants. Plant as a source of drugs of pharmaceutical interest. An outline of the development of systematic classification of plants and Linnaean nomenclature. (10h)

Extraction procedures for natural compounds, their differences and their applications

-biogenesis and biological activity of natural products coming from mevalonate: terpenoids and steroids; (10h+6h lab)

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- the biological activities of several compounds belonging to polyketides, terpenoids and steroids; and their traditional use and application in pharmaceutical and/or nutraceutical field,
 - the main pathways of aromatic amino acids, alkaloids, phenylpropanoids (20h+6h lab)
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TEACHING METHODS

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

EVALUATION METHODS

Intermediate verifications: Written examination, Practical test, Oral examination

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

Pharmacognosy, Phytochemistry, Medicinal plants. J. Bruneton. Ed. Lavoisier

INTERACTION WITH STUDENTS

Email contacts will be used for communication

EXAMINATION SESSIONS (FORECAST)¹

06/02/2019

07/03/2019

16/05/2019

06/06/2019

04/07/2019

12/09/2019

03/10/2019

04/12/2019

SEMINARS BY EXTERNAL EXPERTS YES NO

FURTHER INFORMATION

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