
ALTRE INFORMAZIONI

Per le attività di campo gli studenti devono indossare scarponcini da escursione e avere la seguente attrezzatura: martello da geologo, bussola, macchina fotografica, supporto rigido, colori a pastello e gomma.

COURSE: **Geological mapping, mod.I**

ACADEMIC YEAR: **2016-2017**

TYPE OF EDUCATIONAL ACTIVITY: **Characterizing**

TEACHER: **Paolo Giannandrea**

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website:

phone: **0971 206258**

mobile (optional):

Language: **Italian**

ECTS: **6** (3 lessons, 3 field tutorials)

n. of hours: **60** (24 lessons, 36 tutorials)

Campus: **Potenza**
Dept./School: **Department of Science**
S.C. : **Geo.logical Sciences (L34)**

Semester: **I**

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

Educational goals: field collection and mapping of the geological data in order to draw a geological map.

Expected learning outcomes:

- Obtaining 3D information from the official geological maps published by the Italian Geological Survey, to interpret the structural setting of the rock bodies.
- Describing, classifying, correlating and representing geological data on topographic maps.

PRE-REQUIREMENTS

Have passed the examination of the courses of: Geology 1, Geology 2, and Physical Geography:

SYLLABUS

- 1) Introduction to the geological mapping.
 - 2) Instruments used for the geological mapping.
 - 3) Use of the geological compass.
 - 4) Interpretation of the geological maps.
 - 5) Geological cross-sections.
 - 6) The concept of sedimentary unit; facies and facies association.
 - 7) The principle of stratigraphic superposition.
 - 8) Stratigraphic and formational boundaries. Lithostratigraphic Units and Unconformity-Bounded Stratigraphic Units (UBSU).
 - 9) Lithological characters of some sedimentary and volcanic formations of the southern Apennines.
 - 10) Cartographic representation of natural and artificial outcrops.
 - 11) Description of sedimentary rocks.
 - 12) Spatial relationships between outcrops and correlations.
 - 13) Reconstruction of sedimentary successions.
 - 14) Principles of aerial photograph interpretation.
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TEACHING METHODS

Theoretical lessons, Classroom tutorials, and field tutorials.

EVALUATION METHODS

An intermediate verification, Written examination, Discussion of a project work, Oral examination.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

- Rilevamento Geologico di Giorgio Cremonini - Pitagora Editrice, Bologna.
- Lettura delle carte geologiche di Brian Simpson - Dario Flacco Editore.
- Quaderno 1, serie III dell'SGN, 1992, 2003.
- Approccio alla Geologia Stratigrafica di Loris Montanari.
Monographic scientific articles in Italian and English.

INTERACTION WITH STUDENTS

using three-way preferential: telephone, email and in person in the office hours.

EXAMINATION SESSIONS (FORECAST)¹

26/01/2017; 09/02/2017; 09/03/2017; 06/04/2017; 04/05/2017; 15/06/2017; 06/07/2017; 07/09/2017; 05/10/2017; 09/11/2017; 14/12/2017.

SEMINARS BY EXTERNAL EXPERTS YES NO

FURTHER INFORMATION

For field activities students should wear trekking footwear and have the following equipment: a geologist's hammer, compass, camera, rigid support, pastel colors, and rubber.

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