UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Integrated Environmental Sciences Laboratory - Part One

2021-1-E3201Q008

Aims

- Understand how to carry out an environmental analysis, integrating the mono-disciplinary knowledge.
- Be able to apply the various phases of an environmental analysis, highlighting the most relevant details of a complex environment.
- Organize a team work, integrating and comparing the information obtained.

Contents

- The course consists of two daily trips in a limited anthropized environment, in order to show the main phases of an environmental study.
- During the days, interactive group activities are carried out under the supervision of teachers and experts.
- The disciplinary fields involved in the course are the following: geology, geomorphology, pedology, botany, water ecology, zoology, chemistry.

Detailed program

The Integration Laboratory I aims to show students who have just completed the 1st year of the course how the knowledge acquired is all necessary and immediately applicable performing an environmental study. The workshop is usually carried out in a poorly anthropized environment, of relatively simple reading, to facilitate students' understanding and promote direct and active participation. The place of the excursion is changed frequently, usually favoring alpine environments of medium mountain or lowland areas, of great naturalistic and landscape interest.

The multiple activities carried out:

- require the ability to move on safe but difficult terrain (mountain excursion paths);
- allow direct observations of the most typical environmental phenomena;
- focus on various environmental problems, placing them in the general context;
- explicitly demonstrate the interdependence of the various disciplines and the advantages of the multidisciplinary approach to environmental problems.

The excursion is mandatory; it involves all the students who have completed the first year of the degree course and a dozen teachers, assisted by local collaborators and/or experts (who participate on a voluntary basis). The students are divided into groups, by single discipline or by groups of related disciplines; later the groups are exchanged.

Prerequisites

Prerequisites: be enrolled in the first year of the degree course.

Teaching form

Field activities, in small groups coordinated by the teachers.

Textbook and teaching resource

Documents made available on the e-learning website, relating to the area under study:

- topographic maps;
- geological maps;
- other thematic maps;
- various informative material.

Semester

Summer period after the end of the courses, usually in late June/early September.

Assessment method

- At the end of the excursion, the students draw up a group report (4 participants per group) and deposit it on the e-learning site.
- Each group chooses a reference teacher, who verifies the report, possibly requests changes and finally

evaluate it.
- A positive judgment of the reference teacher gives the right to the achievement of the CFU, through an approval in the career.

Office hours

- On appointment.
- Possibility of contacts between all participants via the e-learning website.