UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Integrated Environmental Sciences Laboratory - Part One

2627-1-E3202Q027

Aims

Knowledge and understanding. At the end of the course the student will be able to:

- understand the methods of environmental analysis, integrating knowledge from different disciplines.
- understand the different stages of an environmental analysis, highlighting the most relevant details of a complex natural environment.
- work in a team, integrating and comparing the information acquired.

Autonomy of judgement. The student will be able to evaluate the most relevant details of a complex natural environment by examining the results of the different disciplinary analyses.
Learning ability. At the end of the course the student will be able to consult the literature on the topics covered and the relevant legislation. The student will also be able to independently design the beginning of an environmental analysis
Communication skills. At the end of the course the student will be able to describe the topics studied in an appropriate way, using the correct specific terminology.

Contents

- The course consists of two daily trips, or a two day excursion, 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

To access the activities of the Integration Laboratory I (scheduled at the end of the first academic year) the student must have achieved sufficient basic preparation. The student have to therefore have passed at least two first-year exams. Students must present certification of exams taken when registering for activities.

Teaching form

Ten-hour field activities in person. Interactive teaching

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 from late June to middle September.

Assessment method

The assessment will take place at the same location as the educational excursion, at its end. It will be preceded by a discussion in small groups, coordinated by the teachers and concerning what was learnt during the excursions; the test will consist of a short individual discussion on the topics covered during the excursion.

Office hours

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

Sustainable Development Goals

LIFE ON LAND