UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Laboratory of Mitigation Work Design

2425-1-F7401Q114

Aims

The objective of this course is to familiarize students with a work method for planning the hydrogeological risk mitigation works.

Contents

During the course real cases of hydrogeological risks will be analysed, to which the work method will be applied, so as to develop mitigation works projects, both independently or in a team.

Detailed program

In the first part of the course the notions acquired in other courses on the main hydrogeological criticalities, as well as on the possible methodologies and intervention techniques, will be quickly reviewed. Normative and technical elements in relation to the planning of soil protection works and to the role of the geologist in this regard will also be given.
It's a very complex, delicate and well-structured area. The mitigation measures projects shall apply to an instable or potentially instable natural context and protect anthropic elements and activities, all evolving over time. The design choice must take all these factors into consideration.
During the course real cases of hydrogeological risks (floods, debris flow, avalanches, landslides in soil and in rocks, sinkholes) will be analysed, to which the work method will be applied, so as to develop mitigation works projects, both independently or in a team. The project results will then be analytically compared to the solutions given by the professionals who actually worked on such real cases.
Field trips and visits to construction sites for soil protection works (either completed or still in progress) will be finally integrated into the course, some of which having been analysed during the course.

Prerequisites

Applied Geology

Teaching form

Lessons
Exercises
Field Trips

Textbook and teaching resource

Materials supplied by the teacher

Semester

Semester 2

Assessment method

1. Report: SCIENTIFIC LABORATORY REPORT
2. Oral exam: INTERVIEW ON THE TOPICS PERFORMED IN THE LESSON
   Sufficiency is required in all 2 assessment methods

Office hours

Sustainable Development Goals

CLIMATE ACTION