



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Hydrogeological Disaster Management

2122-2-F7501Q056

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#### Aims

The Hydrogeological risk assessment and management is the principal aim of the course.

The disaster management cycle will be analyzed with particular attention on the prevention and mitigation part. Successively, Italian national and regional laws will be studied especially for the emergency planning.

During the classes, GIS will be used to create an emergency plan.

#### Contents

Program:

- Basic concept of hydrogeologic risk,
- Hydrographic basin concept
- Risk management cycle: prevention mitigation; Alerting, Event response, Post event
- The role and the system of civil protection at national and regional level

## **Detailed program**

- Basic Knowledge of hydrogeological risk
- Hydrographic basin
- Risk management cycle: Prevention and mitigation, Preparedness, Alert, response, recovery, post disaster.
- Civil protection role
- Regional and local laws,
- Italian Civil protection role: prevision, prevention, response, post disaster
- Emergency planning
- Hydrogeological hazard assessment
- Hydrologic data, what and where
- Precipitation misure
- Principal italian pluviometric systems
- Hydrographic basin and discharge models
- GIS hydrologic processes

## **Prerequisites**

Environmental geology

## **Teaching form**

- Lessons tutorials, 4 credits - 32 hours

- Laboratory experiences, 2 credits - 20 hours

## **Textbook and teaching resource**

Didactic material provided by the teacher and available on UNIMIB elearning website

**Semester**

second semester

**Assessment method**

The student must prepare a written report on a topic chosen by him/her, concerning the topics dealt with during the course, which is then discussed with the teacher on the day of the oral exam.

The object of the evaluation will be to verify that the theses and topics covered have a logical filum that starts from the objectives and ends with the conclusions. The oral test will focus mainly on the presentation of the report and the verification of knowledge of the issues dealt with during the course.

**Office hours**

always

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