

## **Syllabus 2022-2023**

Teacher (name and affiliation)	Riccardo Castellanza (UNIMIB, Dep. Earth and Environmental Sciences)
Title	Advanced experimental testing and monitoring on geomaterials (laboratory and in situ)
Language	English
CFU	2
Hours	20
Program	The aims of this course are: i) provide a specific knowledge and training on advanced experimental testing method for geomaterials (both in laboratory and in situ); ii) provide a specific background of recent monitoring methods for geo-structures or protective defense. The course is focused on the definition of geo-mechanical, hydrogeological and chemical behaviour of soils and rocks. The specific requests of the PhD students attending the course will be considered.  The course is subdivided in 4 parts: 1) experimental apparatus, sensors, datalogger and controller unit for testing geomaterials. 2) advanced laboratory tests on soil and rocks for idro-chemo-mechanical characterization 3) in situ testing overview of recent and innovative devices 4) monitoring of the main physical variables with the most recent devices
Evaluation: YES/NO	YES
Calendar	I semester