

Syllabus 2022-2023

Teacher (name and affiliation)	Davide Ballabio (UNIMIB, Dep. Earth and Environmental Sciences)
Title	Machine learning for multivariate data analysis
Language	English
CFU	2
Hours	16
Program	The course will introduce principles and theory of the main multivariate modelling and machine learning approaches. These can be useful for explor- atory analysis, i.e. to find and visualise main patterns in complex data sys- tems (Principal Component Analysis), as well as to relate a set of independ- ent variables to a modelled qualitative or quantitative response (Support Vector Machines and Partial Least Squares). Theory lessons will be supported with guided exercises and practical ses- sions on real data as case studies. Practical sessions will be based on avail- able MATLAB statistical toolboxes for multivariate data analysis.
Evaluation: YES/NO	NO
Calendar	ll semester