UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Critical Raw Materials and Their Environmental Impact

2425-1-124R010

Title

Critical Raw Materials and their Environmental Impact

Teacher(s)

Alessandro Cavallo

Language

English

Short description

Critical raw materials: REE, PGE, Sb, Be, Co, Ga, Ge, In, Li, Mg, Re, Nb, Ta, W, critical industrial minerals (e.g. barite and fluorspar).

The following topics will be covered for each critical raw material:

1. Chemistry and mineralogy
2. Ore deposits

3. Processing and industrial uses

4. Environmental issues, recycling and replacement

5. Hints at European legislation (e.g., Raw Materials Act) and possible developments.

Evaluation: short oral discussion on course content, consisting of 3 open-ended questions. Relevance and completeness of answers will be evaluated.

CFU / Hours

2 CFU - 16 Hours (Lecture)

Teaching period

II semester

Sustainable Development Goals

AFFORDABLE AND CLEAN ENERGY | INDUSTRY, INNOVATION AND INFRASTRUCTURE | RESPONSIBLE CONSUMPTION AND PRODUCTION | CLIMATE ACTION