UE Emerging pollutions

ECTS
3 credits

Component
UFR PhITEM (physique, ingénierie, terre, environnement, mécanique)

Semester
Automne

- **Teaching language(s):** French
- **Open to exchange students:** Yes
- **Code d'export Apogée:** PAX9HRAE

Presentation

Description

Introduction to concepts involved in risk assessment and how they are applied to formulating human, aquatic or terrestrial environments emerging contaminants risk assessments. Modern methods and models describing environmental risk assessment strategies will be emphasized. Topics will include: Sources and exposure pathways, Transformation and transport processes, Megacities as tomorrow ecosystems, energy exploration and fracking, Military and conflicts areas, nanomaterials and microplastics as emerging contaminants. Tools to be acquired and used include: soil and water quality data evaluation, dynamic box models (for lake, building, city), risk assessment and risk management, human health risk assessment, Life Cycle Analysis. Case studies across all environmental compartments (e.g. surface water, groundwater, soil, air, biological tissue, etc.) will be drawn on specific emerging contaminants by students, who will formulate a risk assessment as part of a team.

Langue d'enseignement / Teaching language: *french, with english support, see the 'Hydroressource' main page.*

Course parts

CMTD	Lectures (CM) & Teaching Unit (UE)	15h
TD	Tutorials (TD)	9h

Useful info

Campus

- Grenoble - University campus