

BIR1313 Integrated exercises in soil and water chemistry

[30h] 2.5 credits

This course is taught in the 2nd semester

**Teacher(s):** Bruno Delvaux, Joseph Dufey, Yves Dufrêne

Language: French
Level: First cycle

## Aims

Chimie générale; Sciences du sol

Practice of the working in a laboratory (security, respect, efficiency, quality, laboratory notebook, reports.)

Intelligent approach of the chemical analysis: laboratory work, comparison of methods, quality of the results.

Application of the chemical analysis to the field of agriculture engineering and the environmental sciences: soil and water.

## **Main themes**

Practice of the current analytical methods, centered on the following themes:

- Soil analysis: acidity, exchange complex, nature, carbonates, nutrition elements and organic matter (chemical specification, bio-availability)
- Analysis of an aqueous solution: ionic balance and bio-mass (of the organic matter)

## Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Precursory courses: General chemistry, Soil sciences

Evaluation: Report (written paper) and oral questioning about the latter.

## Other credits in programs

BIR13BA/A Troisième année de bachelier en sciences de l'ingénieur, (2.5 credits) Mandatory

orientation bioingénieur (option : agronomie)

BIR13BA/E Troisième année de bachelier en sciences de l'ingénieur, (2.5 credits) Mandatory

orientation bioingénieur (option : environnement)