

## Faculty of Biological, Agronomic and Environmental Engineering



### 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.

#### Programmes in which this activity is taught

**BIR2** Bio-ingénieur

#### Other credits in programs

<b>BIR21/A</b>	Première année du programme conduisant au grade de bio-ingénieur (Agronomie)	(2.5 credits)	Mandatory
<b>BIR21/E</b>	Première année du programme conduisant au grade de bio-ingénieur (Environnement)	(2.5 credits)	Mandatory