

## Faculty of Biological, Agronomic and Environmental Engineering

### BIR1335 Field excursions in pedology, agricultural ecology and forestry

[22.5h] 2 credits

This course is taught in the 1st and 2nd semester

**Teacher(s):** Bruno Delvaux, Freddy Devillez, Joseph Dufey, Alain Peeters  
**Language:** French  
**Level:** First cycle

#### Aims

The excursions allow the students to synthesize their acquisitions in the basic sciences (Chemistry, Physics, Geology, Botany#) as well as in the applied sciences like ecology and soil sciences; and to apply this knowledge to the study of the forest, prairies, cultures and breeding in an environmental point of view. They initiate the students to the study of interactions and to the systematic analysis, stimulating their curiosity and their observation skills and assuring them a multidisciplinary framing.

#### Main themes

The excursions aim to apply and synthesize the acquisitions of the students in the basic sciences; they allow them to apprehend concrete cases as well as live a first practical experience to the inter-disciplinarity. In this perspective, they logically the courses BIR 1100 "Introduction aux sciences de la terre" and BIR 1230 "Introduction à l'ingénierie de la biosphère" and allow to illustrate the courses BIR 1332 "science du sol" and BIR 1331 "écologie appliquée".

Different sites are visited in September, October and May in order to spread the observations on at least two seasons of the year. They are chosen in order to cover a large number of environments and modes of soil exploitation. The students must work in groups and realize a number of observations and diagnosis concerning the flora, the vegetation populations, the soil, the topography and other environmental parameters. Doing so, they are initiated to the use of agronomist's and the forester's tools.

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

Precursory courses : All courses of BIR 11 and BIR 12

These excursions illustrate the principles taught in the courses BIR 1332 "sciences du sol" and BIR 1331 "écologie appliquée". They may be considered as a field introduction to more specialized courses in BIR 21 and BIR 22 for the orientations "agronomy" and "environment".

#### 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 credits)	Mandatory
<b>BIR21/E</b>	Première année du programme conduisant au grade de bio-ingénieur (Environnement)	(2 credits)	Mandatory