

## Faculty of Biological, Agronomic and Environmental Engineering

### BRAI2201 Integrated exercises in agronomy

[30h] 2 credits

This course is taught in the 1st semester

**Teacher(s):** Bernard Toussaint  
**Language:** French  
**Level:** Second cycle

#### Aims

To be able to analyse, in an interdisciplinary way, the agricultural reality. Thanks to this abilities, to contribute, as an actor, to the development of the future agriculture taking into account of: economical, social, institutional and environmental constrain. (This analyse requires background acquired in the fourth year lectures). To have a critical approach on: the evolution of agricultural techniques, on the specialisation of productions, on the decision making processes and on the technical supports. This critic will be developed by confronting knowledge's acquired with reality by the way of real cases studies. To broad knowledge's by approaching domains linked to agriculture but not yet included in the formation. To build up its own opinion on the role of agriculture in the current economy : food production and/or landscape management.

#### Main themes

Comparison of conventional, integrated and organic farming on economical, physical (soil, climat) social, environmental aspects? Maximum specialisation in one product or diversification of the productions? Processing and marketing in the farm. Quality and hygienic constraint in the farm. Agricultural waste valorisation; integration of ecological areas (Natura 2000) in the agricultural region. Sewage sludge purification by plants (lagunage). Plantation of wind-break, bocages. Interest in less known activities: bisons, pigs, goats and or sheeps raising or cheese processing, electricity production from agricultural wastes, viticulture, heliculture?

#### Content and teaching methods

The training consists in visits of farms during which several themes will be approached simultaneously. Each visit includes a presentation of themes chosen by the lecturer, a conducted visit of the agricultural enterprise commented by the producer and a question session. In the middle and at the end of the training the students and the lecturer evaluate the visits. Students have to write a report for the examination session following the stage. This report consists in the analyse and critic of an enterprise linked to agriculture, food production or environment. The conception, the purposes, the functioning and the future prospects of the enterprise have to be discussed taking into account of regional constraints.

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

Evaluation Report of stage

#### Other credits in programs

<b>BIR23/8A</b>	Troisième année du programme conduisant au grade de bio-ingénieur : sciences agronomiques (Intégrée, productions animales, végétales & économie)	(2 credits)	Mandatory
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