

## AGRICULTURAL SYSTEMS FOR LOCAL DEVELOPMENT

Year 1 (M1) - Master Agronomie et AgroAlimentaire 1<sup>ère</sup> année

### TRAINING CURRICULUM

Academic year 2010-2011

The Agris Mundus M1 in Montpellier leads to the *Agricultural systems for local development* specialisation delivered at UP Madrid in the M2. Taking into consideration that the students starting the master have very different backgrounds, the M1 curriculum allows an important flexibility to:

to adjust to these backgrounds and bring every student to a standard competence in agricultural sciences to follow the M2 programme in Madrid;  
while having a special focus, within rural development, on the issues raised by agricultural production, the management of natural resources and the policies related to them.

The curriculum is organised by modules from 2 to 4 weeks, some of them being compulsory in the programme, some of them being elective. As the objective is to prepare each individual student to the M2 in Madrid, the choice of the elective modules is not totally free: it results from a discussion to be held between the student, the training staff and the Agris Mundus coordinator.

The curriculum includes:

#### **A - Three compulsory modules (Common Core = Tronc commun in French)**

- ▷ **TC1 : Assessment of student's skills and competences** (130h, 12 ECTS):  
Professional project formalisation and /or master thesis project  
Bibliographic individual report (elective topic)  
Language test, followed by upgrading in English or French if needed;  
Test in Statistics, followed by upgrading in Statistics and Data Management if needed.
- ▷ **TC2 : Cropping and farming systems at the farm level** (90 h, 6 ECTS)  
Farming systems analysis: agronomical rationale and management rationale at the farm level;  
Organisations and bioprocesses governed by farmers;

Technical itineraries for crops and animals;  
Assessment of interactions between crop and animal production at the farm level.

- ▷ **TC3 data processing for agronomical surveys** (90h, 6 ECTS)  
Different kinds of surveys- survey design - Univariable and multivariable analysis.
- ▷ **TC4 Methods and tools for rural surveys and data management** (110 h, 9ECTS)  
This module includes a practical exercise on the field (2 weeks)

TC1, TC2 and TC3 are given between September and December and are part of the first semester.

TC 4 is given in June and is part of the second semester.

### **B – Seven elective modules delivered in the period starting early January**

(Modules underlined are recommended *a priori* but choice is to be discussed with the staff and the Agris Mundus coordinator)

- ▷ **B1 and B2: two modules (35h each, 3 ECTS each)** to be chosen among the following:
  - Initiation to natural resources management
  - Theories and competitiveness of agro-food chains
  - Territorial dynamics and public policies

These two modules complete the first semester.

- ▷ **B3: one module (35h, 3 ECTS)** to be chosen among the following:
  - From plot to fork : technical itineraries and food quality
  - Diversity of cropping systems worldwide
  - Biodiversity conservation
- ▷ **B4: one module (70h, 6 ECTS)** to be chosen among the following:
  - Animal rearing systems and fragile environments;
  - Environmental economics;
  - Crop breeding and plant and seed industry.
- ▷ **B5: one module (70h, 6 ECTS)** to be chosen among the following:
  - Agricultural policies and rural development;
  - Integration of animals and crops and agricultural development;
  - Trees management and uses in temperate and tropical environments.
- ▷ **B6: one module (35h, 3 ECTS)** to be chosen among the following:
  - Hydrosystems functioning;
  - Sociology for rural development;
  - Agrosystems diagnosis : inductivist approaches in Agronomy (1).
- ▷ **B7: one module (35h, 3 ECTS)** to be chosen among the following:
  - Economics for agronomists;
  - Water social management;
  - Agrosystems diagnosis : inductivist approaches in Agronomy (2).