Multiple Criteria Decision Making Analysis

Slim Zekri
Associate Professor
Dept. Natural Resource Economics, Sultan Qaboos University

Location: Univeritat Politecnica de Catalunya, Escuela Superior de Agricultura de Barcelona

Date: 3-7 August 2105
Time: 9:00 -1:00 and 2:00-4:00

Course content

The course will present the theory and applications of MCDM.

1. Quick overview of LP and the use of Excel
2. Introduction to MCDM
3. Goal Programming
4. Multi-objective Programming
5. Compromise Programming
6. Interactive MCDM

Course outcomes

During this course the students are exposed to the multiple criteria decision making theory. At the end of the course students will be able to write, solve and analyze problems related to agricultural and environmental setting using different MCDM techniques. Students will be able to select an appropriate technique to solve a given problem. They will be able to read and understand and discuss literature on MCDM applied to agricultural and non-agricultural contexts.

Course evaluation

Students will have to submit individual daily reports on applications of the methods they are exposed at. Applications will be undertaken using Excel. The reports will count 30% from the final grade. Every student will have to read, summarize and present a paper on MCDM applied to agriculture/environment to the class. Each presentation should be within 5-10 mn. The presentation is evaluated and weights 30% of the final grade. A final exam will be given on Friday 7/08/2015 from 9:00 to 11:00 and will represent 40% of the total mark.

Text book

Romero, C; Rehman, T. 2003. Multiple Criteria Analysis for Agricultural Decisions. Elsevier
Programme AFEPA Summer School Barcelona 2015

First week: (27th July - 1st August)

- Monday 27th July to Thursday 30th July: Oral presentations of Master Theses and proposals
- Thursday 30th pm (Board meeting)
- Friday 31 Alumni session: Invited speaker: Luis Miguel Albisu (CITA- Zaragoza, Spain). Additionally, 7 presentations from alumni (4 with an academic career and 3 with a professional career).
  General discussion on post-AFEPA employability and how to improve it.
- Saturday 1st August: Social event. Parc Natural La Garrotxa", a Vulcano-Natural Park. Leave Barcelona at 7:30 to arrive by bus at 9 there. At 13:00 visit to La Fajeda, a dairy firm specialized in yoghurts. Then lunch and visit to Besalú (a middle age village).

Second week (3-7th August)

- Monday 3rd to Thursday 6th: Course on Multicriteria Decision Making for Agriculture and Environment by Dr. Slim Zekri (Sultan Qaboos University, Oman).
- Friday 7th August: Graduation ceremony, followed by lunch and the end of the summer school.