



GEOL2360 Experimental geomorphology

[30h+30h exercises] 5 credits

Teacher(s): Bas van Wesemael
Language: French
Level: Second cycle

Aims

Knowledge:

To understand the impact of ground use on natural resources

Skills:

Experience in the laboratory and field techniques

To analyze the problems of ground and water resource damage. To suggest measures to take from the analysis of a problem.

Main themes

Prerequisites:

A basic knowledge in earth science

A deep knowledge in hydrological cycles, meteorology, processes of slope surfaces.

Magistral courses:

(9 times 2 hours)

- 1: Introduction, historical setting (student work: 2 hrs)
- 2: Agricultural systems (student work: 3 hrs)
- 3: Intensive agriculture impact (student work: 3hrs)
- 4: Use of water (student work: 3hrs)
- 5: Erosion (student work: 3hrs)
- 6: Erosion (student work: 3hrs)
- 7: Traditionnal techniques (student work: 3hrs)
- 8: Desertification in the mediterranean region (student work: 3hrs)
- 9: Questions student work: 2hrs)

Assisted work:

The work sessions are organized in 7 sessions of 2 hours, a day of field work in a single group of students with one assistant.

1 & 2: Visualize the impacts of environmental changes in hydrology and erosion in the Alicante region (Spain)

3: Preparation of a laboratory experience (student work: 3hrs)

4: Laboratory experience on evaporation (student work: 3hrs)

5: Analysis of experimental data (student work: 3hrs)

6: Field work preparation (student work: 3hrs)

7: Field work (student work: 8 hrs)

8: Analysis of field data (student work: 3hrs)

Personnal work:

Report on simulations of hydrology model (5 hrs)

Report on laboratory experience (20 hrs)

Report on field work (20 hrs) with assistance and consultations available. (during the weeks before the finish date)

Notions acquired:

Bibliographic research

Use of simulation models in order to study the effects of changing parameters

Capacity to analyze environmental problems by making links with the theoretical concepts.

Other credits in programs

GEOG22	Deuxième licence en sciences géographiques	(5 credits)	Mandatory
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