

[30h+30h exercices] 5 credits

Teacher(s): Bas van Wesemael
Language: french
Level: 2nd cycle course

Aims

Knowledge:

To understand the interaction between morphology, the materials and the exogeneous processes in slopes.

Skills:

To acquire experience in field workd, sampling, sample analysis (A level).

To acquire experience in interpretation of material expression and the processes in the scenery morphology from maps and aerial pictures (B level).

To be capable of analyzing and interpreting the results of a field campaign.

Main themes

Prerequisites:

The course uses the following material:

The main lines of atmospheric circulation

The endogeneous processes

The different types of rocks

Elementary notion of exogeneous processes: alteration, hydrological cycle, terrain slides, erosion, grounds and ecosystems.

Magistral courses: (8 X 2hrs)

1: introduction (student work: 2hrs)

2: Slope physics and its materials (student work: 3hrs)

3: Alteration (student work: 3hrs)

4: The relation between morphology, grounds and surfaces (student work: 3hrs)

5: Hydric erosion (student work: 3hrs)

6: Terrain slides (student work: 3 hrs)

7: Slope development because of denudation (student work: 3hrs)

8: Questions and answers (student work: 2hrs)

Assisted work sessions:

The work sessions are organised in 8 sessions of 3 hours; a day of field work in one group of students under the supervision of an assistant.

PW1/2: Geomorphological analysis from topographic maps (student work: 3 hrs)

PW3: Use of numerical field models (MNT) in geomorphology (student work : 3hrs)

PW4: Field preparation (student work: 3hrs)

PW5: Field (student work: 8 hrs)

PW6: Analysis of field data (student work: 8 hrs)

PW7: Geomorphological analysis from aerial photos (student work : 3hrs)

PW8: Field rising (student work: 3hrs)

Personnal work

Literature review (16 hrs)

Field analysis report (20 hrs)

With supervision, the possibility of consultations (during the weeks before the deadline dates).

Notions acquired:

Bibliographic research

Capacity to analyse the results of sampling and to describe them clearly in a report.

Other credits in programs

GEOG21	Première licence en sciences géographiques	(5 credits)	Mandatory
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