


 Faculty of Sciences

GEO1231 Elements of physical geography

[30h+30h exercises] 5 credits

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

Aims

This course introduces the concepts of geomorphology i.e. the interaction between processes, materials and land forms. At the end of the course students should be able to:

Describe the most important interactions between process, materials and land forms within the main geomorphic systems (hillslopes, rivers, glaciers and coasts)

Interpret the morphology and the dominant processes in a given landscape using topographic maps and aerial photographs

Represent the spatial variation in soil characteristics of a hillslope and its impacts on the infiltration rates based on the interpretation of data collected in the field.

Main themes

This course introduces the process, materials and landforms of the main geomorphic systems. First, the exogenous process and their relative intensities will be reviewed for different climatic zones. Then the production of soil and unconsolidated materials through weathering will be discussed and finally, the main geomorphic systems will be reviewed such as hillslopes, rivers, glaciers and coasts.

Content and teaching methods

This is an introductory course in geomorphology, one of the main disciplines in physical geography. The lectures describe the interactions between processes, materials and landforms, while the main geomorphic systems will be introduced i.e. hillslopes, rivers, glaciers and coasts. Practical work focuses on interpretation of landscape forms and dominant processes from topographical maps and aerial photographs as well as field data collection and analysis.

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

Prerequisites : None

Evaluation : Written exam, course work counts for a third of the final grade.

Support : Lecture notes and textbook 'Fundamentals of the Physical Environment' D. Briggs et al. Two copies are available in the library (BSE).

Other credits in programs

ARCH12BA	Deuxième année de bachelier en sciences de l'ingénieur, orientation ingénieur civil architecte	(5 credits)	
ARCH13BA	Troisième année de bachelier en sciences de l'ingénieur, orientation ingénieur civil architecte	(5 credits)	
GEOG12BA	Deuxième année de bachelier en sciences géographiques	(5 credits)	Mandatory