Due to Covid 19, the education and evaluation methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

Geological Mapping B (C003389)

Valid as from the academic year 2020-2021

Course Specifications

Lecturers in academic year 2020-2021
Dewaele, Stijn

WE13 lecturer-in-charge

Course offerings and teaching methods in academic year 2020-2021

A (semester 2) Dutch Gent

lecture 7.5 h
seminar 40.0 h
fieldwork 40.0 h
online seminar 0.0 h
online lecture 0.0 h

Offered in the following programmes in 2020-2021
Bachelor of Science in Geology
Preparatory Course Master of Science in Geology

Credits 5.0 Study time 150 h Contact hrs 87.5 h

Course size (nominal values; actual values may depend on programme)

Teaching languages
Dutch

Keywords
Geological mapping, solid rocks, lithostratigraphy, geological sections

Position of the course
An introduction to geological mapping in solid rock either strongly or weakly deformed. It incorporates exercises in measuring geological structures in solid rock and geological mapping of rock units, processing the field data into a lithostratigraphical column, geological map and sections; with a legend and an explanatory text.

Contents
• Preparation of the field work: extract information from topographic maps, soil maps, and digital maps on websites; producing a provisional mapping of the Palaeozoic-Cenozoic boundary.
• Field work: five days of geological mapping in the Ronquières area in Palaeozoic rocks, cropping out in the lower parts of the valleys (Cambrian to Carboniferous). Day 1: general reconnaissance of the area and demonstration of different lithological and sedimentological features. Day 2-5: mapping of four transects in groups of two to three persons, with in the evening processing of the observation of the day and preparation of the transect of the next day.
• Field data processing: construction of geological sections through the Upper Palaeozoic in each valley (Samme and Sennette); construction of a lithostratigraphical column of the mappable units, drawing of the geological map with legend, explanatory text with short description of the area, geomorphology, geology, mapping problems and references.

Initial competences

Obtained a credit: System Earth: Geology (Ba1), Introduction to Mineralogy (Ba1), Introduction to Petrology (Ba1), and Geological Mapping A (Ba2).
Followed or to follow in parallel courses: Palaeontology 1, Geology of Belgium, Structural Geology with Exercises on Geological Maps, Stratigraphy (Ba2).

Final competences

(Arrived at)
1. To understand and to be able to make a geological map.
2. To be able to map geologically an area with light to strongly deformed solid sedimentary rock, to construct from a transect with own field observations a lithostratigraphical column and to draw a geological map of the area.

Conditions for credit contract
Access to this course unit via a credit contract is determined after successful competences assessment.

Conditions for exam contract
This course unit cannot be taken via an exam contract.

Teaching methods
Lecture, fieldwork, seminar, online lecture, online seminar.

Extra information on the teaching methods
Lectures and seminar during two half days of preparations; five days of field work; ten half days of processing of the field data into a geological map and attachments. Due to COVID19, the type of education can be modified if it seems to be necessary.

Learning materials and price
Topographic and soil maps, aerial photographs, literature on the area are distributed by lecturer. Price of excursion: 125 Euro per student.

References

Course content-related study coaching
Possibility to ask questions by email, personal contact or during the preparations, field work shops or processing sessions; coaching during the preparation and field work shops by the lecturer and assistants.

Evaluation methods
continuous assessment

Examination methods in case of periodic evaluation during the first examination period

Examination methods in case of periodic evaluation during the second examination period

Examination methods in case of permanent evaluation
Oral examination
Possibilities of retake in case of permanent evaluation
examination during the second examination period is possible

Extra information on the examination methods
Permanent evaluation during the preparation, the fieldwork and the processing after the fieldwork and of the final result: the geological map, sections, lithostratigraphical logs and explanatory text. Due to COVID19, the type of evaluation can be modified if it seems to be necessary.

Calculation of the examination mark
NPE: 100%

(Approved)