Course Specifications
Valid as from the academic year 2019-2020

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.

Course size (nominal values; actual values may depend on programme)
 Credits  6.0  Study time  156 h  Contact hrs  66.5 h

Course offerings and teaching methods in academic year 2019-2020
A (semester 1)  English  UGent  practicum  15.0 h
   on campus lecture  25.0 h
   on campus seminar  12.5 h
   on campus group work  15.0 h

Lecturers in academic year 2019-2020
Bertrand, Sebastien  WE13  lecturer-in-charge

Offered in the following programmes in 2019-2020
  Master of Science in Teaching in Science and Technology (main subject Geology)  6  A
  Master of Science in Geology  6  A
  Master of Science in Geology  6  A
  Exchange programme in Geology (master's level)  6  A

Teaching languages
  English

Keywords
  Sediment sampling equipment, analytical techniques in sedimentology, sedimentological case-studies

Position of the course
  This course builds on the principles of sediment production, transport, and deposition that were introduced in Sedimentology. It is focused on the use of sediments for research purposes.

Contents
  Sediment sampling techniques, in-situ sediment monitoring instruments, coring equipment.
  Analytical techniques in sedimentology.
  Core logging instrumentation: Multi-sensor core loggers, XRF and CT core scanners.
  Interpretation of multi-proxy sediment records, including age-depth modeling.
  Recent advances in sedimentology.
  Case-studies (seminars given by guest speakers).

Initial competences
  Advanced sedimentology builds on the concepts and skills learned in Sedimentology. To follow this course, students must have passed course C003342.

Final competences
  1 The student can design a research project based on sediments and sedimentary archives.
  2 He/she is able to select the most appropriate techniques to analyze sediments for specific purposes, as well as combine and interpret data obtained using several independent techniques.

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

(Approved)
assessment

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

Teaching methods
  On campus group work, on campus lecture, practicum, on campus seminar

Learning materials and price
  Course notes, hand-outs, and scientific articles available on Ufora

References
  Specific scientific articles given during the course.

Course content-related study coaching
  Discussion of problems and questions during and after the lectures and seminars.
  Continued support by teaching assistants during the practical exercises.

Evaluation methods
  end-of-term evaluation and continuous assessment

Examination methods in case of periodic evaluation during the first examination period
  Written examination with open questions, assignment, skills test, report

Examination methods in case of periodic evaluation during the second examination period
  Written examination with open questions, written examination with multiple choice questions, skills test, report

Examination methods in case of permanent evaluation
  Assignment

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

Calculation of the examination mark
  Theoretical exam, including conception, presentation, and discussion of sediment-based mock research project: 75%
  Group project report: 25%

(Approved)