GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2024-2025

Exploration Geochemistry (I002923)

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

Credits 5.0 **Study time 150 h**

Course offerings in academic year 2026-2027

A (semester 1) English Gent

Lecturers in academic year 2026-2027

Barker, Abigail UPPSALO1 lecturer-in-charge

Offered in the following programmes in 2026-2027	crdts	offering
International Master of Science in Sustainable and Innovative Natural Resource Management	5	A

Teaching languages

English

Keywords

Position of the course

The main focus of the course is the geochemical understanding of the formation, composition and distribution of ore deposits. Major types of ore deposits in the world and their characteristics. Geochemistry and its application for identification of economically relevant deposits.

Contents

Geochemistry for regional exploration. Exploration of mineralized rocks, including ore minerals, alteration assemblages and host rock. Estimating grades and tonnage from geochemical data, drill cores and image analysis. Environmental geochemistry of mine sites applied to monitoring and remediation.

Initial competences

120 credits in natural science/technology including 10 credits chemistry or participation in Economic geology.
Proficiency in English equivalent to the Swedish upper secondary course English 6.

Final competences

1 On completion of the course the student shall be able to:
- Identify and explain geochemical anomalies associated with ore deposits and mineralizations

2 • Critically analyze and interpret geochemical exploration data
3 • Construct an exploration plan based on geochemical information

Conditions for credit contract

This course unit cannot be taken via a credit contract

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Seminar, Lecture, Practical

Extra information on the teaching methods

Exercises, seminars and lectures.

Study material

None

References

Scientific articles that will be made available at the start of the course

Course content-related study coaching

Assessment moments

end-of-term and continuous assessment

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

Participation, Written assessment

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

Participation, Written assessment

Examination methods in case of permanent assessment

Participation

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible in modified form

Extra information on the examination methods

Active participation in seminars and lectures (2 hp), written exercises (3 hp).
If there are special reasons for doing so, an examiner may make an exception from the method of assessment indicated and allow a student to be assessed by another method. An example of special reasons might be a certificate regarding special pedagogical support from the disability coordinator of the university.

Calculation of the examination mark