



DEPARTMENT OF EARTH SCIENCES

GVG450 Ore-forming processes, 7.5 credits

Malmbildande processer, 7,5 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by Department of Earth Sciences on 2017-09-01 and was last revised on 2023-09-14 to be valid from 2024-01-15, spring semester of 2024.

Field of education: Science 100%

Department: Department of Earth Sciences

Position in the educational system

The course includes 7.5 credits at Master's level and can be included in a Master's Degree in Earth Sciences. The course is offered as an elective course subject to availability.

The course can be part of the following programme: 1) Master's Programme in Earth Sciences (N2GVS)

Main field of studies

Earth Sciences

Specialization

A1N, Second cycle, has only first-cycle course/s as entry requirements

Entry requirements

Admission to the course requires 165 credits of completed courses in the main field of Earth Sciences. In addition, completed course GVG370 Economic geology or equivalent is required. Applicants with equivalent education can, after review and approval, be admitted to the course.

Learning outcomes

On successful completion of the course the student will be able to:

Knowledge and understanding

- demonstrate a deeper understanding of ore-forming processes.
- demonstrate knowledge and understanding of methods that can be used in the study of ore formation.

Competence and skills

- plan, perform and document mapping and sampling in the field.
- describe ore mineralogy and textures.
- perform advanced geochemical analysis and data evaluation.
- present a scientific studies in writing and orally.

Judgement and approach

- use scientific literature to develop testable hypotheses about how a specific ore has been formed.
- critically evaluate the reliability of geological data and geological interpretations.
- develop and present a logical argument for or against a hypothesis.

The course is sustainability-related, which means that at least one of the learning outcomes clearly shows that the course content meets at least one of the University of Gothenburg's confirmed sustainability criteria.

Course content

The course provides students with skills in scientific methods and approaches useful in the investigation of ores and ore-forming processes. Students will design, conduct, analyse and present scientific studies on ore-forming processes. The course includes field work.

The course can be seen as a preparation for further studies at postgraduate level or for a career in project management in ore exploration.

Form of teaching

The teaching includes lectures, seminars, exercises, field studies, laboratory work, reports and presentations.

Language of instruction: English

Assessment

Module 1: Ore-forming processes, 7.5 credits: U/G/VG

If a student who has twice received a failing grade for the same examination component wishes to change examiner ahead of the next examination session, such a request should be made to the department in writing and should be approved unless there are special reasons to the contrary (Chapter 6 Section 22 of the Higher Education Ordinance).

If a student has received a recommendation from the University of Gothenburg for study support for students with disabilities, the examiner may, where it is compatible with the learning outcomes of the course and provided that no unreasonable resources are required, decide to allow the student to sit an adjusted exam or alternative form of assessment.

In the event that a course has ceased or undergone major changes, students are to be guaranteed at least three examination sessions (including the ordinary examination session) over a period of at least one year, but no longer than two years after the course has ceased/been changed. The same applies to internships and professional placements (VFU), although this is restricted to just one additional examination session.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U). Assessment is based on participation in seminars and exercises, written reports, oral presentations and assignments. The final grade for the course is a weighted average of the results.

Course evaluation

Students are given the opportunity to make a written, anonymous evaluation of the course.

The results of and possible changes to the course will be shared with students who participated in the evaluation and students who are starting the course.

Additional information

Students admitted to N2GVS Master's Programme in Earth Sciences are given priority to the course.