

SYLLABUS

Geochemical Exploration

7.5 credits L7017K

Geokemisk prospektering

Course syllabus admitted: Autumn 2023 Sp 1 - Present

DECISION DATE
2022-02-11

Geochemical Exploration 7.5 credits L7017K

Geokemisk prospektering

Second cycle, L7017K

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	G U 3 4 5	Geovetenskap	Earth Science and Physical Geography

Main field of study

Geosciences

Entry requirements

90 credits in geoscience, including the courses L7021K Freshwater Geochemistry and Economic Geology.

Selection

The selection is based on 30-285 credits

Course Aim

After the course the student should be able to: -analyse, explain and apply the basic geochemical processes that control geochemical anomalies

Contents

Distribution of trace metals in minerals Geochemical associations Mobility of elements at the earth surface Ion exchange and sorption Interpretation of geochemical anomaly data Practical examples in geochemical prospecting

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

The course is built around practical field examples from geochemical prospecting which are solved individually or in groups by the students. In these examples are the fundamental geochemical principles and processes, which creates geochemical anomalies, discussed. The lectures constitute the theoretical support for assignment reports and the written exam.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

The ability to explain the geochemical processes that create anomalies is checked with a written exam at the end of the course (grade 3, 4, 5). The ability to analyse and apply these processes on real cases are tested with practical examples that are given both individually and in group.

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term “unauthorized aids” refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Overlap

The course L7017K is equal to KGL013

Course offered by

Department of Civil, Environmental and Natural Resources Engineering

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0002	Assignment report I (Group)	U G#	3	Mandatory	A07	
0003	Assignment report II (Individually)	U G#	1.5	Mandatory	A07	
0004	Written exam	G U 3 4 5	3	Mandatory	A10	

Last revised

by Assistant Director of Undergraduate Studies Eva Gunneriusson, Department of Civil, Environmental and Natural Resources Engineering 2022-02-11

Syllabus established

Course plan approved by the Department of Chemical Engineering and Geosciences 2007-02-28.