

**SYLLABUS**

# **Petrology 7.5 credits**

## **00008K**

**Petrologi**

**Course syllabus admitted: Autumn 2023 Sp 1 - Present**

DECISION DATE  
**2021-02-17**

# Petrology 7.5 credits 00008K

## Petrologi

### First cycle, 00008K

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

### Main field of study

Natural Resources Engineering

## Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language and O0035K Geology, basic course and O0036K Mineralogy or equivalent knowledge.

## Selection

The selection is based on 1-165 credits.

## Course Aim

After completing the course, the student should be able to describe, identify and classify the most common sedimentary, magmatic and metamorphic rocks and their structures in field and in microscope and be able to relate structures to rock formation processes. In addition, the student should be able to relate rock formation processes to plate tectonic processes and different geological environments. The student should also have basic skills in field mapping.

## Contents

The main rock-forming minerals, structures and textures of rocks. Magmatic, sedimentary and metamorphic rocks – rock forming processes in relation to plate tectonics and local environments. Methods of identification for rocks including microscopy and mineralogical and geochemical classification diagrams. Practical exercises in fieldwork as well as geological documentation and reporting.

## Realization

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

The teaching includes lectures where basic theory is presented and explained. Practical exercises focus on the student's skills to describe, interpret and explain the textures and structures and to classify rocks in the field and in thin sections. Excursion and field exercises with focus on magmatic and sedimentary rocks as well as geological documentation and reporting.

## 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. Graded written examination at the end of the course or alternatively three partial exams during the study period. Approved practical exercises, fieldwork and field report.

## 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 O0008K is equal to KGO005

## Course offered by

Department of Civil, Environmental and Natural Resources Engineering

## Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Written exam	G U 3 4 5	4.5	Mandatory	A07	
0002	Exercises	U G#	1.5	Mandatory	A07	
0011	Excursion, Field Exercises and Report	U G#	1.5	Mandatory	A21	

## Last revised

by Assistant Director of Undergraduate Studies Eva Gunneriusson, Department of Civil, Environmental and Natural Resources Engineering 2021-02-17

## Syllabus established

by the Department of Chemical Engineering and Geosciences 2007-02-28