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 Specifications

**Introduction to Mineralogy (C003059)**

Valid as from the academic year 2020-2021

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

<table>
<thead>
<tr>
<th>Credits</th>
<th>Study time</th>
<th>Contact hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>90 h</td>
<td>30.0 h</td>
</tr>
</tbody>
</table>

**Course offerings and teaching methods in academic year 2020-2021**

A (semester 1)  
Dutch  
Gent  
lecture  
20.0 h  
practicum  
10.0 h  
online lecture  
0.0 h

**Lecturers in academic year 2020-2021**

Dewaele, Stijn  
WE13  
lecturer-in-charge

**Offered in the following programmes in 2020-2021**

Bachelor of Science in Geography and Geomatics  
3  
A

**Teaching languages**

Dutch

**Keywords**

Minerals, physical properties, identification, composition, formation, classification

**Position of the course**

The course is intended to provide bachelor students with a thorough insight in the most important aspects of mineral science. Minerals are the basic constituents of rocks and hence, a good training in mineralogy is essential in any academic education dealing with the Earth as our natural environment. Mineralogy is directly based on scientific knowledge that has been gathered in more fundamental physical sciences such as (solid state) physics and (inorganic) chemistry. It is therefore logical to include a mineralogy course in the study program of a second bachelor year.

**Contents**

- General characteristics of minerals in hand specimens.
- Physical properties of minerals.
- Elements of crystal chemistry.
- Analytical techniques in mineralogy.
- Systematic mineralogy with emphasis on rock forming minerals.

**Initial competences**

No previous knowledge of mineralogy is required but a basic training in chemistry and physics is recommended.

**Final competences**

1. The student possesses a good knowledge of the most important rock forming minerals and has a clear insight into their composition and most important physical and chemical characteristics.
2. The student has a good knowledge and understanding of the main groups of minerals and he/she can recognize the main mineral species macroscopically.

**Conditions for credit contract**

Access to this course unit via a credit contract is determined after successful competences assessment.

**Conditions for exam contract**

This course unit cannot be taken via an exam contract.

Teaching methods

(Approved)
Lecture, practicum, online lecture

Extra information on the teaching methods
Lectures supported by digital projection of figures, photos and 3D animations. Practical exercises on mineral identification and chemical analyses of minerals. Due to COVID19, the type of education can be modified, if it seems to be necessary

Learning materials and price
Syllabus and exercises on the Ufora platform.

References

Course content-related study coaching
Theory: answers to questions and discussion of problems during and after classes. Practicals: guidance by assistant during the practicals; rehearsal session scheduled before the exam.

Evaluation methods
end-of-term evaluation

Examination methods in case of periodic evaluation during the first examination period
Written examination with open questions

Examination methods in case of periodic evaluation during the second examination period
Written examination with open questions

Examination methods in case of permanent evaluation

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

Extra information on the examination methods
Theory: Written examination.
Practicals: Written examination based on the recognition of hand specimens, and on the interpretation of a mineral chemical formula. Due to COVID19, the type of evaluation can be modified, if it seems to be necessary

Calculation of the examination mark
Theoretical exam 80%, practical exam 20%. Participation in the practical exercises is mandatory. The students should be successfull for both the theoretical and practical exam to pass for the entire course.