

## Soil Microbiology Course (1002487)

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.

<b>Course size</b>	<i>(nominal values; actual values may depend on programme)</i>		
<b>Credits</b> 4.0	<b>Study time</b> 120 h	<b>Contact hrs</b>	40.0 h

### Course offerings in academic year 2022-2023

A (semester 2)	English	Gent
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### Lecturers in academic year 2022-2023

Keiblinger, Katharina	WIEN03	lecturer-in-charge
Diaz-Pines, Eugenio	WIEN03	co-lecturer
Zechmeister-Boltenstern, Sophie	WIEN03	co-lecturer

### Offered in the following programmes in 2022-2023

	crdts	offering
<a href="#">International Master of Science in Soils and Global Change (main subject Soil Biogeochemistry and Global Change)</a>	4	A

### Teaching languages

English

### Keywords

### Position of the course

### Contents

We will work one day in the field on an experimental site in the Roalia mountains at the forest demonstration centre. We will collect gas samples from manual cuvettes and measure them on a gas chromatograph in the lab, in order to assess the microbial production of greenhouse gases (carbon dioxide, nitrous oxide and methane). Soil microbiological methods include microbial biomass Carbon (Cmic) and Nitrogen (Nmic), inorganic forms of nitrogen (ammonium and nitrate), reducing sugars, soil respiration via titration. The data are statistically evaluated, interpreted and presented as posters.

### Initial competences

no previous knowledge expected

### Final competences

- 1 By the end of the course, students are expected to be able to:  
Explain a set of main methods used in the field of soil microbiology;
- 2 Apply classical methods in soil microbiology in the lab;
- 3 Interpret soil microbiological data, including interrelations between different variables.

### 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

Lecture: plenary exercises

**Extra information on the teaching methods**

Results will be presented as posters, a best poster award will be donated.

**Learning materials and price****References****Course content-related study coaching****Evaluation methods**

end-of-term evaluation and continuous assessment

**Examination methods in case of periodic evaluation during the first examination period**

Written examination

**Examination methods in case of periodic evaluation during the second examination period**

Written examination

**Examination methods in case of permanent evaluation**

Participation, assignment

**Possibilities of retake in case of permanent evaluation**

examination during the second examination period is possible

**Calculation of the examination mark**