

Summer School IMSOGL0 (I002477)

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

Credits 3.0 **Study time 90 h**

Course offerings and teaching methods in academic year 2023-2024

A (semester 2)	English	Gent	lecture peer teaching seminar practical
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Lecturers in academic year 2023-2024

Finke, Peter	LA20	lecturer-in-charge
Diaz-Pines, Eugenio	WIEN03	co-lecturer
Zechmeister-Boltenstern, Sophie	WIEN03	co-lecturer

Offered in the following programmes in 2023-2024

	crdts	offering
International Master of Science in Soils and Global Change (main subject Physical Land Resources and Global Change)	3	A
International Master of Science in Soils and Global Change (main subject Soil Biogeochemistry and Global Change)	3	A

Teaching languages

English

Keywords

Soils, soil characteristics, soil processes, soil reactions, soil threats, environment, ecosystem services, soilscape, greenhouse gas, global change

Position of the course

This course integrates previously acquired knowledge on soil processes, soil threats and their assessment in the first 2 semesters of the IMSOGL0-programme by means of guided case studies using simulation models, measurement devices and Geographical Information System. Students are initiated in scenario-thinking by using these instruments

Contents

Theory: Introduction to 3 topics: (i) modelling of pedogenesis under global change, (ii) measuring and modelling GHG emissions, (iii) assessing soil threats and ecosystem services at the EU-level

Exercises: getting acquainted with tools (simulation models, Land Information Systems) and measurement devices to assess soil change under global change over time and geographically.

Initial competences

The summer school builds on certain learning outcomes of course units pedology, soil physics, soil chemistry and soil genetic processes, and application of soil data in land information systems; these are part of the first semester programme of IMSOGL0. Participation to these courses is a prerequisite.

Final competences

Student has experience in the construction and evaluation of scenario studies on soils under global change, using simulation tools, measurement devices and geographical information systems

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

Seminar, Lecture, Practical, Peer teaching

Extra information on the teaching methods

After plenary lectures, exercises are introduced; these must be done individually or small student groups and have to be reported by the students. Feedback is provided during the summer school week.

Learning materials and price

handouts, software instruments are supplied

References**Course content-related study coaching**

Interactive support by e-mail or by teaching persons. Assistants collaborate for the exercises

Assessment moments

continuous assessment

Examination methods in case of periodic assessment during the first examination period**Examination methods in case of periodic assessment during the second examination period****Examination methods in case of permanent assessment**

Professional practice, Oral assessment, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible in modified form

Extra information on the examination methods

Students are asked to present their results after the individual modules during the summer school. These receive feedback and are being evaluated during the summer school.

Calculation of the examination mark

Calculation of the final marks and the terms and conditions to pass a course unit: A weighted average of the reports and oral presentations on the 3 modules in this course will be used to calculate the mark.
Students who eschew period aligned and/or non-period aligned evaluations for this course unit may be failed by the examiner.