

Soil classification (I002469)

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.

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|--------------------|--|--------------------|--------|
| Course size | <i>(nominal values; actual values may depend on programme)</i> | | |
| Credits 5.0 | Study time 140 h | Contact hrs | 70.0 h |

Course offerings and teaching methods in academic year 2022-2023

| | | | | |
|----------------|---------|------|----------------------------|---------|
| A (semester 1) | English | Gent | guided self-study | 13.75 h |
| | | | fieldwork | 5.0 h |
| | | | seminar | 30.0 h |
| | | | seminar: coached exercises | 7.5 h |
| | | | lecture | 13.75 h |

Lecturers in academic year 2022-2023

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|------------------|----------|--------------------|
| Greve, Mogens H. | AARHUS01 | lecturer-in-charge |
| Møller, Anders | AARHUS01 | co-lecturer |

Offered in the following programmes in 2022-2023

| | crdts | offering |
|---|-------|----------|
| International Master of Science in Soils and Global Change (main subject Physical Land Resources and Global Change) | 5 | A |

Teaching languages

English

Keywords

Position of the course

The course provides students with an understanding of the basic concepts of soil classification. The course is a field-based studies of the soils in Denmark, with travel throughout Denmark. Emphasis on description and classification of soils; relationships among soils, vegetation, geology, and climate; physical, chemical, and biological processes active in soils and landscapes; and the role of soils in land use. Emphasis will also be on the ability to sampling for a range of soil physical analysis both individual soil profiles but also on fields with high variability. Field measurements of key soil properties will be performed.

Contents

By the end of this course, you will have learnt:

- how different soil classifications are structured and designed
- how soil characteristics are used to identify key diagnostic features used in soil classifications.
- how key diagnostic features relate to soil processes and functions.
- How to classify a DK soil using the internationally recognized soil classification systems
- how to describe and sample soils
- How to do field measurements of key soil properties

Initial competences

Basic knowledge in soil science, soil physics and soil chemistry

Final competences

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

Guided self-study, lecture, fieldwork, seminar, seminar: coached exercises

Extra information on the teaching methods

The course combines self-study, participation in a field trip throughout Denmark including description and sampling of soils, theoretical lectures, soils analysis, project reports.

Learning materials and price

References

Soil classification : a global desk reference / edited by Hari Eswaran Ö [et al.]. p. cm. Includes bibliographical references and index. ISBN 0-8493-1339-2 (alk. paper) 1. SoilsóClassification. I. Eswaran, Hari.

World Reference Base for Soil Resources (WRB) WRB key Fao Guidelines for soil description
Soil Taxonomy A Basic System of Soil Classification for Making and Interpreting Soil Surveys

Course content-related study coaching

Evaluation methods

continuous assessment

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

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

Examination methods in case of permanent evaluation

Participation, report

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible

Extra information on the examination methods

Participation in field trip across Denamrk, approved participation in practical exercises and submitted project report

Calculation of the examination mark