

Module No. P	Module name Soil ecology and management
Module coordinator Prof. Dr. Hildebrand Email: Ernst.Hildebrand@bodenkunde.uni-freiburg.de	
Additional teaching staff Prof. Dr. P. Trüby, Dr. H. Schack-Kirchner, Prof. Dr. J. Bauhus	
Syllabus <p>Soil assessment and mapping Excursion: Introduction to soils and geomorphology Soil classification and theory of soil mapping Field methods of soil assessment (practical training) Soil and site Mapping (field training) Self-study</p> <p>Soil hazards and soil protection Introduction and mechanical impacts of harvesting operations Soil Erosion, Salination and Irrigation Eutrophication and acidification, Soil contamination and remediation</p> <p>Plant/Soil Relations Concepts and theory of tree nutrition Diagnosis and therapy of nutrient deficiencies Field trip: Nutrient cycling Interactions between vegetation and soils</p>	
Learning goals and qualifications <ul style="list-style-type: none"> • Ability to assess soil and site quality in the field • Ability to use and interpret soil maps • Knowledge of soil hazards especially in forests • Ability to select adequate management options • Ability to understand scientific and technical publications concerning soil resources • Ability to use computer resources and the WWW to obtain soil information • Ability to assess and to manage the nutrient status of forests 	

Teaching and learning methods
Lectures (field and lecture hall), computer based training, field training
Prerequisites
Basics of ecology, chemistry and soil science
Requirements for registration
None
Distribution of work load
<i>Contact hours</i> 60 h (Lectures, pracs, excursion, exam)
<i>Student learning</i> 65 h (Preparation, reading etc.)
Proposed assessment
Written Examination
Field exam
Link to learning resources
Forest Ecology Online
Preliminary Reading
Comments