

P06 Soil and water

Module	Soil and water							
Code	P06							
Coordinator	Prof. Dr. R.G. Joergensen							
Language	English							
Stud. workload	180 hours (60h contact time)							
Credits	6 ECTS							
Frequency (WS/SS)	SS							
Instructor	Prof. Dr. R.G. Joergensen, Prof. Dr. O. Hensel, NN							
Contents	<ul style="list-style-type: none"> - Soil quality, processes and functions (Org. matter turnover, interactions between soil organisms, soil fertility) - Soil degradation and conservation (erosion, acidification, compaction, contamination), soil and water salinity - Water management (basics of water ecology and landscape water household, evaluation and development of waters) in national and international context - Water lifting and conveyance, surface irrigation, sprinklers, micro-irrigation 							
Objectives	Students are able to critically evaluate soil and water problems and the limits of natural resources.							
Literature	Wild, A. 1993: Soils and the Environment. Cambridge University Press; Achtnich, W. 1998: Bewässerungslandbau. Ulmer Verlag, Germany; Coyne, M.S. 1999: Soil microbiology: an exploratory approach. Thomson Press; Paul, E.A., Clark, F.E. 1996: Soil microbiology and biochemistry. 2nd ed. New York Academic Press; Lampert, W. 1997: Limnoecology. Oxford University Press; Naiman, R.J. (ed.) 1998: River Ecology and Management. Springer; Wetzel, R.G. 1983: Limnology. Saunders College Publishing.							
Study system usability	Economy		Organic		Tropical			
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Entrance requirements	Module Soil and plant science or equivalent, Fundamentals on water ecology and management							
Instruction type	Lecture		Seminar	Excursion	Practice	Tutorial	Project	
Duration [contact h]	50				10			
Examination type	Oral test	Written test	Homework	Presentation	Protocol	Work report	Proj. report	Proj. pres.
	x							
Grade composition	100% oral test							