

Module Name	1.7 Soil Ecology
Identification code	AEF282, AE-CAU402 <b>(QIS-registration for examination) 72200</b>
Subtitle	
Courses embedded	
Term	Winter
Coordinator	Dr. C. Schimming
Teachers	Dr. C. Schimming Prof. Dr. Bölter
Tuition language	English
Programme involvement	Elective MSc Environmental Management Compulsory MSc European Master in Applied Ecology
Teaching form, contact time per week class size	Lecture: 30h/90h. – Schimming/Bölter Practice: 30 h/90h – Schimming/Bölter 12
Workload overall	180h
Contact time	60h
ECTS credit points	6
Preconditions prescribed	
Prerequisites recommended	
Learning outcomes	Students understand soil ecological interrelations/processes and are able to recognize the function of biological components and their interactions, and can estimate the impacts of agricultural impacts to the soil organisms. The practical part of this module deals with methods of detection of soil zoological and microbiological parameters and with the influences of different types of land use measures
Content	Soil zoology: lifeforms and the activity of soil organisms; decomposition processes; the influence of agriculture on the function of soil organisms and food chains in soil. Soil microbiology; Functions of soil organisms, e.g. decomposition and enzyme activity
Assessment	Written exam 100%
Teaching media	Powerpoint-Präsentationen & discussions
References	- D.C. Coleman, D.A. Crossley, P.F. Hendrix: Fundamentals of Soil Ecology (Elsevier) - U. Gisi: Bodenökologie (Thieme Verlag) - G. Brucker, D. Kalusche: Bode und Umwelt (Quelle & Meyer) - W. Dunger, H.J. Fiedler: Methoden der Bodenbiologie (Fischer)
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