

Georg-August-Universität Göttingen Universität Kassel/Witzenhausen Module M.SIA.P01: Ecology and agroecosystems		6 C 4 WLH
Learning outcome, core skills: Students are able to define site-specific conditions of sustainability, identify key constraints to the productivity and sustainable use of agro-ecosystems, assess the scope of human (management) interventions, determine the causes of productivity decline and chose approaches to strengthen sustainability		C/Weekly lecture hours in total: Attendance time: 56 h Self-study time: 124 h
Course: Ecology and agroecosystems (Lecture, Seminar) <i>Contents:</i> Case-study based analysis and discussion of ecological framework conditions (limitations) in different arid and sub-humid agro-ecosystems of tropical and temperate zones with a particular focus on marginal soils and/or difficult infrastructural conditions where effective nutrient cycling, integration of cropping and animal husbandry systems as well as the use of biodiversity for income generation at the farm level is of particular importance. The potential/role of organic agriculture will be discussed and a more general discussion of the potential of organic agriculture to strengthen the resilience of agro-ecosystems will be presented.		4 WLH
Examination: Mündliche Prüfung (ca. 15 Minuten, Gewichtung: 60%) und Präsentation, Referat oder Korreferat (ca. 20 Minuten, Gewichtung: 40%)		
Admission requirements: none	Recommended previous knowledge: Basic knowledge in plant, soil and animal science, willingness to analyse agro-ecosystems quantitatively	
Language: English	Person responsible for module: Prof. Dr. Andreas Bürkert	
Course frequency: each summer semester; Witzenhausen	Duration: 1 Semester[s]	
Number of repeat examinations permitted: twice	Recommended semester:	
Maximum number of students: not limited		
Additional notes and regulations: Literature: Altieri, M. 1987: Agroecology: the scientific basis of alternative agriculture. Westview Press, Boulder, Colorado, USA; Gliessman, S.R. 1998: Agroecology: ecological processes in sustainable agriculture. Ann Arbor Press, Michigan, USA.		