## Georg-August-Universität Göttingen 6 C 4 WLH Universität Kassel/Witzenhausen Module M.SIA.P13: Agrobiodiversity and plant genetic resources in the tropics Workload: Learning outcome, core skills: Attendance time: Students are able to understand the role of agrobiodiversity in tropical agro-ecosystems, to present approaches of functional biodiversity analysis and to discuss the needs and strategies of on-farm (in situ) and off-farm conservation of plant genetic resources. Self-study time: 124 h 4 WLH Course: M.SIA.P13.C Agrobiodiversity and plant genetic resources in the tropics (Lecture, Seminar) Contents: Case-study based analysis of the role of biodiversity for selected crops in different agroecosystems from the arid to the humid climate zones; importance of biodiversity for the stability / sustainability of smallholder (subsistence) versus commodity-oriented commercial agriculture in the Tropics, assessment and utilization of diversity, principles and practices in conservation of genetic resources, role of homegardens and indigenous wild fruit trees for in situ conservation of biodiversity, causes and consequences of genetic erosion, approaches of germplasm collection. 6 C Examination: Oral exam (about 15 minutes, 60%) and presentation (about 20 minutes, 40%) M.SIA.P13.Mp: Agrobiodiversity and plant genetic resources in the tropics **Examination requirements:** Students should be able to understand the role of agrobiodiversity in tropical agroecosystems, to present basic approaches to functionally analyse biodiversity and to discuss the need of and strategies for in and ex situ conservation of genetic resources. Admission requirements: Recommended previous knowledge: none Basic knowledge in plant and soil sciences Language: Person responsible for module: Prof. Dr. Gunter Backes English Course frequency: **Duration:** each winter semester; Witzenhausen 1 semester[s]

## Additional notes and regulations:

Maximum number of students:

Number of repeat examinations permitted:

Literature:

not limited

twice

Altieri, M. 1987: Agroecology: the scientific basis of alternative agriculture. Westview Press, Boulder,

Recommended semester:

Colorado, USA; Eyzaguirre, P.B., Linares, O.F. 2004: Home gardens and agrobiodiversity. Smithsonia Books, Washington, USA; Wood, D., Lenne, J.M. 1999: Agrobiodiversity: Characterization, utilization and management. CABI Publishing, Wallingford, UK.