Georg-August-Universität Göttingen Module M.iPAB.0002: Breeding schemes and programs in plant and animal breeding

Learning outcome, core skills: Workload: Students will learn the basic elements and structures of breeding programs in plant and Attendance time: animal breeding. They understand the relationship between biological characteristics 56 h of the crop or livestock species and the specific design of the breeding program. Self-study time: The students know the four breeding categories and design possibilities of breeding 124 h programs for self-pollination, cross-pollination and vegetative and clonally propagated crops. They learn breeding programs for major crops and livestock species. Course: M.iPAB.0002.LV Breeding schemes and programs in plant and animal 4 WLH **breeding** (Lecture, Excursion) Contents: Design of breeding programs. Basic elements of breeding programs: Breeding objectives and breeding planning, performance testing, selection and mate selection, use of biotechnologies, transfer of breeding progress in the production level, monitoring of the breeding progress. Breeding program structures in the most important crop species: cereals, corn, rape, sugar beet, specialty crops. Breeding program structures in the main livestock species: dairy cattle, pigs, poultry, beef cattle, small ruminants. Breeding program structures in forest genetics. 6 C Examination: Written exam (45 minutes, 50%) and an Essay (45 minutes, 50%) M.iPAB.0002.Mp: Breeding schemes and programs in plant and animal breeding **Examination requirements:** Profound knowledge of basic breeding program structures and elements of breeding programs and their concrete implementation to various crops and livestock. Elaboration

Admission requirements:	Recommended previous knowledge:
none	none
Language:	Person responsible for module:
English	Dr. Birgit Jutta Zumbach
Course frequency:	Duration:
each summer semester	1 semester[s]
Number of repeat examinations permitted:	Recommended semester:
twice	Master: 1
Maximum number of students:	
30	

Additional notes and regulations:

of the breeding planning for a livestock or crop species.

Mandatory excursions to practical plant breeding and animal breeding programs.