Georg-August-University Göttingen/University of Kassel

Master Program „Crop Protection"

Module P 07 SIA „ Soil and Plant Science"

Contents, Objectives	C/H PER SW
Contents: Fundamentals of soil science: Physical properties (texture, soil water, pore space), chemical properties (buffering, exchange capacity, nutrients), biological properties (organic matter, edaphon), soil formation and classification Plant nutrition: Role of major and minor elements in plants, nutrient availability and nutrient mobilisation, plant nutrients and food quality Plant breeding and genetics: plant morphology, genetics and breeding: principles of plant domestication and use, characterization and evaluation, use of genetic resources in plant breeding, genetic basis for plant breeding Plant protection: principles of plant pathology and entomology, genetics of plant diseases, epidemiology, plant defense mechanisms; insect physiology and ecology. **Objectives**: Bridging module for students lacking basic knowledge in some agronomy disciplines. With the help of lectures and reading materials students will be enabled to fill in gaps and get updated on state-of-the art knowledge with a special focus on questions pertinent to organic agriculture. Students, having taken this module, will be able to follow advanced courses in the above fields.	6 C/4 H PER SW Workload : 180 h Contact time: 60 h Self study time: 120 h
Type of instruction and examination Lecture 50 h , seminar 10 h Examination: Written or oral test	

Type of module	Entrance requirements
Bridging , elective module	none
Frequency	**Duration**
Winter	One semester
Language	**Number of students**
English	30

Coordinator
Prof. Dr. M. R. Finckh