## Georg-August-University Göttingen/University of Kassel

## Master Program "Crop Protection"

## Module P 07 SIA "Soil and Plant Science"

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       6 C/4 H PER SW         Workload :       180 h         Plant nutrition: Role of major and minor elements in plants, nutrient availability and nutrient mobilisation, plant nutrients and food quality       Contact time: 60 h         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       Self study time: 120 h         Plant protection: principles of plant pathology and entomology, genetics of plant diseases, epidemiology, plant defense mechanisms; insect physiology and ecology.       Self study time: 120 h         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.         Type of module       Entrance requirements       none         Frequency       Duration       One semester         Uniter       One semester       30         One with difficulties       30			C/H PER SW
Bridging , elective module     none       Frequency     Duration       Winter     One semester       Language     Number of students       English     30	pore space), chemical properties (buffering, exchar biological properties (organic matter, edaphon), so Plant nutrition: Role of major and minor elements i and nutrient mobilisation, plant nutrients and food Plant breeding and genetics: plant morphology, ger of plant domestication and use, characterization ar resources in plant breeding, genetic basis for plant Plant protection: principles of plant pathology and diseases, epidemiology, plant defense mechanisms <b>Objectives</b> : Bridging module for students lacking ba agronomy disciplines. With the help of lectures and be enabled to fill in gaps and get updated on state- special focus on questions pertinent to organic agri Students, having taken this module, will be able to above fields. <b>Type of instruction and examination</b>	nge capacity, nutrients), il formation and classification n plants, nutrient availability quality netics and breeding: principles nd evaluation, use of genetic breeding entomology, genetics of plant ; insect physiology and ecology. asic knowledge in some I reading materials students will of-the art knowledge with a iculture.	6 C/4 H PER SW Workload : 180 h Contact time: 60 h Self study time:
Bridging , elective module     none       Frequency     Duration       Winter     One semester       Language     Number of students       English     30			
Winter     One semester       Language     Number of students       English     30	Examination: Written or oral test	Entrance requirements	
Winter     One semester       Language     Number of students       English     30	Examination: Written or oral test Type of module		
Language     Number of students       English     30	Examination: Written or oral test Type of module Bridging , elective module	none	
English 30	Examination: Written or oral test Type of module Bridging , elective module Frequency	none Duration	
	Examination: Written or oral test Type of module Bridging , elective module Frequency Winter	none Duration One semester	
	Examination: Written or oral test Type of module Bridging , elective module Frequency Winter	none Duration One semester	
Coordinator	Examination: Written or oral test Type of module Bridging , elective module Frequency Winter Language	none Duration One semester Number of students	