

Georg-August-University Göttingen/University of Kassel

Master Program „Crop Protection“

Modul P 03 SIA „ Ecological Soil Microbiology“

<b>Contents, Objectives</b>  <b>Contents:</b> Introduction to-and application of important up-to-date methods in soil-microbiology to determine the activity, biomass and community structure of soil-microorganisms. The complete operational sequence of a research project is simulated: (1) sampling, (2) sample preparation, (3) measurements and data collection (application of methods), (4) data processing, (5) statistics and (6) drafting a manuscript. Up-to-date literature is presented and discussed by the students.  <b>Objectives:</b> Students learn to use microbiological methods and to interpret the obtained data. Students develop a consciousness for the complexity of soil fertility and soil quality and see the difficulties in diagnosing it.		<b>C/H PER SW</b>  6 C/4 H PER SW  Workload : 180 h  Contact time: 60 h  Self study time: 120 h
<b>Type of instruction and examination</b>  Lecture 8 h, Seminar 8 h, Excursion 4 h, Practical 40 h  Examination: Written work report  Examination prerequisite: two project presentation, 20 min		
<b>Type of module</b>  Elective module	<b>Entrance requirements</b>  Basic knowledge in biology, chemistry, and soil sciences	
<b>Frequency</b>  Winter	<b>Duration</b>  One semester	
<b>Language</b>  English	<b>Number of students</b>  30	
<b>Coordinator</b>  Prof. Dr. R.G Jörgensen		