

<b>Georg-August-Universität Göttingen</b> <b>Module M.Agr.0056: Plant breeding methodology and genetic resources</b>	6 C 4 WLH
<b>Learning outcome, core skills:</b> Students learn the integration of classical and molecular approaches to solve present problems in plant breeding. Social aspects have to be considered.  Students learn, in own presentations, to draw critical conclusions from recent research papers and to communicate these to other students.	<b>Workload:</b> Attendance time: 56 h Self-study time: 124 h
<b>Course: Plant breeding methodology and genetic resources (Lecture)</b> <i>Contents:</i> Principles of breeding methodology: Response to selection, breeding methods for clonal, line, hybrid and population cultivars.  Marker assisted selection for monogenic and polygenic traits.  Use of plant genetic resources: wild species, ex-situ and in-situ conservation, on-farm management.  Breeding for marginal environments, demonstrated with examples from temperate and tropical regions.	4 WLH
<b>Examination: Written exam (90 minutes, 80%) and presentation (20 minutes, 20%)</b> M.Agr.0056.Mp: Plant breeding methodology and genetic resources <b>Examination requirements:</b> Population Genetics, Application of Markers in Plant Breeding, Concepts of using genetic resources in plant breeding. Good knowledge on: 'Pre-Breeding', categories and methods in Plant Breeding.	
<b>Admission requirements:</b> none	<b>Recommended previous knowledge:</b> Basic knowledge (B.Sc. level) in genetics and plant breeding
<b>Language:</b> German, English	<b>Person responsible for module:</b> apl. Prof. Dr. Wolfgang Link
<b>Course frequency:</b> each summer semester	<b>Duration:</b> 1 semester[s]
<b>Number of repeat examinations permitted:</b> twice	<b>Recommended semester:</b>
<b>Maximum number of students:</b> 25	
<b>Additional notes and regulations:</b> <b>Literature:</b> Lecture based material.	