

Module description for the compulsory elective subject

Modul english titel	Resilent Agriculture (language: English) Optional subject
ECTS credits	3
Teaching hours per week	2
Module description	<p>Environment and food security are threatend by climate change, increasing droughts, biodiversity loss and soil degradation. At the same time, modern agriculture itself is one of the major causes for the violation of its productive resources.</p> <p>Resilient agriculture must respect and restore ecological principles to sustain its productivity under a broad variety of abiotic and biotic stress factors.</p> <p>Current approaches like organic farming, regenerative agriculture, agroforestry, keyline design, permaculture, biochar application, habitat management and others are presented, discussed and evaluated. Hands-on experience, case studies and an excursion complement the picture.</p>
Outcome	<p>Participants get to know agricultural techniques and concepts that are supposed to restore natural resources and maintain productivity under global change conditions. They critically assess strengths and weaknesses of these approaches' contribution towards climate change mitigation, water management, biodiversity and yield stability.</p> <p>With their knowledge they can devise and support efficient means of changing agriculture to a more resource oriented, sustainable and climate change adapted system for food security.</p>
Control	Portfolio: literature excerpt, case study presentation, short excursion record, minimum 75% attendance
Grading	<input checked="" type="checkbox"/> passed/failed <input checked="" type="checkbox"/> by grade for degree programmes, if required
Prerequisite	<ul style="list-style-type: none"> - Good english language proficiency - Basic knowledge on ecology and agriculture
Procedure	<p>Lecture:</p> <ul style="list-style-type: none"> - 12 sessions (90 minutes) - 1 excursion (approx. 5 hours/self-organized field trip for distant participants) <p>Date (prospective): Wednesday, 17:30 – 19:00 (Central European Time)</p>
Lecturer	Prof. Dr. sc. agr. Jens Poetsch
Offer for semester	Advanced students of all programmes admitted
Number of participants	min. 8, max. 20 participants (additionally up to 10 externals with online participation)