

WPM 12 Advanced Empirical Methodology for Socio-Ecological Systems Analysis			Credits: 6	
<p>Objectives</p> <p>The students learn about</p> <ul style="list-style-type: none"> - the leverage interrelationships between ecological, economic, social and institutional systems leading to unsustainable trends in natural resource use, - collective action problems among users in an increasingly globalised arena, - the potential of multiple-methods to provide valuable insights and to contribute to collaborative strategies and conflict-resolution mechanisms, - the stock of experiences based on pertinent research employing multiple methods with the aim to study the complexity of human behavior and the complex interactions with socio-ecological systems, - experimental economics and game theory, - employing experimental techniques to provide insights on the role of institutions and of behavioural aspects in solving problems of group externalities or social dilemmas where the individual optimum clashes with the group optimum. 				
<p>Preconditions for participation: basic knowledge of qualitative and quantitative research methods</p> <p>Recommended: basics of economics and social sciences, basic statistics, basic econometrics</p>				
Teaching formats	SWS	Workload	Credits, prerequisite for exam	Contents
LE	2	90 hours	3	<ul style="list-style-type: none"> - Introduction of general research methodologies applied in social sciences and economics - Theoretical discussion and practical testing of relevant methods - Role playing games stressing social interaction and collaboration instead of competition - Agent-based models as computational models for simulating the actions and interactions of individuals or collectives - Crafting Rules by Discourse as an innovative urban rule-making development-promoting planning and consensus-building tool - Introducing Simulations, Vision Development, Mediated Modelling, Systemic Constellations, Social Metabolism, etc. - Empirical studies drawing also on Game theory and its relevance to Institutional, Experimental and Behavioral Economics focusing on applications in Natural Resource Management. - Discussing types of games, game design concepts and interpretation of results.
SE	2	90 hours	3	Practical training in multiple-methods, exercise, gaming
Examination		180 hours	Pass	Oral group exam (100%). Precondition: Participation to practical (lab) training
Duration		<input checked="" type="checkbox"/> 1 Semester <input type="checkbox"/> 2 Semester		
Start of module		<input type="checkbox"/> WS <input checked="" type="checkbox"/> SS		