PLATFORM Methods Course

3-19 May 2021 -- 3 internet seminars each week (+ presentations at workshops in July and December)

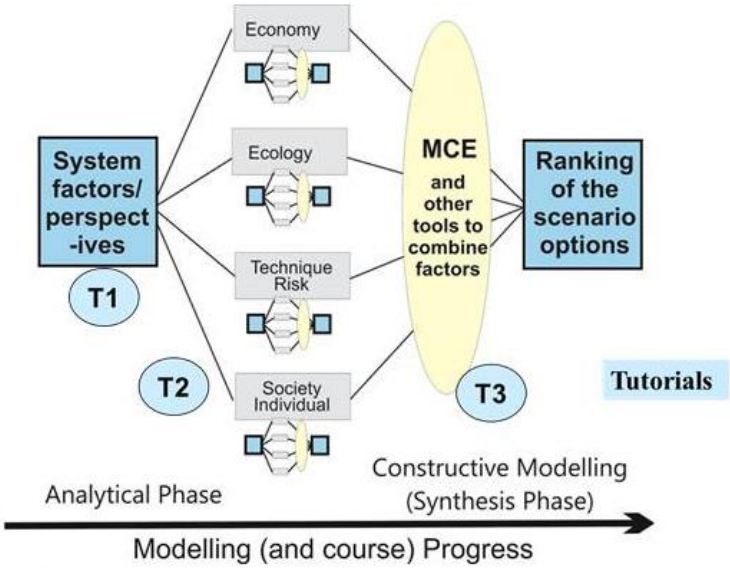
Conceptual Case-Study Modeling for Project Collaboration

Univ. Gothenburg, Sweden, in collaboration with partner institutes in the PLATFORM project

This web-based course utilizes conceptual modelling tools to promote system understanding when dealing with complex issues, such as societal resource management where multiple disciplines, stakeholders and processes are involved. The overall aim of this course and this "system perspective" is to help initiate projects and bring together the actors that can jointly develop strategies for problem definition, appropriate methodology and project opportunities. Although the main examples will deal with environment and resource management, the approach is applicable to most any type of problem and within a range of disciplines. Both research and educational collaboration can be facilitated by case-study modeling. Considering the diversity of applications areas and the specificity of each individual case study, the methodology intends to provide general but adaptable procedural guidance for initial project development.

This very much a "hands-on" course and the participants are expected to actively get involved in the development of one of the proposed case studies. These will be proposed by the members of the PLATFORM network and who will also be prepared to help assist during the group work with each case study. The sequential methods for problem analysis and project initiation will be jointly presented and discussed in the weekly webinars. The results achieved by the participants will be an important part of the discussions. Therefore, a timely completion of the tutorials is pedagogically valuable for both individuals and jointly for the case-study groups. An international and interdisciplinary mixture of course participants is expected. This will help illustrate the need and value for cooperative tools.

Certificates of participation and completion will be given, but credits should be coordinated by the individual home institutes. Following the webinars and completing the tutorials is considered equivalent to 3 ECTS credits. Case-study presentation can increase this to 5.



The "Brunswikian Lens" model (after Scholz & Tietje 2002), illustrating the two, complementary steps in modelling a problem. The small lens figures represent the addition of greater detail and resolution when quantitative or qualitative information is available. The tutorials will follow this progression from problem analysis to constructive modelling.

Tutorials

T1. System Sketch – defining and describing the relevant system
T2. System structural analysis – studying the internal relationships
T3. Multi-criteria analysis – predicting the impact of the variables

Course Schedule

Webinars will be from 10.00 – 12.00 (CET), Workshop schedules to be decided later

	Topics	***Tutorials***
3/5 Mon	**PLATFORM Goals and Course Introduction**	
4/5 Tues	**Presentation of case-study proposals for modeling Sketch –brainstorming & parameter identification**	**T1**
6/5 Thurs	**System Sketch – Brainstorming & parameter identification**	
10/5 Mon	**Discussion of Tutorial T1 & System Structural Analysis**	**T2**
11/5 Tues	**System Structural Analysis continued**	
14/5 Thurs	**Examples and Discussion**	
17/5 Mon	**Presentation of Tutorial T2 results**	**T3**
18/5 Tues	**Multi-Criteria Evaluation**	
20/5 Thurs	**MCE Examples and Methods Review**	
	Additional on-line help for completing the course projects, including poster presentations for the PLATFORM Workshops.	
tentative dates	***Hybrid Workshops***	
1/7	**Workshop on Case-Study Methods at SGEM Conference – Albena, Bulgaria. Presentations of initial modeling results**	
8/12 Tues	**Workshop with presentations of case-study projects initiated using PLATFORM tools. SWS Conference in Vienna, Austria**	

The tutorials intend to lead the participants stepwise through the basics of decision-support modeling. Recordings of the on-line lectures and discussions will hopefully help to include everyone despite timing conflicts.

The course case studies will be presented a workshop in July, 2021, either virtually or on site at the SGEM Geoscience Conference. This work workshop will focus on the methodology and their function as cooperation tools. The initial case study analyses will also be taken up as examples of project initiation. A second SGEM workshop, in December 2021, will deal more specifically with the science of the case studies themselves, although the methodology of PLATFORM approach will still be under evaluation. The workshop presentation will mainly be as posters together with short conference papers. The workshop will allow interaction and networking with international scientists and between the course participants themselves, hopefully leading to future co-development of projects.

Most importantly the course activities will hopefully result in actual projects with a good basis for support and expansion in the appropriate contexts for each case study. It is envisioned that case studies can in some cases be developed as joint Master's projects, integrating research and educational goals. The course results may also be suitable for adaption, in some cases, for teaching modules and popular-science presentations, aiming to interface with teaching programs and with local stakeholders. Since the overall course aim is problem analysis and project initiation, the progress of each individual or group can be valuable for both their own understanding and for practical applications.

For more information, contact Rod Stevens, stevens@gvc.gu.se, tel: 46-709892750
Course website: https://kermitcooperation.wixsite.com/platform
Webinar site: https://gu-se.zoom.us/j/2983061154