

| | |
|---|--|
| FACOLTÀ | Scienze Politiche |
| ANNO ACCADEMICO | 2013/2014 |
| CORSO DI LAUREA MAGISTRALE_LM63 interateneo | SVILUPPO SOSTENIBILE DELLE ORGANIZZAZIONI PUBBLICHE E PRIVATE Descrizione Curriculum: MANAGING SUSTAINABLE DEVELOPMENT IN PUBLIC AND PRIVATE ORGANISATIONS |
| INSEGNAMENTO | Group model building II |
| TIPO DI ATTIVITÀ | Affine |
| AMBITO DISCIPLINARE | Affine |
| CODICE INSEGNAMENTO | 14138 |
| ARTICOLAZIONE IN MODULI | no |
| NUMERO MODULI | |
| SETTORI SCIENTIFICO DISCIPLINARI | Sps/01 |
| DOCENTE RESPONSABILE | Etienne Rouwette Professore Associato Università di Njmegen |
| CFU | 6 |
| NUMERO DI ORE RISERVATE ALLO STUDIO PERSONALE | 108 |
| NUMERO DI ORE RISERVATE ALLE ATTIVITÀ DIDATTICHE ASSISTITE | 42 |
| PROPEDEUTICITÀ | primo anno |
| ANNO DI CORSO | II |
| SEDE DI SVOLGIMENTO DELLE LEZIONI | Università estera |
| ORGANIZZAZIONE DELLA DIDATTICA | Lezioni frontali, Esercitazioni in aula, Esercitazioni in aula informatica, redazione di un progetto |
| MODALITÀ DI FREQUENZA | Obbligatoria |
| METODI DI VALUTAZIONE | Prova Scritta, Presentazione di un progetto |
| TIPO DI VALUTAZIONE | Voto in trentesimi |
| PERIODO DELLE LEZIONI | Primo semestre |
| CALENDARIO DELLE ATTIVITÀ DIDATTICHE | Vedi sito università |
| ORARIO DI RICEVIMENTO DEGLI STUDENTI | Vedi sito facoltà |

1. Course Description

Group model building II Level: graduate; 6 ECTS points. The course is conducted entirely in English.

2. Learning Outcomes

Knowledge and understanding

Knowledge from the course on Group Model Building I will be deepened and extended—students will be able to also conduct quantitative Group Model Building projects and conduct GMB in more complex situations (e.g. more divergent viewpoints between stakeholders). Additional tools and scripts will be in the focus of study and be known to the students.

Applying knowledge and understanding

Students are able to conduct quantitative Group Model Building sessions themselves. They will have experience with additional supplementary tools, in particular to elicit quantitative knowledge from experts.

Making judgements

Students should be able to reflect on the issue whether Group Model Building is an appropriate method for a given problem, and whether a qualitative or quantitative approach seems useful. They will also be able to evaluate the usefulness of supplementary tools.

Communication

Students will be able to present results from Group Model Building sessions to stakeholders in organizations and to interested academics. Furthermore, they can statistically analyse quantitative results from Group Model Building projects.

Learning skills

Due to the profound experience they will acquire in the method, students can themselves acquire additional knowledge to further enhance the method and to adjust it to their needs.

3. Course Content

- ^ Eliciting knowledge for quantitative modelling: stocks and flows,
- ^ Calibrating the model: parameters, graph functions etc.
- ^ Model analysis with groups
- ^ Creating and using model based scenarios
- ^ From model and scenario analysis to strategic decisions
- ^ Dissemination and learning environments
- ^ How to determine the effectiveness of GMB interventions
- ^ Intercultural issues
- ^ Practical training sessions with faculty feedback

4. Course Design

The course is comprised of lectures, case studies, and students' projects and presentations. An 80% attendance rate in sessions is required; students have to engage actively in class discussions and in project work. Assessment is carried out by means of evaluated project reports, which are based on actual or potential real-life issues (partially provided by industry partners).

5. Students' evaluation

An ECTS grade is provided to the student at the end of the course according to the A—F scale. Students not successfully fulfilling all the course requirements within the regular time frame have the option of a re-sit once the following semester.

6. Course Admission Requirements

Admission to the course requires previous and regular enrolment in the European Master of System Dynamics programme (i.e., having completed the first semester in Bergen and the second semester in Lund or Palermo) or a completed Bachelor programme in Business Administration from Radboud University.

7. Literature

Coyle, Geoff: Qualitative and Quantitative Modelling in System Dynamics: some research questions, in: System Dynamics Review, 16/3 (2000), 225-244. Homer, Jack and Rogelio Oliva: Maps and Models in System Dynamics: a response to Coyle, in: System Dynamics Review, 17/4 (2001), 347-355. Rouwette, Etienne and Jac Vennix: System dynamics and Organizational Interventions, in: Systems Research and Behavioral Science, 23/4 (2006), 451-466. Vennix, Jac: Group Model Building, 1996.

8. Further Information

Course Schedule

| Week | Topic |
|------|--|
| 1 | 1. Introduction to the course (logistics) |
| | 2. Introduction to Group model building 2 |
| 2 | 3. Eliciting quantitative knowledge |
| | 4. Quantifying and calibrating shared formal models |
| 3 | 5. Simulation experiments with groups |
| | 6. From model and scenario analysis to strategic decisions |
| 4 | 7. Students' trial run |
| | 8. Reflection on students' trial run |
| 5 | 9. Dissemination of insights in organizations |
| | 10. |
| 6 | 11. Learning environments based on GMB |
| | 12. |
| 7 | 13. Project presentations |
| | 14. |

Two lectures per week plus tutorials are envisioned.