

Course Topics:

1. Problem Structuring and Framing
 - 1.1. Identifying Policy Units and Framing their Spatial Relationships
 - 1.2. Scoping Participation (From Structuring to Evaluation)
 - 1.3. Facts (objective aspects) & Values (subjective aspects)
 - 1.4. Socio-technical constructive/participatory process design (decision conferences, requisite models, process consultation)
2. Criteria Tree
 - 2.1. Disentangling, Means/Ends and Causes/Effects Objectives
 - 2.2. Compensatory Models
 - 2.2.1. Desired Properties
 - 2.3. Synergies/Antagonisms
 - 2.4. Screening
3. Structuring Policy Instruments / Policy Mix
 - 3.1. Structuring/Combining Policy Instruments into a Policy Mix (e.g. AIDA)
 - 3.2. Baseline (business as usual)
 - 3.2.1. With
 - 3.2.2. Without
 - 3.3. Additivity
4. Performance measurement (Indicators/Descriptors) for each policy instrument/mix
 - 4.1. Means/Ends & Causes/Effects
 - 4.2. With
 - 4.2.1. Desired Properties
 - 4.2.2. Typology of Indicators (quantitative/qualitative, natural/constructed, direct/indirect, discrete/continuous)
 - 4.2.3. Spatial (e.g.: derived from before-after-control-intervention or quasi-experimental "impact evaluation" methods)
 - 4.2.3.1. Resolution
 - 4.2.3.2. Inter-spatial tradeoffs
 - 4.2.4. Non-Spatial
 - 4.2.5. Inter-temporal tradeoffs
 - 4.2.6. Screening
 - 4.3. Without (➔ see 5.2.2)
5. Evaluation/Tradeoffs (MACBETH)
 - 5.1. Reference performance levels of intrinsic value
 - 5.1.1. OPTIMAL (e.g.: derived from outputs of optimal reserve site selection)
 - 5.1.2. GOOD (Targets and aspiration levels)
 - 5.1.3. NEUTRAL (Minimal satisfactory levels)

- 5.2. Scoring (Intra-criteria value judgments)
 - 5.2.1. Indirect value scoring
 - 5.2.1.1. Quantitative Value/Utility Functions
 - 5.2.1.2. Qualitative
 - 5.2.2. Direct value scoring (direct paired comparisons)
 - 5.2.3. Screening
- 5.3. Weights (Inter-criteria tradeoff judgments)
 - 5.3.1. Screening
 - 5.3.2. Scales
- 5.4. Overall scoring
- 6. Sensitivity and robustness Analysis (MACBETH)
 - 6.1. Uncertainty, imprecision or bad determination of performances
 - 6.2. Uncertainty on value judgments
- 7. Negotiation/Conflict Analysis
- 8. Resource Allocation (commons dilemma)