Introduction to the course

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After the course, the student can:

- Explain what Bayesian Networks are and how they work
- Evaluate theoretical, scientific, and cognitive factors that need to be taken into account when designing an interdisciplinary BN model
- Design and build an interdisciplinary Bayesian Network model on their research question using a readily available software package
- Find and evaluate information sources to populate the model

Schedule

Week	Topics
1	Introduction Introduction to Bayesian Networks and decision support models How are Bayesian Networks useful for interdisciplinary environmental research Interdisciplinary research, problem framing
2	Theory of Bayesian Networks How to build the models in BN software
3	Building the model: structure and parameters
4	Building own models in groups with Hugin software
5	Working on own models
6	Working on own models Preparing a presentation of the model
7	Presentations of the models in the course conference Peer evaluation of the projects

Grading

- Pass/Fail

- Requirements:
  - Active participation in group discussions
  - Active participation in peer collaboration
  - Presentation of own model in final conference
  - Peer evaluation of two presentations

Teachers

Laura Uusitalo

- PhD (fisheries science), MSc (limnology), MSc (computer science)
- Leading researcher at the Finnish Environment Institute SYKE
- 18 years of experience on BNs
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Riikka Puntila-Dodd

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- Researcher at Marine Research Centre at SYKE
- Specialized in food web interactions and the impacts of humans and invasive species
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