Key aspects of the final exam (Part I)

- Linear regression problem: Maximum Likelihood vs. Bayesian
- Regression as a linear factor model: visible and latent variables
- Probabilistic graphical models: the d-separation rules
- Computation around n-dim Gaussians, e.g. the posterior, the marginal
- The EM learning algorithm: E and M steps
- Variational inference vs. learning
- Combined variational inference and learning

- DO's: Make sure you know
  - How to **recognize and compute** n-dim Gaussians
  - **Concepts** embedded in each of the above problems
- DON'T's
  - Read w/o doing exact computations
  - Come w/o studying beforehand
  - Copy and paste from lecture notes
  - Provide answers w/o details
- REMEDIES (for those who perform not so well)
  - Run computer simulations after the exam
  - Present results in private sessions