

## Literature:

- Logic Notes by John Slaney: <https://users.cecs.anu.edu.au/~jks/LogicNotes/>
- Sets, Logic, Computation by the Open Logic Project: <https://slc.openlogicproject.org/slc-screen.pdf>
- Intro to Constructive Logic and Mathematics, by Thomas Streicher: <https://www2.mathematik.tu-darmstadt.de/~streicher/CLM/clm.pdf>

## Session 1:

- Intro, sentences, deduction. Examples, Notion of Deduction from assumption
- Make sentences more formal: formulae of propositional logic
- Make deduction more formal: propositional natural deduction, both classic and intuitionistic.
- Soundness: Heyting algebras

## Session 2:

- Examples of Heyting algebras, soundness theorem
- Idea of re-engineering: what if we had proved the completeness theorem already
- Completeness for classical deduction: maximally consistent sets