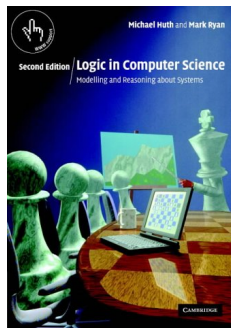


Logic and Modelling

— Introduction —

Jörg Endrullis

VU University Amsterdam



Logic in Computer Science
by Michael Huth and Mark Ryan

Cambridge University Press,
Second Edition, 2004

Course Structure

Lecturer: Jörg Endrullis

- ▶ room: T437
- ▶ email: `j.endrullis@vu.nl`

Teaching assistants:

- ▶ Peter Atkinson
- ▶ Roy Overbeek

Course structure:

- ▶ 2 lectures per week
- ▶ 2 exercise classes per week
- ▶ Exercise classes in week 2,3 are *computer practicum*.

Final exam, see rooster.vu.nl!

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- ▶ **Passing the practicum required for exam participation!**

Final Exam and Final Grade

Passing the ProofWeb Practicum

You need to solve

- ▶ 50% of the propositional logic tasks assigned to you
- ▶ 50% of the predicate logic tasks assigned to you

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Final Exam and Final Grade

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Final Exam

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Final Grade

The final grade for the course is:

- ▶ **final exam grade,**
- ▶ plus a maximum of 0.6 bonus points from the **practicum.**

Rough Course Content

The main subjects of this course are:

- ▶ propositional logic
 - ▶ syntax
 - ▶ semantic
 - ▶ natural deduction
- ▶ (first-order) predicate logic
 - ▶ syntax
 - ▶ semantic
 - ▶ natural deduction
- ▶ modal logic
 - ▶ frames and validity on frames
 - ▶ correspondence between formulas and frame properties
- ▶ important concepts are:
 - ▶ (in)completeness, correctness, consistency
 - ▶ (un)definability
 - ▶ (un)decidability