Institut for Matematik og Datalogi Syddansk Universitet

DM517 – Fall 2014 – Weekly Note 1

Welcome to DM517!

The weekly notes and the lectures will be in English as we may have foreign participants. If you have any problem understanding what I write or say, please do not hesitate to ask for a danish translation.

The weekly note will be published on the course web page once a week. It will contain information about what will happen in the next week (lecture(s) and exercise classes).

Litterature

Michael Sipser: Introduction to the Theory of Computation, 3rd edition. It is available from the bookstore.

Besides this book you may look at the following which will be in on the course shelf in the library

- Lewis and Papadimitriou, Elements of the theory of computation, 2nd ed. Prentice Hall, 1998.
- Efim Kimber and Carl Smith, Theory of Computing: A gentle introduction, Prentice Hall, 2001.

Exam

The exam is written (4h) with external exminator. Note that the exam will have to be done electronically. We will discuss the format of the exam during the course. Also note that if you have taken the course before but failed the exam, then you must sign up for the course again in order to take the exam.

In order to attend the exam you must solve the obligatory assignments and get your solutions approved. If you already attended the course and got these approved earlier, you do not have to do the exercises again.

Course schedule:

See the faculty pages. **NB: look for possible changes as announced on weekly notes!** In particular there will be two lectures in week 36 and no exercises. **Instructor**

Your instructor for the exercise/training classes is Jon Christensen email pelvark@gmail.com

Lecture September 1, 2014:

- Short introduction to the course. You are expected to read Chapter 0 yourself. We will not cover anything from that (explicitly) during the lectures.
- Finite Automata, Section 1.1
- Nondeterminism, Section 1.2

Lecture September 3, 2014:

Note that the exercises will not start until week 37. Instead we spend the time getting through some more material so that you have something to work with.

- Regular expressions, Section 1.3.
- If there is more time we may also start on Nonregular languages, Section 1.4