Course PM

DIT311/TDA184, Models of computation, 7.5 hec, autumn 2018

Examiner: Nils Anders Danielsson (http://www.cse.chalmers.se/~nad/).

Course content:

See the syllabus.

Learning outcomes:

See the syllabus.

Course structure/course implementation:

There will be lectures and tutorials.

There are two sub-courses: Assignments (3 hec), and Written examination (4.5 hec).

Examination forms:

The following is required to pass the course:

- Passed assignments.

- Passed written exam.

If both of these requirements are satisfied, then the final grade is the grade on the written exam.

The written exams are graded in the following way:

- The GU grades Pass (G) and Pass with Distinction (VG) correspond to the Chalmers grades 3 and 5, respectively.

- To get grade n on an exam you have to be awarded grade n or higher on at least n exercises.

- A completely correct solution of one exercise is awarded the grade 5. Solutions with minor mistakes *might* get the grade 5, and solutions with larger mistakes might get lower grades.

- Exercises can contain parts and/or requirements that are only required for a certain grade. To get grade n on such an exercise you have to get grade n or higher on every part marked with grade n or lower (and every unmarked part), and you have to fulfil

every requirement marked with grade *n* or lower (as well as every unmarked requirement).

Authorised aids during the written exams (except for the aids that are always permitted): none.

For the time and location of the written exams, see the official exam schedule.

There will be six assignments, and you have to pass at least five of them. Deadlines: 13/11, 20/11, 29/11, 6/12, 13/12 and 20/12.

You are free to cooperate with other students when solving the assignments. However:

- The assignments must be handed in individually.

- You must write down the solutions yourself, using your own words/code.

- You must be able to explain and discuss your solutions.

The assignments must be handed in via Fire, no later than the dates indicated above.

Course Literature:

There is no compulsory text book. Texts will be made available to you (this may include chapters from books that can be accessed online).

You can optionally choose to read a standard text book on computability, such as Sipser's "Introduction to the Theory of Computation", or Hopcroft, Motwani and Ullman's "Introduction to Automata Theory, Languages, and Computation". Note, however, that large parts of those two books are not covered in this course, and that the course covers topics that are not included in the books.

Schedule:

Lectures: Mondays, 10:00-11:45. Tutorials: Wednesdays, 10:00-11:45.

Note that the division between lectures and tutorials may not be followed exactly: questions will be asked during lectures, and there may be some lecturing during tutorials.

Course evaluation:

The course will be evaluated, and Chalmers' normal course evaluation procedure will be followed.

Changes since last year:

There have been no major changes of the course since last year.