Discrete Mathematics – Dr. Ivan Martino

Instructor: Dr. Ivan Martino, Office 3732 - 7th floor, KTH, Mathematics, **imartino@kth.se**

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Textbook: i) Eriksson & Gavel – Discrete Mathematics and Discrete Models, Studentlitteratur;

ii) Eriksson & Gavel – More discrete mathematic, Studentlitteratur.

Course Description: We will cover several fundamental parts of discrete mathematics. They may roughly fit in five interlinked topics:
   i) Number theory and modular arithmetic;
   ii) Proof techniques, set theory and combinatorics;
   iii) Group theory, applications in encryption and error-correcting codes;
   iv) Boolean algebra; and
   iv) Graph theory.

Examination: There will be so called continuous examination. The course is divided into five parts and for each part there is a 60 min long written (partial) exam, see Schedule for details. If you pass all five partial exams you will at least receive the grade E on the course. For higher grades you should, on the final exam, have solved problems from all parts of the course.

The final exam is divided into three parts (part I, part II and part III). Part I consists of 5 problems, each worth 3p. If you have passed partial exam # i you will automatically get 3p on problem i in part I. Part II consists of 3 problems, each worth 4p. Part III consists of 2 problems, each worth 5p. The final exam is worth 37p in total. Your grade on the course is based on your score on the final exam:

A: 32p, B: 27p, C: 22p, D: 18p, E: 15p.

If your score is 13-14, then you have the right to a complementary exam. There will be no make-up quizzes or midterm exams. If you need to reschedule some of those, please discuss it with *the instructor* in advance. Rescheduling will be accepted in **extraordinary** situations.

Conflicts: If you have a conflict, please, let me know as soon as possible so we can discuss it. It is NOT possible to change the scheduled time for the final exam.

Canceled classes: If classed are canceled for any official or personal reasons, you will be contacted at the email provided in canvas as *Inloggnings-ID*.

Change of the syllabus. Please note that the syllabus is subject to change, and that it is the student's obligation to keep aware of developments. It is your responsibility to be aware of any changes the instructor may make to the syllabus as they are announced in class. Students are responsible for all information given when they are absent.

Attendance Policy. Attendance is expected for all class meetings.

Course Policies

- Computers, Calculators, and Cell phones. Prohibited from class.

- Academic Integrity and Honesty. Cheating will not be tolerated. All incidents of cheating will be reported.

- Policies on Conduct and sex or gender discrimination. All cases will be reported by the Instructor or the Teaching Assistant.