Algebra 1 (2011)-Aalborg University
Lecture 1, September 5th

Welcome to "Algebra 1" for Mat3. We will follow the book: [Lau] Niels Lauritzen, "Concrete abstract algebra", Cambridge University Press, 2003. ISBN: 978-0-521-53410-9. We will only focus on the first two chapters.

You may find the information about the course, lecture sheets, exercises, etc, ... in Moodle and in the course's webpage: http://people.math.aau.dk/~diego/Algebra12011.html

The shedule for today is:

1st Lecture: Monday September 5th, 8:15-12:00 at room G5-112.

- 8:15-10:00 Lecture: The natural numbers and the integers. Well ordering and mathematical induction. Division with remainder. Congruences. Greatest common divisor (pages 1-9).

- 10:00-12:00 Work in groups. Exercises from [Lau], 1.12 (page 41): 1,2,3,4,6,7,8,9. You may also consider $[a + b] = [[a] + [b]]$ for exercise 3.

The usual schema for the lectures (after the second lecture) will be:

- Repetition (30 minutes): we will review some concepts from previous lectures.

- Work in groups (2 hours): you will solve exercises in groups.

- Lecture (75 minutes): we will introduce some new material.

The teacher will not be present in approximately half of the lectures. In such lectures, one group will be responsible for the lecture. The repetition part will be directed by this group and the Lecture part will consist on self-study in the group rooms or in the lecture room followed by a common discussion in the lecture room. At the end of the lecture, the responsible group will orientate the teacher, by e-mail, about the success and difficulties of the lecture.

Best regards,

Diego