Welcome to the reading course Algebra 3.
We meet wednesdays at 13:15 in Aud 08.

1. Course material

In the weeks 1-7 we are going to read some lecture notes in English, written by Jørn B. Olsson (Chapter I) and Christian U. Jensen (Chapters II-V) which may be downloaded now from the course homepage. In addition two collections of Exercises are available. In week 8-9 we will study an introduction to module theory based on a chapter in a textbook (to be announced) Please note: Some later parts of Chapter I have been rewritten and extended and may still contain misprints or (hopefully minor) mistakes. Please contact the lecturer olsson@math.ku.dk if you discover such misprints/mistakes.

2. Reading plan

In week 1-3 we read Chapters I and II of the notes.
- Week 1: Read Chapter I, pages 1-34.
- Week 2: Read Chapter I, pages 34-52, and chapter II, pages 1-9.
- Week 3: Read Chapter II, pages 9-35.

In the chapter I-II there is a certain overlap with material covered in the courses Algebra 1 and Algebra 2 and we will in the wednesday sessions concentrate on the results going beyond Algebra 1-2. These sessions will have Jørn B. Olsson as lecturer/instructor.

In week 4-7 we read Chapters III-V of the notes. The wednesday sessions will have Chr. U. Jensen as lecturer/instructor.

In week 8-9 we discuss module theory. The wednesday sessions will have Matthew Gelvin as lecturer/instructor.

3. Exercises week 1-3

In the first two weeks we will discuss selected exercises in the collection “Exercises for Chapter I”. In the third week we discuss the first two pages of the collection “Exercises for Chapter II-V”. In both collections exercises marked by * are particularly recommended.
4. Compulsory activities

- Week 4: First compulsory exercises. (Not graded)
- Week 5: First multiple choice test (Graded)
- Week 8: Second compulsory exercises. (Graded)
- Week 9: Second multiple choice test (Graded)

The first compulsory exercises will be available 22. September with deadline 29. September.

The first multiple choice test takes place 6. October 15:15-16:00. The test consist of fairly elementary questions related to the notes/exercises which have to be answered without the use of notes and other course material.