



## Survey of Modern Algebra Math 461D – Spring 2016

**Textbook:** *An Introduction to Groups, Rings, and Fields*, by Bruce Cooperstein  
(available at [www.centerofmath.org/subjects/algebra/index.html](http://www.centerofmath.org/subjects/algebra/index.html))

**Content:** The course will be on chapters 2 and 3 of the book, plus, time permitting, part of chapter 6. Chapters 1 (“Preliminaries”) and 4 (“Vector spaces”) are part of the Prerequisites. Tentative outline:

- Groups: 5 weeks
- Rings: 5 weeks
- Fields: 3 weeks

### Grading policy:

- Three exams; third is comprehensive. Makeups will be given only in case of documented medical excuse.
- Attendance, class participation and homework will play an important role in determining final grades, especially in borderline cases.
- Weekly homework will typically be posted on my website. (There will be no homework in the weeks of tests.) The homework will be collected on Fridays. (Late homeworks will not be accepted.) All pages should be stapled together.

### General rules:

- During class, cell phones and computers must be put away. Questions and feedback are always welcome.
- Showing up at office hours is not compulsory, but recommended. (It is more convenient if you come when you have doubts, rather than the day before the test.) Homework is not compulsory, but strongly recommended.
- Tests are designed to cover the material explained in class (students are expected to keep track of the topics presented.) There will be a preparation before each test (but no solutions handout!, i find it better for students this way.) What was presented in class but is not written in the book, *can* appear in the test.
- In contrast, any topics covered by the book but not presented in class will not appear in the test.

With this, I wish you a lovely Spring semester here at The U!

Bruno Benedetti  
*Assistant Professor*