V63.0344 Undergraduate Algebra II, Spring 14

Time	Monday, Wednesday 11:00-12:15
Location	wwh 317
Instructor	Prof. Joel Spencer, wwh 829
Phone	x8-3219
email	lowercaselastname@cims.nyu.edu
Office Hours	TBA
Text	Topics in Algebra
	i.n. herstein
`Website:`	http://www.cs.nyu.edu/cs/faculty/spencer/algebra/index.html
T.A.	TBA
TA Session Time	TBA
TA Session Place	TBA
TA Office Hours	TBA
Midterm	TBA
Final Exam	TBA
Final Exam	place TBA

This is basically a course in Field Theory with Galois Theory a highlight. We begin with elements of Rings and of Linear Algebra over arbitrary fields. We consider field extensions of the rationals by irrationals such as $\sqrt{2}$. We also study Finite Fields. Throughout, number theory provides a wealth of examples and applications. On the opposite side is a *rough* outline of the course. We expect to cover these topics but not necessarily on the precise days indicated. In addition there may be several topics that will only be covered through lecture. Students are responsible for all such material.

For the Galois Theory, notes specially prepared by Prof. Spencer will be made available.

Submission of assignments (unless clearly marked otherwise) will be *mandatory*.

`Special note:` Collaboration on the assignments is *encouraged*. Each student must submit the assignment separately and must note on the assignment the names of other students with which he/she has collaborated.

The final grade will be based 60% on the Final Exam, 35% on the Midterm, and 15% on the Homework. But grades are not determined by an algorithm, subjective factors such as class participation are a "fudge factor" that can carry great weight.