Modern Algebra II
MA 542
Spring 2010

Meetings: GCB 206 (750 Comm Ave), MWF 1:00pm–2:00pm

Instructor: Robert Harron

Email	rharron@
Office	MCS 230
Office Hours	M 2:30pm–3:30pm
	F 3:00pm–4:00pm

Course website: http://math.bu.edu/people/rharron/MA542/

Textbooks: – *Contemporary Abstract Algebra, Seventh Edition*, Joseph A. Gallian
– *Fields and Galois Theory, v. 4.21*, J.S. Milne

Official description: Prereq: MA 541. Vector spaces and modules, Galois theory, linear transformations and matrices, canonical forms, bilinear and quadratic forms. 4 credits.

Actual description: Prereq: MA 541. Basic properties of rings. Ring homomorphisms, ideals, and quotients. Isomorphism theorems. Polynomial rings, integral domains, fields, vector spaces. Divisibility. Field extensions. Finite fields. Galois theory. Classical applications. 4 credits.

Assignments: There will be weekly assignments. These are very important for understanding the course material. All problems must be turned in, only some will be graded.

Exams: There will an in-class midterm March 3rd and a final during the usual exam period.

Grading scheme:

Homework	20%
Midterm	25%
Final	55%

Academic conduct: Your academic conduct will, of course, be governed by the CAS Academic Conduct Code.