MATH 236: Algebra 2
McGill University
Winter 2009

Instructor: Xander Faber, 1248 Burnside Hall, xander@math.mcgill.ca


Course Coordinates: MWF 8:35–9:25am, 1B24 Burnside Hall


Prerequisite: MATH 235

Weight: 3.0 Credit Hours

Grading: Your final course grade will be determined by
- Weekly Written Homework — 20%
- Formal Midterm Exam — 20%
- Take-home Midterm Exam — 20%
- Final Exam — 40%

List of Topics to be Covered: Linear equations over a field, Introduction to vector spaces, Linear mappings, Matrix representation of linear mappings, Determinants, Eigenvectors and eigenvalues, Diagonalizable operators, Cayley-Hamilton theorem, Bilinear and quadratic forms, Inner product spaces, Orthogonal diagonalization of symmetric matrices, Canonical forms.

Academic Integrity: McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see http://www.mcgill.ca/integrity/ for more information).