Math 112 - Introduction to Linear Algebra

**Instructor:** Chester Weatherby  
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**Office Hours:** _____________ and by request.

**Location:** Jeffery Hall rm 128

**Times:**  
Monday: 8:30am  
Tuesday: 10:30am  
Thursday: 9:30am

**Start Date:** Jan. 5th, 2009  
**End Date:** April 3rd, 2009

**Textbook:** Matrices With Applications by Hugh G. Campbell (courseware)

**Evaluation:**  
Homework 20%  
Midterm Test 30%  
Final Exam 50%

**Course Outline:**

- Vectors and Matrices - terminology, vector spaces, bases
- Binary Operations on Matrices - addition, multiplication
- Unary Operations on Matrices - transpose, trace, determinant
- Linear Equations - methods used to solve them, row reduction, Cramer’s rule
- Matrix and Linear Transformations
- Eigenvalues and Eigenvectors - calculations and diagonalization
- Discrete Dynamical Systems - recurrence relations, difference equations

**Notes:**

1) Homework is due at the end of class on the assigned date.
2) The midterm will be held in class on Feb. 23rd or Feb. 24th.