# Linear Systems

Math 214 Spring 2006 © 2006 Ron Buckmire  $\label{eq:fowler_307_MWF_2:30pm-3:25pm} Fowler~307~MWF~2:30pm-3:25pm\\ http://faculty.oxy.edu/ron/math/214/06/$ 

### Week 8

Monday March 20 Class 19:

Applications of Linear Algebra. We will look at one or two very cool applications of linear algebra to graph theory.

## Reading:

Poole, Section 3.7

Homework #18: (due in  $Class\ 20$ )

Poole, Section 3.7: 27, 28, 29, 30, 35, 36, 37, 38.

QUIZ #6 DUE

Wednesday March 22 Class 20:

**Eigenvalues and Eigenvectors.** We will be introduced to the concept of eigenvectors and eigenvalues of a matrix for 2x2 matrices.

#### Reading:

Poole, Section 4.1

Homework #19: (due in Class 21)

Poole, Section 4.1: 3,4,5,6,10,11,16,17,21,22. EXTRA CREDIT 36, 37

#### Friday March 24 Class 21:

**Determinants.** We will learn all sorts of ways to compute determinants of matrices.

### Reading:

Poole, Section 4.2

Homework #20: (due in Class 22)

Poole, Section 4.2: 4,6, 7, **10**, 15, 26, 27, 32, **33, 48, 49,50,51**,52. EXTRA CREDIT 46.

**QUIZ** #7