# Linear Systems

Math 214 Spring 2007 © 2007 Ron Buckmire

Fowler 110 MWF 2:30pm - 3:25pm http://faculty.oxy.edu/ron/math/214/07/

## Monday January 22 Class 1:

Introduction to Vectors and Matrices. Definition of Linear Combination of vectors.

## Reading:

Poole, Section 1.1

# Homework #1: (due in Class 2)

Poole, Section 1.1 # 1d, 2d, 3c, 4c, 5a, 6, 9, 11, 15, 17, 20; EXTRA CREDIT #14

HW #0: Automathography

#### Wednesday January 24 Class 2:

We will consider the graphical interpretation of algebraic operations on vectors (i.e. vector addition, vector subtraction, scalar multiplication). We will also introduce the concept of projection of a vector onto another vector.

## Reading:

Poole, Section 1.2

Homework #2: (due in Class 3)

Poole, Section 1.2 # 2,5, 11, 17, 19, 25, 44, 46, 47, 52

#### Friday January 26 Class 3:

We will consider projections in more depth and examine ways to think about algebraically defining lines using vectors.

#### Reading:

Poole, Section 1.3

#### Homework #3: (due in Class 4)

Poole, Section 1.2: #31, 41, 57, 62, 63, 64 QUIZ #1