Linear Systems

Math 214 Spring 2006 ©2006 Ron Buckmire Fowler 307 MWF 2:30pm - 3:25pm http://faculty.oxy.edu/ron/math/214/06/

Week 10

Monday April 3 Class 25:

Orthonormality. We will revisit orthogonality, norms and projections and intrudce a class of matrices known as *orthornormal*.

Reading:

Poole, Section 5.1

Homework #24: (due in $Class\ 26$)

Poole, Section 5.1: 3,4,5,6,8,9,12,13,16,17,30,31. EXTRA CREDIT 28, 33.

Quiz 8 and BONUS QUIZ Due

Wednesday April 5 Class 26:

Orthogonal Complements. We will learn about an incredibly important feature of vectors and orthogonal vector spaces.

Reading:

Poole, Section 5.2

Homework #25: (due in $Class\ 26$)

Poole, Section 5.2: 2,3,4,5,6,7,12,15,16,17,19,20,21. EXTRA CREDIT 29.

Friday April 7 Class 25:

Gram-Schmidt Orthogonalization. We shall learn about the famous Gram-Schmidt process to generate an orthonormal basis for a vector space.

Reading:

Poole, Section 5.3

Homework #26: (due in $Class\ 27$)

Poole, Section 5.3: 1,2,3,4,6,11,13, 17. EXTRA CREDIT 18.

QUIZ #9