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GRANDE PRAIRIE REGIONAL COLLEGE DEPARTMENT OF COMPUTING, MATHEMATICS and STATISTICAL SCIENCES MATHEMATICS 1020 A3 WINTER 2001

Title:

Applied Linear Algebra

Prerequisite: Mathematics 1000

Schedule:

Lectures MW 10:00 to 11:15 in J229 Seminars AS2 R 14:30 to 15:20 in J229 Seminars AS1 R 15:30 to 16:20 in J229

Instructor:

Thomas Kaip Office J212 Extension 2963

Email kaip@gprc.ab.ca

Textbooks:

David C. Lay; Linear Algebra and Its Applications

(2nd Ed)

James Stewart, Calculus (4th Edition)

Topics:

Systems of Linear Equations

Linear Combinations, Spanning and Independence

Matrix algebra Determinants

Vector Spaces and Subspaces

Basis and Dimension

Orthogonality and Gram-Schmidt

Complex Numbers

Eigenvalues and Eigenvectors

Introduction to Differential Equations

Grading:

Assignments 10% Quizzes 15%

Exam I 25% (February 05, 2001) Exam II 25% (March 12, 2001) Exam III 25% (April 11, 2001)

Assignments:

Assignments will be given following the lecture

and due the following day.

Quizzes:

Ouizzes will be held in the latter 30 minutes of the seminar. There will be a total of n Quizzes. The best n-1 quizzes will count towards your grade.

Calculators:

Calculators WILL NOT be allowed in quizzes and

exams.