

**GRANDE PRAIRIE REGIONAL COLLEGE  
DEPARTMENT OF COMPUTING, MATHEMATICAL  
and STATISTICAL SCIENCES  
MATHEMATICS 1200 A3  
WINTER SEMESTER 2005**

**TITLE:** LINEAR ALGEBRA I

**SCHEDULE:** LECTURES M W 08:30 – 09:50 J229  
SEMINARS F 08:00 – 08:50 J229

**INSTRUCTOR:** THOMAS KAIP  
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**TEXTBOOK:** ANTON - RORRES; ELEMENTARY LINEAR ALGEBRA  
APPLICATIONS VERSION (8<sup>TH</sup> ED)

**COMPOSITION OF THE COURSE GRADE:**

FINAL EXAM	50%
MIDTERM EXAM	30%
ASSINMENTS	10%
QUIZZES ( 4 )	10%

**COURSE TOPICS:** SYSTEMS OF LINEAR EQUATIONS  
GAUSS-JORDON ELIMINATION AND REDUCED ROW ECHELON FORM  
MATRIX ALGEBRA  
DETERMINATES  
CRAMER'S RULE  
GEOMETRY OF VECTORS IN  $\mathbb{R}^n$   
SUBSPACES OF  $\mathbb{R}^n$   
LINEAR COMBINATIONS, SPAN AND LINEAR INDEPENDENCE  
BASIS AND DIMENSION  
EIGENVALUES AND EIGENVECTORS  
APPLICATIONS

**CALCULATORS:** NO CALCULATORS ALLOWED IN QUIZZES AND EXAMS.