

**GRANDE PRAIRIE REGIONAL COLLEGE  
MATHEMATICS 1200 A2 (Fall 2004) – COURSE OUTLINE**

**Title :     Linear Algebra I**

<b>Schedule :</b>	<b>Lecture A2</b>	<b>T</b>	<b>R</b>	<b>10:00 a m - 11:20 a m</b>	<b>J203</b>
	<b>Seminar AS1</b>		<b>F</b>	<b>9:00 a m - 9:50 a m</b>	<b>J204</b>
	<b>AS2</b>		<b>F</b>	<b>10:00 a m - 10:50 a m</b>	<b>J204</b>

**Instructor : Dr Subhash Karnik**  
**Office J206**  
**Phone 539 - 2093**  
**e-mail : skarnik@gprc.ab.ca**

**Textbook : Elementary Linear Algebra (Applications Version)**  
**- 8<sup>th</sup> Edition by Howard Anton & Chris Rorres**  
**(John Wiley & Sons )**

<b>Grading :</b>	<b>Assignments</b>	<b>10 %</b>
	<b>Quizzes</b>	<b>15 %</b>
	<b>Mid-term Exam</b>	<b>25 %</b>
	<b>Final Exam</b>	<b>50 %</b>

**Exam Schedule :**

**Mid-term Exam - Thursday October 21, 2004 (Tentative)**  
**10:00 a m - 11:20 a m**

**Final Exam as per Registrar's Schedule to be published in December 2004.**

**Students must write the quizzes and exams at the scheduled times.**

**Turn over . . .**

## **Course Description**

**MA 1200 3 (3 - 1 - 0) UT 60 Hours**

**Pure Math 30 is a pre-requisite for this course.**

**(Credit will be granted for only one of MA 1020 or MA 1200.)**

**From Alberta Transfer Guide 2003 – 2004 :**

**In the Province of Alberta this course is transferable as follows :**

<b>Athabasca</b>	<b>MATH 270(3)</b>	<b>Augustana UC</b>	<b>MAT 120(3)</b>
<b>Canadian UC</b>	<b>MATH 1xx(3)</b>	<b>Concordia UC</b>	<b>MAT 120(3)</b>
<b>King's UC</b>	<b>MATH 221(3)</b>	<b>U of A</b>	<b>MATH 120(3)</b>
<b>U of C</b>	<b>MATH 211(3)</b>	<b>U of L</b>	<b>MATH 1410(3)</b>

**The following topics are covered in this course :**

**Systems of Linear Equations**

**Reduced Row Echelon Form and Gauss-Jordan Elimination**

**Vector and Matrix Algebra**

**Determinants**

**Cramer's Rule**

**Vector Spaces and Subspaces**

**Linear Combinations, Linear Span, Linear Dependence & Independence**

**Basis and Dimension**

**Eigenvalues and Eigenvectors**

**Applications**