DEPARTMENT OF SCIENCE

COURSE OUTLINE
MA 2250 A3 – LINEAR ALGEBRA II
WINTER 2014

INSTRUCTOR: Dr. Brian Redmond, Ph.D. **PHONE:** (780) 539-2093

OFFICE: J206 **E-MAIL:** bredmond@gprc.ab.ca

OFFICE HOURS: M W F 10:00AM – 11:00AM

PREREQUISITE: MA1020 or MA1200, and Mathematics 31 or 1000-level Calculus course

REQUIRED TEXT/RESOURCE MATERIALS:

W. Keith Nicholson, Linear Algebra with Applications 7E, McGraw-Hill Ryerson 2013.

CALENDAR DESCRIPTION: Vector spaces; inner product spaces; examples of n-space and the space of continuous functions. Gram-Schmidt process, QR-factorization of a matrix and least squares. Linear transformations, change of basis, similarity and diagonalization. Orthogonal diagonalization, quadratic forms. Applications in a variety of fields, numerical methods.

CREDIT/CONTACT HOURS: 3 (3-1-0) UT

DELIVERY MODE(S):

Lecture:	10:00-11:20	T R	J202
Seminar:	14:30-15:20	F	J202

TRANSFERABILITY: See www.gprc.ab.ca and www.acat.gov.ab.ca **

**Note: Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability

EVALUATIONS:

Assignments: 12.5% Quizzes: 12.5% Midterm: 25% Final Exam: 50%

STUDENT RESPONSIBILITIES:

Attend all lectures and seminars and check moodle regularly for course updates.

STATEMENT ON PLAGIARISM AND CHEATING:

Refer to the Student Conduct section of the College Admission Guide at http://www.gprc.ab.ca/programs/calendar/ or the College Policy on Student Misconduct: Plagiarism and Cheating at www.gprc.ab.ca/about/administration/policies/**

**Note: all Academic and Administrative policies are available on the same page.

GRANDE PRAIRIE REGIONAL COLLEGE			
GRADING CONVERSION CHART			
Alpha Grade	**4-point Equivalent**	**Percentage Guidelines**	**Designation**
A^+	**4.0**	**95 – 100**	**EXCELLENT**
A	**4.0**	**90 – 94**	
A^-	**3.7**	**85 – 89**	**FIRST CLASS STANDING**
B^+	**3.3**	**80 – 84**	
B	**3.0**	**75 – 79**	**GOOD**
B^-	**2.7**	**70 – 74**	
C^+	**2.3**	**66 – 69**	**SATISFACTORY**
C	**2.0**	**62 – 65**	
C^-	**1.7**	**58 – 61**	
D^+	**1.3**	**55 – 57**	**MINIMAL PASS**
D	**1.0**	**50 – 54**	
F	**0.0**	**0 – 49**	**FAIL**
WF	**0.0**	**0**	**FAIL, withdrawal after the deadline**

COURSE SCHEDULE/TENTATIVE TIMELINE:

Week	Sections	Notes
1. Jan. 7-10	Appendix A: Complex Numbers	Jan 7 classes begin
2. Jan. 13-17	Review of Chapter 5, Chapter 8 with Applications	
3. Jan. 20-24		
4. Jan. 27-31		
5. Feb. 3-7		
6. Feb. 10-14	Midterm	
7. Feb. 17-21	Winter Break	
8. Feb. 24-28	Chapter 6: Vector Spaces and Applications	
9. Mar. 3-7		Mar 7 last day to withdraw
10. Mar. 10-14	Chapter 7: Linear Transformations	
11. Mar. 17-21		
12. Mar. 24-28	Chapter 9: Change of Basis	
13. Mar. 31-Apr.4	Chapter 10: Inner Product Spaces, Review	
14. Apr. 7-11		
15. Apr. 14		Apr 14 last day of classes
Apr. 16-28		Final Exams