



**DEPARTMENT OF SCIENCE**  
**COURSE OUTLINE – WINTER 2012**  
**MA 1020 A3**  
**APPLIED LINEAR ALGEBRA**

**INSTRUCTOR:** Tom McLeister      **PHONE:** (780) 539-2961

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**OFFICE HOURS:** T,R 11:30—13:00

**PREREQUISITE:** MA 1000

**REQUIRED TEXT/RESOURCE MATERIALS:**

Anton-Rorres: Elementary Linear Algebra: Applications Version, 10E, Wiley 2010.

**CALENDAR DESCRIPTION:**

Vectors and matrices, solution of linear equations, equations of lines and planes, determinants, matrix algebra, orthogonality and applications (Gram-Schmidt), eigenvalues and eigenvectors and applications, complex numbers will be covered in the course.

**CREDIT/CONTACT HOURS:** 3.5 (3-1-0) UT

**DELIVERY MODE(S):**

Lecture:	10:00 – 11:20	T R	J228
Seminar:	AS1 13:30-14:20	M	J202

## TRANSFERABILITY:

University of Alberta \*, University of Calgary \*, University of Lethbridge \*, Athabasca University \*, Augustana Faculty, University of Alberta \*, Concordia University College, Grant MacEwan University, King's University College. (From the GPRC course catalog)

\* An asterisk (\*) beside any transfer institution indicates important transfer information. Consult the Alberta Transfer Guide

Note: A 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.

## GRADING CRITERIA:

<b>GRANDE PRAIRIE REGIONAL COLLEGE</b>			
<b>GRADING CONVERSION CHART</b>			
<b>Alpha Grade</b>	<b>4-point Equivalent</b>	<b>Percentage Guidelines</b>	<b>Designation</b>
<b>A<sup>+</sup></b>	<b>4.0</b>	<b>90 – 100</b>	<b>EXCELLENT</b>
<b>A</b>	<b>4.0</b>	<b>85 – 89</b>	
<b>A<sup>-</sup></b>	<b>3.7</b>	<b>80 – 84</b>	<b>FIRST CLASS STANDING</b>
<b>B<sup>+</sup></b>	<b>3.3</b>	<b>77 – 79</b>	
<b>B</b>	<b>3.0</b>	<b>73 – 76</b>	<b>GOOD</b>
<b>B<sup>-</sup></b>	<b>2.7</b>	<b>70 – 72</b>	
<b>C<sup>+</sup></b>	<b>2.3</b>	<b>67 – 69</b>	<b>SATISFACTORY</b>
<b>C</b>	<b>2.0</b>	<b>63 – 66</b>	
<b>C<sup>-</sup></b>	<b>1.7</b>	<b>60 – 62</b>	
<b>D<sup>+</sup></b>	<b>1.3</b>	<b>55 – 59</b>	<b>MINIMAL PASS</b>
<b>D</b>	<b>1.0</b>	<b>50 – 54</b>	
<b>F</b>	<b>0.0</b>	<b>0 – 49</b>	<b>FAIL</b>
<b>WF</b>	<b>0.0</b>	<b>0</b>	<b>FAIL, withdrawal after the deadline</b>

## **EVALUATIONS:**

Assignments:	10%
Quizzes:	15%
Midterm:	25% (Thursday, March 1, 2012)
Final Exam:	50% (Cumulative and scheduled during exam period, TBA)

Note: There will be no make-up quizzes or exams. If a quiz/test is missed for a valid reason and proper documentation is provided, then the weight of the quiz/test will be transferred to another component.

**SEMINAR ASSIGNMENTS:** An assignment will be handed out at the beginning of the seminar, which will be turned in by the end of the seminar for grading.

**QUIZZES:** Quizzes will be held every Tuesday, beginning January 17.

**FINAL EXAM:** The final exam will be written during the exam period, between April 16 and April 26 inclusive (including Saturdays and evenings). It is the student's responsibility to be available to write the exam at the scheduled time. Writing early is not permitted.

**CALCULATORS:** Use of calculators is not permitted on the quizzes or exams.

## **STUDENT RESPONSIBILITIES:**

Attend all lectures and seminars. If a lecture or seminar is missed, it is the student's responsibility to catch up on the material and obtain the missing lecture notes.

## **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/](http://www.gprc.ab.ca/about/administration/policies/)

## COURSE SCHEDULE/TENTATIVE TIMELINE:

Week	Sections	Notes
1. Jan. 5	1.1	First class: Thur., Jan. 5
2. Jan. 9-13	1.2, 1.3	
3. Jan. 16-20	1.4, 1.5	
4. Jan. 23-27	1.6, 1.7, 1.8	
5. Jan. 30-Feb. 3	2.1, 2.2, 2.3	
6. Feb. 6-10	3.1, 3.2	
7. Feb. 13-17	3.3, 3.4, 3.5	Feb. 20-24, Winter Break
8. Feb. 27- Mar. 2	4.1, 4.2, 4.3	<b>Midterm (Thur. Mar. 1<sup>st</sup>)</b>
9. Mar. 5-9	4.4, 4.5, 4.6	Mar. 6, last day to withdraw
10. Mar. 12-16	4.7, 4.8	
11. Mar. 19-23	4.9, 4.10, 4.11* or 4.12*	
12. Mar. 26-30	5.1, 5.2	
13. Apr. 2-5	Appendix B, 5.3, 5.4*,	Apr. 6, Good Friday-no classes
14. Apr. 9-12	6.1, 6.2, 6.3, 6.6*	Apr. 12, last day of classes
15, 16. Apr. 16-26		Final Exams

\* Time permitting