

# **DEPARTMENT OF SCIENCE**

# COURSE OUTLINE – WINTER 2015 MA 1200 A3 LINEAR ALGEBRA I

<b>INSTRUCTOR:</b>	Tom McLeister	PHONE:	(780) 539-2961
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OFFICE HOURS:	M, T, R, F 11:30-13:00	)	
<b>PREREQUISITE:</b> Mathematics 30-1 or equivalent			

# **REQUIRED TEXT/RESOURCE MATERIALS:**

Nicholson: Linear Algebra With Applications 7th Edition, McGraw-Hill Ryerson 2013

#### **CALENDAR DESCRIPTION:**

Systems of linear equations, vectors in n-space, vector equations of lines and planes, matrix algebra, inverses and invertibility, introduction to linear transformations, subspaces of n-space, determinants, introduction to eigenvalues and eigenvectors, the dot product and orthogonality, applications in a variety of fields.

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

#### **DELIVERY MODE(S):**

Lecture:		10:00 - 11:20	Т	R J20	)4
Seminar:	AS1	10:00 - 10:50	F	J20	)4

### **TRANSFERABILITY:**

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

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

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.

	GRANDE PRAIRIE REGIONAL COLLEGE			
	GRADING CONVERSION CHART			
Alpha Grade	4-point Equivalent	Percentage Guidelines	Designation	
$A^{+}$	4.0	95 – 100		
Α	4.0	90 – 94	EXCELLENT	
A	3.7	85 – 89		
B⁺	3.3	80 - 84	FIRST CLASS STANDING	
В	3.0	75 – 79	2222	
B⁻	2.7	70 – 74	GOOD	
C⁺	2.3	66 – 69		
С	2.0	62 – 65	SATISFACTORY	
C⁻	1.7	58 - 61	]	
$D^{\star}$	1.3	55 – 57		
D	1.0	50 – 54	MINIMAL PASS	
F	0.0	0 – 49	FAIL	
WF	0.0	0	FAIL, withdrawal after the deadline	

#### **GRADING CRITERIA:**

#### **EVALUATIONS:**

Assignments:	10%	
Quizzes:	15%	
Midterm:	25%	(Tuesday, March 3)
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. Late assignments will not be accepted.

**ASSIGNMENTS:** There will be take-home assignments to be handed in for grading roughly every week.

QUIZZES: Quizzes will be held roughly every other week.

**FINAL EXAM:** The final exam will be written during the exam period, between April 16 and April 27 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 <a href="http://www.gprc.ab.ca/programs/calendar/">http://www.gprc.ab.ca/programs/calendar/</a> or the College Policy on Student Misconduct: Plagiarism and Cheating at <a href="http://www.gprc.ab.ca/about/administration/policies/\*\*">www.gprc.ab.ca/about/administration/policies/\*\*</a> \*\*Note: all Academic and Administrative policies are available on the same page.

Week	Text Sections	Notes	
1. Jan. 6-9	1.1, 1.2		
2. Jan. 12-16	1.2, 1.3, 1.4 <sup>†</sup>		
3. Jan. 19-23	2.1, 2.2		
4. Jan. 26-30	2.2, 2.3		
5. Feb. 2-6	2.3, 2.4		
6. Feb. 9-13	$2.5, 2.6^{\dagger}$		
Feb. 16-20, Winter Break			
7. Feb. 23-27	3.1, 3.2		
8. Mar. 2-6	3.2	Tue. Mar. 3 Mid-term	
		Fri. Mar. 6 Last day to	
		withdraw	
9. Mar. 9-13	3.3, 4.1		
10. Mar. 16-20	4.1, 4.2		
11. Mar. 23-27	5.1, 5.2		
12. Mar. 30-Apr. 2	5.3, 5.4	Fri. Apr. 3, Good	
		Friday—College closed	
13. Apr. 6-10	$5.4, 5.5, 5.6^{\dagger}$		
14. Apr. 13, 14	Review	Apr. 14, last day of	
		classes	
Apr. 16-27, Final Exams			

COURSE SCHEDULE/TENTATIVE TIMELINE:

† Time permitting