

## DEPARTMENT OF SCIENCE

# COURSE OUTLINE – WINTER 2014 MA 1020 A3 APPLIED LINEAR ALGEBRA

**INSTRUCTOR:** Thomas Kaip PHONE: (780) 539-2963

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**OFFICE** 

**HOURS:** TBA

**PREREQUISITE:** MA 1000

# REQUIRED TEXT/RESOURCE MATERIALS:

Nicholson: Linear Algebra With Applications 7 E, (or6th) McGraw-Hill Ryerson 2013

### **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 11:30-12:20	M	J228
	AS2 15:30-16:20	M	TBA

### 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)

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:**

GRANDE PRAIRIE REGIONAL COLLEGE					
GRADING CONVERSION CHART					
Alpha Grade	4-point Equivalent	Percentage Guidelines	Designation		
$\mathbf{A}^{+}$	4.0	95 – 100	EXCELLENT		
A	4.0	90 – 94			
$\mathbf{A}^{-}$	3.7	85 – 90	FIRST CLASS STANDING		
$\mathbf{B}^{+}$	3.3	80 – 84			
В	3.0	75 – 79	GOOD		
B <sup>-</sup>	2.7	70 – 74			
<b>C</b> <sup>+</sup>	2.3	66 – 69	SATISFACTORY		
С	2.0	62 – 65			
<b>C</b> -	1.7	58 – 61			
$\mathbf{D}^{+}$	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		

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

### **EVALUATIONS:**

Assignments: 10%
Quizzes: 15%
Midterm: 25%

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.

**ASSIGNMENTS:** Most weeks an assignment will be handed out and will be due one week later.

**QUIZZES:** Quizzes will be held on the day an assignment is due, based on the assignment..

**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>

### **COURSE SCHEDULE/TENTATIVE TIMELINE:**

Not all topics from the individual chapters will be covered

Chap 1 1. 1 weeks 2. Chap 2 1.5 weeks 3. Chap 3. 1.5 weeks 4. Chap 4 1.5 weeks 5. Chap 5, 6, Appendix A 3 weeks Section 7.1, 9.1, 10.1-10.2 6 2.5 weeks