

## COURSE INFORMATION SHEET

### FALL 2008

- Course:** MATHEMATICS 311 (Linear Methods II, Fall Term 2008)  
**Lecture/Time:** L01  
**Instructor:** Clifton Cunningham  
**Office/Phone/Email:** MS 528 / 220-6888 / [cunning@math.ucalgary.ca](mailto:cunning@math.ucalgary.ca)
- Prerequisites:** MATH 211 or MATH 221  
**NOTE:** The Faculty of Science policy on pre- and co-requisite checking is outlined in the current University Calendar (see [www.ucalgary.ca/pubs/calendar](http://www.ucalgary.ca/pubs/calendar)) *Faculty of Science, section 5C*. **It is the students' responsibility to ensure that they have the pre- and co-requisites for the course, and if they do not they will be withdrawn from the course without notice.**
- Fee policy:** After the last day to drop/add courses, there will be no refund of tuition fees if a student withdraws from a course, courses or the session.
- Academic Accommodations:** It is the student's responsibility to request academic accommodations. A student with a documented disability who may require academic accommodation must register with the Disability Resource Centre to be eligible for formal academic accommodation. DRC registered students are required to discuss their needs with the instructor no later than fourteen (14) days after the start of this course.
- The University policy on grading and related matters** is described in the current University Calendar, *Academic Standings*. In determining the overall grade in the course, the following weights will be used:

Quizzes	[ 3 x 50 minutes]	30 %
Test	[ 1 x 50 minutes]	10 %
Final Exam	[180 minutes]	60 %

The final examination will be scheduled by the Registrar's Office. \*\*\* The use of aids such as calculators, books, notes, etc. **is forbidden** during all quizzes, tests and exams.
- Missed Components of Term Work.** The regulations of the Faculty of Science pertaining to this matter are outlined in the current University Calendar, *Faculty of Science, section 6A*. It is the student's responsibility to familiarize herself/himself with these regulations.
- Academic misconduct** (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the current University Calendar. See: <http://www.ucalgary.ca/honesty/>
- Dates and times of class exercises held outside of class hours (evening tests, Saturday laboratory examinations, weekend field trips, etc.):**  
**\*\* THERE WILL BE NO OUT-OF-CLASS-TIME ACTIVITY.\*\***

REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME ACTIVITY. If you have a conflict with any out of class time activity, please inform your instructor at least one week in advance of the activity so that other arrangements may be made for you.

**SCHEDULE**

<b>Dates</b>	<b>Topics</b>	<b>Text sections</b>	<b>Quiz or Test</b>
Sept. 8, 10, 12	Vector spaces & subspaces	6.1, 6.2	
Sept. 15, 17, 19	Bases	6.3, 6.4	
Sept. 22, 24, 26	Linear transformations	7.1, 9.1	Quiz 1: Sept 23 <sup>rd</sup>
Sept. 29, Oct. 1, 3	Kernel and Image	7.2	
Oct. 6, 8, 10	Isomorphisms	7.3, 9.2	
Oct. 14, 16	Orthogonal diagonalization	8.1, 8.2	Quiz 2: Oct. 15 <sup>th</sup>
Oct. 20, 22, 24	Positive definite matrices	8.2, 8.3	
Oct. 27, 29, 31	Complex eigenvalues	8.5, 8.6	
Nov. 3, 5, 7	Quadratic Forms	8.9	
Nov. 12, 14	Inner products & norms	10.1	
Nov. 17, 19, 21	Gram Schmidt orthogonalization	10.2, 10.3	Test: Nov. 18 <sup>th</sup>
Nov. 24, 26, 28	Isometries	10.4	
Dec. 1, 3, 5	Fourier series	10.5	Quiz 3: Dec. 2 <sup>nd</sup>