## Faculty of Science

## DEPARTMENT OF MATHEMATICS and STATISTICS Course Information Sheet

1. Course:

Lecture/Time/Session: Instructor(s): Office:

MATH 221 - Linear Algebra for Scientists \& Engineers FALL 2003 L04 \& 12 \& 22 TR 14:00 (Duration: 75 minutes) Room: ST 143 Dr. T. Dinh
MS 370 Phone: 220-2214 Email: tndinh@math.ucalgary.ca

Prerequisite(s): A grade of 70\% or higher in Mathematics 30 or Pure Mathematics 30.
Co-requisite(s): None
Note: The Faculty of Science policy on pre- or co-requisite checking is outlined on page 198, of the 2003-2004 Calendar. It is a student's responsibility to ensure that they have the pre-and/or corequisites for the course, and if they do not they will be withdrawn from the course without further notice.
3. 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.
4. The University policy on grading and related matters is described on pages 41-42 of the 2003-2004 Calendar. In determining the overall grade in the course, the following weights will be used:

| Mid-term Test(s) | [1] | $20 \%$ |
| :--- | :--- | :--- |
| Quiz(zes) | [Best 4 of 5] | $30 \%$ |
| Final Exam |  | $50 \%$ |

A passing grade on any particular component of the course is essential to passing the course as a whole. There will be a final examination scheduled by the Registrar's Office. The use of aids such as open book, etc. is not permitted.
5. Missed Components of Term Work. The regulations of the Faculty of Science pertaining to this matter are outlined on page 199, of the 2003-2004 Calendar. It is the student's responsibility to familiarize herself/himself with these regulations.
6. 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 2003-2004 University Calendar under the heading "Student Misconduct", pages 53-56.
7. Dates and times of class exercises held outside of class hours (evening test, Saturday laboratory examinations, week end field trips, etc.): There are no out-of-class-time activities.

SCUM: The Society for Calgary Undergraduate Mathematics is located in MS 337A. They sell exam packages, run final reviews, and can often assist with problems. The office is open from 10am-3pm Monday-Friday, and you are welcome to drop by. We look forward to meeting you!

## ADDITIONAL COURSE INFORMATION <br> MATHEMATICS 221 L04/12/22 FALL 2003

TEXTS: Elementary Linear Algebra 2nd edition., by W.K.Nicholson, McGraw-Hill Ryerson.
This is available in the University bookstore.
OPTIONAL MATERIALS: MATH 211 Problem Book; MATH 211 Exam Book.
These will be available from the undergraduate mathematics society (SCUM), MS337A.
QUIZZES: There are five 30 -minute quizzes which will be written in the labs in the weeks scheduled below. The quizzes will be graded and returned in the following lab. No make-up quizzes will be given. The best 4 of 5 quiz scores will be used for $30 \%$ of the final grade in the course.

MIDTERM: This is a 50 minute written examination held in the lecture period on Friday, November $6^{\text {th }}$. The midterm is worth $20 \%$ of the final grade in the course.
FINAL EXAMINATION: This is a 3-hour test worth $50 \%$ of the final grade, scheduled by the Registrar. A passing grade on the final examination is necessary to pass the course.

## TENTATIVE SCHEDULE:

| WEEK | SECTION | COMMENTS |
| :---: | :---: | :---: |
| Sept 8-12 | 1.1, 1.2 |  |
| Sept 15-19 | 1.3, 1.4 |  |
| Sept 22-26 | 1.4, 1.5 | Quiz 1 in lab |
| Sept 29 - Oct 3 | 1.6, 1.8 |  |
| Oct 6-10 | 2.1, 2.2 | Quiz 2 in lab |
| Oct 13-17 | 2.3 |  |
| Oct 20-24 | 2.5 | Quiz 3 in lab |
| Oct 27-31 | 3.1, 3.2 |  |
| Nov 3-7 | 3.2, Mid | Midterm Nov 6, in lecture time |
| Nov 10-14 | ,3.3 | Reading Days: Nov 8-11 |
| Nov 17-21 | 3.3 | Quiz 4 in lab |
| Nov 24-28 | 3.3, 3.5 |  |
| Dec 1-5 | 3.4 | Quiz 5 in lab |
| Dec 8 | Review | Review, last lecture on Dec 8. |
| Dec 12-22 |  | Final Examinations |

## SUGGESTED PROBLEMS:

| Section |  |
| :---: | :--- |
| $\mathbf{1 . 1}$ | $4-10$ |
| $\mathbf{1 . 2}$ | $1-4,6-14$ |
| $\mathbf{1 . 3}$ | $1,4-7$ |
| $\mathbf{1 . 4}$ | $1-18,21,22,27,31,32,33$ |
| $\mathbf{1 . 5}$ | $1-16,18-22,24-29$ |
| $\mathbf{1 . 6}$ | $1-6,8-14$ |
| $\mathbf{1 . 8}$ | $1-7$ |
| $\mathbf{2 . 1}$ | $1-3,5-20$ |
| $\mathbf{2 . 2}$ | $1-15,19-23$ |
| $\mathbf{2 . 3}$ | $1-14,16,17$ |
| $\mathbf{2 . 5}$ | $1-9,20-26$ |
| $\mathbf{3 . 1}$ | $1-19$ |
| $\mathbf{3 . 2}$ | $1-21$ |
| $\mathbf{3 . 3}$ | $1-24$ |
| $\mathbf{3 . 4}$ | $1-7,13-20$ |
| $\mathbf{3 . 5}$ | $1-12$ |

